

# 2019 Energy Statistics Yearbook



## Department of Economic and Social Affairs

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Statistics compiled as of December 2021

# INTRODUCTION

The *Energy Statistics Yearbook 2019* is a comprehensive collection of international energy statistics prepared by the United Nations Statistics Division. It is the sixty-third in a series of annual compilations which commenced under the title *World Energy Supplies in Selected Years, 1929-1950*.<sup>1</sup> It updates the statistical series shown in the previous issue. Supplementary series of monthly data on production of energy may be found in the *Monthly Bulletin of Statistics*.<sup>2</sup>

The principal objective of the *Yearbook* is to provide a global framework of comparable data on long-term trends in the supply of both primary and secondary forms of energy. Data for each energy product and aggregated data for the total energy supply are shown for individual countries and territories, and are summarized into regional and world totals. The data are compiled primarily from the annual energy questionnaire distributed by the United Nations Statistics Division and supplemented by official national statistical publications, as well as publications from international and regional organizations. Where official data are not available or are inconsistent, estimates are made by the Statistics Division based on governmental, professional or commercial materials. Estimates include, but are not limited to, extrapolated data based on partial year information, use of annual trends, trade data based on partner country reports, breakdowns of aggregated data and analysis of current energy events.<sup>3</sup>

This issue of the *Yearbook* contains data in original and common energy units (tons of coal equivalent and joules) for the years 2016-2019.<sup>4</sup>

This publication presents energy statistics consistent with the International Recommendations for Energy Statistics (IRES), which were endorsed by the United Nations Statistical Commission in 2011. IRES contains the Standard International Energy Product Classification (SIEC), the first definitive standard classification for energy products. It has been

built on a set of internationally harmonized definitions of energy products developed by the Intersecretariat Working Group on Energy Statistics (InterEnerStat) as mandated by the United Nations Statistical Commission. The adoption of SIEC as an international standard classification for energy products represents a significant step forward for energy statistics at the international level. SIEC not only provides a unified set of product definitions, but also uses a standard coding scheme, a common hierarchy of categories, and provides links to other internationally agreed product classifications, such as the Central Product Classification (CPC) and the Harmonized Commodity Description and Coding System (HS).

Within this methodological framework:

- a) Table 1 shows a more historical perspective of total energy supply, with data for selected years going back to 1990.
- b) Table 2 provides more detail on the components of total energy supply, namely primary production (broken down by type), trade, international bunkers and stock changes. Total energy supply is also shown on a per capita basis.
- c) Table 3 provides more detail on total final consumption of energy products, broken down by consuming sector (including non-energy use), and also shows total final consumption per capita.

By referring to previous volumes of the publication, time series can be established from 1950 to the present for the shown products. In addition to the basic tables showing production, trade, stock changes, international bunkers, supply and consumption, information is included on various other topics such as:

(a) The principal importers and exporters of hard coal, crude oil and natural gas for the years 2018 and 2019;

(b) The capacity of oil refineries and electricity generating plants by type;

(c) The ratio of crude oil and natural gas liquids reserves to crude oil and natural gas liquids production (R/P ratio);

(d) The electricity generated from different

<sup>1</sup>Statistical Papers, Series J, No. 1 (United Nations publication, Sales No. 1952.XVII.3).

<sup>2</sup>Statistical Papers, Series Q, *Monthly Bulletin of Statistics*, (United Nations publication).

<sup>3</sup>For details, see

[unstats.un.org/unsd/energystats/pubs/yearbook/](http://unstats.un.org/unsd/energystats/pubs/yearbook/)

<sup>4</sup>Table 1 shows data back to 1990 to give a more historical perspective.

sources (including both electricity-only and combined heat and power (CHP) plants) such as from combustible fuels, nuclear, hydro, wind, and solar;

(e) The heat produced (from both heat-only and CHP plants) from combustible fuels, geothermal, solar thermal, nuclear, chemical heat, heat pumps and electric boilers, and direct use of solar thermal and geothermal.

The information contained in the *Yearbook* is also available in electronic format<sup>5</sup>. Requests for information should be directed to United Nations Publications at: [order@un.org](mailto:order@un.org).

Acknowledgement is due to the following specialized and intergovernmental agencies whose publications have been utilized in supplementing our statistics: African Energy Commission (AFREC), Asia-Pacific Economic Cooperation (APEC), Food and Agriculture Organization of the United Nations (FAO), International Atomic Energy Agency (IAEA), International Energy Agency of the Organisation

for Economic Co-operation and Development (IEA/OECD), International Renewable Energy Agency (IRENA), International Sugar Organization (ISO), Organization of Arab Petroleum Exporting Countries (OAPEC), Organization of the Petroleum Exporting Countries (OPEC), Organización Latinoamericana de Energía (OLADE), Statistical Office of the European Union (Eurostat), World Energy Council (WEC). Acknowledgement is also made to governmental, energy and statistical authorities of the Member States which have been cooperative in providing data.

The annual energy data are being collected and processed by the Energy Statistics Section of UNSD, headed by Mr. Leonardo Souza. The processing of the energy data and preparation for publication was carried out by Ms. Agnieszka Koscielniak, Mr. Man Soni, Ms. Costanza Giovannelli, Ms. Peng Guo and Mr. Graham Osborn.

Enquiries, comments and suggestions for improving this publication are welcome and should be addressed to: [energy\\_stat@un.org](mailto:energy_stat@un.org).

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<sup>5</sup> For details, see [unstats.un.org/unsd/energystats/pubs/yearbook/](http://unstats.un.org/unsd/energystats/pubs/yearbook/)

## ABBREVIATIONS AND SYMBOLS

The following symbols and abbreviations have been used:

|                    |   |
|--------------------|---|
| cSt                | centistoke  |
| m <sup>3</sup>     | cubic metre   |
| °C                 | degree Celsius                                      |
| GJ                 | gigajoule (10 <sup>9</sup> joules)                  |
| GWh                | gigawatt-hour (10 <sup>6</sup> kWh)                 |
| IRES               | International Recommendations for Energy Statistics |
| kcal               | kilocalorie   |
| kg                 | kilogramme  |
| kg/cm <sup>2</sup> | kilogramme per square centimetre                    |
| kJ                 | kilojoule (10 <sup>3</sup> joules)                  |
| kWh                | kilowatt-hour                                       |
| LPG                | liquefied petroleum gas                             |
| mg/g               | milligramme per gramme                              |
| MJ                 | megajoule (10 <sup>6</sup> joules)                  |
| MW                 | megawatt  |
| NGL                | natural gas liquids                                 |
| PJ                 | petajoule (10 <sup>15</sup> joules)                 |
| t                  | metric ton  |
| TCE                | ton of coal equivalent                              |
| TJ                 | terajoule (10 <sup>12</sup> joules)                 |
| *                  | estimate by the United Nations Statistics Division  |
| ..                 | data not applicable or not available                |



# ENERGY PRODUCT DEFINITIONS

This section provides definitions of energy products utilized in the publication. These definitions correspond to SIEC. Some tables may include names or concepts not included in these product definitions. See the specific table's notes for how its product definitions relate to SIEC definitions.

## SOLID FOSSIL FUELS

**Hard coal** – Coals with a gross calorific value (moist, ash-free basis) which is not less than 24 MJ/kg or which is less than 24 MJ/kg provided that the coal has a vitrinite mean random reflectance greater than or equal to 0.6 per cent. Hard coal comprises anthracite and bituminous coals.

**Brown coal** – Coals with a gross calorific value (moist, ash-free basis) less than 24 MJ/kg and a vitrinite mean random reflectance less than 0.6 per cent. Brown coal comprises sub-bituminous coal and lignite.

**Peat** – A solid fuel formed from the partial decomposition of dead vegetation under conditions of high humidity and limited air access (initial stage of coalification). It is available in two forms for use as a fuel, sod peat and milled peat. Only peat used as fuel is included.

**Patent fuel** – A composition fuel made by moulding hard coal fines into briquette shapes with the addition of a binding agent such as pitch.

**Brown coal briquettes** – A composition fuel made of brown coal produced by briquetting under high pressure with or without the addition of a binding agent. Either sub-bituminous coal or lignite may be used, including dried lignite fines and dust.

**Peat products** – This includes products such as peat briquettes derived directly or indirectly from sod peat and milled peat.

**Coal coke** – This group includes the solid, cellular, infusible material remaining after the carbonisation of certain coals. Various cokes are defined according to the type of coal carbonised and their conditions of carbonisation or use: coke oven coke, gas coke, coke breeze and semi cokes. For collection purposes coke breeze and

semi cokes are included with coke oven coke.

**Coal tar** – The liquid by-product of the carbonization of coal in coke ovens. Coal tar may be separated by distillation into several liquid products which may be used for pharmaceutical or wood preservative purposes.

**Other coal products** – coal products not elsewhere specified (if any).

**Oil shale** – A sedimentary rock which contains organic matter in the form of kerogen. Kerogen is a waxy hydrocarbon-rich material regarded as a precursor of petroleum. Oil shale may be burned directly or processed by heating to extract shale oil. Note that this product was formerly included under Lignite by the IEA.

## LIQUID FOSSIL FUELS

**Conventional crude oil** – A mineral oil of fossil origin extracted by conventional means from underground reservoirs, and comprises liquid or near-liquid hydrocarbons and associated impurities such as sulphur and metals. Conventional crude oil exists in the liquid phase under normal surface temperature and pressure, and usually flows to the surface under the pressure of the reservoir. This is termed "conventional" extraction. Crude oil includes condensate from condensate fields, and "field" or "lease" condensate extracted with the crude oil.

The various crude oils may be classified according to their sulphur content ("sweet" or "sour") and API gravity ("heavy" or "light"). There are no rigorous specifications for the classifications, but a heavy crude oil may be assumed to have an API gravity of less than 20° and a sweet crude oil may be assumed to have less than 0.5% sulphur content. For simplicity, this publication often refers to conventional crude oil as simply crude oil.

**Natural gas liquids (NGL)** – Natural gas liquids are a mixture of ethane, propane, butane (normal and iso), (iso) pentane and a few higher alkanes collectively referred to as pentanes plus.

NGL are produced in association with oil or natural gas. They are removed in field facilities or

gas separation plants before sale of the gas. All of the components of NGL except ethane are either liquid at the surface or are liquefied for disposal.

The definition given above is the most commonly used. However, there is some use of terms based on the vapour pressure of the components which are liquid at the surface or can be easily liquefied. The three resulting groups are in order of increasing vapour pressure: condensates, natural gasoline and liquefied petroleum gas.

NGL may be distilled with crude oil in refineries, blended with refined oil products or used directly. NGL differs from LNG (liquefied natural gas) which is obtained by liquefying natural gas from which the NGL has been removed.

**Additives and oxygenates** – Compounds added to or blended with oil products to modify their properties (octane, cetane, cold properties, etc.). Examples are: (a) oxygenates such as alcohols (methanol, ethanol) and ethers [MTBE (methyl tertiary butyl ether), ETBE (ethyl tertiary butyl ether), TAME (tertiary amyl methyl ether)]; (b) esters (e.g., rapeseed or dimethylester, etc.); and (c) chemical compounds (such as TML, TEL and detergents). Some additives/oxygenates may be derived from biomass while others may be of fossil hydrocarbon origin.

**Other hydrocarbons** – This includes non-conventional oils and hydrogen. Non-conventional oils refer to oils obtained by non-conventional production techniques, that is oils which are extracted from reservoirs containing extra heavy oils or oil sands which need heating or treatment (e.g., emulsification) in situ before they can be brought to the surface for refining/processing. They also include the oils extracted from oil sands, extra heavy oils, coal and oil shale which are at, or can be brought to, the surface without treatment and require processing after mining (ex situ processing). Non-conventional oils may also be produced from natural gas.

The oils may be divided into two groups: (i) oils for transformation (e.g., synthetic crudes extracted from extra heavy oils, oil sands, coal and oil shale); and (ii) oils for direct use (e.g., emulsified oils such as orimulsion and GTL liquids).

**Oil products** – Products obtained from crude oil, non-conventional oils or gases from oil and gas fields. They may be produced through the refining of conventional crude and non-conventional oils or during the separation of natural gas from gases extracted from oil or gas fields. This category includes Aviation gasoline, Motor gasoline, Gasoline-type jet fuel, Kerosene-type jet fuel, Other kerosene, Gas/diesel oil, Fuel oil, LPG, Feedstocks, Naphtha, White spirit and SBP, Lubricants, Bitumen, Paraffin waxes, Petroleum coke, Refinery gas, Ethane, and Other oil products.

**Aviation gasoline** – Gasoline prepared especially for aviation piston engines with additives which assure performance under flight conditions. Aviation gasolines are predominantly alkylates (obtained by combining C4 and C5 isoparaffins with C3, C4 and C5 olefins) with the possible addition of more aromatic components including toluene. The distillation range is 25°C to 170°C.

**Motor gasoline** – A mixture of some aromatics (e.g., benzene and toluene) and aliphatic hydrocarbons in the C5 to C12 range. The distillation range is 25°C to 220°C.

Additives are blended to improve octane rating, improve combustion performance, reduce oxidation during storage, maintain cleanliness of the engine and improve capture of pollutants by catalytic converters in the exhaust system. Motor gasoline may also contain biogasoline products when blended.

**Gasoline-type jet fuel** – Light hydrocarbons for use in aviation turbine power units, distilling between 100°C and 250°C. They are obtained by blending kerosene and gasoline or naphtha in such a way that the aromatic content does not exceed 25 per cent in volume, and the vapour pressure is between 13.7 kPa and 20.6 kPa. Gasoline-type jet fuel is also known as “aviation turbine fuel”.

**Kerosene** – Mixtures of hydrocarbons in the range C9 to C16 and distilling over the temperature interval 145°C to 300°C, but not usually above 250°C and with a flash point above 38°C.

The chemical compositions of kerosenes

depend on the nature of the crude oils from which they are derived and the refinery processes that they have undergone. Kerosenes obtained from crude oil by atmospheric distillation are known as straight-run kerosenes. Such streams may be treated by a variety of processes to produce kerosenes that are acceptable for blending as jet fuels.

Kerosenes are primarily used as jet fuels. They are also used as domestic heating and cooking fuels, and as solvents. Kerosenes may include components or additives derived from biomass when blended.

**Kerosene-type jet fuel** – A blend of kerosenes suited to flight conditions with particular specifications, such as freezing point.

The specifications are set down by a small number of national standards committees, most notably ASTM (U.S.), MOD (UK), GOST (Russia).

**Other kerosene** – Kerosene which is used for heating, cooking, lighting, solvents and internal combustion engines. Other names for this product are burning oil, vaporizing oil, power kerosene and illuminating oil.

**Gas oil/diesel oil** – Gas oils are middle distillates, predominantly of carbon number range C11 to C25 and with a distillation range of 160°C to 420°C. The principal marketed products are fuels for diesel engines (diesel oil), heating oils and marine fuel. Gas oils are also used as middle distillate feedstock for the petrochemical industry and as solvents. Also included here is heavy gasoil, which is a mixture of predominantly gas oil and fuel oil which distills in the range of approximately 380°C to 540°C.

**Fuel oil** – Comprises residual fuel oil and heavy fuel oil. Residual fuel oils have a distillation range of 350°C to 650°C and a kinematic viscosity in the range 6 to 55 cSt at 100°C. Their flash point is always above 60°C and their specific gravity is above 0.95. Heavy fuel oil is a general term describing a blended product based on the residues from various refinery processes. Other names commonly used to describe fuel oil include: bunker fuel, bunker C, fuel oil No. 6, industrial fuel oil, marine fuel oil and black oil.

Residual and heavy fuel oil are used in medium to large industrial plants, marine

applications and power stations in combustion equipment such as boilers, furnaces and diesel engines. Residual fuel oil is also used as fuel within the refinery.

**Liquefied petroleum gases (LPG)** – LPG refers to liquefied propane (C<sub>3</sub>H<sub>8</sub>) and butane (C<sub>4</sub>H<sub>10</sub>) or mixtures of both. Commercial grades are usually mixtures of the gases with small amounts of propylene, butylene, isobutene and isobutylene stored under pressure in containers.

The mixture of propane and butane used varies according to purpose and season of the year. The gases may be extracted from natural gas at gas separation plants or at plants re-gasifying imported liquefied natural gas. They are also obtained during the refining of crude oil. LPG may be used for heating and as a vehicle fuel.

See also the definition for natural gas liquids. Certain oil field practices also use the term LPG to describe the high vapour pressure components of natural gas liquids.

**Ethane** – A naturally straight-chain hydrocarbon (C<sub>2</sub>H<sub>6</sub>). Ethane is obtained at gas separation plants or from the refining of crude oil. It is a valuable feedstock for petrochemical manufacture.

**Refinery gas** – Includes a mixture of non-condensable gases mainly consisting of hydrogen, methane, ethane and olefins obtained during distillation of crude oil or treatment of oil products (e.g., cracking) in refineries or from nearby petrochemical plants. It is used mainly as a fuel within the refinery.

**Feedstocks** – This includes refinery feedstocks, i.e. oils or gases from crude oil refining or the processing of hydrocarbons in the petrochemical industry which are destined for further processing in the refinery excluding blending. Typical feedstocks include naphthas, middle distillates, pyrolysis gasoline and heavy oils from vacuum distillation and petrochemical plants.

**Naphtha** – Light or medium oils distilling between 30°C and 210°C which do not meet the specification for motor gasoline. Different naphthas are distinguished by their density and the content of paraffins, isoparaffins, olefins, naphthenes and aromatics. The main uses for naphthas are as feedstock for high octane

gasolines and the manufacture of olefins in the petrochemical industry.

**White spirit and SBP industrial spirits –**

White spirit and special boiling point industrial spirits (SBP) are refined distillate intermediates with a distillation in the naphtha/kerosene range. They are mainly used for non-fuel purposes and sub-divided as: (a) white spirit - an industrial spirit with a flash point above 30°C and a distillation range of 135°C to 200°C; and (b) industrial spirit (SBP) - light oils distilling between 30°C and 200°C.

There are 7 or 8 grades of industrial spirits, depending on the position of the cut in the distillation range. The grades are defined according to the temperature difference between the 5 per cent and 90 per cent volume distillation points (which is not more than 60°C). White spirit and Industrial spirits are mostly used as thinners and solvents.

**Lubricants –** Oils, produced from crude oil, for which the principal use is to reduce friction between sliding surfaces and during metal cutting operations.

Lubricant base stocks are obtained from vacuum distillates which result from further distillation of the residue from atmospheric distillation of crude oil. The lubricant base stocks are then further processed to produce lubricants with the desired properties.

**Bitumen –** A solid, semi-solid or viscous hydrocarbon with a colloidal structure, being brown to black in color. It is obtained as a residue in the distillation of crude oil and by vacuum distillation of oil residues from atmospheric distillation. It should not be confused with the non-conventional primary extra heavy oils which may also be referred to as bitumen.

In addition to its major use for road pavements, bitumen is also used as an adhesive, a waterproofing agent for roof coverings and as a binder in the manufacture of patent fuel. It may also be used for electricity generation in specially designed power plants.

Bitumen is also known in some countries as asphalt but in others asphalt describes the mixture of bitumen and stone aggregate used for road pavements.

**Paraffin waxes –** Residues extracted when dewaxing lubricant oils. The waxes have a crystalline structure which varies in fineness according to the grade, and are colourless, odourless and translucent, with a melting point above 45°C.

Paraffin waxes are also known as “petroleum waxes”.

**Petroleum coke –** Petroleum coke is a black solid obtained mainly by cracking and carbonizing heavy hydrocarbon oils, tars and pitches. It consists mainly of carbon (90 to 95 per cent) and has a low ash content.

The two most important categories are "green coke" and "calcined coke".

Green coke (raw coke) is the primary solid carbonization product from high boiling hydrocarbon fractions obtained at temperatures below 630°C. It contains 4-15 per cent by weight of matter that can be released as volatiles during subsequent heat treatment at temperatures up to approximately 1330°C.

Calcined coke is a petroleum coke or coal-derived pitch coke obtained by heat treatment of green coke to about 1330°C. It will normally have a hydrogen content of less than 0.1 per cent by weight.

In many catalytic operations (e.g., catalytic cracking) carbon or catalytic coke is deposited on the catalyst, thus deactivating it. The catalyst is reactivated by burning off the coke which is used as a fuel in the refining process. The coke is not recoverable in a concentrated form.

**Other oil products –** Products (including partly refined products) from the refining of crude oil and feedstocks which are not specified above. These products will include basic chemicals and organic chemicals destined for use within the refinery or for sale to or processing in the chemical industry such as propylene, benzene, toluene and xylene.

## **GASEOUS FOSSIL FUELS**

**Natural gas –** A mixture of gaseous hydrocarbons, primarily methane, but generally also including ethane, propane and higher

hydrocarbons in much smaller amounts and some non-combustible gases such as nitrogen and carbon dioxide.

The majority of natural gas is separated from both "non-associated" gas originating from fields producing hydrocarbons only in gaseous form, and "associated" gas produced in association with crude oil.

The separation process produces natural gas by removing or reducing the hydrocarbons other than methane to levels which are acceptable in the marketable gas. The natural gas liquids (NGL) removed in the process are distributed separately.

Natural gas also includes methane recovered from coal mines (colliery gas) or from coal seams (coal seam gas) and shale gas. When distributed it may also contain methane from anaerobic fermentation or the methanation of biomass.

Natural gas may be liquefied (LNG) by reducing its temperature in order to simplify storage and transportation when production sites are remote from centres of consumption and pipeline transportation is not economically practicable.

**Gas works gas (and other manufactured gases for distribution)** – This includes gases obtained from the carbonisation or gasification of carbonaceous material of fossil or biomass origins in Gas Works. The gases comprise: (a) gases obtained from carbonisation or gasification of coals, cokes, biomass or waste; and (b) substitute natural gas (a methane-rich gas) made from synthesis gas.

Synthesis gas is a mixture of mainly hydrogen and carbon monoxide obtained by cracking hydrocarbons with high temperature steam.

**Coke oven gas** – A gas produced from coke ovens during the manufacture of coke oven coke.

**Blast furnace gas** – The by-product gas of blast furnace operation consisting mainly of nitrogen, carbon dioxide and carbon monoxide. The gas is recovered as it leaves the furnace. Its calorific value arises mainly from the carbon monoxide produced by the partial combustion of coke and other carbon bearing products in the blast furnace. It is used to heat blast air and as a

fuel in the iron and steel industry. It may also be used by other nearby industrial plants. Note that where carbonised biomass (e.g, charcoal or animal meal) is used in blast furnaces, part of the carbon supply may be considered renewable.

**Other recovered gases** - Combustible gases of solid carbonaceous origin recovered from manufacturing and chemical processes not elsewhere defined. Examples of fuel gas production from metals and chemicals processing are in the production of zinc, tin, lead, ferroalloys, phosphorus and silicon carbide.

## BIOFUELS AND WASTE

**Fuelwood, wood residues and by-products** – Fuelwood or firewood (in log, brushwood, pellet or chip form) obtained from natural or managed forests or isolated trees. Also included are wood residues used as fuel and in which the original composition of wood is retained. Charcoal and black liquor are excluded.

**Bagasse** – The fuel obtained from the fibre which remains after juice extraction in sugar cane processing. It is often used as a fuel within the sugar milling industry.

**Charcoal** – The solid residue from the carbonisation of wood or other vegetal matter through slow pyrolysis.

**Animal waste** – Excreta of animals, meat and fish residues which, when dry, are used directly as a fuel.

This excludes waste used in anaerobic fermentation plants. Fuel gases from these plants are included under biogases.

**Vegetal waste** – Refers to SIEC's 'Other vegetal materials and residues', which are solid primary biofuels not specified elsewhere, including straw, vegetable husks, ground nut shells, pruning brushwood, olive pomace and other wastes arising from the maintenance, cropping and processing of plants.

**Municipal waste** – Household waste and waste from companies and public services that resembles household waste and which is collected at installations specifically designed for the disposal of mixed wastes with recovery of combustible liquids, gases or heat.

Municipal wastes can be divided into renewable and non-renewable fractions.

**Industrial waste** – Non-renewable waste which is combusted with heat recovery in plants other than those used for the incineration of municipal waste.

Examples are used tires, specific residues from the chemical industry and hazardous wastes from health care. Combustion includes co-firing with other fuels.

The renewable portions of industrial waste combusted with heat recovery are classified according to the biofuels which best describe them.

**Black liquor** – The alkaline-spent liquor obtained from the digesters during the production of sulphate or soda pulp required for paper manufacture. The lignin contained in the liquor burns to release heat when the concentrated liquor is sprayed into a recovery furnace and heated with hot gases at 900°C. Black liquor is used as a fuel in the pulping process.

**Biogasoline** – Liquid fuels derived from biomass and used in spark-ignition internal combustion engines.

Common examples are: bioethanol (including both hydrous and anhydrous ethanol); biomethanol; biobutanol; bio ETBE (ethyl-tertio-butyl-ether); and bio MTBE (methyl-tertio-butyl-ether). Biogasoline may be blended with petroleum gasoline or used directly in engines. The blending may take place in refineries or at or near the point of sale.

**Biodiesels** – Liquid biofuels derived from biomass and used in diesel engines.

Biodiesels obtained by chemical modification are a linear alkyl ester made by transesterification of vegetable oils or animal fats with methanol. The transesterification distinguishes biodiesel from straight vegetable and waste oils. Biodiesel has a flash point of around 150°C and a density of about 0.88 kg/litre. Biological sources of biodiesel include, but are not limited to, vegetable oils made from canola (rapeseed), soybeans, corn, oil palm, peanut or sunflower. Some liquid biofuels (straight vegetable oils) may be used without chemical modification and their use usually

requires modification of the engine.

A further category of diesel fuels can be produced by a range of thermal processes (including for example gasification followed by Fischer Tropsch synthesis, pyrolysis followed by hydrogenation, or conversion of sugar to hydrocarbons using microorganisms (e.g. yeast)). A wide range of biomass feedstocks, including cellulosic materials and algal biomass could be used in such processes.

Biodiesels may be blended with petroleum diesel or used directly in diesel engines.

**Bio jet kerosene** – Liquid biofuels derived from biomass and blended with or replacing jet kerosene. Bio jet kerosene can be produced by a range of thermal processes (including for example gasification followed by Fischer-Tropsch synthesis, pyrolysis followed by hydrogenation, or conversion of sugar to hydrocarbons using microorganisms (e.g. yeast)). A wide range of biomass feedstocks, including cellulosic materials and algal biomass could be used in such processes.

**Other liquid biofuels** – Includes liquid biofuels not elsewhere specified.

**Biogases** – Gases arising from the anaerobic fermentation of biomass and the gasification of solid biomass (including biomass in wastes).

The biogases from anaerobic fermentation are composed principally of methane and carbon dioxide and comprise landfill gas, sewage sludge gas and other biogases from anaerobic fermentation.

Biogases can also be produced from thermal processes (by gasification or pyrolysis) of biomass and are mixtures containing hydrogen and carbon monoxide (usually known as syngas) along with other components. These gases may be further processed to modify their composition and can be further processed to produce substitute natural gas.

The gases are divided into two groups according to their production: biogases from anaerobic fermentation and biogases from thermal processes.

Biogases are used mainly as a fuel but can

be used as a chemical feedstock.

## ELECTRICITY AND HEAT

**Electricity** –The transfer of energy through the physical phenomena involving electric charges and their effects when at rest and in motion.

Electricity can be generated through different processes such as: the conversion of energy contained in falling or streaming water, wind or waves; the direct conversion of solar radiation through photovoltaic processes in semiconductor devices (solar cells); or by the combustion of fuels.

Electricity production in this Yearbook refers to gross production, which is the sum of the electrical energy production by all the generating units/installations concerned (including pumped storage) measured at the output terminals of the main generators.

*Editorial note:* as of the 2012 edition of the Yearbook, Table 1 changed in scope as described in the introduction. The total energy supply figure is now consistent with energy balances as defined within IRES and published in the *Energy Balances* and *Electricity Profiles*<sup>6</sup> that are complementary to this publication. As such, see the changes in presentation for electricity from non-combustible fuels described below under General Notes.

**Primary electricity** refers to electrical energy from hydro, solar photovoltaics, wind, tide, wave and ocean sources.

**Secondary electricity** is defined as electricity derived from a product already accounted for within energy statistics. This includes electricity generated from combustible fuels, in addition to electricity coming from solar heat, nuclear heat, geothermal heat and heat from chemical sources.

**Main activity producers** – These are

enterprises which produce electricity or heat as their principal activity. Formerly known as public utilities, these enterprises may be privately or publicly owned companies.

**Autoproducers (electricity)** – These are enterprises which produce electricity but for whom the production is not their principal activity.

**Autoproducers (heat)** – These are enterprises which produce heat for sale but for whom the production is not their principal activity. Deliveries of fuels for heat generated by an establishment for its own purposes are classified within the part of final consumption where they are consumed, and not as transformation inputs.

**Heat** – The energy obtained from the translational, rotational and vibrational motion of the constituents of matter, as well as changes in its physical state.

Heat can be produced by different production processes, both primary and secondary. It is usually sold in the form of steam or hot water, and for the purposes of energy statistics it is important to note that heat only represents quantities of energy for sale (or generated and consumed directly by direct use of solar thermal or geothermal). This means that any quantities “generated” at an end-use site (for example through the combustion of coal to power a boiler, or an electric filament heating a kettle) are not considered within the scope of heat production.

In Tables 1 and 2, which follow energy balance methodology, the heat column includes primary heat from sources such as nuclear, solar thermal and geothermal which are used to generate electricity. These quantities are not taken into account in Table 34.

**Uranium production** – Comprises the U content of uranium ores and concentrates intended for treatment for uranium recovery.

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<sup>6</sup> Statistical Papers, Series W (United Nations publication).

# ENERGY FLOW DEFINITIONS

**Production** is defined as the capture, extraction or manufacture of fuels or energy in forms which are ready for general use. In energy statistics, two types of production are distinguished, primary and secondary.

Primary production is the capture or extraction of fuels or energy from natural energy flows, the biosphere and natural reserves of fossil fuels within the national territory in a form suitable for use. Inert matter removed from the extracted fuels and quantities reinjected, flared or vented are not included. The resulting products are referred to as “primary” products.

Secondary production is the manufacture of energy products through the process of transformation of primary fuels or energy. The quantities of secondary fuels reported as production include quantities lost through venting and flaring during and after production. In this manner, the mass, energy and carbon within the primary source(s) from which the fuels are manufactured may be balanced against the secondary fuels produced. Fuels, electricity and heat produced are usually sold but may be partly or entirely consumed by the producer (but see the definition of autoproducer heat plants for an important exception.)

When considering complete energy balances (such as in Table 1, where total energy supply is displayed), or indeed adding together a mix of primary and secondary fuels (like Table 4), the distinction between primary and secondary production is crucial. Within a complete energy balance (or a coal table showing both primary and secondary energy), only primary energy is shown to avoid double counting of quantities transformed into secondary products. For the product-specific tables however, this distinction is not necessary as double counting does not apply, and so primary and/or secondary production is included under production to give a complete idea of the “supply” of that product. See individual table notes for details.

**Imports** of energy products comprise all fuel and other energy products entering the national territory. Goods simply being transported through a country (goods in transit) and goods temporarily admitted are excluded but re-imports, which are domestic goods exported but subsequently

readmitted, are included. The bunkering of fuel outside the reference territory by national merchant ships and civil aircraft engaged in international travel is excluded from imports. Fuels delivered to national merchant ships and civil aircraft which are outside of the national territory and are engaged in international travel should be classified as “International Marine” or “Aviation Bunkers”, respectively, in the country where such bunkering is carried out. Note that the “country of origin” of energy products should be recorded as a country from which goods were imported.

**Exports** of energy products comprise all fuel and other energy products leaving the national territory with the exception that exports exclude quantities of fuels delivered for use by merchant (including passenger) ships and civil aircraft, of all nationalities, during international transport of goods and passengers. Goods simply being transported through a country (goods in transit) and goods temporarily withdrawn are excluded but re-exports, foreign goods exported in the same state as previously imported, are included. Fuels delivered to foreign merchant ships and civil aircraft engaged in international travel are classified as “International Marine” or “Aviation Bunkers”, respectively. Note that “country of destination” of energy products (that is country of the last known destination as it is known at the time of exportation) should be recorded as a country to which these products are exported to.

For electricity, trade data include “goods in transit”, i.e. electricity transmitted through the country from one neighbour to another, as there is no practical way of discerning which quantities are re-exported and which are consumed by the transit country.

**International Marine Bunkers** are quantities of fuels delivered to merchant (including passenger) ships, of any nationality, for consumption during international voyages transporting goods or passengers. International voyages take place when the ports of departure and arrival are in different national territories. Fuels delivered for consumption by ships during domestic transportation, fishing or military uses are not included here. For the purposes of energy statistics International Marine Bunkers are not included in exports.



**International Aviation Bunkers** are quantities of fuels delivered to civil aircraft, of any nationality, for consumption during international flights transporting goods or passengers. International flights take place when the ports of departure and arrival are in different national territories. Fuels delivered for consumption by aircraft undertaking domestic or military flights are not included here. For the purposes of energy statistics International Aviation Bunkers are not included in exports.

**Stocks** – For the purposes of energy statistics, stocks are quantities of energy products that are held on the national territory and can be used to: (a) maintain service under conditions where supply and demand are variable in their timing or amount due to normal market fluctuations, or (b) supplement supply in the case of a supply disruption. Stocks used to manage a supply disruption may be called "strategic" or "emergency" stocks and are often held separately from stocks designed to meet normal market fluctuations. **Stock changes** are defined as the increase (stock build) or decrease (stock draw) in the quantity of stock over the reporting period and are thus calculated as the difference between the

closing and opening stocks.

**Energy supply** – is defined as energy production plus imports minus exports minus international marine bunkers minus international aviation bunkers minus stock changes. Depending on the table in this Yearbook, production can refer to either primary, secondary, or both primary and secondary production (see the note under production above).

**Energy industries own use** refers to consumption of fuels and energy for the direct support of the production, and preparation for use of fuels and energy. Quantities of fuels which are transformed into other fuels or energy are not included here but within the transformation use. Neither are quantities which are used within parts of the energy industry not directly involved in the activities listed in the definition. These quantities are reported within final consumption.

**Final Consumption** refers to all fuel and energy that is delivered to users for both their energy and non-energy uses which do not involve a transformation process.

# CAPACITIES AND OTHER DEFINITIONS

## CAPACITIES

**Refinery capacity** is the theoretical maximum capacity of crude oil refineries available for operation at the end of the reference year.

**Net maximum electrical capacity** is the maximum active power that can be supplied continuously, with all plants running, at the point of outlet (i.e., after taking the power supplies for the station auxiliaries and allowing for the losses in those transformers considered integral to the station). This assumes no restriction of interconnection to the network. Does not include overload capacity that can only be sustained for a short period of time (e.g., internal combustion engines momentarily running above their rated capacity). The net maximum electricity-generating capacity represents the sum of all individual plants' maximum capacities available to run continuously throughout a prolonged period of operation in a day. For annual data, the net maximum electrical capacity is considered as measured at the end of the reference year.

## ENERGY RESOURCES AND RESERVES<sup>7</sup>

### Hard Coal, Brown coal and Peat

**Proved amount in place** is the resource remaining in known deposits that has been carefully measured and assessed as exploitable under present and expected local economic conditions with existing available technology.

**Proved recoverable reserves** are the tonnage within the proved amount in place that can be recovered in the future under present and expected local economic conditions with existing available technology.

**Estimated additional amount in place** is the indicated and inferred tonnage additional to the proved amount in place that is of foreseeable economic interest. It includes estimates of amounts which could exist in unexplored extensions of known deposits or in undiscovered deposits in known coal-bearing areas, as well as amounts inferred through knowledge of

favourable geological conditions. Speculative amounts are not included.

### Crude Oil and Natural Gas Liquids

**Proved recoverable reserves** are the quantity within the proved amount in place that can be recovered in the future under present and expected local economic conditions with existing available technology. Proved amount in place is the resource remaining in known natural reservoirs that has been carefully measured and assessed as exploitable under present and expected local economic conditions with existing available technology.

The **ratio of crude oil reserves to production (R/P ratio)** is used to show the length of time those reserves would last in years if production continued at the then-current level and there were no further increases in the proved recoverable reserves. The ratio is calculated by dividing the proved recoverable crude oil and NGL reserves (which for the most part refer to reserves at the end of 2014) by the production. These R/P ratios should be viewed with caution. The definition used for proved recoverable reserves is very restrictive and confined to those known reserves which can be recovered with reasonable certainty under existing economic conditions. The R/P ratios, therefore, can frequently give a very pessimistic impression of the expected life of a country's reserves. In addition, for some of those countries whose R/P ratios appear very large, it can reasonably be assumed that the figures for proved recoverable reserves include some unproved reserves.

### Oil Shale and Bituminous Sands

**Proved recoverable reserves** are the amount, expressed as tonnage of recoverable synthetic oil that has been both carefully measured and has also been assessed as exploitable under present and expected local economic conditions with existing available technology.

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<sup>7</sup>World Energy Resources 2016.  
World Energy Council (WEC)

## Natural Gas

**Proved recoverable reserves** are the volume within the proved amount in place that can be recovered in the future under present and expected local economic conditions with existing available technology.

## Uranium

**Reasonably assured resources** refer to recoverable uranium that occurs in known mineral deposits of delineated size, grade and configuration such that the quantities which could be recovered within the given production cost ranges with currently proven mining and processing technology can be specified. Estimates of tonnage and grade are based on specific sample data and measurements of the deposits and on knowledge of deposit characteristics.

**Inferred Resources** refer to recoverable uranium (in addition to reasonably assured resources) that is inferred to occur, based on direct geological evidence, in extensions of well-explored deposits and in deposits in which geological continuity has been established, but where specific data and measurements of the deposits and knowledge of their characteristics are considered to be inadequate to classify the resource as reasonably assured resources.

## Hydropower

**Gross theoretical capability** is the annual energy potentially available in the country if all natural flows were turbinized down to sea level or to the water level of the border of the country (if the water course extends into another country) with 100% efficiency from the machinery and driving water-works. Unless otherwise stated, the figures have been estimated on the basis of atmospheric precipitation and water runoff.

# GENERAL NOTES

## Calculation of primary energy equivalent for electricity and heat

As mentioned previously, the publication now treats electricity and heat consistently with IRES energy balances. Notably, this leads to the following notional efficiencies applying to electricity and heat generation (to back calculate the primary energy):

- 100% for electricity from hydro, wind, tide, wave, ocean and solar PV;
- 33% for electricity from nuclear heat or solar thermal;
- 100% for solar thermal heat;
- 50% for heat produced from geothermal heat;
- 10% for electricity from geothermal heat.

## Consumption

Consumption throughout the *Yearbook* is defined consistently with the definition of final consumption in IRES, namely the sum of flows reflecting energy consumption by energy consumers, as well as non-energy use of energy products. As such, the publication should no longer have the same issues with negative consumption figures that previous versions did, when consumption was calculated based on supply flows and as such negative figures could appear for countries that exported secondary products.

## Negative Supply

Negative supply can represent a residual or statistical difference between production and exports when a particular product is mainly exported, or when a transferred product is subsequently exported.

## Time Period

The period to which the data refer is the calendar year, with the exception of the data of the following countries which refer to the fiscal year:

Afghanistan and Iran (Islamic Rep. of) - beginning 21 March of the year stated;

Australia, Bangladesh, Bhutan, Egypt (for the latter two, electricity only), Nepal - ending June of the year stated;

Pakistan - starting July of the year stated

India, Japan and Myanmar - beginning April of the year stated.

## Trade data

Figures displayed for international trade by partner country in Tables 6, 15 and 28 are based on data from the International Energy Agency and from the United Nations Statistics Division COMTRADE (Commodity Trade Statistics). The total of all exports will likely differ from the figures given in other tables because not all of the importers are included, and also possibly because of definitional differences between data sources.

## Per Capita Data

Data on a *per capita* basis use population data from the United Nations Population Division as a denominator. These indicators may sometimes show differences for certain years compared to previous versions of this publication, due to revisions made by the Population Division rather than changes to the underlying energy data.

## Coverage

As Table 1 contains data back to 1990, data are included for former countries such as the Union of Soviet Socialist Republics, and older versions of countries such as Ethiopia which have since had territories split from them.

# GEOGRAPHICAL NOTES

**Australia** – Data exclude the overseas territories.

**Bonaire, Sint Eustatius, Saba** – Data prior to 2012 are included in Netherlands Antilles (former).

**China** – Data exclude Hong Kong and Macao Special Administrative Regions (Hong Kong SAR and Macao SAR) and Taiwan Province.

**Curaçao** – Data prior to 2012 are included in Netherlands Antilles (former).

**Czechoslovakia** – prior to 1993, refers to the former Czechoslovakia composed of Czechia and Slovakia.

**Denmark** – Data exclude Greenland and the Danish Faroes.

**France** – Data up to 2010 include Monaco and exclude the following overseas departments and territories: Guadeloupe, French Guiana, Martinique, Mayotte, New Caledonia, French Polynesia, Réunion, Saint Barthélemy, Saint Martin, St. Pierre and Miquelon, and Wallis and Futuna. From 2011 onwards, data include Monaco and the overseas departments (Guadeloupe, French Guiana, Martinique, Mayotte and Réunion), excluding the overseas collectivities: New Caledonia, French Polynesia, Saint Barthélemy, Saint Martin, St. Pierre and Miquelon, and Wallis and Futuna.

**French Guiana** – Data after 2010 are included in France.

**Germany** – Through the accession of the **German Democratic Republic** to the **Federal Republic of Germany** with effect from 3 October 1990, the two German States united to form one sovereign state. Data for 1990 are shown separately for the former states.

**Guadeloupe** – Data after 2010 are included in France.

**Indonesia** – Data include Timor-Leste until 2001.

**Italy** – Data include San Marino and the Holy See.

**Japan** – Data include Okinawa.

**Kuwait** – The data for crude oil production include 50 per cent of the output of the Neutral Zone.

**Martinique** – Data after 2010 are included in France.

**Mayotte** – Data after 2010 are included in France.

**Netherlands** – Data exclude Suriname and the Netherlands Antilles (former).

**Netherlands Antilles (former)** – The country, comprising Bonaire, Curaçao, Saba, Sint Eustatius and Sint Marteen (Dutch part), was dissolved on 10 October 2010. For the purposes of this yearbook, data up to 2011 refer to the former territory of the Netherlands Antilles as it was known prior to 10 October 2010.

**Pacific Islands** – Until 1991, Trust Territory comprising Federated States of Micronesia, Marshall Islands, Northern Mariana Islands and Palau.

**Portugal** – Data include the Azores and Madeira.

**Republic of Moldova** – Data exclude Transnistria and the municipality of Bender.

**Réunion** – Data after 2010 are included in France.

**Saudi Arabia** – Data for crude oil production include 50 per cent of the output of the Neutral Zone.

**Serbia** – Data exclude Kosovo, which is shown separately.

**Serbia and Montenegro** – Data exclude Kosovo from 2000 onwards. As a former country/area, it appears in this edition only in Table 1.

**Sint Maarten (Dutch part)** – Data prior to 2012 are included in Netherlands Antilles (former).

**South Sudan** – Data prior to 2012 are included in Sudan (former).

**Spain** – Data include the Canary Islands.

**Sudan** – Data prior to 2012 are included in Sudan (former).

**Sudan** (former) – South Sudan became an independent state on 9 July 2011. This country represents the whole territory of Sudan as it was on 1 January 2011 for data up to and including 2011.

**Switzerland** – Data include Liechtenstein for oil statistics.

**Ukraine** – The Government of Ukraine has informed the United Nations that it is not in a position to provide statistical data concerning the Autonomous Republic of Crimea and the city of Sevastopol.

**Union of Soviet Socialist Republics** – Referred to as USSR, comprised up to 1990 Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania,

Republic of Moldova, Russian Federation, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

**United Kingdom** – Shipments of coal and oil to Jersey, Guernsey and the Isle of Man from the United Kingdom are not classed as exports. Supplies of coal and oil to these islands are, therefore, included as part of UK supply. Exports of natural gas to the Isle of Man are included with the exports to Ireland.

**United States** – Includes the 50 states and the District of Columbia. Oil statistics as well as coal trade statistics also include Puerto Rico, Guam and the U.S. Virgin Islands.

**Yemen** – On 22 May 1990 **Democratic Yemen** and **Yemen Arab Republic** merged to form a single State. Since that date they have been represented as one Member with the name 'Yemen'. Data for 1990 are shown separately for the former states.

**Yugoslavia** – Data until 1991 refer to the former Socialist Federal Republic of Yugoslavia, namely Bosnia and Herzegovina, Croatia, North Macedonia, Montenegro, Slovenia and Serbia (including Kosovo).

## COUNTRY-SPECIFIC INFORMATION

**Armenia** – Other vegetal material and residues data are available from 2012 onward, Animal waste production and consumption are available from 2015 onward.

**Belarus** – Prior to 2013, kerosene-type jet fuel is reported under other oil products.

**Bulgaria** – Production of crude oil is confidential in 2019.

**China** – Data for other kerosene include kerosene-type jet fuel until 2013.

**China, Hong Kong SAR** – Data on kerosene-type jet fuel include Aviation gasoline and other kerosene.

**China, Macao SAR** – For confidentiality reasons, some data on coal and coal products, petroleum products and biomass are not available.

**Estonia** – There are breaks in the series of coke oven gas and gas works gas, as from 2015 onward these products include the breakdown of oil shale gases. Revisions are pending.

**France** – For confidentiality reasons, the category Blast furnace gas also includes coke oven gas and other recovered gases from 2018 onwards. The information about losses of blast furnace gas, coke oven gas and other recovered gases are available from 2017 onward and reported under “other energy uses”.

**Germany** – Trade data of natural gas up to 2017 include transit volumes.

**Greenland** – Data for kerosene-type jet fuel include other kerosene.

**Ireland** – Due to confidentiality issues patent fuel quantities are aggregated with anthracite figures.

**Israel** – For confidentiality reasons, data on electricity generation from hydro, wind and autoproducers biogases are aggregated under autoproducers wind from 2016 onward.

**Kazakhstan** – The Committee of Statistics of Kazakhstan constantly works on improving data

quality and aligning their data collection and dissemination system with the *International Recommendations for Energy Statistics*.

Coke oven throughputs from 2014 until 2019 are under verification. Natural gas production may include unmarketable gas up to 2018 data, historical revisions are pending.

**Lesotho** – In 2017, the Bureau of Statistics conducted the “Household Energy Consumption Survey 2017” in order to establish a baseline for energy consumption in households. The data on supply and consumption of animal waste and fuelwood for 2017 are based on the results of this new survey. Supply and consumption data of animal waste and fuelwood from 2009 to 2016 were estimated by UNSD to avoid breaks in the time series. Revisions are pending.

**Madagascar** – Data for bitumen include petroleum coke.

**Russian Federation** – The main source of Russian trade statistics is the Federal Customs Service of the Russian Federation. As a result, some of the figures may not include the mutual trade with the Member States of the Eurasian Economic Union. Some of the crucial trade datapoints were estimated by UNSD in order to avoid undercounting on the world level and for international comparison purposes.

Kerosene-type jet fuel statistics are confidential, and as such were estimated by UNSD.

Ethane figures are under investigation and should be treated with caution.

**Senegal** – The sources of trade data for 2017 are the Bureaux de change au Sénégal and this may lead to breaks in time series between 2016 and 2017.

Manantali dam and Félou hydro electricity plants are situated in Mali, but are owned by Mali, Senegal and Mauritania, supplying electricity to these three countries. Following the *International Recommendations for Energy Statistics*, electricity obtained by Senegal from these plants are counted as imports, and not as Senegalese hydro electricity production.

**Tajikistan** – The Agency on Statistics under President of the Republic of Tajikistan is constantly working on increasing transparency and improving the quality of energy data.

Starting with 2016, more granular data on coal consumption are available. This leads to breaks in time series between 2015 and 2016 data.

New information on quantities of fuelwood consumed for energy purposes in Tajikistan are available for 2016 as a result of a survey conducted by the Agency on Statistics, the revised historical time series were estimated by UNSD.

**Ukraine** – For confidentiality reasons, data on the following products (mainly on production) may not be available or may be included with other products: anthracite (included with other bituminous coal), sub-bituminous coal (included with other bituminous coal), lignite (included with peat), patent fuel (included with peat briquettes), aviation gasoline, kerosene-type jet fuel, other

kerosene, petroleum coke, paraffin waxes and white spirit (the latter three included with other oil products), gasworks gas (included with other recovered gases). 2018 and 2019 data on motor gasoline and gas oil/diesel oil production were estimated based on the information found on the Naftogaz website (<https://www.naftogaz.com/>)

**United Kingdom** – Shipments of coal and oil to the Channel Islands and the Isle of Man from the United Kingdom are not classed as exports. Supplies of coal and oil to these islands are, therefore, included as part of UK supply. Exports of natural gas to the Isle of Man are included with the exports to Ireland.

**Uzbekistan** – In 2019, the State Committee of the Republic of Uzbekistan on Statistics released more granular energy supply information, starting with 2013 data and with 2018 data. As a result, there are breaks in time series for many products and flows between 2012 and 2012, and between 2018 and 2019. For historical data, revisions are pending.



## UNITS OF MEASUREMENT AND CONVERSION

Metric units of measurement are used throughout the *Yearbook*. The following tables provide the necessary factors for converting energy data from one measurement system (mass, volume or heat) to another. Unless otherwise stated in the Table Notes, in the case of solid fuels, liquid fuels and gases, the conversions are based on the net calorific value.

The comparison between different fuels is presented in metric tons of coal equivalent (TCE, Table 4), and terajoules (Tables 1, 2, 3 and 12) on the basis of the heat energy which may be obtained from each of them. One TCE is defined as 0.0293076 TJ, or 29307.6 MJ. This is derived from the standard coal equivalency of 7000 calories per gram.

The procedure to convert from original units to the common unit terajoule is as follows:

- Data in original (mass) units multiplied by the factors in Table I will give data in terajoules.

Further, to convert electricity data to terajoules, the following energy equivalence is applied: 1 GWh = 3.6 TJ.

Data on natural gas are collected in terajoules on a gross calorific value basis by convention. When comparing natural gas with other energy sources, it is more appropriate to compare useful energy, and thus the data have been converted to be on a net calorific basis by multiplying them by 0.9.

**Table I**  
**NET CALORIFIC VALUES OF ENERGY PRODUCTS**  
**GJ/ton**

**PRODUCTION, EXPORTS AND CHANGES IN STOCKS**

| <b>HARD COAL</b>                       | <b>2016</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> |
|--|-------------|-------------|-------------|-------------|
| <b>Standard factor</b>                 | <b>25.8</b> | <b>25.8</b> | <b>25.8</b> | <b>25.8</b> |
| Albania                                | 14.3        | 20.4        | 20.4        | 20.4        |
| Argentina                              | 24.7        | 24.7        | 24.7        | 24.7        |
| Australia                              | 27.0        | 27.0        | 26.9        | 26.9        |
| Austria                                | 28.1        | 28.4        | 28.4        | 28.0        |
| Azerbaijan                             | 27.7        | 27.7        | 27.7        | 27.7        |
| Bangladesh                             | 20.9        | 20.9        | 20.9        | 20.9        |
| Belarus                                | 25.2        | 24.5        | 23.7        | 24.7        |
| Belgium                                | 27.8        | 29.4        | 29.4        | 29.5        |
| Bosnia and Herzegovina                 | 29.1        | 29.1        | 29.1        | 29.1        |
| Botswana                               | 23.6        | 23.6        | 23.6        | 23.6        |
| Brazil                                 | 15.8        | 16.8        | 16.7        | 16.7        |
| Bulgaria                               | 28.0        | 25.2        | 27.4        | 26.9        |
| Canada                                 | 25.0        | 25.0        | 25.0        | 25.1        |
| Chile                                  | 16.8        | 17.0        | 16.7        | 16.7        |
| China                                  | 20.8        | 20.8        | 20.8        | 20.8        |
| China, Hong Kong SAR                   | 26.4        | 26.4        | 26.4        | 26.4        |
| Colombia                               | 27.2        | 27.2        | 27.2        | 28.8        |
| Croatia                                | 25.1        | 25.1        | 25.1        | 24.6        |
| Czechia                                | 27.5        | 26.6        | 26.5        | 27.1        |
| Denmark                                | 24.3        | 24.3        | 26.6        | 23.9        |
| Egypt                                  | 25.7        | 25.7        | 25.8        | 25.8        |
| Estonia                                | 27.2        | 22.0        | 22.0        | 24.9        |
| Finland                                | 26.7        | 26.6        | 26.8        | 27.0        |
| Georgia                                | 27.6        | 27.6        | 27.6        | 27.6        |
| Germany                                | 29.1        | 29.1        | 29.1        | 27.4        |
| Greece                                 | 25.5        | 23.3        | 25.9        | 26.1        |
| Guatemala                              | 28.9        | 28.9        | 28.9        | 28.9        |
| Hungary                                | 31.1        | 29.4        | 30.0        | 29.7        |
| Iceland                                | 28.1        | 28.1        | 27.8        | 27.8        |
| India                                  | 16.5        | 16.1        | 16.0        | 15.9        |
| Indonesia                              | 25.9        | 25.9        | 25.9        | 24.5        |
| Iran (Islamic Republic of)             | 27.8        | 28.0        | 28.0        | 28.0        |
| Ireland                                | 25.1        | 25.8        | 25.8        | 26.9        |
| Israel                                 | 24.9        | 24.9        | 24.9        | 24.8        |
| Japan                                  | 21.4        | 24.4        | 23.2        | 23.2        |
| Kazakhstan                             | 18.6        | 18.6        | 18.9        | 17.9        |
| Korea, Democratic People's Republic of | 26.5        | 26.5        | 26.5        | 26.5        |
| Korea, Republic of                     | 18.6        | 19.4        | 19.4        | 19.4        |
| Kyrgyzstan                             | 18.6        | 18.6        | 18.6        | 18.6        |
| Latvia                                 | 23.8        | 24.1        | 24.1        | 24.4        |
| Lithuania                              | 25.1        | 25.1        | 25.1        | 25.1        |
| Malaysia                               | 26.4        | 26.4        | 26.4        | 26.4        |

Table I (continued)

**NET CALORIFIC VALUES OF ENERGY PRODUCTS**  
**GJ/ton**

**PRODUCTION, EXPORTS AND CHANGES IN STOCKS**

| <b>HARD COAL</b>                   | <b>2016</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> |
|------------------------------------|-------------|-------------|-------------|-------------|
| <b>Standard factor</b>             | <b>25.8</b> | <b>25.8</b> | <b>25.8</b> | <b>25.8</b> |
| Mauritius                          | 25.8        | 26.0        | 26.0        | 26.0        |
| Mexico                             | 29.3        | 29.3        | 29.3        | 29.0        |
| Mongolia                           | 28.3        | 28.3        | 28.3        | 28.3        |
| Morocco                            | 27.6        | 27.6        | 27.6        | 27.6        |
| Mozambique                         | 27.0        | 26.9        | 26.8        | 26.7        |
| Myanmar                            | 23.3        | 23.3        | 23.3        | 23.3        |
| Namibia                            | 22.7        | 22.7        | 22.7        | 22.7        |
| Nepal                              | 25.1        | 25.1        | 25.1        | 25.1        |
| Netherlands                        | 25.3        | 26.2        | 26.4        | 26.5        |
| New Caledonia                      | 26.0        | 26.0        | 26.0        | 26.0        |
| New Zealand                        | 30.2        | 29.7        | 28.7        | 28.8        |
| Niger                              | 16.0        | 16.0        | 16.0        | 16.0        |
| North Macedonia                    | 26.1        | 26.2        | 27.0        | 27.0        |
| Pakistan                           | 18.8        | 18.8        | 18.8        | 18.8        |
| Peru                               | 27.3        | 27.1        | 26.9        | 27.5        |
| Poland                             | 24.0        | 23.9        | 23.9        | 23.7        |
| Portugal                           | 24.7        | 24.9        | 24.8        | 24.8        |
| Republic of Moldova                | 24.8        | 25.2        | 24.9        | 24.9        |
| Romania                            | 25.7        | 25.6        | 25.6        | 25.6        |
| Russian Federation                 | 26.1        | 26.1        | 26.1        | 26.1        |
| Serbia                             | 25.7        | 25.6        | 27.5        | 27.7        |
| Slovakia                           | 29.0        | 29.0        | 28.9        | 28.2        |
| Slovenia                           | 27.3        | 27.4        | 27.3        | 27.3        |
| South Africa                       | 23.7        | 23.7        | 23.7        | 23.7        |
| Spain                              | 19.6        | 19.5        | 19.6        | 24.3        |
| Sri Lanka                          | 29.3        | 29.3        | 29.3        | 29.3        |
| Sweden                             | 29.1        | 29.0        | 28.7        | 29.1        |
| Tajikistan                         | 25.0        | 25.1        | 25.0        | 25.0        |
| Thailand                           | 26.4        | 26.4        | 26.4        | 26.4        |
| Turkey                             | 24.2        | 24.6        | 24.9        | 24.7        |
| Ukraine                            | 24.1        | 23.4        | 23.2        | 23.5        |
| United Kingdom                     | 25.1        | 25.1        | 25.1        | 26.8        |
| United States                      | 27.0        | 27.1        | 27.2        | 27.2        |
| Uruguay                            | 25.8        | 25.8        | 25.8        | 25.8        |
| Uzbekistan                         | 18.6        | 18.6        | 18.6        | 18.6        |
| Venezuela (Bolivarian Republic of) | 30.6        | 30.6        | 30.6        | 30.6        |
| Viet Nam                           | 23.4        | 23.4        | 23.4        | 23.4        |
| Zambia                             | 24.7        | 24.7        | 24.7        | 24.7        |
| Zimbabwe                           | 27.0        | 27.0        | 27.0        | 27.0        |

Table I (continued)

**NET CALORIFIC VALUES OF ENERGY PRODUCTS**  
**GJ/ton**

**PRODUCTION, EXPORTS AND CHANGES IN STOCKS**

| <b>BROWN COAL</b>                      | <b>2016</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> |
|--|-------------|-------------|-------------|-------------|
| <b>Standard factor</b>                 | <b>14.0</b> | <b>14.0</b> | <b>14.0</b> | <b>14.0</b> |
| Armenia                                | 7.8         | 7.8         | 11.9        | 11.9        |
| Australia                              | 12.4        | 12.6        | 13.1        | 13.1        |
| Austria                                | 20.5        | 20.3        | 21.1        | 22.1        |
| Belgium                                | 22.0        | 21.8        | 22.6        | 22.6        |
| Bosnia and Herzegovina                 | 10.8        | 10.7        | 10.6        | 10.7        |
| Bulgaria                               | 6.8         | 6.9         | 7.0         | 7.0         |
| Cambodia                               | 19.9        | 19.9        | 19.9        | 19.9        |
| Canada                                 | 16.7        | 16.7        | 16.5        | 16.2        |
| Croatia                                | 16.9        | 17.1        | 17.1        | 17.1        |
| Czechia                                | 12.5        | 12.5        | 12.6        | 12.5        |
| Georgia                                | 17.0        | 17.0        | 17.0        | 17.0        |
| Germany                                | 9.0         | 9.0         | 9.0         | 9.1         |
| Greece                                 | 5.1         | 5.1         | 4.9         | 4.7         |
| Hungary                                | 6.6         | 6.7         | 6.7         | 6.1         |
| India                                  | 9.5         | 9.5         | 9.5         | 9.5         |
| Indonesia                              | 21.1        | 21.2        | 21.2        | 21.2        |
| Kazakhstan                             | 18.6        | 19.5        | 19.5        | 19.4        |
| Korea, Democratic People's Republic of | 17.6        | 17.6        | 17.6        | 17.6        |
| Korea, Republic of                     | 21.4        | 21.4        | 21.4        | 19.9        |
| Kosovo                                 | 7.8         | 7.8         | 7.8         | 7.8         |
| Kyrgyzstan                             | 14.7        | 14.7        | 14.7        | 14.7        |
| Lao People's Democratic Republic       | 10.9        | 10.8        | 9.6         | 9.6         |
| Lithuania                              | 22.7        | 22.7        | 22.7        | 22.7        |
| Mexico                                 | 19.8        | 19.6        | 19.6        | 19.8        |
| Mongolia                               | 14.4        | 14.4        | 14.4        | 14.4        |
| Montenegro                             | 9.2         | 9.2         | 9.6         | 10.3        |
| Myanmar                                | 16.3        | 16.3        | 16.3        | 16.3        |
| Netherlands                            | 20.0        | 20.0        | 20.0        | 20.0        |
| New Zealand                            | 19.2        | 19.5        | 19.7        | 22.2        |
| North Macedonia                        | 6.1         | 7.0         | 6.7         | 6.6         |
| Philippines                            | 22.1        | 22.1        | 22.1        | 22.1        |
| Poland                                 | 8.1         | 8.3         | 8.3         | 7.9         |
| Romania                                | 7.7         | 7.3         | 7.1         | 7.6         |
| Russian Federation                     | 14.9        | 14.9        | 14.9        | 14.9        |
| Serbia                                 | 7.8         | 7.6         | 7.4         | 7.4         |
| Slovakia                               | 13.8        | 10.2        | 10.2        | 10.2        |
| Slovenia                               | 10.2        | 11.6        | 11.7        | 11.7        |
| Spain                                  | 13.5        | 13.5        | 13.4        | 13.4        |
| Tajikistan                             | 17.0        | 17.0        | 17.0        | 17.0        |
| Thailand                               | 10.6        | 10.6        | 10.6        | 10.5        |
| Turkey                                 | 8.6         | 8.6         | 8.0         | 8.1         |
| United States                          | 18.1        | 18.2        | 18.3        | 18.3        |
| Uzbekistan                             | 14.7        | 14.7        | 14.7        | 14.7        |

Table I (continued)

**NET CALORIFIC VALUES OF ENERGY PRODUCTS**  
**GJ/ton**

**PRODUCTION, EXPORTS AND CHANGES IN STOCKS**

| <b>COKE OVEN COKE</b>  | <b>2016</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> |
|------------------------|-------------|-------------|-------------|-------------|
| <b>Standard factor</b> | <b>28.2</b> | <b>28.2</b> | <b>28.2</b> | <b>28.2</b> |
| Argentina              | 28.5        | 28.5        | 28.5        | 28.5        |
| Australia              | 27.0        | 27.0        | 27.0        | 27.0        |
| Austria                | 28.9        | 28.6        | 27.9        | 28.7        |
| Belgium                | 29.3        | 29.3        | 29.3        | 29.3        |
| Bosnia and Herzegovina | 28.5        | 28.5        | 28.5        | 28.5        |
| Brazil                 | 28.9        | 28.9        | 28.9        | 28.9        |
| Bulgaria               | 28.5        | 28.5        | 28.5        | 28.5        |
| Belarus                | 29.0        | 29.0        | 29.0        | 29.0        |
| Canada                 | 27.5        | 27.5        | 27.5        | 27.5        |
| Chile                  | 28.6        | 28.6        | 30.1        | 30.1        |
| China                  | 28.5        | 28.5        | 28.4        | 28.4        |
| Colombia               | 20.1        | 20.1        | 20.1        | 20.1        |
| Croatia                | 29.3        | 29.3        | 29.3        | 29.3        |
| Czechia                | 28.7        | 28.9        | 28.5        | 28.6        |
| Denmark                | 29.3        | 29.3        | 29.3        | 29.3        |
| Estonia                | 28.5        | 28.5        | 28.5        | 28.5        |
| Finland                | 29.3        | 29.3        | 29.3        | 29.3        |
| Georgia                | 29.3        | 29.3        | 29.3        | 29.3        |
| Germany                | 28.7        | 28.7        | 28.7        | 28.7        |
| Hungary                | 29.9        | 29.6        | 29.4        | 29.5        |
| Iceland                | 26.7        | 26.7        | 27.8        | 27.8        |
| Japan                  | 29.2        | 29.2        | 29.2        | 29.2        |
| Kazakhstan             | 26.8        | 26.9        | 26.9        | 27.5        |
| Korea, Republic of     | 28.9        | 28.9        | 28.9        | 28.9        |
| Luxembourg             | 28.5        | 28.5        | 28.5        | 28.5        |
| Mexico                 | 28.4        | 28.4        | 28.4        | 28.7        |
| Netherlands            | 28.5        | 28.5        | 28.5        | 28.5        |
| New Zealand            | 29.5        | 29.5        | 29.5        | 29.5        |
| Peru                   | 28.2        | 28.2        | 28.2        | 28.2        |
| Poland                 | 28.0        | 28.0        | 28.0        | 28.0        |
| Portugal               | 30.4        | 30.8        | 30.8        | 30.8        |
| Romania                | 26.4        | 26.4        | 26.4        | 26.4        |
| Russian Federation     | 29.0        | 29.0        | 29.0        | 29.0        |
| Serbia                 | 29.0        | 29.0        | 29.0        | 29.0        |
| Slovakia               | 28.3        | 28.4        | 28.4        | 28.3        |
| Slovenia               | 30.0        | 30.1        | 30.1        | 30.1        |
| South Africa           | 26.5        | 26.5        | 26.5        | 26.5        |
| Spain                  | 26.8        | 27.3        | 27.3        | 27.3        |
| Sweden                 | 28.1        | 28.1        | 28.1        | 28.1        |
| Turkey                 | 27.0        | 27.0        | 27.0        | 27.0        |
| Ukraine                | 25.1        | 25.1        | 25.1        | 25.1        |
| United Kingdom         | 29.8        | 29.8        | 29.8        | 29.8        |
| United States          | 28.9        | 28.9        | 28.9        | 28.9        |
| Zimbabwe               | 25.1        | 25.1        | 25.1        | 25.1        |

Table I (continued)

**NET CALORIFIC VALUES OF ENERGY PRODUCTS**  
**GJ/ton**

**PRODUCTION, EXPORTS AND CHANGES IN STOCKS**

| <b>PATENT FUEL</b>           | <b>2016</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> |
|------------------------------|-------------|-------------|-------------|-------------|
| <b>Standard factor</b>       | <b>20.7</b> | <b>20.7</b> | <b>20.7</b> | <b>20.7</b> |
| Austria                      | 31.0        | 31.0        | 31.0        | 31.0        |
| Belgium                      | 30.5        | 30.5        | 30.5        | 30.5        |
| Germany                      | 31.4        | 31.4        | 31.4        | 31.4        |
| Korea, Republic of           | 18.6        | 19.4        | 19.4        | 19.4        |
| Luxembourg                   | 28.2        | 28.2        | 28.2        | 28.2        |
| Poland                       | 23.2        | 23.2        | 23.2        | 23.2        |
| Slovakia                     | 28.0        | 28.0        | 28.0        | 28.0        |
| United Arab Emirates         | 29.0        | 29.0        | 29.0        | 29.0        |
| United Kingdom               | 28.3        | 28.3        | 28.3        | 28.3        |
| Uzbekistan                   | 29.0        | 29.0        | 29.0        | 29.0        |
| <b>BROWN COAL BRIQUETTES</b> | <b>2016</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> |
| <b>Standard factor</b>       | <b>20.7</b> | <b>20.7</b> | <b>20.7</b> | <b>20.7</b> |
| Australia                    | 21.0        | 22.0        | 21.0        | 22.0        |
| Austria                      | 19.8        | 19.8        | 19.8        | 19.8        |
| Belgium                      | 20.7        | 20.7        | 20.7        | 20.7        |
| Bulgaria                     | 13.4        | 11.6        | 12.6        | 12.9        |
| Czechia                      | 19.8        | 23.4        | 23.3        | 22.9        |
| Germany                      | 21.2        | 21.4        | 21.1        | 21.1        |
| Hungary                      | 19.1        | 19.0        | 19.6        | 19.3        |
| India                        | 20.0        | 20.0        | 20.0        | 20.0        |
| Ireland                      | 19.8        | 19.8        | 19.8        | 19.8        |
| Luxembourg                   | 22.2        | 22.2        | 22.2        | 22.2        |
| Mexico                       | 18.0        | 18.0        | 18.0        | 18.0        |
| Netherlands                  | 20.0        | 20.0        | 20.0        | 20.0        |
| Poland                       | 17.5        | 17.5        | 17.5        | 17.5        |
| Serbia                       | 17.7        | 17.7        | 17.6        | 17.8        |
| Slovakia                     | 17.9        | 17.2        | 17.6        | 17.6        |
| <b>PEAT</b>                  | <b>2016</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> |
| <b>Standard factor</b>       | <b>9.8</b>  | <b>9.8</b>  | <b>9.8</b>  | <b>9.8</b>  |
| Belarus                      | 10.0        | 9.4         | 9.7         | 9.9         |
| Burundi                      | 14.7        | 14.7        | 14.7        | 14.7        |
| Estonia                      | 10.7        | 10.1        | 10.1        | 10.1        |
| Falkland Islands             | 9.5         | 9.5         | 9.5         | 9.5         |
| Finland                      | 10.0        | 9.9         | 9.9         | 10.4        |
| Ireland                      | 8.9         | 8.7         | 8.7         | 9.6         |
| Latvia                       | 10.1        | 10.1        | 10.1        | 10.1        |
| Lithuania                    | 11.7        | 11.7        | 11.7        | 11.7        |
| Romania                      | 8.8         | 8.8         | 8.8         | 8.8         |
| Russian Federation           | 10.0        | 10.0        | 10.0        | 10.0        |
| Sweden                       | 12.5        | 12.5        | 12.5        | 12.5        |
| Ukraine                      | 9.7         | 9.7         | 9.7         | 9.7         |

Table I (continued)

**NET CALORIFIC VALUES OF ENERGY PRODUCTS**  
**GJ/ton**

**PRODUCTION, EXPORTS AND CHANGES IN STOCKS**

| <b>OIL SHALE</b>       | <b>2016</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> |
|------------------------|-------------|-------------|-------------|-------------|
| <b>Standard factor</b> | <b>8.9</b>  | <b>8.9</b>  | <b>8.9</b>  | <b>8.9</b>  |
| Estonia                | 8.3         | 8.0         | 9.2         | 9.2         |
| Israel                 | 4.0         | 4.0         | 4.0         | 4.0         |
| <br>                   |             |             |             |             |
| <b>CRUDE OIL</b>       | <b>2016</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> |
| <b>Standard factor</b> | <b>42.3</b> | <b>42.3</b> | <b>42.3</b> | <b>42.3</b> |
| Azerbaijan             | 43.1        | 43.1        | 43.1        | 43.1        |
| Australia              | 44.0        | 44.0        | 44.0        | 44.0        |
| Austria                | 42.5        | 42.5        | 42.5        | 42.5        |
| Belgium                | 42.2        | 42.2        | 42.1        | 42.1        |
| Brazil                 | 42.2        | 42.3        | 42.3        | 42.3        |
| Canada                 | 42.8        | 42.8        | 42.8        | 42.8        |
| Chile                  | 43.2        | 43.2        | 43.2        | 43.2        |
| China                  | 41.9        | 41.9        | 41.9        | 41.9        |
| Czechia                | 42.4        | 42.4        | 42.8        | 42.8        |
| Denmark                | 43.0        | 43.0        | 43.0        | 43.0        |
| Finland                | 42.7        | 42.7        | 42.7        | 42.7        |
| France                 | 42.8        | 42.8        | 42.8        | 42.8        |
| Georgia                | 42.5        | 42.5        | 42.5        | 42.5        |
| Germany                | 42.5        | 42.5        | 42.5        | 42.5        |
| Greece                 | 38.2        | 38.2        | 38.2        | 40.8        |
| China, Hong Kong SAR   | 42.5        | 42.5        | 42.5        | 42.5        |
| Hungary                | 41.8        | 41.8        | 41.8        | 41.8        |
| Ireland                | 42.8        | 42.8        | 42.8        | 42.8        |
| Israel                 | 42.5        | 42.5        | 42.5        | 42.5        |
| Italy                  | 41.9        | 41.9        | 41.9        | 41.9        |
| Japan                  | 42.1        | 42.0        | 42.0        | 42.0        |
| Korea, Republic of     | 42.7        | 42.2        | 42.2        | 42.2        |
| Lithuania              | 42.3        | 42.3        | 42.3        | 42.3        |
| Mexico                 | 43.5        | 43.5        | 43.5        | 43.5        |
| Morocco                | 42.4        | 42.4        | 42.4        | 42.4        |
| Netherlands            | 42.7        | 42.7        | 42.7        | 42.7        |
| New Zealand            | 43.6        | 43.6        | 43.6        | 43.6        |
| Norway                 | 42.2        | 43.4        | 43.4        | 43.4        |
| Peru                   | 43.0        | 43.0        | 42.3        | 42.3        |
| Poland                 | 42.5        | 42.1        | 42.5        | 42.5        |
| Portugal               | 43.0        | 43.0        | 43.0        | 43.0        |
| Slovakia               | 43.2        | 43.3        | 43.3        | 43.3        |
| Spain                  | 42.3        | 42.3        | 42.3        | 42.3        |
| Sweden                 | 42.2        | 42.2        | 42.2        | 42.2        |
| Switzerland            | 43.2        | 43.2        | 43.2        | 43.2        |
| Turkey                 | 44.3        | 44.3        | 44.3        | 44.2        |
| United Kingdom         | 43.4        | 43.4        | 43.4        | 43.4        |
| United States          | 42.7        | 42.7        | 42.6        | 42.6        |

Table I (continued)

**NET CALORIFIC VALUES OF ENERGY PRODUCTS**  
**GJ/ton**

**PRODUCTION, EXPORTS AND CHANGES IN STOCKS**

| <b>NATURAL GAS LIQUIDS</b> | <b>2016</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> |
|----------------------------|-------------|-------------|-------------|-------------|
| <b>Standard factor</b>     | <b>44.2</b> | <b>44.2</b> | <b>44.2</b> | <b>44.2</b> |
| Australia                  | 45.4        | 45.4        | 45.4        | 45.4        |
| Austria                    | 42.5        | 42.5        | 42.5        | 42.5        |
| Armenia                    | 34.7        | 34.7        | 34.7        | 34.7        |
| Belgium                    | 45.2        | 45.2        | 45.2        | 45.2        |
| Canada                     | 45.2        | 45.2        | 45.2        | 45.2        |
| Chile                      | 48.1        | 48.1        | 48.1        | 48.1        |
| Equatorial Guinea          | 47.3        | 47.3        | 47.3        | 47.3        |
| Finland                    | 44.0        | 44.0        | 44.0        | 44.0        |
| France                     | 42.0        | 42.0        | 42.0        | 42.0        |
| Hungary                    | 43.0        | 43.0        | 43.0        | 43.0        |
| Japan                      | 45.6        | 45.3        | 45.3        | 45.3        |
| Mexico                     | 41.3        | 41.4        | 41.4        | 41.4        |
| Netherlands                | 44.0        | 44.0        | 44.0        | 44.0        |
| New Zealand                | 45.8        | 45.8        | 45.8        | 45.8        |
| Norway                     | 43.8        | 43.8        | 43.8        | 43.8        |
| Peru                       | 42.1        | 42.1        | 42.1        | 42.1        |
| Republic of Moldova        | 42.0        | 42.0        | 42.0        | 42.0        |
| Slovakia                   | 42.4        | 42.0        | 42.0        | 42.0        |
| United Kingdom             | 45.3        | 45.3        | 45.3        | 45.3        |
| United States              | 46.4        | 46.2        | 44.8        | 44.8        |
| <b>REFINERY FEEDSTOCKS</b> | <b>2016</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> |
| <b>Standard factor</b>     | <b>43.0</b> | <b>43.0</b> | <b>43.0</b> | <b>43.0</b> |
| Australia                  | 43.3        | 43.3        | 43.3        | 43.3        |
| Austria                    | 42.1        | 42.3        | 42.3        | 42.0        |
| Belgium                    | 42.2        | 42.2        | 42.1        | 42.0        |
| Canada                     | 42.5        | 42.5        | 42.5        | 42.5        |
| Chile                      | 44.8        | 44.8        | 44.8        | 44.8        |
| Czechia                    | 40.2        | 40.2        | 40.2        | 40.2        |
| Denmark                    | 42.7        | 42.7        | 42.7        | 42.7        |
| Finland                    | 42.5        | 42.5        | 42.5        | 42.5        |
| France                     | 41.9        | 41.9        | 41.9        | 41.9        |
| Germany                    | 42.5        | 42.5        | 42.5        | 42.5        |
| Greece                     | 41.3        | 41.3        | 41.3        | 41.3        |
| Hungary                    | 41.8        | 41.8        | 41.8        | 41.8        |
| Ireland                    | 44.6        | 44.6        | 44.6        | 44.6        |
| Israel                     | 44.8        | 44.8        | 44.8        | 44.8        |
| Italy                      | 42.5        | 42.5        | 42.5        | 42.5        |
| Japan                      | 42.5        | 42.5        | 42.5        | 42.5        |
| Korea, Republic of         | 44.8        | 47.2        | 47.2        | 47.2        |
| Lithuania                  | 41.4        | 41.5        | 42.3        | 42.3        |
| Mexico                     | 42.4        | 42.4        | 42.4        | 42.4        |
| Morocco                    | 41.9        | 41.9        | 41.9        | 41.9        |



Table I (continued)

**NET CALORIFIC VALUES OF ENERGY PRODUCTS**  
**GJ/ton**

**PRODUCTION, EXPORTS AND CHANGES IN STOCKS**

| <b>REFINERY FEEDSTOCKS</b>           | <b>2016</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> |
|--------------------------------------|-------------|-------------|-------------|-------------|
| <b>Standard factor</b>               | <b>43.0</b> | <b>43.0</b> | <b>43.0</b> | <b>43.0</b> |
| Netherlands                          | 44.0        | 41.9        | 41.8        | 41.8        |
| New Zealand                          | 43.9        | 43.9        | 43.9        | 43.9        |
| Norway                               | 42.3        | 42.3        | 42.3        | 42.3        |
| Poland                               | 43.0        | 43.0        | 43.0        | 42.9        |
| Portugal                             | 42.6        | 42.6        | 42.6        | 42.6        |
| Republic of Moldova                  | 41.6        | 41.6        | 41.6        | 41.6        |
| Slovakia                             | 42.0        | 43.9        | 43.9        | 43.9        |
| Spain                                | 42.5        | 42.5        | 42.5        | 42.5        |
| Sweden                               | 44.2        | 44.2        | 44.2        | 44.2        |
| Switzerland                          | 43.7        | 43.7        | 43.7        | 43.7        |
| Turkey                               | 43.5        | 41.5        | 41.5        | 41.5        |
| United Kingdom                       | 42.0        | 42.0        | 42.0        | 42.0        |
| United States                        | 43.5        | 43.5        | 43.5        | 43.5        |
| <b>OTHER HYDROCARBONS</b>            | <b>2016</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> |
| <b>Standard factor</b>               | <b>36.0</b> | <b>36.0</b> | <b>36.0</b> | <b>36.0</b> |
| Brazil                               | 120.0       | 120.0       | 120.0       | 120.0       |
| Canada                               | 41.9        | 41.9        | 41.9        | 41.9        |
| Estonia                              | 39.4        | 39.4        | 39.4        | 39.4        |
| Finland                              | 49.1        | 49.1        | 49.5        | 49.5        |
| Hungary                              | 40.0        | 40.0        | 40.0        | 40.0        |
| Ireland                              | 47.2        | 47.2        | 47.5        | 47.5        |
| Israel                               | 41.9        | 41.9        | 41.9        | 41.9        |
| Latvia                               | 39.4        | 39.4        | 39.4        | 39.4        |
| Mexico                               | 41.9        | 41.9        | 41.9        | 41.9        |
| Poland                               | 42.5        | 42.5        | 42.5        | 42.5        |
| Portugal                             | 120.0       | 120.0       | 120.0       | 120.0       |
| Serbia                               | 120.0       | 120.0       | 120.0       | 120.0       |
| Turkey                               | 41.9        | 41.9        | 41.9        | 41.9        |
| United Kingdom                       | 28.2        | 28.2        | 28.2        | 28.2        |
| United States                        | 51.0        | 51.0        | 51.0        | 51.0        |
| <b>ADDITIVES/BLENDING COMPONENTS</b> | <b>2016</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> |
| <b>Standard factor</b>               | <b>30.0</b> | <b>30.0</b> | <b>30.0</b> | <b>30.0</b> |
| Canada                               | 25.1        | 25.1        | 25.1        | 25.1        |
| Chile                                | 22.7        | 22.7        | 22.7        | 22.7        |
| Czechia                              | 39.5        | 39.5        | 39.5        | 39.5        |
| Equatorial Guinea                    | 20.9        | 20.9        | 20.9        | 20.9        |
| Finland                              | 42.5        | 42.5        | 42.5        | 42.5        |
| France                               | 25.1        | 25.1        | 25.1        | 25.1        |
| Germany                              | 37.5        | 37.1        | 37.1        | 37.1        |
| Greece                               | 41.3        | 41.3        | 41.3        | 41.3        |

**Table I** (continued)**NET CALORIFIC VALUES OF ENERGY PRODUCTS  
GJ/ton****PRODUCTION, EXPORTS AND CHANGES IN STOCKS**

| <b>ADDITIVES/BLENDING COMPONENTS</b> | <b>2016</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> |
|--------------------------------------|-------------|-------------|-------------|-------------|
| <b>Standard factor</b>               | <b>30.0</b> | <b>30.0</b> | <b>30.0</b> | <b>30.0</b> |
| Italy                                | 37.0        | 37.0        | 37.0        | 37.0        |
| Korea, Republic of                   | 41.9        | 44.1        | 44.1        | 44.1        |
| Lithuania                            | 41.9        | 41.9        | 41.9        | 41.9        |
| Mexico                               | 38.7        | 34.1        | 34.1        | 34.1        |
| Netherlands                          | 38.7        | 37.4        | 38.8        | 38.8        |
| Norway                               | 36.8        | 36.8        | 36.8        | 36.8        |
| Poland                               | 40.2        | 40.2        | 40.2        | 40.2        |
| Portugal                             | 37.0        | 37.0        | 37.0        | 37.0        |
| Slovakia                             | 42.0        | 42.0        | 42.0        | 42.0        |
| Sweden                               | 25.1        | 39.9        | 39.9        | 39.9        |
| Switzerland                          | 41.3        | 41.3        | 41.3        | 41.3        |
| Turkey                               | 25.1        | 25.1        | 25.1        | 25.1        |
| United Kingdom                       | 32.1        | 32.1        | 33.3        | 33.3        |
| United States                        | 37.9        | 37.9        | 37.9        | 37.9        |

Table I (continued)

**NET CALORIFIC VALUES OF ENERGY PRODUCTS**  
**GJ/ton**

| <b>IMPORTS</b>                         |             |             |             |             |
|--|-------------|-------------|-------------|-------------|
| <b>HARD COAL</b>                       | <b>2016</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> |
| <b>Standard factor</b>                 | <b>25.8</b> | <b>25.8</b> | <b>25.8</b> | <b>25.8</b> |
| Albania                                | 25.2        | 25.2        | 25.2        | 25.2        |
| Argentina                              | 28.4        | 28.8        | 28.8        | 30.0        |
| Armenia                                | 26.7        | 26.7        | 26.7        | 26.8        |
| Australia                              | 27.6        | 28.1        | 27.9        | 27.0        |
| Austria                                | 28.1        | 28.4        | 28.4        | 28.0        |
| Azerbaijan                             | 27.7        | 27.7        | 27.7        | 27.7        |
| Bangladesh                             | 20.9        | 20.9        | 20.9        | 20.9        |
| Belarus                                | 25.2        | 24.5        | 23.7        | 24.7        |
| Belgium                                | 27.8        | 29.4        | 29.4        | 29.5        |
| Bosnia and Herzegovina                 | 29.1        | 29.1        | 29.1        | 29.1        |
| Brazil                                 | 27.7        | 27.7        | 27.5        | 27.6        |
| Bulgaria                               | 28.0        | 25.2        | 27.4        | 26.9        |
| Canada                                 | 28.0        | 27.9        | 28.0        | 28.0        |
| Chile                                  | 23.9        | 24.1        | 23.9        | 24.0        |
| China                                  | 18.5        | 18.3        | 17.8        | 18.1        |
| China, Hong Kong SAR                   | 26.4        | 26.4        | 26.4        | 26.4        |
| Colombia                               | 27.2        | 27.2        | 27.2        | 28.8        |
| Croatia                                | 25.1        | 25.1        | 25.1        | 24.6        |
| Czechia                                | 26.1        | 26.5        | 26.2        | 27.2        |
| Denmark                                | 24.3        | 24.3        | 26.6        | 23.9        |
| Egypt                                  | 25.7        | 25.7        | 25.8        | 25.8        |
| Estonia                                | 27.2        | 22.0        | 22.0        | 24.9        |
| Finland                                | 26.7        | 26.6        | 26.8        | 27.0        |
| Georgia                                | 27.6        | 27.6        | 27.6        | 27.6        |
| Germany                                | 27.5        | 26.6        | 26.7        | 27.4        |
| Greece                                 | 25.5        | 23.3        | 25.9        | 26.1        |
| Guatemala                              | 28.9        | 28.9        | 28.9        | 28.9        |
| Hungary                                | 31.1        | 29.4        | 30.0        | 29.7        |
| Iceland                                | 28.1        | 28.1        | 27.8        | 27.8        |
| India                                  | 26.5        | 26.6        | 26.8        | 26.7        |
| Indonesia                              | 28.2        | 28.2        | 28.2        | 24.5        |
| Iran (Islamic Republic of)             | 28.1        | 26.1        | 25.8        | 25.8        |
| Ireland                                | 25.1        | 25.8        | 25.8        | 26.9        |
| Israel                                 | 24.9        | 24.9        | 24.9        | 24.8        |
| Japan                                  | 25.5        | 25.9        | 25.9        | 25.9        |
| Jordan                                 | 26.7        | 26.7        | 26.7        | 26.7        |
| Kazakhstan                             | 18.6        | 18.6        | 22.1        | 26.2        |
| Korea, Democratic People's Republic of | 25.8        | 25.8        | 26.5        | 25.8        |
| Korea, Republic of                     | 25.5        | 24.8        | 24.8        | 24.8        |
| Kosovo                                 | 22.5        | 22.5        | 27.0        | 23.3        |
| Kyrgyzstan                             | 20.8        | 20.5        | 20.9        | 20.9        |
| Latvia                                 | 23.8        | 24.1        | 24.1        | 24.4        |

Table I (continued)

**NET CALORIFIC VALUES OF ENERGY PRODUCTS**  
**GJ/ton**

| <b>IMPORTS</b>         |             |             |             |             |
|------------------------|-------------|-------------|-------------|-------------|
| <b>HARD COAL</b>       | <b>2016</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> |
| <b>Standard factor</b> | <b>25.8</b> | <b>25.8</b> | <b>25.8</b> | <b>25.8</b> |
| Lebanon                | 27.7        | 27.7        | 27.7        | 27.7        |
| Lithuania              | 25.1        | 25.1        | 25.1        | 25.1        |
| Luxembourg             | 24.7        | 24.6        | 24.6        | 24.6        |
| Malaysia               | 26.4        | 26.4        | 26.4        | 26.4        |
| Mauritius              | 25.8        | 26.0        | 26.0        | 26.0        |
| Mexico                 | 26.1        | 26.0        | 26.0        | 26.0        |
| Mongolia               | 28.6        | 28.6        | 28.6        | 28.6        |
| Morocco                | 27.6        | 27.6        | 27.6        | 27.6        |
| Myanmar                | 23.3        | 23.3        | 23.3        | 23.3        |
| Namibia                | 22.7        | 22.7        | 22.7        | 22.7        |
| Nepal                  | 25.1        | 25.1        | 25.1        | 25.1        |
| Netherlands            | 25.3        | 26.2        | 26.4        | 26.5        |
| New Caledonia          | 26.0        | 26.0        | 26.0        | 26.0        |
| New Zealand            | 26.0        | 26.6        | 27.0        | 28.8        |
| North Macedonia        | 26.1        | 26.2        | 27.0        | 27.0        |
| Pakistan               | 27.6        | 27.6        | 27.6        | 27.6        |
| Paraguay               | 28.1        | 28.1        | 28.1        | 28.1        |
| Peru                   | 30.5        | 30.5        | 30.5        | 30.5        |
| Poland                 | 24.6        | 24.9        | 24.2        | 24.8        |
| Portugal               | 24.7        | 24.9        | 24.8        | 24.8        |
| Republic of Moldova    | 24.8        | 25.2        | 24.9        | 24.9        |
| Romania                | 25.7        | 25.6        | 25.6        | 25.6        |
| Russian Federation     | 25.3        | 25.6        | 25.7        | 25.7        |
| Senegal                | 25.9        | 25.9        | 25.9        | 25.9        |
| Serbia                 | 25.7        | 25.6        | 27.5        | 27.7        |
| Slovakia               | 29.0        | 29.0        | 28.9        | 28.2        |
| Slovenia               | 27.3        | 27.4        | 27.3        | 27.3        |
| South Africa           | 31.0        | 31.0        | 31.0        | 31.0        |
| Spain                  | 24.1        | 24.1        | 24.0        | 24.3        |
| Sri Lanka              | 29.3        | 29.3        | 29.3        | 29.3        |
| Sweden                 | 29.1        | 29.0        | 28.7        | 29.1        |
| Switzerland            | 25.5        | 25.5        | 25.5        | 25.5        |
| Tajikistan             | 25.0        | 25.0        | 25.0        | 25.0        |
| Thailand               | 26.4        | 26.4        | 26.4        | 26.4        |
| Turkey                 | 26.8        | 26.7        | 26.2        | 26.2        |
| Ukraine                | 25.8        | 25.5        | 26.0        | 25.2        |
| United Arab Emirates   | 27.7        | 27.7        | 27.8        | 27.8        |
| United Kingdom         | 26.9        | 26.9        | 26.5        | 26.9        |
| United States          | 24.9        | 25.1        | 25.3        | 24.9        |
| Uruguay                | 25.8        | 25.8        | 25.8        | 25.8        |
| Uzbekistan             | 18.6        | 18.6        | 18.6        | 18.6        |
| Viet Nam               | 23.4        | 23.4        | 23.4        | 23.4        |
| Zimbabwe               | 27.0        | 27.0        | 27.0        | 27.0        |

Table I (continued)

**NET CALORIFIC VALUES OF ENERGY PRODUCTS**  
**GJ/ton**

| <b>IMPORTS</b>                         |             |             |             |             |
|--|-------------|-------------|-------------|-------------|
| <b>BROWN COAL</b>                      | <b>2016</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> |
| <b>Standard factor</b>                 | <b>14.0</b> | <b>14.0</b> | <b>14.0</b> | <b>14.0</b> |
| Austria                                | 20.5        | 20.3        | 21.1        | 22.1        |
| Armenia                                | 7.8         | 7.8         | 11.9        | 11.9        |
| Belgium                                | 22.6        | 22.6        | 22.6        | 22.6        |
| Bosnia and Herzegovina                 | 10.8        | 10.7        | 10.6        | 10.7        |
| Cambodia                               | 19.9        | 19.9        | 19.9        | 19.9        |
| Canada                                 | 17.9        | 17.9        | 17.9        | 17.9        |
| Croatia                                | 16.9        | 17.1        | 17.1        | 17.1        |
| Czechia                                | 13.9        | 14.0        | 14.2        | 14.3        |
| France                                 | 17.0        | 17.0        | 17.0        | 17.0        |
| Georgia                                | 17.0        | 17.0        | 17.0        | 17.0        |
| Germany                                | 18.4        | 18.4        | 18.4        | 17.9        |
| Greece                                 | 5.1         | 5.1         | 4.9         | 4.7         |
| Hungary                                | 18.2        | 17.9        | 17.9        | 17.9        |
| India                                  | 18.0        | 18.0        | 18.0        | 18.0        |
| Italy                                  | 18.7        | 17.0        | 10.5        | 10.5        |
| Kazakhstan                             | 18.6        | 19.5        | 19.5        | 19.4        |
| Korea, Democratic People's Republic of | 17.6        | 17.6        | 17.6        | 17.6        |
| Korea, Republic of                     | 21.4        | 21.4        | 21.4        | 19.9        |
| Kosovo                                 | 7.8         | 7.8         | 7.8         | 7.8         |
| Kyrgyzstan                             | 14.7        | 14.7        | 14.7        | 14.7        |
| Lao People's Democratic Republic       | 10.9        | 10.8        | 9.6         | 9.6         |
| Lithuania                              | 22.7        | 22.7        | 22.7        | 22.7        |
| Mexico                                 | 19.0        | 19.0        | 19.0        | 18.6        |
| Montenegro                             | 9.2         | 9.2         | 9.6         | 10.3        |
| Netherlands                            | 20.0        | 20.0        | 20.0        | 20.0        |
| New Zealand                            | 20.3        | 20.2        | 20.2        | 23.2        |
| Philippines                            | 21.6        | 22.0        | 21.9        | 22.0        |
| Poland                                 | 8.1         | 8.3         | 8.3         | 7.9         |
| Romania                                | 20.8        | 24.5        | 22.8        | 22.8        |
| Russian Federation                     | 14.9        | 14.9        | 14.9        | 14.9        |
| Serbia                                 | 8.1         | 8.1         | 8.1         | 8.1         |
| Slovakia                               | 13.8        | 14.3        | 14.3        | 14.3        |
| Slovenia                               | 13.8        | 19.0        | 19.0        | 19.0        |
| Switzerland                            | 23.6        | 23.6        | 23.6        | 23.6        |
| North Macedonia                        | 20.8        | 22.1        | 19.4        | 19.9        |
| United States                          | 19.7        | 19.6        | 19.8        | 19.9        |
| Uzbekistan                             | 14.7        | 14.7        | 14.7        | 14.7        |

Table I (continued)

**NET CALORIFIC VALUES OF ENERGY PRODUCTS**  
**GJ/ton**

| IMPORTS                |             |             |             |             |
|------------------------|-------------|-------------|-------------|-------------|
| COKE OVEN COKE         | 2016        | 2017        | 2018        | 2019        |
| <b>Standard factor</b> | <b>28.2</b> | <b>28.2</b> | <b>28.2</b> | <b>28.2</b> |
| Argentina              | 28.5        | 28.5        | 28.5        | 28.5        |
| Australia              | 27.0        | 27.0        | 27.0        | 27.0        |
| Austria                | 28.9        | 28.6        | 27.9        | 28.7        |
| Belgium                | 29.3        | 29.3        | 29.3        | 29.3        |
| Bosnia and Herzegovina | 28.5        | 28.5        | 28.5        | 28.5        |
| Brazil                 | 28.9        | 28.9        | 28.9        | 28.9        |
| Bulgaria               | 28.5        | 28.5        | 28.5        | 28.5        |
| Belarus                | 29.0        | 29.0        | 29.0        | 29.0        |
| Canada                 | 27.5        | 27.5        | 27.5        | 27.5        |
| China                  | 28.5        | 28.5        | 28.4        | 28.4        |
| Colombia               | 20.1        | 20.1        | 20.1        | 20.1        |
| Croatia                | 29.3        | 29.3        | 29.3        | 29.3        |
| Czechia                | 28.1        | 28.0        | 26.8        | 28.1        |
| Denmark                | 29.3        | 29.3        | 29.3        | 29.3        |
| Egypt                  | 27.2        | 27.2        | 27.2        | 27.2        |
| Finland                | 29.3        | 29.3        | 29.3        | 29.3        |
| France                 | 28.0        | 28.0        | 28.0        | 28.0        |
| Georgia                | 29.3        | 29.3        | 29.3        | 29.3        |
| Germany                | 28.7        | 28.7        | 28.7        | 28.7        |
| Hungary                | 29.9        | 29.6        | 29.3        | 29.5        |
| Iceland                | 26.7        | 26.7        | 27.8        | 27.8        |
| Italy                  | 28.4        | 28.4        | 28.8        | 28.4        |
| Japan                  | 29.2        | 29.2        | 29.2        | 29.2        |
| Kazakhstan             | 26.8        | 26.9        | 26.9        | 27.5        |
| Korea, Republic of     | 28.9        | 28.9        | 28.9        | 28.9        |
| Lithuania              | 29.3        | 29.3        | 29.3        | 29.3        |
| Luxembourg             | 28.5        | 28.5        | 28.5        | 28.5        |
| Mexico                 | 28.4        | 28.7        | 28.7        | 27.8        |
| Netherlands            | 28.5        | 28.5        | 28.5        | 28.5        |
| North Macedonia        | 27.5        | 26.9        | 29.1        | 28.6        |
| Norway                 | 28.5        | 28.5        | 28.5        | 28.5        |
| Peru                   | 28.2        | 28.2        | 28.2        | 28.2        |
| Poland                 | 28.0        | 28.0        | 28.0        | 28.0        |
| Portugal               | 30.4        | 30.8        | 30.8        | 30.8        |
| Romania                | 26.4        | 26.4        | 26.4        | 26.4        |
| Russian Federation     | 29.0        | 29.0        | 29.0        | 29.0        |
| Serbia                 | 29.0        | 29.0        | 29.0        | 29.0        |
| Slovakia               | 26.5        | 27.7        | 27.7        | 28.0        |
| Spain                  | 26.8        | 27.3        | 27.3        | 27.3        |
| Sweden                 | 28.1        | 28.1        | 28.1        | 28.1        |
| Switzerland            | 25.5        | 25.5        | 25.5        | 25.5        |
| Turkey                 | 27.0        | 27.0        | 27.0        | 27.0        |
| Ukraine                | 25.1        | 25.1        | 25.1        | 25.1        |
| North Macedonia        | 27.5        | 26.9        | 29.1        | 28.6        |
| United Kingdom         | 29.8        | 29.8        | 29.8        | 29.8        |
| United States          | 28.9        | 28.9        | 28.9        | 28.9        |

Table I (continued)

**NET CALORIFIC VALUES OF ENERGY PRODUCTS**  
**GJ/ton**

| <b>IMPORTS</b>               |             |             |             |             |
|------------------------------|-------------|-------------|-------------|-------------|
| <b>PATENT FUEL</b>           | <b>2016</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> |
| <b>Standard factor</b>       | <b>20.7</b> | <b>20.7</b> | <b>20.7</b> | <b>20.7</b> |
| Austria                      | 31.0        | 31.0        | 31.0        | 31.0        |
| Belgium                      | 30.5        | 30.5        | 30.5        | 30.5        |
| France                       | 32.0        | 32.0        | 32.0        | 32.0        |
| Germany                      | 31.4        | 31.4        | 31.4        | 31.4        |
| Luxembourg                   | 28.2        | 28.2        | 28.2        | 28.2        |
| Poland                       | 23.2        | 23.2        | 23.2        | 23.2        |
| Slovakia                     | 28.0        | 28.0        | 28.0        | 28.0        |
| United Arab Emirates         | 29.0        | 29.0        | 29.0        | 29.0        |
| United Kingdom               | 28.3        | 28.3        | 28.3        | 28.3        |
| <b>BROWN COAL BRIQUETTES</b> | <b>2016</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> |
| <b>Standard factor</b>       | <b>20.7</b> | <b>20.7</b> | <b>20.7</b> | <b>20.7</b> |
| Australia                    | 21.0        | 22.0        | 21.0        | 22.0        |
| Austria                      | 19.8        | 19.8        | 19.8        | 19.8        |
| Belgium                      | 20.7        | 20.7        | 20.7        | 20.7        |
| Czechia                      | 19.8        | 20.0        | 20.2        | 20.3        |
| France                       | 16.9        | 16.9        | 16.9        | 16.9        |
| Germany                      | 25.5        | 22.1        | 25.6        | 25.6        |
| Hungary                      | 19.1        | 19.0        | 19.6        | 19.3        |
| Ireland                      | 19.8        | 19.8        | 19.8        | 19.8        |
| Luxembourg                   | 22.2        | 22.2        | 22.2        | 22.2        |
| Mexico                       | 18.0        | 18.0        | 18.0        | 18.0        |
| Netherlands                  | 20.0        | 20.0        | 20.0        | 20.0        |
| Poland                       | 17.5        | 17.5        | 17.5        | 17.5        |
| Serbia                       | 15.8        | 15.8        | 15.8        | 15.8        |
| Slovakia                     | 17.9        | 17.2        | 17.6        | 17.6        |
| <b>PEAT</b>                  | <b>2016</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> |
| <b>Standard factor</b>       | <b>9.8</b>  | <b>9.8</b>  | <b>9.8</b>  | <b>9.8</b>  |
| Finland                      | 10.0        | 9.9         | 9.9         | 10.4        |
| Latvia                       | 10.1        | 10.1        | 10.1        | 10.1        |
| Romania                      | 8.8         | 8.8         | 8.8         | 8.8         |
| Russian Federation           | 10.0        | 10.0        | 10.0        | 10.0        |
| Sweden                       | 12.9        | 12.9        | 12.9        | 12.9        |
| Ukraine                      | 9.7         | 9.7         | 9.7         | 9.7         |

Table I (continued)

**NET CALORIFIC VALUES OF ENERGY PRODUCTS**  
**GJ/ton**

| <b>IMPORTS</b>         |             |             |             |             |
|------------------------|-------------|-------------|-------------|-------------|
| <b>CRUDE OIL</b>       | <b>2016</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> |
| <b>Standard factor</b> | <b>42.3</b> | <b>42.3</b> | <b>42.3</b> | <b>42.3</b> |
| Azerbaijan             | 43.1        | 43.1        | 43.1        | 43.1        |
| Australia              | 42.7        | 42.7        | 42.7        | 42.7        |
| Austria                | 42.5        | 42.5        | 42.5        | 42.5        |
| Belgium                | 42.2        | 42.2        | 42.1        | 42.1        |
| Brazil                 | 42.2        | 42.3        | 42.3        | 42.3        |
| Canada                 | 42.8        | 42.8        | 42.8        | 42.8        |
| Chile                  | 43.2        | 43.2        | 43.2        | 43.2        |
| China                  | 41.9        | 41.9        | 41.9        | 41.9        |
| Czechia                | 42.4        | 42.4        | 42.8        | 42.8        |
| Denmark                | 43.0        | 43.0        | 43.0        | 43.0        |
| Finland                | 42.7        | 42.7        | 42.7        | 42.7        |
| France                 | 42.8        | 42.8        | 42.8        | 42.8        |
| Georgia                | 42.5        | 42.5        | 42.5        | 42.5        |
| Germany                | 42.5        | 42.5        | 42.5        | 42.5        |
| Greece                 | 41.5        | 41.5        | 41.5        | 41.5        |
| China, Hong Kong SAR   | 42.5        | 42.5        | 42.5        | 42.5        |
| Hungary                | 41.8        | 41.8        | 41.8        | 41.8        |
| Ireland                | 42.8        | 42.8        | 42.8        | 42.8        |
| Israel                 | 42.5        | 42.7        | 42.7        | 42.7        |
| Italy                  | 41.9        | 41.9        | 41.9        | 41.9        |
| Japan                  | 42.1        | 42.0        | 42.0        | 42.0        |
| Korea, Republic of     | 42.7        | 42.2        | 42.2        | 42.2        |
| Lithuania              | 42.3        | 42.3        | 42.3        | 42.3        |
| Morocco                | 43.5        | 43.5        | 43.5        | 43.5        |
| Netherlands            | 42.4        | 42.4        | 42.4        | 42.4        |
| New Zealand            | 42.7        | 42.7        | 42.7        | 42.7        |
| Norway                 | 42.8        | 42.8        | 42.8        | 42.8        |
| Peru                   | 42.2        | 43.4        | 43.4        | 43.4        |
| Poland                 | 43.0        | 43.0        | 42.3        | 42.3        |
| Portugal               | 42.5        | 42.5        | 42.5        | 42.5        |
| Slovakia               | 43.0        | 43.0        | 43.0        | 43.0        |
| Spain                  | 42.0        | 42.0        | 42.0        | 42.0        |
| Sweden                 | 42.3        | 42.3        | 42.3        | 42.3        |
| Switzerland            | 42.2        | 42.2        | 42.2        | 42.2        |
| Turkey                 | 43.2        | 43.2        | 43.2        | 43.2        |
| United Kingdom         | 44.3        | 44.3        | 44.3        | 44.4        |
| United States          | 43.4        | 43.4        | 43.4        | 43.4        |



Table I (continued)

**NET CALORIFIC VALUES OF ENERGY PRODUCTS**  
**GJ/ton**

| <b>IMPORTS</b>             |             |             |             |             |
|----------------------------|-------------|-------------|-------------|-------------|
|                            | <b>2016</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> |
| <b>NATURAL GAS LIQUIDS</b> |             |             |             |             |
| <b>Standard factor</b>     | <b>44.2</b> | <b>44.2</b> | <b>44.2</b> | <b>44.2</b> |
| Azerbaijan                 | 39.1        | 39.1        | 39.1        | 39.1        |
| Armenia                    | 34.7        | 34.7        | 34.7        | 34.7        |
| Belgium                    | 45.2        | 45.2        | 45.2        | 45.2        |
| Canada                     | 45.2        | 45.2        | 45.2        | 45.2        |
| Equatorial Guinea          | 47.3        | 47.3        | 47.3        | 47.3        |
| Finland                    | 44.0        | 44.0        | 44.0        | 44.0        |
| France                     | 42.0        | 42.0        | 42.0        | 42.0        |
| Japan                      | 45.4        | 45.6        | 45.3        | 45.3        |
| Netherlands                | 44.0        | 44.0        | 44.0        | 44.0        |
| Peru                       | 42.1        | 42.1        | 42.1        | 42.1        |
| Republic of Moldova        | 42.0        | 42.0        | 42.0        | 42.0        |
| United Kingdom             | 45.3        | 45.3        | 45.3        | 45.3        |
| United States              | 48.1        | 47.7        | 47.5        | 46.1        |
| <b>REFINERY FEEDSTOCKS</b> | <b>2016</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> |
| <b>Standard factor</b>     | <b>43.0</b> | <b>43.0</b> | <b>43.0</b> | <b>43.0</b> |
| Australia                  | 43.3        | 43.3        | 43.3        | 43.3        |
| Austria                    | 42.1        | 42.3        | 42.3        | 42.3        |
| Belgium                    | 42.2        | 42.2        | 42.1        | 42.0        |
| Czechia                    | 40.2        | 40.2        | 40.2        | 40.2        |
| France                     | 41.9        | 41.9        | 41.9        | 41.9        |
| Greece                     | 41.3        | 41.3        | 41.3        | 41.3        |
| Hungary                    | 41.8        | 41.8        | 41.8        | 41.8        |
| Israel                     | 44.8        | 44.8        | 44.8        | 44.8        |
| Italy                      | 42.5        | 42.5        | 42.5        | 42.5        |
| Korea, Republic of         | 44.8        | 47.2        | 47.2        | 47.2        |
| Lithuania                  | 41.4        | 41.5        | 42.3        | 42.3        |
| Morocco                    | 41.9        | 41.9        | 41.9        | 41.9        |
| New Zealand                | 43.9        | 43.9        | 43.9        | 43.9        |
| Poland                     | 43.0        | 43.0        | 43.0        | 42.9        |
| Portugal                   | 42.6        | 42.6        | 42.6        | 42.6        |
| Republic of Moldova        | 41.6        | 41.6        | 41.6        | 41.6        |
| Spain                      | 42.5        | 42.5        | 42.5        | 42.5        |
| Sweden                     | 44.2        | 44.2        | 44.2        | 44.2        |
| Switzerland                | 43.7        | 43.7        | 43.7        | 43.7        |
| United Kingdom             | 42.0        | 42.0        | 42.0        | 42.0        |
| United States              | 43.5        | 43.5        | 43.5        | 43.5        |

**Table I** (continued)

**NET CALORIFIC VALUES OF ENERGY PRODUCTS  
GJ/ton**

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| <b>IMPORTS</b>                       |             |             |             |             |
|--------------------------------------|-------------|-------------|-------------|-------------|
| <b>OTHER HYDROCARBONS</b>            | <b>2016</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> |
| <b>Standard factor</b>               | <b>36.0</b> | <b>36.0</b> | <b>36.0</b> | <b>36.0</b> |
| Belgium                              | 120.0       | 120.0       | 120.0       | 120.0       |
| Canada                               | 41.9        | 41.9        | 41.9        | 41.9        |
| Estonia                              | 39.4        | 39.4        | 39.4        | 39.4        |
| Latvia                               | 39.4        | 39.4        | 39.4        | 39.4        |
| Serbia                               | 120.0       | 120.0       | 120.0       | 120.0       |
| Sweden                               | 41.9        | 41.9        | 41.9        | 41.9        |
| United Kingdom                       | 28.2        | 28.2        | 28.2        | 28.2        |
| United States                        | 51.0        | 51.0        | 51.0        | 51.0        |
| <b>ADDITIVES/BLENDING COMPONENTS</b> | <b>2016</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> |
| <b>Standard factor</b>               | <b>30.0</b> | <b>30.0</b> | <b>30.0</b> | <b>30.0</b> |
| Canada                               | 25.1        | 25.1        | 25.1        | 25.1        |
| Chile                                | 22.7        | 22.7        | 22.7        | 22.7        |
| Czechia                              | 39.5        | 39.5        | 39.5        | 39.5        |
| Finland                              | 42.5        | 42.5        | 42.5        | 42.5        |
| France                               | 25.1        | 25.1        | 25.1        | 25.1        |
| Greece                               | 41.3        | 41.3        | 41.3        | 41.3        |
| Italy                                | 37.0        | 37.0        | 37.0        | 37.0        |
| Korea, Republic of                   | 41.9        | 44.1        | 44.1        | 44.1        |
| Lithuania                            | 41.9        | 41.9        | 41.9        | 41.9        |
| Mexico                               | 38.7        | 34.1        | 34.1        | 34.1        |
| Netherlands                          | 38.7        | 37.4        | 38.8        | 38.8        |
| Poland                               | 40.2        | 40.2        | 40.2        | 40.2        |
| Portugal                             | 37.0        | 37.0        | 37.0        | 37.0        |
| Slovakia                             | 42.0        | 42.0        | 42.0        | 42.0        |
| Switzerland                          | 41.3        | 41.3        | 41.3        | 41.3        |
| Turkey                               | 25.1        | 25.1        | 25.1        | 25.1        |
| United Kingdom                       | 32.1        | 32.1        | 33.3        | 33.3        |
| United States                        | 37.9        | 37.9        | 37.9        | 37.9        |

**Table II**  
**SELECTED CONVERSION FACTORS FOR CRUDE OIL**  
**AND OIL PRODUCTS**

(To convert from metric tons into the following units, multiply by the factor in the appropriate column)

| <b>Commodity</b>                                  | <b>Litre</b> | <b>U.S.<br/>Gallon</b> | <b>Imperial<br/>Gallon</b> | <b>Barrel</b> | <b>Barrels<br/>/ day</b> | <b>Cubic<br/>Metre</b> |
|---|--------------|------------------------|----------------------------|---------------|--------------------------|------------------------|
| Conventional crude oil (average specific gravity) | 1164         | 308                    | 256                        | 7.32          | 0.02005                  | 1.164                  |
| Natural gas liquids (NGL)                         | 1653         | 437                    | 364                        | 10.40         | 0.02849                  | 1.653                  |
| Additives and oxygenates                          | 1033         | 315                    | 262                        | 7.50          | 0.02055                  | 1.033                  |
| Other hydrocarbons                                | 1177         | 311                    | 259                        | 7.40          | 0.02027                  | 1.177                  |
| Aviation gasoline                                 | 1370         | 362                    | 301                        | 8.62          | 0.02362                  | 1.370                  |
| Motor gasoline                                    | 1351         | 357                    | 297                        | 8.50          | 0.02329                  | 1.351                  |
| Gasoline-type jet fuel                            | 1317         | 348                    | 290                        | 8.28          | 0.02270                  | 1.317                  |
| Kerosene-type jet fuel                            | 1235         | 326                    | 272                        | 7.77          | 0.02129                  | 1.235                  |
| Other kerosene                                    | 1235         | 326                    | 272                        | 7.77          | 0.02129                  | 1.235                  |
| Gas oil/diesel oil                                | 1149         | 304                    | 253                        | 7.23          | 0.01981                  | 1.149                  |
| Fuel oil  | 1053         | 278                    | 232                        | 6.62          | 0.01814                  | 1.053                  |
| Liquefied petroleum gases (LPG)                   | 1852         | 489                    | 407                        | 11.65         | 0.03192                  | 1.852                  |
| Ethane  | 2679         | 708                    | 589                        | 16.85         | 0.04616                  | 2.679                  |
| Refinery gas                                      | 1272         | 336                    | 280                        | 8.00          | 0.02192                  | 1.272                  |
| Feedstocks  | 1177         | 311                    | 259                        | 7.40          | 0.02027                  | 1.177                  |
| Naphtha   | 1389         | 367                    | 306                        | 8.74          | 0.02395                  | 1.389                  |
| White spirit and SBP industrial spirits           | 1235         | 326                    | 272                        | 7.77          | 0.02129                  | 1.235                  |
| Lubricants  | 1111         | 294                    | 244                        | 6.99          | 0.01915                  | 1.111                  |
| Bitumen   | 962          | 254                    | 212                        | 6.05          | 0.01658                  | 0.962                  |
| Paraffin waxes                                    | 1250         | 330                    | 275                        | 7.86          | 0.02153                  | 1.250                  |
| Petroleum coke                                    | 877          | 232                    | 193                        | 5.52          | 0.01512                  | 0.877                  |
| Other oil products                                | 1099         | 290                    | 241                        | 6.91          | 0.01893                  | 1.099                  |



# **TABLES**

**Table 1**

## Total energy supply

Petajoules

### Table Notes

#### For tables 1 to 3

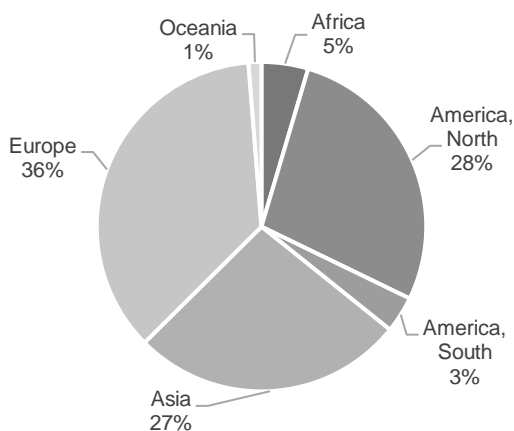
Data on individual energy commodities are aggregated and presented in these tables. As discussed in the introduction, these tables follow the principles of energy balances as recommended in IRES.

Although both Table 1 and Table 2 display figures for total energy supply, there may be rounding differences for certain countries or regions in the same year. This is due to the different ways they are added up.

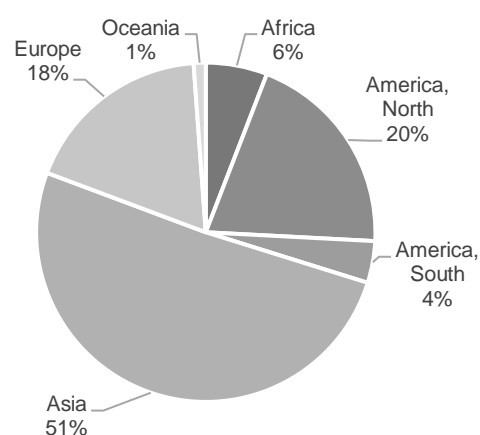
Instead of breaking energy supply down by flow, Table 1 gives a longer historical perspective back to 1990. As such, historical countries that existed in 1990 are included here. Due to the break-up of the Former Union of Soviet Socialist Republics, there is a reallocation between Europe and Asia between 1991 and 1992.

Please refer to the Definitions Section on pages ix to xv for the appropriate product description/ classification, and xvi to xvii for the descriptions of relevant flows.

**Figure 1: Total energy supply by region, 1990**



**Figure 2: Total energy supply by region, 2019**



**Figure 3: Total energy supply by region, 1990-2019**

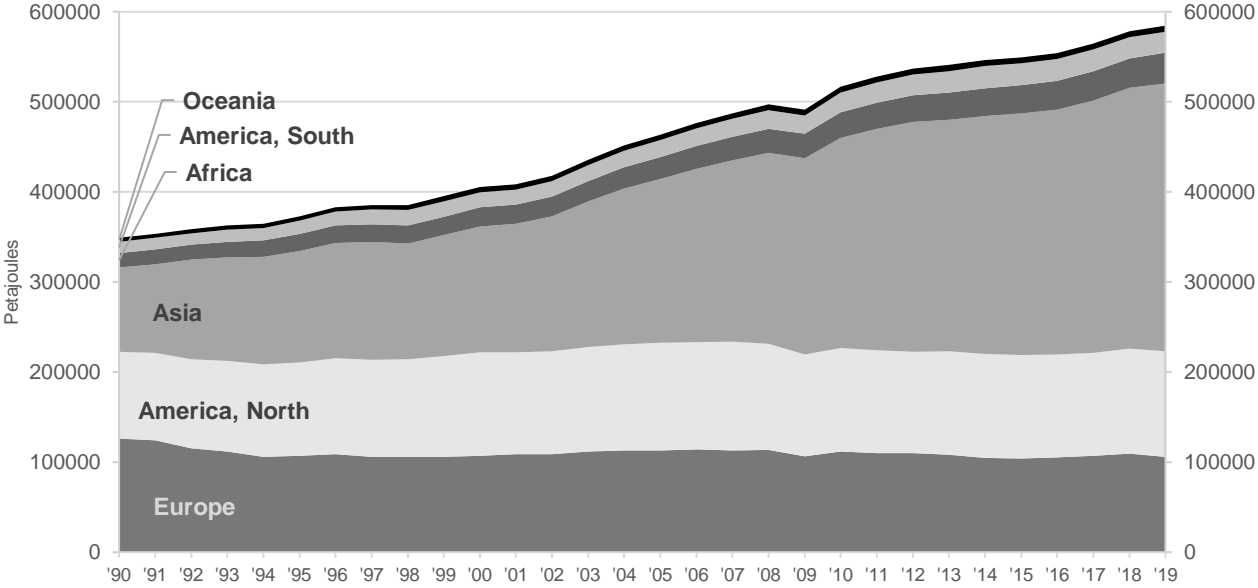


Table 1

## Total Energy Supply

Petajoules

| Country or area         | 1990           | 1995           | 2000           | 2005           | 2010           | 2015           | 2019           |
|-------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| <b>World</b>            | <b>349,017</b> | <b>372,677</b> | <b>405,196</b> | <b>463,436</b> | <b>516,988</b> | <b>549,527</b> | <b>584,594</b> |
| <b>Africa</b>           | <b>16,005</b>  | <b>18,925</b>  | <b>21,062</b>  | <b>24,515</b>  | <b>28,164</b>  | <b>31,180</b>  | <b>34,302</b>  |
| Algeria                 | 1,075          | 1,270          | 1,103          | 1,583          | 1,641          | 2,224          | 2,509          |
| Angola                  | 238            | 340            | 288            | 319            | 469            | 555            | 553            |
| Benin                   | 73             | 87             | 83             | 104            | 149            | 180            | 220            |
| Botswana                | 39             | 44             | 57             | 65             | 74             | 80             | 98             |
| Burkina Faso            | *63            | *68            | 83             | 114            | 145            | 172            | 199            |
| Burundi                 | *52            | *53            | 55             | *56            | *58            | 62             | 66             |
| Cabo Verde              | *3             | *4             | *6             | 8              | 9              | *9             | *10            |
| Cameroon                | 203            | 237            | 266            | 297            | 293            | 384            | 408            |
| Central African Rep.    | 31             | 31             | *29            | *32            | 36             | 36             | *38            |
| Chad                    | 48             | 54             | 62             | 71             | 82             | 87             | 95             |
| Comoros                 | *3             | *3             | *4             | 5              | *6             | *6             | *8             |
| Congo                   | 36             | 40             | 34             | 45             | 70             | 117            | 135            |
| Côte d'Ivoire           | 204            | 245            | 278            | 418            | 347            | 412            | 444            |
| Dem. Rep. of the Congo  | 489            | 595            | 635            | 698            | 831            | 1,209          | 1,266          |
| Djibouti                | *6             | *7             | 8              | *9             | 11             | 10             | *10            |
| Egypt                   | 1,271          | 1,605          | 2,288          | 2,742          | 3,242          | 3,450          | 4,081          |
| Equatorial Guinea       | 5              | 5              | 11             | 65             | 77             | 108            | 75             |
| Eritrea                 | ..             | 42             | 30             | 32             | 31             | 34             | 37             |
| Eswatini                | *28            | *29            | 35             | 36             | 41             | 46             | 46             |
| Ethiopia                | ..             | 918            | 1,022          | 1,132          | 1,293          | 1,462          | 1,615          |
| Ethiopia, incl. Eritrea | 543            | ..             | ..             | ..             | ..             | ..             | ..             |
| Gabon                   | 49             | 56             | 61             | 72             | 93             | 111            | 104            |
| Gambia                  | 7              | 8              | 9              | 10             | 12             | 15             | *15            |
| Ghana                   | 187            | *249           | 265            | 241            | 287            | 387            | 444            |
| Guinea                  | 105            | 126            | 128            | 135            | 147            | 152            | 183            |
| Guinea-Bissau           | 20             | 21             | 23             | 26             | 28             | 30             | 32             |
| Kenya                   | 439            | 518            | *627           | *686           | *793           | 953            | *1,008         |
| Lesotho                 | *36            | *41            | *48            | 47             | 52             | *46            | *45            |
| Liberia                 | 38             | 31             | 49             | 62             | 75             | 92             | 101            |
| Libya                   | 468            | 653            | 695            | 815            | 869            | 763            | 908            |
| Madagascar              | 99             | 126            | *153           | *168           | *200           | 250            | 374            |
| Malawi                  | 64             | 65             | 65             | 70             | 76             | 81             | 90             |
| Mali                    | *61            | *71            | *86            | 120            | *153           | *195           | *210           |
| Mauritania              | *23            | *26            | 29             | 36             | 46             | *61            | 76             |
| Mauritius               | 33             | 41             | 49             | 57             | 63             | 67             | 69             |
| Mayotte                 | *1             | *2             | *2             | *3             | 4              | ..             | ..             |
| Morocco                 | 345            | 423            | 478            | 606            | 762            | 799            | 943            |
| Mozambique              | 248            | 264            | 293            | 365            | 309            | 447            | 464            |
| Namibia                 | ..             | 38             | 39             | 54             | 63             | 78             | 84             |
| Niger                   | 60             | 70             | 81             | *77            | 70             | 95             | *105           |
| Nigeria                 | 2,780          | 3,052          | 3,642          | 4,401          | 5,325          | 6,020          | 6,586          |
| Reunion                 | 24             | 31             | 42             | 49             | 58             | ..             | ..             |
| Rwanda                  | 35             | 54             | 54             | 71             | 84             | *98            | *111           |
| Sao Tome and Principe   | *1             | 1              | *2             | *2             | 2              | *3             | *3             |
| Senegal                 | *81            | *87            | 97             | 114            | 160            | 178            | 209            |
| Seychelles              | 2              | *3             | 4              | 5              | 6              | 7              | 8              |
| Sierra Leone            | 51             | 46             | 54             | 56             | 59             | 69             | 73             |
| Somalia                 | 68             | 77             | 90             | 107            | 126            | 138            | 156            |
| South Africa            | 4,179          | 4,750          | 4,921          | 5,197          | 5,897          | 5,724          | 5,991          |
| South Sudan             | ..             | ..             | ..             | ..             | ..             | 35             | 30             |
| Sudan                   | ..             | ..             | ..             | ..             | ..             | 503            | *535           |
| Sudan (former)          | 451            | 506            | 556            | 654            | 711            | ..             | ..             |
| Togo                    | 55             | 71             | 89             | 99             | 130            | 131            | 138            |
| Tunisia                 | 192            | 220            | 293            | 349            | 427            | 457            | 477            |
| Uganda                  | 351            | 390            | 396            | 516            | 645            | 804            | 966            |
| United Rep. of Tanzania | 409            | 463            | 564            | 699            | 793            | 883            | 933            |



Table 1

## Total Energy Supply

Petajoules

| Country or area             | 1990          | 1995           | 2000           | 2005           | 2010           | 2015           | 2019           |
|-----------------------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Zambia                      | 222           | 244            | 263            | 301            | 340            | 408            | 455            |
| Zimbabwe                    | 405           | 421            | 438            | 414            | 397            | 458            | 464            |
| <b>America, North</b>       | <b>96,322</b> | <b>104,100</b> | <b>114,840</b> | <b>119,325</b> | <b>114,857</b> | <b>114,724</b> | <b>116,720</b> |
| Anguilla                    | *1            | *1             | *1             | *2             | *2             | *2             | *2             |
| Antigua and Barbuda         | *3            | *3             | *4             | *5             | *6             | *7             | *7             |
| Aruba                       | *7            | *10            | *54            | 58             | *56            | *13            | *13            |
| Bahamas                     | *28           | *26            | *28            | *28            | 28             | 31             | 37             |
| Barbados                    | 16            | 12             | 16             | 17             | 20             | 17             | 16             |
| Belize                      | 8             | 10             | 11             | 11             | 13             | 16             | 17             |
| Bermuda                     | *7            | *8             | *8             | *9             | *9             | 8              | 9              |
| Bonaire, St Eustatius, Saba | ..            | ..             | ..             | ..             | ..             | *1             | *2             |
| British Virgin Islands      | *1            | *2             | *2             | *3             | *3             | *3             | *2             |
| Canada                      | 8,838         | 9,783          | 10,609         | 11,441         | 10,902         | 11,699         | 12,779         |
| Cayman Islands              | 4             | *5             | *7             | 7              | 8              | 8              | 10             |
| Costa Rica                  | 68            | 110            | 137            | 177            | 203            | 207            | 214            |
| Cuba                        | 604           | 414            | 459            | 388            | 505            | 459            | 367            |
| Curaçao                     | ..            | ..             | ..             | ..             | ..             | 101            | 32             |
| Dominica                    | *1            | 1              | 2              | *2             | 3              | *3             | *3             |
| Dominican Republic          | 140           | 223            | 275            | 259            | 298            | 326            | 395            |
| El Salvador                 | 91            | 133            | 146            | 160            | 175            | 172            | 188            |
| Greenland                   | 6             | 6              | 7              | 9              | 11             | 9              | *8             |
| Grenada                     | 2             | 2              | 3              | 3              | 4              | 4              | 5              |
| Guadeloupe                  | 18            | *21            | 26             | 33             | *32            | ..             | ..             |
| Guatemala                   | 195           | 252            | 307            | 361            | 388            | 480            | 571            |
| Haiti                       | 101           | 107            | 128            | 138            | 159            | 176            | 190            |
| Honduras                    | 100           | 120            | 127            | 164            | 198            | 233            | 241            |
| Jamaica                     | 113           | 130            | 148            | 147            | 113            | 117            | 115            |
| Martinique                  | 21            | *22            | *23            | 30             | 29             | ..             | ..             |
| Mexico                      | 5,179         | 5,516          | 6,314          | 7,559          | 7,557          | 7,830          | 7,764          |
| Montserrat                  | 0             | 0              | 0              | 1              | 1              | 1              | 0              |
| Neth. Antilles (former)     | 82            | *95            | 83             | 84             | 69             | ..             | ..             |
| Nicaragua                   | 87            | 104            | 106            | 118            | 128            | 161            | 168            |
| Panama                      | 60            | 71             | 105            | 122            | 144            | 171            | 210            |
| Puerto Rico                 | *1            | 0              | 13             | 24             | 28             | 56             | 70             |
| Sint Maarten (Dutch part)   | ..            | ..             | ..             | ..             | ..             | *12            | *11            |
| St. Kitts-Nevis             | *2            | *2             | *3             | *3             | 3              | *3             | *4             |
| St. Lucia                   | *4            | *5             | *6             | *7             | *8             | *8             | *8             |
| St. Pierre-Miquelon         | 1             | 1              | *1             | *1             | *1             | *1             | *1             |
| St. Vincent-Grenadines      | *1            | *2             | 2              | *3             | 3              | 4              | 3              |
| Trinidad and Tobago         | 251           | 251            | 420            | 676            | 833            | 797            | 718            |
| Turks and Caicos Islands    | *1            | *1             | *2             | *3             | *4             | *5             | *5             |
| United States               | 80,280        | 86,648         | 95,257         | 97,271         | 92,911         | 91,585         | 92,534         |
| <b>America, South</b>       | <b>12,463</b> | <b>14,584</b>  | <b>16,750</b>  | <b>18,861</b>  | <b>22,131</b>  | <b>24,423</b>  | <b>23,278</b>  |
| Argentina                   | 1,928         | 2,194          | 2,564          | 2,919          | 3,295          | 3,423          | 3,293          |
| Bolivia (Plur. State of)    | 108           | 156            | 160            | 199            | 268            | 351            | 382            |
| Brazil                      | 5,972         | 7,069          | 7,998          | 9,212          | 10,946         | 12,393         | 12,186         |
| Chile                       | 593           | 780            | 1,082          | 1,187          | 1,286          | 1,510          | 1,728          |
| Colombia                    | 983           | 1,104          | 1,103          | 1,180          | 1,402          | 2,048          | 2,043          |
| Ecuador                     | 255           | 339            | 328            | 470            | 521            | 603            | 626            |
| Falkland Is. (Malvinas)     | 1             | *1             | 0              | *1             | *1             | 1              | 1              |
| French Guiana               | 9             | *9             | 8              | 10             | *12            | ..             | ..             |
| Guyana                      | 28            | 31             | 34             | 32             | 34             | 35             | 41             |
| Paraguay                    | *96           | 131            | 175            | 198            | 258            | 281            | 304            |
| Peru                        | 421           | 464            | 514            | 565            | 808            | 904            | 1,048          |
| Suriname                    | 29            | 34             | 36             | 26             | 40             | 39             | 43             |
| Uruguay                     | 96            | 107            | 119            | 126            | 173            | 213            | 221            |
| Venezuela (Bolivar. Rep.)   | 1,944         | 2,167          | 2,629          | 2,737          | 3,087          | 2,622          | 1,362          |

Table 1

## Total Energy Supply

Petajoules

| Country or area          | 1990           | 1995           | 2000           | 2005           | 2010           | 2015           | 2019           |
|--------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| <b>Asia</b>              | <b>93,575</b>  | <b>123,514</b> | <b>140,251</b> | <b>181,840</b> | <b>233,353</b> | <b>268,609</b> | <b>297,447</b> |
| Afghanistan              | *39            | *33            | 31             | 46             | *141           | 169            | 189            |
| Armenia                  | ..             | 69             | 85             | 106            | *106           | 135            | 141            |
| Azerbaijan               | ..             | 536            | 485            | 573            | 486            | 605            | 664            |
| Bahrain                  | 213            | 257            | 331            | 348            | 513            | 577            | 669            |
| Bangladesh               | 769            | 918            | 998            | 1,191          | 1,493          | 1,803          | 2,068          |
| Bhutan                   | 37             | 39             | 44             | 48             | 57             | 64             | 71             |
| Brunei Darussalam        | 107            | 71             | 73             | 76             | 136            | 114            | 169            |
| Cambodia                 | 121            | 119            | 142            | 144            | 196            | 252            | 338            |
| China                    | 30,398         | 39,212         | 42,516         | 68,833         | 101,618        | 120,324        | 136,602        |
| China, Hong Kong SAR     | 316            | 398            | 570            | 579            | 544            | 576            | 585            |
| China, Macao SAR         | 15             | 18             | 24             | 29             | 32             | 43             | 40             |
| Cyprus                   | 58             | 71             | 90             | 94             | 103            | 86             | 95             |
| Georgia                  | ..             | 88             | 120            | 135            | 140            | 198            | 215            |
| India                    | 12,063         | 14,882         | 18,356         | 21,126         | 27,410         | 35,123         | 40,566         |
| Indonesia                | 4,012          | 5,220          | 5,881          | 7,037          | 8,073          | 8,709          | 11,146         |
| Iran (Islamic Rep. of)   | 2,819          | 3,887          | 5,386          | 7,216          | 8,579          | 10,024         | 11,460         |
| Iraq                     | 586            | 1,072          | 995            | 1,485          | 1,424          | 1,997          | 2,292          |
| Israel                   | 482            | 652            | 767            | 773            | 972            | 915            | 911            |
| Japan                    | 18,354         | 20,715         | 21,681         | 21,868         | 21,010         | 18,126         | 17,437         |
| Jordan                   | 138            | 172            | 205            | 289            | 303            | 368            | 399            |
| Kazakhstan               | ..             | 2,173          | 1,554          | 2,356          | 3,363          | 3,180          | 3,003          |
| Korea, Dem.Ppl's.Rep.    | 1,391          | 921            | 826            | 896            | 622            | 332            | 653            |
| Korea, Republic of       | 3,868          | 6,121          | 7,912          | 8,822          | 10,498         | 11,428         | 11,738         |
| Kuwait                   | 566            | 835            | 824            | 1,133          | 1,350          | 1,405          | 1,598          |
| Kyrgyzstan               | ..             | 101            | 101            | 114            | 115            | 167            | 159            |
| Lao People's Dem. Rep.   | 60             | 63             | 58             | 69             | 100            | 169            | 246            |
| Lebanon                  | *113           | 174            | 207            | 206            | 262            | 337            | 350            |
| Malaysia                 | 757            | 1,708          | 1,959          | 2,745          | 2,965          | 3,424          | 3,896          |
| Maldives                 | 2              | 4              | 6              | 9              | 13             | 19             | 28             |
| Mongolia                 | 114            | 88             | 86             | 103            | 164            | 273            | 541            |
| Myanmar                  | 466            | 495            | 538            | 616            | 660            | 847            | 965            |
| Nepal                    | 239            | 299            | 349            | 388            | 446            | 502            | 597            |
| Oman                     | 153            | 236            | 319            | 445            | 825            | 1,100          | 1,021          |
| Other Asia               | 1,965          | 2,612          | 3,510          | 4,231          | 4,624          | 4,666          | 4,558          |
| Pakistan                 | 1,834          | 2,182          | 2,437          | 2,964          | 3,092          | 3,314          | 3,849          |
| Philippines              | 1,119          | 1,312          | 1,603          | 1,525          | 1,706          | 2,143          | 2,520          |
| Qatar                    | 194            | 547            | 576            | 728            | 1,165          | 1,546          | 1,723          |
| Saudi Arabia             | 3,178          | 3,881          | 4,487          | 6,047          | 7,707          | 10,307         | 10,129         |
| Singapore                | 658            | 645            | 761            | 927            | 1,085          | 1,166          | 823            |
| Sri Lanka                | 187            | 225            | 296            | 324            | 360            | 433            | 457            |
| State of Palestine       | *20            | *22            | 38             | 58             | 54             | 72             | 80             |
| Syrian Arab Republic     | 476            | 585            | 729            | 741            | 911            | 424            | 390            |
| Tajikistan               | ..             | 146            | 141            | 148            | 143            | 167            | 208            |
| Thailand                 | 1,766          | 2,620          | 3,049          | 4,048          | 4,931          | 5,668          | 5,795          |
| Timor-Leste              | ..             | ..             | ..             | *4             | *4             | 7              | 10             |
| Turkey                   | 2,211          | 2,578          | 3,182          | 3,529          | 4,442          | 5,390          | 6,118          |
| Turkmenistan             | ..             | 574            | 625            | 754            | 951            | 1,160          | 1,191          |
| United Arab Emirates     | 791            | 1,108          | 1,719          | 1,842          | 2,977          | 3,571          | 2,189          |
| Uzbekistan               | ..             | 1,780          | 2,124          | 2,046          | 1,821          | 1,735          | 1,999          |
| Viet Nam                 | 791            | 908            | 1,262          | 1,756          | 2,334          | 3,269          | 4,401          |
| Yemen                    | ..             | 142            | 197            | 274            | 326            | 180            | 155            |
| Yemen Arab Rep. (former) | *47            | ..             | ..             | ..             | ..             | ..             | ..             |
| Yemen, Dem. (former)     | *84            | ..             | ..             | ..             | ..             | ..             | ..             |
| <b>Europe</b>            | <b>126,235</b> | <b>106,772</b> | <b>106,787</b> | <b>113,126</b> | <b>111,985</b> | <b>103,986</b> | <b>106,113</b> |
| Albania                  | 92             | 47             | 65             | 91             | 91             | 91             | 91             |
| Andorra                  | *7             | 7              | 9              | 10             | 10             | 9              | 9              |
| Austria                  | 1,041          | 1,123          | 1,198          | 1,411          | 1,425          | 1,368          | 1,396          |

Table 1

## Total Energy Supply

Petajoules

| Country or area             | 1990         | 1995         | 2000         | 2005         | 2010         | 2015         | 2019         |
|-----------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Belarus                     | ..           | 1,038        | 1,029        | 1,121        | 1,152        | 1,067        | 1,081        |
| Belgium                     | 1,999        | 2,231        | 2,418        | 2,421        | 2,499        | 2,183        | 2,288        |
| Bosnia and Herzegovina      | ..           | 62           | 179          | 206          | 269          | 250          | 303          |
| Bulgaria                    | 1,181        | 966          | 773          | 826          | 741          | 778          | 771          |
| Croatia                     | ..           | 325          | 349          | 407          | 390          | 350          | 361          |
| Czechia                     | ..           | 1,760        | 1,746        | 1,898        | 1,892        | 1,758        | 1,789        |
| Czechoslovakia (former)     | 2,950        | ..           | ..           | ..           | ..           | ..           | ..           |
| Denmark                     | 726          | 809          | 780          | 791          | 815          | 682          | 669          |
| Estonia                     | ..           | 222          | 195          | 220          | 237          | 230          | 220          |
| Faeroe Islands              | 10           | *8           | *10          | *10          | *9           | *9           | *11          |
| Finland                     | 1,186        | 1,208        | 1,353        | 1,440        | 1,528        | 1,351        | 1,388        |
| France                      | 9,345        | 9,886        | 10,500       | 11,374       | 10,969       | 10,527       | 10,114       |
| German Dem. R. (former)     | *3,679       | ..           | ..           | ..           | ..           | ..           | ..           |
| Germany                     | ..           | 14,083       | 14,081       | 14,156       | 13,791       | 12,932       | 12,314       |
| Germany, Fed. R. (former)   | 11,391       | ..           | ..           | ..           | ..           | ..           | ..           |
| Gibraltar                   | 2            | 4            | 5            | 6            | 7            | 9            | 11           |
| Greece                      | 895          | 950          | 1,134        | 1,268        | 1,158        | 967          | 915          |
| Guernsey                    | ..           | ..           | ..           | 1            | 1            | 1            | 1            |
| Hungary                     | 1,200        | 1,083        | 1,046        | 1,174        | 1,109        | 1,053        | 1,114        |
| Iceland                     | 87           | 90           | 139          | 158          | 285          | 320          | 363          |
| Ireland                     | 417          | 448          | 580          | 618          | 608          | 559          | 574          |
| Isle of Man                 | ..           | ..           | ..           | 1            | 4            | 4            | 5            |
| Italy                       | 6,138        | 6,668        | 7,183        | 7,797        | 7,277        | 6,374        | 6,221        |
| Jersey                      | ..           | 1            | 1            | 3            | 3            | 3            | 3            |
| Kosovo                      | ..           | ..           | 65           | 82           | 105          | 106          | 112          |
| Latvia                      | ..           | 193          | 161          | 190          | 189          | 179          | 188          |
| Liechtenstein               | 1            | 2            | 2            | 3            | 3            | 3            | 3            |
| Lithuania                   | ..           | 363          | 295          | 364          | 292          | 292          | 318          |
| Luxembourg                  | 143          | 133          | 142          | 185          | 178          | 158          | 167          |
| Malta                       | 29           | 30           | 29           | 37           | 35           | 27           | 30           |
| Montenegro                  | ..           | ..           | ..           | 42           | 48           | 42           | 47           |
| Netherlands                 | 2,771        | 3,042        | 3,106        | 3,316        | 3,443        | 2,997        | 2,971        |
| North Macedonia             | ..           | 151          | 169          | 163          | 121          | 116          | 121          |
| Norway                      | 879          | 981          | 1,092        | 1,215        | 1,353        | 1,215        | 1,160        |
| Poland                      | 4,393        | 4,249        | 3,784        | 3,891        | 4,256        | 4,004        | 4,324        |
| Portugal                    | 703          | 846          | 1,031        | 1,109        | 983          | 918          | 910          |
| Republic of Moldova         | ..           | 186          | 66           | 89           | 91           | 109          | 119          |
| Romania                     | 2,621        | 1,925        | 1,532        | 1,626        | 1,474        | 1,341        | 1,392        |
| Russian Federation          | ..           | 26,720       | 25,994       | 27,338       | 28,932       | 28,943       | 31,678       |
| Serbia                      | ..           | ..           | ..           | 669          | 648          | 612          | 633          |
| Serbia and Montenegro       | ..           | 522          | 556          | ..           | ..           | ..           | ..           |
| Slovakia                    | ..           | 742          | 740          | 777          | 736          | 675          | 705          |
| Slovenia                    | ..           | 254          | 274          | 316          | 307          | 276          | 285          |
| Spain                       | 3,762        | 4,211        | 5,073        | 5,914        | 5,335        | 4,904        | 5,036        |
| Sweden                      | 1,965        | 2,086        | 1,968        | 2,123        | 2,099        | 1,834        | 2,002        |
| Switzerland                 | 1,018        | 1,004        | 1,041        | 1,080        | 1,085        | 1,013        | 1,023        |
| Ukraine                     | ..           | 7,073        | 5,574        | 5,872        | 5,491        | 3,753        | 3,736        |
| United Kingdom              | 8,612        | 9,037        | 9,317        | 9,318        | 8,511        | 7,596        | 7,139        |
| USSR (former)               | 55,194       | ..           | ..           | ..           | ..           | ..           | ..           |
| Yugoslavia, SFR (former)    | 1,797        | ..           | ..           | ..           | ..           | ..           | ..           |
| <b>Oceania</b>              | <b>4,418</b> | <b>4,782</b> | <b>5,506</b> | <b>5,769</b> | <b>6,499</b> | <b>6,605</b> | <b>6,733</b> |
| American Samoa              | *7           | *6           | *6           | *7           | *7           | *4           | *4           |
| Australia                   | 3,694        | 3,962        | 4,567        | 4,790        | 5,396        | 5,330        | 5,424        |
| Cook Islands                | *1           | *1           | *1           | 1            | *1           | *1           | *1           |
| Fiji                        | 23           | *23          | 21           | 24           | 21           | 25           | *26          |
| French Polynesia            | *7           | 7            | 9            | 12           | 14           | 13           | 13           |
| Kiribati                    | *1           | *1           | 1            | 1            | 1            | 1            | *2           |
| Marshall Islands            | ..           | *1           | *2           | *2           | *2           | *2           | *2           |
| Micronesia (Fed. States of) | ..           | 3            | *3           | 2            | 2            | 2            | *2           |

**Table 1****Total Energy Supply**

Petajoules

| Country or area          | 1990 | 1995 | 2000 | 2005 | 2010 | 2015 | 2019 |
|--------------------------|------|------|------|------|------|------|------|
| Nauru                    | *2   | *1   | *1   | *1   | *1   | *1   | *1   |
| New Caledonia            | 21   | 27   | 30   | 37   | 46   | 61   | 66   |
| New Zealand              | 560  | 645  | 748  | 747  | 839  | 958  | 960  |
| Northern Mariana Islands | ..   | ..   | ..   | ..   | *7   | *8   | *8   |
| Pacific Islands (former) | *3   | ..   | ..   | ..   | ..   | ..   | ..   |
| Palau                    | ..   | *3   | *3   | *3   | 3    | *3   | *3   |
| Papua New Guinea         | 88   | 89   | 99   | 126  | 141  | 178  | *202 |
| Samoa                    | *3   | *4   | 4    | 4    | 4    | 5    | 6    |
| Solomon Islands          | *5   | *6   | *6   | *7   | *8   | 8    | *8   |
| Tonga                    | 1    | 1    | 1    | *2   | 2    | 2    | 2    |
| Vanuatu                  | 1    | 1    | *2   | 2    | 3    | 3    | 3    |



**Table 2**

**Components of total energy supply**

Petajoules and Gigajoules per capita

**Table Notes**

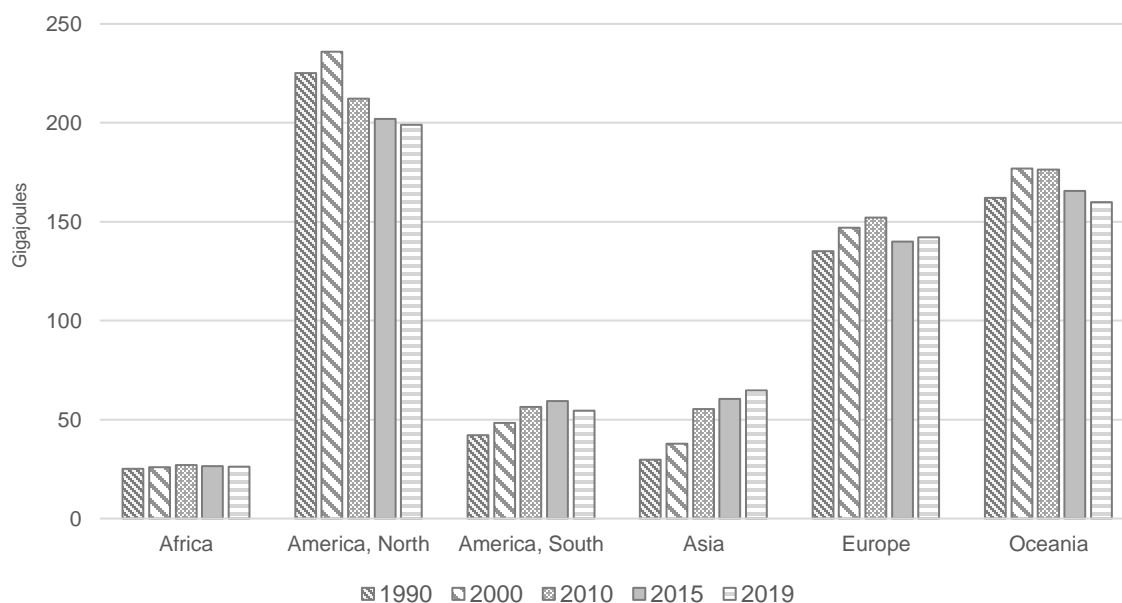
Included in the **Primary energy production** for **Solids** are hard coal, lignite, peat, oil shale, primary solid biofuels and wastes; **Liquids** are comprised of crude oil, natural gas liquids, other hydrocarbons, additives and oxygenates, and liquid biofuels; **Gas** comprises natural gas and biogas; **Electricity** is comprised of primary electricity generation from hydro, wind, tide, wave and solar sources; and **Heat** comprises primary heat from nuclear, geothermal, chemical and solar sources.

**Stock changes, trade and International bunkers** refer to all primary and secondary forms of energy.

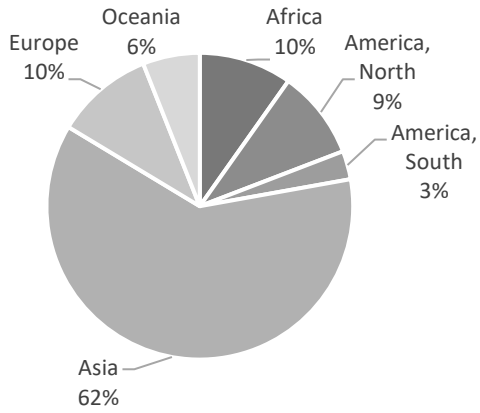
**Supply** is calculated as primary energy production plus import minus exports minus International bunkers minus stock changes.

Please refer to the Definitions Section on pages ix to xv for the appropriate product description/ classification, and xvi to xvii for the descriptions of relevant flows.

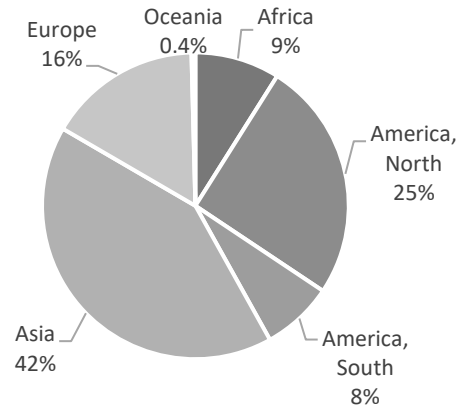
**Figure 4: Total per capita energy supply by region, selected years**



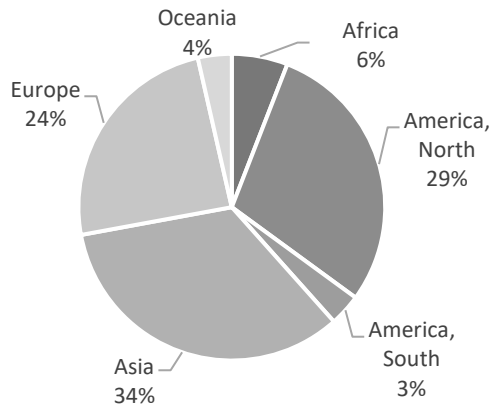
**Figure 5: Production of solids by region, 2019**



**Figure 6: Production of liquids by region, 2019**



**Figure 7: Production of gases by region, 2019**



**Figure 8: Primary electricity production by region, 2019**

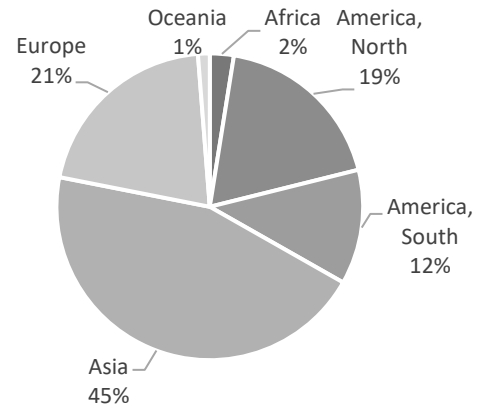


Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Country or area      | Year | Primary energy production |         |         |         |             |        |
|----------------------|------|---------------------------|---------|---------|---------|-------------|--------|
|                      |      | Total                     | Solids  | Liquids | Gases   | Electricity | Heat   |
| World                | 2016 | 569,869                   | 199,253 | 190,000 | 129,704 | 19,054      | 31,856 |
|                      | 2017 | 581,895                   | 204,228 | 190,604 | 134,604 | 20,196      | 32,263 |
|                      | 2018 | 601,245                   | 212,603 | 194,234 | 139,508 | 21,669      | 33,231 |
|                      | 2019 | 612,971                   | 215,784 | 193,493 | 146,693 | 22,820      | 34,181 |
| Africa               | 2016 | 44,298                    | 20,227  | 15,638  | 7,598   | 482         | 354    |
|                      | 2017 | 46,309                    | 20,586  | 16,643  | 8,207   | 508         | 365    |
|                      | 2018 | 46,947                    | 20,950  | 16,903  | 8,203   | 550         | 342    |
|                      | 2019 | 48,095                    | 21,156  | 17,329  | 8,659   | 576         | 374    |
| Algeria              | 2016 | 6,284                     | 0       | 2,947   | 3,335   | *2          | ..     |
|                      | 2017 | 6,285                     | 0       | 2,877   | 3,406   | *2          | ..     |
|                      | 2018 | 6,254                     | 1       | 2,816   | 3,434   | *3          | ..     |
|                      | 2019 | 5,954                     | 0       | 2,777   | 3,173   | *3          | ..     |
| Angola               | 2016 | 3,996                     | 260     | 3,656   | 58      | 21          | ..     |
|                      | 2017 | 4,085                     | 264     | 3,595   | 198     | 28          | ..     |
|                      | 2018 | 3,794                     | 268     | 3,279   | 212     | 35          | ..     |
|                      | 2019 | 3,639                     | 272     | 3,095   | 233     | 39          | ..     |
| Benin                | 2016 | 107                       | 107     | ..      | ..      | 0           | ..     |
|                      | 2017 | 110                       | 110     | ..      | ..      | 0           | ..     |
|                      | 2018 | 113                       | 113     | ..      | ..      | 0           | ..     |
|                      | 2019 | 121                       | 121     | ..      | ..      | 0           | ..     |
| Botswana             | 2016 | 51                        | 51      | ..      | ..      | 0           | ..     |
|                      | 2017 | 59                        | 59      | ..      | ..      | 0           | ..     |
|                      | 2018 | 65                        | 65      | ..      | ..      | 0           | ..     |
|                      | 2019 | 56                        | 56      | ..      | ..      | 0           | ..     |
| Burkina Faso         | 2016 | 128                       | 127     | ..      | 0       | 1           | ..     |
|                      | 2017 | 129                       | 129     | ..      | 0       | 0           | ..     |
|                      | 2018 | 131                       | 130     | ..      | 0       | 1           | ..     |
|                      | 2019 | 132                       | 132     | ..      | 0       | 1           | ..     |
| Burundi              | 2016 | 56                        | 56      | ..      | ..      | 1           | ..     |
|                      | 2017 | 56                        | 56      | ..      | ..      | 0           | ..     |
|                      | 2018 | 56                        | 55      | ..      | ..      | 1           | ..     |
|                      | 2019 | 56                        | 55      | ..      | ..      | 1           | ..     |
| Cabo Verde           | 2016 | *2                        | *1      | ..      | ..      | 0           | ..     |
|                      | 2017 | *2                        | *1      | ..      | ..      | 0           | ..     |
|                      | 2018 | *2                        | *1      | ..      | ..      | 0           | ..     |
|                      | 2019 | *2                        | *1      | ..      | ..      | 0           | ..     |
| Cameroon             | 2016 | 502                       | 269     | 198     | 18      | 17          | ..     |
|                      | 2017 | *477                      | *276    | 163     | 21      | 18          | ..     |
|                      | 2018 | 504                       | 283     | 148     | 55      | 18          | ..     |
|                      | 2019 | 544                       | 290     | 154     | 81      | 19          | ..     |
| Central African Rep. | 2016 | 34                        | 33      | ..      | ..      | 1           | ..     |
|                      | 2017 | *34                       | *33     | ..      | ..      | 1           | ..     |
|                      | 2018 | *34                       | *34     | ..      | ..      | 1           | ..     |
|                      | 2019 | *34                       | *34     | ..      | ..      | 1           | ..     |
| Chad                 | 2016 | 347                       | 72      | 275     | ..      | ..          | ..     |
|                      | 2017 | 318                       | 73      | 245     | ..      | ..          | ..     |
|                      | 2018 | 349                       | 74      | 275     | ..      | ..          | ..     |
|                      | 2019 | 358                       | 75      | 283     | ..      | ..          | ..     |
| Comoros              | 2016 | *4                        | *4      | ..      | ..      | ..          | ..     |
|                      | 2017 | 4                         | 4       | ..      | ..      | ..          | ..     |
|                      | 2018 | 4                         | 4       | ..      | ..      | ..          | ..     |
|                      | 2019 | *4                        | *4      | ..      | ..      | ..          | ..     |
| Congo                | 2016 | 602                       | 65      | 512     | 21      | 4           | ..     |
|                      | 2017 | 684                       | 67      | 591     | 22      | 4           | ..     |
|                      | 2018 | 812                       | 68      | 716     | 25      | 4           | ..     |
|                      | 2019 | 834                       | 68      | 729     | 34      | 3           | ..     |



Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Imports | Exports | International bunkers |        | Stock changes | Supply  |            |
|---------|---------|-----------------------|--------|---------------|---------|------------|
|         |         | Aviation              | Marine |               | Total   | Per capita |
| 230,642 | 236,200 | 7,687                 | 8,572  | -6,196        | 554,247 | 74         |
| 240,960 | 244,329 | 8,097                 | 8,988  | -3,408        | 564,848 | 75         |
| 243,894 | 249,612 | 8,443                 | 8,699  | 126           | 578,259 | 76         |
| 242,668 | 248,815 | 8,529                 | 8,536  | 5,166         | 584,593 | 76         |
| 7,620   | 19,474  | 333                   | 161    | -105          | 32,055  | 26         |
| 7,662   | 20,974  | 371                   | 145    | -130          | 32,610  | 26         |
| 7,616   | 21,365  | 371                   | 218    | -56           | 32,665  | 26         |
| 7,724   | 20,872  | 354                   | 205    | 86            | 34,302  | 26         |
| 167     | 4,225   | *17                   | 10     | -3            | 2,203   | 54         |
| 169     | 4,129   | *16                   | 10     | 12            | 2,288   | 55         |
| 60      | 3,846   | *19                   | 9      | 12            | 2,429   | 58         |
| 102     | 3,524   | 21                    | 1      | 1             | 2,509   | 58         |
| 154     | 3,632   | 13                    | 15     | *-48          | 539     | 19         |
| 152     | 3,728   | 13                    | 16     | *-50          | 531     | 18         |
| 148     | 3,440   | 13                    | 10     | *-67          | 546     | 18         |
| 137     | 3,190   | 13                    | 11     | *10           | 553     | 17         |
| 91      | ..      | 1                     | 0      | -3            | 199     | 18         |
| 97      | ..      | 1                     | 0      | -2            | 207     | 19         |
| 109     | ..      | 1                     | ..     | 3             | 219     | 19         |
| 101     | 0       | 1                     | 0      | 0             | 220     | 19         |
| 47      | 5       | 0                     | ..     | 0             | 92      | 43         |
| 46      | 5       | 0                     | ..     | ..            | 99      | 45         |
| 47      | 7       | 1                     | ..     | ..            | 104     | 46         |
| 49      | 7       | 1                     | ..     | ..            | 98      | 42         |
| 43      | 0       | 1                     | ..     | -6            | 176     | 9          |
| 53      | 0       | 1                     | ..     | *-4           | 185     | 10         |
| 68      | 0       | 1                     | ..     | *4            | 193     | 10         |
| 62      | 0       | 1                     | ..     | *-6           | 199     | 10         |
| 7       | 0       | 0                     | ..     | 0             | 63      | 6          |
| *8      | ..      | 0                     | ..     | 0             | 64      | 6          |
| *10     | ..      | 0                     | ..     | 0             | 66      | 6          |
| *10     | ..      | 0                     | ..     | 0             | 66      | 6          |
| *13     | ..      | *2                    | *3     | ..            | *9      | *17        |
| *14     | ..      | *2                    | *3     | ..            | *10     | *18        |
| *14     | ..      | *2                    | *3     | ..            | *10     | *18        |
| *14     | ..      | *2                    | *4     | ..            | *10     | *19        |
| 96      | 206     | 1                     | 0      | 0             | 392     | 16         |
| 82      | 164     | 1                     | 0      | ..            | 395     | 16         |
| 64      | 165     | 1                     | ..     | ..            | 402     | 16         |
| 69      | 203     | 1                     | ..     | ..            | 408     | 16         |
| *4      | ..      | 1                     | ..     | ..            | 37      | 8          |
| *4      | ..      | 1                     | ..     | ..            | *37     | *8         |
| *4      | ..      | 1                     | ..     | ..            | *37     | *8         |
| *4      | ..      | *1                    | ..     | ..            | *38     | *8         |
| *7      | 261     | *1                    | ..     | ..            | 91      | 6          |
| *7      | 232     | 1                     | ..     | 0             | 92      | 6          |
| *7      | 261     | 1                     | ..     | ..            | 94      | 6          |
| *7      | 270     | 1                     | ..     | ..            | 95      | 6          |
| *3      | ..      | 0                     | ..     | ..            | *7      | *8         |
| *4      | ..      | 0                     | ..     | ..            | *8      | *9         |
| *4      | ..      | 0                     | ..     | ..            | *8      | *10        |
| *5      | ..      | 0                     | ..     | ..            | *8      | *10        |
| 17      | 495     | 2                     | ..     | 0             | 122     | 24         |
| 9       | 570     | 1                     | ..     | 0             | 122     | 24         |
| 9       | 694     | 1                     | ..     | 0             | 126     | 24         |
| 9       | 699     | 1                     | ..     | 7             | 135     | 25         |

Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Country or area        | Year | Primary energy production |        |         |       |             |      |
|------------------------|------|---------------------------|--------|---------|-------|-------------|------|
|                        |      | Total                     | Solids | Liquids | Gases | Electricity | Heat |
| Côte d'Ivoire          | 2016 | 454                       | 268    | 93      | 87    | 6           | ..   |
|                        | 2017 | 436                       | 264    | 85      | 79    | 7           | ..   |
|                        | 2018 | 415                       | 262    | 71      | 72    | 11          | ..   |
|                        | 2019 | 436                       | 268    | 77      | 78    | 13          | ..   |
| Dem. Rep. of the Congo | 2016 | 1,256                     | 1,181  | 42      | 0     | 33          | ..   |
|                        | 2017 | 1,264                     | 1,180  | 51      | 0     | 34          | ..   |
|                        | 2018 | 1,173                     | 1,077  | 56      | 0     | 40          | ..   |
|                        | 2019 | 1,285                     | 1,195  | 49      | ..    | 40          | ..   |
| Djibouti               | 2016 | 4                         | 4      | ..      | ..    | ..          | ..   |
|                        | 2017 | 4                         | 4      | ..      | ..    | ..          | ..   |
|                        | 2018 | 4                         | 4      | ..      | ..    | ..          | ..   |
|                        | 2019 | 4                         | 4      | ..      | ..    | ..          | ..   |
| Egypt                  | 2016 | 3,105                     | 225    | 1,369   | 1,455 | 56          | ..   |
|                        | 2017 | 3,418                     | 225    | 1,341   | 1,795 | 56          | ..   |
|                        | 2018 | 3,364                     | 228    | 1,362   | 1,718 | 56          | ..   |
|                        | 2019 | 3,982                     | 207    | 1,331   | 2,379 | 66          | ..   |
| Equatorial Guinea      | 2016 | 763                       | 4      | 482     | 277   | *1          | ..   |
|                        | 2017 | 715                       | 4      | 421     | 289   | *1          | ..   |
|                        | 2018 | 648                       | 4      | 371     | 272   | *1          | ..   |
|                        | 2019 | 570                       | 4      | 347     | 219   | *1          | ..   |
| Eritrea                | 2016 | 26                        | 26     | ..      | ..    | 0           | ..   |
|                        | 2017 | 26                        | 26     | ..      | ..    | 0           | ..   |
|                        | 2018 | 27                        | 27     | ..      | ..    | 0           | ..   |
|                        | 2019 | 27                        | 27     | ..      | ..    | 0           | ..   |
| Eswatini               | 2016 | 35                        | 35     | ..      | ..    | 0           | ..   |
|                        | 2017 | 30                        | 29     | ..      | ..    | 0           | ..   |
|                        | 2018 | 29                        | 28     | ..      | ..    | 1           | ..   |
|                        | 2019 | 31                        | 30     | ..      | ..    | 1           | ..   |
| Ethiopia               | 2016 | 1,356                     | 1,311  | 0       | ..    | 45          | ..   |
|                        | 2017 | 1,380                     | 1,332  | 0       | ..    | 48          | ..   |
|                        | 2018 | 1,399                     | 1,347  | 0       | ..    | 51          | ..   |
|                        | 2019 | 1,420                     | 1,365  | 0       | ..    | 54          | ..   |
| Gabon                  | 2016 | 556                       | *53    | 481     | 19    | 3           | ..   |
|                        | 2017 | 518                       | *54    | 444     | 17    | 3           | ..   |
|                        | 2018 | 476                       | *55    | 401     | 16    | 4           | ..   |
|                        | 2019 | 535                       | *55    | 460     | 17    | 4           | ..   |
| Gambia                 | 2016 | 7                         | 7      | ..      | ..    | 0           | ..   |
|                        | 2017 | 7                         | 7      | ..      | ..    | 0           | ..   |
|                        | 2018 | 7                         | 7      | ..      | ..    | 0           | ..   |
|                        | 2019 | 7                         | 7      | ..      | ..    | 0           | ..   |
| Ghana                  | 2016 | 388                       | 151    | 195     | 22    | 20          | ..   |
|                        | 2017 | 573                       | 162    | 360     | 32    | 20          | ..   |
|                        | 2018 | 615                       | 177    | 379     | 37    | 22          | ..   |
|                        | 2019 | 686                       | 173    | 435     | 53    | 26          | ..   |
| Guinea                 | 2016 | 117                       | 113    | ..      | 0     | 4           | ..   |
|                        | 2017 | 117                       | 113    | ..      | 0     | 4           | ..   |
|                        | 2018 | 118                       | 113    | ..      | 0     | 4           | ..   |
|                        | 2019 | 118                       | 114    | ..      | 0     | 5           | ..   |
| Guinea-Bissau          | 2016 | 26                        | 26     | ..      | ..    | ..          | ..   |
|                        | 2017 | 26                        | 26     | ..      | ..    | 0           | ..   |
|                        | 2018 | 26                        | 26     | ..      | ..    | 0           | ..   |
|                        | 2019 | 26                        | 26     | ..      | ..    | 0           | ..   |
| Kenya                  | 2016 | 736                       | 560    | ..      | ..    | 14          | 161  |
|                        | 2017 | 738                       | 556    | ..      | ..    | 10          | 171  |
|                        | 2018 | *754                      | *553   | ..      | 0     | 16          | 185  |
|                        | 2019 | *772                      | *566   | ..      | ..    | 17          | 188  |

Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Imports | Exports | International bunkers |        | Stock changes | Supply |            |
|---------|---------|-----------------------|--------|---------------|--------|------------|
|         |         | Aviation              | Marine |               | Total  | Per capita |
| 164     | 152     | 7                     | 3      | 0             | 455    | 19         |
| 160     | 130     | *7                    | 3      | -1            | 456    | 19         |
| 160     | 131     | 7                     | 3      | ..            | 434    | 17         |
| 172     | 152     | 8                     | 4      | ..            | 444    | 17         |
| 32      | 44      | 5                     | ..     | ..            | 1,240  | 16         |
| 38      | 51      | 5                     | ..     | ..            | 1,246  | 15         |
| 38      | 57      | 6                     | ..     | ..            | 1,149  | 14         |
| 37      | 50      | 5                     | ..     | ..            | 1,266  | 15         |
| 12      | 0       | 4                     | *1     | *1            | 10     | 10         |
| 11      | 0       | *4                    | *1     | 0             | 10     | 11         |
| *11     | 0       | *4                    | *1     | 0             | *10    | *11        |
| *11     | 0       | *4                    | *1     | 0             | *10    | *10        |
| 1,274   | 603     | 19                    | 2      | -1            | 3,756  | 40         |
| 1,237   | 557     | 20                    | 8      | 2             | 4,069  | 42         |
| 1,147   | 627     | 28                    | 4      | -1            | 3,853  | 39         |
| 796     | 659     | 35                    | 3      | ..            | 4,081  | 41         |
| *13     | 659     | *2                    | ..     | -7            | 122    | 101        |
| *13     | 596     | 2                     | ..     | -4            | 134    | 106        |
| *12     | 558     | 2                     | ..     | 1             | 99     | 76         |
| *13     | 506     | 2                     | ..     | 0             | 75     | 56         |
| 8       | ..      | 0                     | ..     | ..            | 34     | 10         |
| 9       | ..      | 0                     | ..     | ..            | 35     | 10         |
| 11      | ..      | 1                     | ..     | ..            | 37     | 11         |
| 11      | ..      | 0                     | ..     | ..            | 37     | 11         |
| 18      | *4      | 0                     | ..     | 0             | 49     | 44         |
| 17      | 5       | 0                     | ..     | ..            | 42     | 37         |
| 18      | 3       | 0                     | ..     | ..            | 44     | 38         |
| *19     | 3       | 0                     | ..     | ..            | 46     | 40         |
| 177     | 5       | 26                    | ..     | 0             | 1,503  | 15         |
| 191     | 5       | 30                    | ..     | -4            | 1,539  | 14         |
| 199     | 4       | 32                    | ..     | -1            | 1,564  | 14         |
| 230     | 4       | 32                    | ..     | ..            | 1,615  | 14         |
| 24      | 456     | 3                     | 8      | ..            | 113    | 56         |
| *18     | 407     | 2                     | 5      | 13            | 110    | 53         |
| 17      | 375     | 2                     | 5      | ..            | 110    | 52         |
| *21     | 445     | 2                     | 5      | ..            | 104    | 48         |
| 9       | 0       | *1                    | ..     | ..            | 15     | 7          |
| 9       | 0       | *1                    | ..     | ..            | 15     | 7          |
| 9       | 0       | *1                    | ..     | ..            | 15     | 7          |
| *9      | 0       | *1                    | ..     | ..            | *15    | *7         |
| 213     | 205     | 6                     | 0      | 14            | 376    | 13         |
| 177     | 366     | 6                     | 4      | 12            | 363    | 12         |
| 195     | 384     | 8                     | 0      | -8            | 425    | 14         |
| 213     | 447     | 9                     | 0      | 0             | 444    | 15         |
| 41      | 0       | *1                    | ..     | ..            | 156    | 13         |
| 49      | 0       | *1                    | ..     | ..            | 165    | 14         |
| 55      | 0       | *1                    | ..     | ..            | 171    | 14         |
| 66      | 0       | *2                    | ..     | ..            | 183    | 14         |
| *6      | 0       | *1                    | ..     | ..            | 31     | 17         |
| *6      | 0       | *1                    | ..     | ..            | 31     | 17         |
| *6      | 0       | *1                    | ..     | ..            | 32     | 17         |
| *6      | 0       | *1                    | ..     | ..            | 32     | 17         |
| 310     | 73      | 31                    | 0      | 0             | 941    | 19         |
| 301     | 63      | 34                    | 0      | 0             | 941    | 19         |
| 252     | 1       | 30                    | 2      | ..            | *973   | *19        |
| 268     | 1       | 31                    | ..     | ..            | *1,008 | *19        |

Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Country or area | Year | Primary energy production |        |         |       |             | Heat |
|-----------------|------|---------------------------|--------|---------|-------|-------------|------|
|                 |      | Total                     | Solids | Liquids | Gases | Electricity |      |
| Lesotho         | 2016 | *19                       | *17    | ..      | ..    | 2           | ..   |
|                 | 2017 | 18                        | 16     | ..      | ..    | 2           | ..   |
|                 | 2018 | *17                       | *15    | ..      | ..    | 2           | ..   |
|                 | 2019 | *16                       | *15    | ..      | ..    | 1           | ..   |
| Liberia         | 2016 | 79                        | 79     | ..      | ..    | 0           | ..   |
|                 | 2017 | 81                        | 81     | ..      | ..    | 0           | ..   |
|                 | 2018 | 84                        | 84     | ..      | ..    | 0           | ..   |
|                 | 2019 | 87                        | 86     | ..      | ..    | 0           | ..   |
| Libya           | 2016 | 1,407                     | 24     | 851     | 533   | 0           | ..   |
|                 | 2017 | 2,414                     | 25     | 1,900   | 489   | 0           | ..   |
|                 | 2018 | 2,883                     | 25     | 2,383   | 475   | 0           | ..   |
|                 | 2019 | 3,187                     | 25     | 2,677   | 485   | 0           | ..   |
| Madagascar      | 2016 | 263                       | 259    | ..      | ..    | 3           | ..   |
|                 | 2017 | 272                       | 269    | ..      | ..    | 3           | ..   |
|                 | 2018 | 306                       | 302    | ..      | ..    | 4           | ..   |
|                 | 2019 | 318                       | 315    | ..      | ..    | 3           | ..   |
| Malawi          | 2016 | 68                        | 61     | ..      | ..    | 7           | ..   |
|                 | 2017 | 69                        | 62     | ..      | ..    | 7           | ..   |
|                 | 2018 | 69                        | 62     | ..      | ..    | *7          | ..   |
|                 | 2019 | 71                        | 63     | ..      | ..    | *8          | ..   |
| Mali            | 2016 | *156                      | *152   | ..      | ..    | 4           | ..   |
|                 | 2017 | *159                      | *155   | ..      | ..    | 4           | ..   |
|                 | 2018 | *161                      | *157   | ..      | ..    | *4          | ..   |
|                 | 2019 | *162                      | *158   | ..      | ..    | *4          | ..   |
| Mauritania      | 2016 | 30                        | 19     | 10      | ..    | 1           | ..   |
|                 | 2017 | 24                        | 19     | 4       | ..    | 1           | ..   |
|                 | 2018 | 21                        | 20     | 0       | ..    | 1           | ..   |
|                 | 2019 | 21                        | 20     | ..      | ..    | *1          | ..   |
| Mauritius       | 2016 | 11                        | 10     | ..      | 0     | 1           | ..   |
|                 | 2017 | 10                        | 10     | ..      | 0     | 1           | ..   |
|                 | 2018 | 10                        | 9      | ..      | 0     | 1           | ..   |
|                 | 2019 | 10                        | 9      | ..      | 0     | 1           | ..   |
| Morocco         | 2016 | 90                        | 68     | 0       | 3     | 15          | 4    |
|                 | 2017 | 90                        | 67     | 0       | 3     | 15          | 4    |
|                 | 2018 | 98                        | 66     | 0       | 3     | 20          | 9    |
|                 | 2019 | 105                       | 66     | 0       | 3     | 23          | 13   |
| Mozambique      | 2016 | 685                       | 452    | 2       | 175   | 56          | ..   |
|                 | 2017 | 849                       | 625    | 0       | 173   | 51          | ..   |
|                 | 2018 | 968                       | 745    | 0       | 173   | 50          | ..   |
|                 | 2019 | 835                       | 609    | 0       | 171   | 54          | ..   |
| Namibia         | 2016 | 20                        | 15     | ..      | ..    | 5           | 0    |
|                 | 2017 | 21                        | 15     | ..      | ..    | 6           | 0    |
|                 | 2018 | 22                        | 17     | ..      | ..    | 5           | 0    |
|                 | 2019 | 24                        | 20     | ..      | ..    | 4           | 0    |
| Niger           | 2016 | 105                       | 71     | 35      | ..    | 0           | ..   |
|                 | 2017 | *98                       | *59    | 39      | ..    | 0           | ..   |
|                 | 2018 | *106                      | *71    | 35      | ..    | 0           | ..   |
|                 | 2019 | *112                      | *74    | 38      | ..    | 0           | ..   |
| Nigeria         | 2016 | 10,059                    | 4,704  | 3,882   | 1,443 | 29          | ..   |
|                 | 2017 | 10,297                    | 4,784  | 3,942   | 1,542 | 28          | ..   |
|                 | 2018 | 10,499                    | 4,865  | 4,046   | 1,563 | 24          | ..   |
|                 | 2019 | 10,795                    | 4,931  | 4,260   | 1,579 | 24          | ..   |
| Rwanda          | 2016 | *86                       | *84    | ..      | *2    | 1           | ..   |
|                 | 2017 | *87                       | *84    | ..      | *2    | 1           | ..   |
|                 | 2018 | *88                       | *85    | ..      | *2    | 1           | ..   |
|                 | 2019 | *88                       | *85    | ..      | *2    | 1           | ..   |

Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Imports | Exports | International bunkers |        | Stock changes | Supply |            |     |
|---------|---------|-----------------------|--------|---------------|--------|------------|-----|
|         |         | Aviation              | Marine |               | Total  | Per capita |     |
| *26     | 0       | 0                     | 0      | ..            | ..     | *45        | *22 |
| *29     | 0       | 0                     | 0      | ..            | ..     | *47        | *22 |
| *28     | 0       | 0                     | 0      | ..            | ..     | *45        | *21 |
| *29     | 0       | 0                     | 0      | ..            | ..     | *45        | *21 |
| *19     | 0       | 0                     | 0      | 0             | ..     | 97         | 21  |
| *17     | 0       | 0                     | 0      | 0             | ..     | 97         | 21  |
| *14     | 0       | 0                     | 0      | 0             | ..     | 98         | 20  |
| *15     | 0       | 0                     | 0      | 0             | ..     | 101        | 20  |
| 257     | 902     | 2                     | 3      | ..            | ..     | 757        | 117 |
| 249     | 1,922   | 2                     | 9      | ..            | ..     | 729        | 111 |
| 243     | 2,397   | 2                     | 11     | ..            | ..     | 714        | 107 |
| 258     | 2,523   | 2                     | 12     | ..            | ..     | 908        | 134 |
| 48      | ..      | 1                     | 0      | 3             | ..     | 306        | 12  |
| 53      | ..      | 2                     | 0      | -2            | ..     | 325        | 13  |
| 48      | 0       | 2                     | 0      | -4            | ..     | 356        | 14  |
| 59      | 0       | 2                     | 0      | 2             | ..     | 374        | 14  |
| 15      | 0       | 0                     | ..     | ..            | ..     | 83         | 5   |
| 17      | 0       | 0                     | ..     | ..            | ..     | 85         | 5   |
| 20      | 0       | 0                     | ..     | ..            | ..     | 88         | 5   |
| 20      | 0       | 0                     | ..     | ..            | ..     | 90         | 5   |
| *48     | *2      | *3                    | ..     | *1            | ..     | *198       | *11 |
| *50     | *2      | *3                    | ..     | *1            | ..     | *204       | *11 |
| *52     | *2      | *3                    | ..     | 0             | ..     | *207       | *11 |
| *53     | *2      | *3                    | ..     | 0             | ..     | *210       | *11 |
| 38      | *10     | 1                     | ..     | ..            | ..     | 56         | 14  |
| 51      | *4      | 1                     | ..     | *2            | ..     | 68         | 16  |
| 71      | 0       | 1                     | ..     | *16           | ..     | 74         | 17  |
| 76      | ..      | 1                     | ..     | *19           | ..     | 76         | 17  |
| 87      | *4      | 6                     | 14     | 6             | ..     | 67         | 53  |
| 108     | ..      | 7                     | 19     | 22            | ..     | 69         | 55  |
| 104     | ..      | 7                     | 24     | 14            | ..     | 69         | 54  |
| 110     | 3       | 6                     | 27     | 14            | ..     | 69         | 55  |
| 778     | 1       | 28                    | 6      | 3             | ..     | 831        | 23  |
| 817     | 1       | 30                    | 6      | 2             | ..     | 869        | 24  |
| 836     | 1       | 32                    | 6      | 17            | ..     | 878        | 24  |
| 867     | 5       | 34                    | 6      | -17           | ..     | 943        | 25  |
| 127     | 414     | *2                    | ..     | *-64          | ..     | 460        | 17  |
| 99      | 647     | 1                     | 0      | -152          | ..     | 452        | 16  |
| 101     | 595     | 0                     | 0      | 14            | ..     | 459        | 16  |
| 99      | 471     | 0                     | 0      | -2            | ..     | 464        | 15  |
| 67      | 3       | 2                     | ..     | ..            | ..     | 83         | 35  |
| 67      | 3       | 2                     | ..     | ..            | ..     | 83         | 35  |
| 67      | 4       | 2                     | ..     | 0             | ..     | 84         | 34  |
| 66      | 4       | 2                     | ..     | 0             | ..     | 84         | 34  |
| 6       | 13      | 2                     | ..     | 0             | ..     | 97         | 5   |
| 7       | *16     | *3                    | ..     | 0             | ..     | *87        | *4  |
| 7       | *15     | *2                    | ..     | *2            | ..     | *94        | *4  |
| 6       | *5      | *2                    | ..     | 6             | ..     | *105       | *5  |
| 825     | 4,569   | 19                    | 13     | 45            | ..     | 6,238      | 34  |
| 766     | 4,757   | 22                    | 13     | 26            | ..     | 6,245      | 33  |
| 555     | 4,894   | 29                    | 14     | -100          | ..     | 6,217      | 32  |
| 941     | 5,123   | 20                    | 14     | -8            | ..     | 6,586      | 33  |
| 14      | 0       | *1                    | ..     | 0             | ..     | *99        | *8  |
| 15      | 0       | *1                    | ..     | 0             | ..     | *101       | *8  |
| 16      | 0       | *1                    | ..     | 0             | ..     | *103       | *8  |
| 24      | 0       | *1                    | ..     | ..            | ..     | *111       | *9  |

Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Country or area         | Year | Primary energy production |        |         |       |             |      |
|-------------------------|------|---------------------------|--------|---------|-------|-------------|------|
|                         |      | Total                     | Solids | Liquids | Gases | Electricity | Heat |
| Sao Tome and Principe   | 2016 | 1                         | 1      | ..      | ..    | 0           | ..   |
|                         | 2017 | 1                         | 1      | ..      | ..    | 0           | ..   |
|                         | 2018 | 1                         | 1      | ..      | ..    | 0           | ..   |
|                         | 2019 | 1                         | 1      | ..      | ..    | 0           | ..   |
| Senegal                 | 2016 | 66                        | 65     | ..      | 1     | 0           | 1    |
|                         | 2017 | 69                        | 67     | ..      | 1     | 0           | 1    |
|                         | 2018 | 69                        | 68     | ..      | 0     | 0           | 1    |
|                         | 2019 | 75                        | 73     | ..      | 1     | *1          | 1    |
| Seychelles              | 2016 | 0                         | 0      | ..      | ..    | 0           | ..   |
|                         | 2017 | 0                         | 0      | ..      | ..    | 0           | ..   |
|                         | 2018 | 0                         | 0      | ..      | ..    | 0           | ..   |
|                         | 2019 | 0                         | 0      | ..      | ..    | 0           | ..   |
| Sierra Leone            | 2016 | 54                        | 54     | ..      | ..    | *1          | ..   |
|                         | 2017 | 55                        | 54     | ..      | ..    | 1           | ..   |
|                         | 2018 | 55                        | 54     | ..      | ..    | 1           | ..   |
|                         | 2019 | 56                        | 55     | ..      | ..    | 1           | ..   |
| Somalia                 | 2016 | 136                       | 136    | ..      | ..    | 0           | ..   |
|                         | 2017 | 139                       | 139    | ..      | ..    | 0           | ..   |
|                         | 2018 | 143                       | 143    | ..      | ..    | 0           | ..   |
|                         | 2019 | 147                       | 147    | ..      | ..    | 0           | ..   |
| South Africa            | 2016 | 6,630                     | 6,395  | 3       | 26    | 25          | 182  |
|                         | 2017 | 6,587                     | 6,344  | 4       | 23    | 33          | 183  |
|                         | 2018 | 6,629                     | 6,409  | 4       | 35    | 39          | 141  |
|                         | 2019 | 6,712                     | 6,465  | 3       | 40    | 38          | 165  |
| South Sudan             | 2016 | 299                       | 8      | 291     | ..    | 0           | ..   |
|                         | 2017 | 318                       | 7      | 311     | ..    | 0           | ..   |
|                         | 2018 | 312                       | 7      | 305     | ..    | 0           | ..   |
|                         | 2019 | 371                       | 7      | 364     | ..    | 0           | ..   |
| St. Helena and Depend.  | 2016 | 0                         | 0      | ..      | ..    | 0           | ..   |
|                         | 2017 | 0                         | 0      | ..      | ..    | 0           | ..   |
|                         | 2018 | 0                         | 0      | ..      | ..    | 0           | ..   |
|                         | 2019 | 0                         | 0      | ..      | ..    | 0           | ..   |
| Sudan                   | 2016 | 432                       | 204    | 200     | ..    | 29          | ..   |
|                         | 2017 | 412                       | 205    | 173     | ..    | 34          | ..   |
|                         | 2018 | 403                       | 207    | 162     | ..    | 35          | ..   |
|                         | 2019 | 408                       | 208    | *164    | ..    | 37          | ..   |
| Togo                    | 2016 | 116                       | 115    | ..      | ..    | 1           | ..   |
|                         | 2017 | 108                       | 107    | ..      | ..    | 1           | ..   |
|                         | 2018 | 114                       | 114    | ..      | ..    | 1           | ..   |
|                         | 2019 | 114                       | 114    | ..      | ..    | 1           | ..   |
| Tunisia                 | 2016 | 261                       | 45     | 113     | 95    | 2           | 5    |
|                         | 2017 | 239                       | 45     | 96      | 90    | 2           | 6    |
|                         | 2018 | 232                       | 46     | 92      | 86    | 2           | 7    |
|                         | 2019 | 218                       | 46     | 84      | 78    | 3           | 7    |
| Uganda                  | 2016 | 773                       | 761    | ..      | ..    | 12          | ..   |
|                         | 2017 | 809                       | 797    | ..      | ..    | 13          | ..   |
|                         | 2018 | 847                       | 834    | ..      | ..    | 13          | ..   |
|                         | 2019 | 889                       | 874    | ..      | ..    | 15          | ..   |
| United Rep. of Tanzania | 2016 | 797                       | 759    | ..      | 29    | 9           | ..   |
|                         | 2017 | 811                       | 775    | ..      | 27    | 9           | ..   |
|                         | 2018 | 823                       | 788    | ..      | 26    | *9          | ..   |
|                         | 2019 | 834                       | 791    | ..      | 34    | 9           | ..   |
| Zambia                  | 2016 | 355                       | 315    | ..      | ..    | 40          | ..   |
|                         | 2017 | 377                       | 333    | ..      | ..    | 44          | ..   |
|                         | 2018 | 394                       | 348    | ..      | ..    | 46          | ..   |
|                         | 2019 | 391                       | 350    | ..      | ..    | 41          | ..   |

Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Imports | Exports | International bunkers |        | Stock changes | Supply |            |
|---------|---------|-----------------------|--------|---------------|--------|------------|
|         |         | Aviation              | Marine |               | Total  | Per capita |
| *2      | ..      | 0                     | ..     | ..            | *3     | *14        |
| *2      | ..      | 0                     | ..     | ..            | *3     | *14        |
| *2      | ..      | *1                    | ..     | ..            | *3     | *14        |
| *2      | ..      | *1                    | ..     | ..            | *3     | *14        |
| 154     | 37      | 9                     | 6      | -6            | 174    | 12         |
| 137     | 11      | 10                    | 5      | *-6           | 186    | 12         |
| 159     | *19     | 9                     | *6     | *4            | 191    | 12         |
| 179     | *29     | 8                     | 8      | -1            | 209    | 13         |
| 17      | 0       | *2                    | *7     | *1            | 8      | 80         |
| 18      | 0       | *2                    | 7      | 0             | 8      | 83         |
| 16      | 0       | *1                    | *6     | 0             | 8      | 86         |
| 15      | 0       | *2                    | *5     | 0             | 8      | 85         |
| 17      | ..      | 0                     | ..     | ..            | 71     | 10         |
| 16      | ..      | 1                     | ..     | ..            | 70     | 9          |
| 15      | ..      | 0                     | ..     | ..            | 70     | 9          |
| 17      | ..      | 0                     | ..     | ..            | 73     | 9          |
| *12     | 0       | 2                     | 1      | ..            | 145    | 10         |
| *12     | 0       | 2                     | *1     | ..            | 148    | 10         |
| *12     | ..      | 2                     | *1     | ..            | 152    | 10         |
| *12     | ..      | 2                     | *1     | ..            | 156    | 10         |
| 1,331   | 2,042   | 73                    | 67     | ..            | 5,779  | 103        |
| 1,423   | 2,188   | 95                    | 32     | ..            | 5,694  | 100        |
| 1,738   | 2,480   | 77                    | 111    | 36            | 5,663  | 98         |
| 1,581   | 2,093   | 52                    | 101    | 56            | 5,991  | 102        |
| 24      | 288     | 3                     | ..     | ..            | 32     | 3          |
| 21      | 308     | 3                     | ..     | ..            | 27     | 3          |
| 21      | 302     | 3                     | ..     | ..            | 28     | 3          |
| 23      | 360     | 4                     | ..     | ..            | 30     | 3          |
| 0       | ..      | ..                    | ..     | ..            | 0      | 35         |
| 0       | ..      | ..                    | ..     | ..            | 0      | 25         |
| 0       | ..      | ..                    | ..     | ..            | 0      | 32         |
| 0       | ..      | ..                    | ..     | ..            | 0      | 34         |
| 113     | 47      | *7                    | 1      | 0             | 491    | 12         |
| 140     | 12      | *6                    | 1      | ..            | 532    | 13         |
| 136     | 5       | *5                    | *1     | ..            | 528    | 13         |
| *137    | *5      | *5                    | *1     | ..            | *535   | *12        |
| 24      | ..      | 2                     | ..     | -1            | 138    | 18         |
| 24      | ..      | 2                     | 1      | -1            | 130    | 17         |
| 26      | ..      | 3                     | ..     | -1            | 138    | 17         |
| 26      | 0       | 3                     | ..     | ..            | 138    | 17         |
| 322     | 106     | 9                     | 0      | 1             | 467    | 41         |
| 340     | 84      | 11                    | 0      | -5            | 487    | 43         |
| 345     | 85      | 13                    | 0      | -5            | 484    | 42         |
| 348     | 74      | 13                    | 0      | 0             | 477    | 41         |
| 68      | 1       | 4                     | ..     | ..            | 836    | 21         |
| 76      | 1       | 4                     | ..     | ..            | 879    | 21         |
| 81      | 1       | 5                     | ..     | ..            | 922    | 22         |
| 83      | 1       | 5                     | ..     | ..            | 966    | 22         |
| 108     | ..      | 5                     | 1      | ..            | 898    | 17         |
| 106     | ..      | 6                     | 1      | ..            | 910    | 17         |
| 108     | ..      | 6                     | 0      | ..            | 924    | 16         |
| 105     | ..      | 6                     | 0      | ..            | 933    | 16         |
| 70      | 3       | 1                     | ..     | -3            | 423    | 26         |
| 61      | 4       | 1                     | ..     | -4            | 437    | 26         |
| 56      | 5       | 1                     | ..     | -1            | 444    | 26         |
| 69      | 4       | 1                     | ..     | 0             | 455    | 25         |

Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Country or area             | Year        | Primary energy production |               |               |               |              |               |
|-----------------------------|-------------|---------------------------|---------------|---------------|---------------|--------------|---------------|
|                             |             | Total                     | Solids        | Liquids       | Gases         | Electricity  | Heat          |
| Zimbabwe                    | 2016        | 359                       | 347           | 1             | ..            | 10           | ..            |
|                             | 2017        | 402                       | 387           | 1             | ..            | 14           | ..            |
|                             | 2018        | 423                       | 403           | 2             | ..            | 18           | ..            |
|                             | 2019        | 415                       | 400           | 2             | ..            | 13           | ..            |
| <b>America, North</b>       | <b>2016</b> | <b>110,585</b>            | <b>20,195</b> | <b>39,815</b> | <b>35,378</b> | <b>3,739</b> | <b>11,458</b> |
|                             | <b>2017</b> | <b>114,426</b>            | <b>21,220</b> | <b>41,620</b> | <b>36,058</b> | <b>4,093</b> | <b>11,436</b> |
|                             | <b>2018</b> | <b>122,107</b>            | <b>21,286</b> | <b>46,066</b> | <b>39,044</b> | <b>4,176</b> | <b>11,535</b> |
|                             | <b>2019</b> | <b>127,876</b>            | <b>20,211</b> | <b>49,162</b> | <b>42,747</b> | <b>4,242</b> | <b>11,514</b> |
| Anguilla                    | 2016        | 0                         | 0             | ..            | ..            | 0            | ..            |
|                             | 2017        | 0                         | 0             | ..            | ..            | 0            | ..            |
|                             | 2018        | 0                         | 0             | ..            | ..            | 0            | ..            |
|                             | 2019        | 0                         | 0             | ..            | ..            | 0            | ..            |
| Antigua and Barbuda         | 2016        | 0                         | ..            | ..            | ..            | 0            | ..            |
|                             | 2017        | 0                         | ..            | ..            | ..            | 0            | ..            |
|                             | 2018        | 0                         | ..            | ..            | ..            | 0            | ..            |
|                             | 2019        | 0                         | ..            | ..            | ..            | 0            | ..            |
| Aruba                       | 2016        | *1                        | 0             | ..            | ..            | *1           | ..            |
|                             | 2017        | *1                        | 0             | ..            | ..            | *1           | ..            |
|                             | 2018        | *1                        | 0             | ..            | ..            | *1           | ..            |
|                             | 2019        | *1                        | 0             | ..            | ..            | *1           | ..            |
| Bahamas                     | 2016        | 0                         | 0             | ..            | ..            | ..           | ..            |
|                             | 2017        | 0                         | 0             | ..            | ..            | ..           | ..            |
|                             | 2018        | 0                         | 0             | ..            | ..            | ..           | ..            |
|                             | 2019        | 0                         | 0             | ..            | ..            | ..           | ..            |
| Barbados                    | 2016        | 3                         | 1             | 1             | 1             | 0            | ..            |
|                             | 2017        | 3                         | 1             | 1             | 1             | 0            | ..            |
|                             | 2018        | 3                         | 1             | 1             | 1             | 0            | ..            |
|                             | 2019        | 3                         | 0             | 1             | 1             | 0            | ..            |
| Belize                      | 2016        | 8                         | 4             | 3             | 0             | 1            | 0             |
|                             | 2017        | 9                         | 5             | 2             | 0             | 1            | 0             |
|                             | 2018        | 8                         | 5             | 2             | 0             | 1            | 0             |
|                             | 2019        | 7                         | 5             | 2             | 0             | 0            | 0             |
| Bermuda                     | 2016        | *1                        | *1            | ..            | ..            | 0            | ..            |
|                             | 2017        | *1                        | *1            | ..            | ..            | 0            | ..            |
|                             | 2018        | *1                        | *1            | ..            | ..            | 0            | ..            |
|                             | 2019        | *1                        | *1            | ..            | ..            | 0            | ..            |
| Bonaire, St Eustatius, Saba | 2016        | 0                         | ..            | ..            | ..            | 0            | ..            |
|                             | 2017        | 0                         | ..            | ..            | ..            | 0            | ..            |
|                             | 2018        | 0                         | ..            | ..            | ..            | 0            | ..            |
|                             | 2019        | 0                         | ..            | ..            | ..            | 0            | ..            |
| British Virgin Islands      | 2016        | 0                         | 0             | ..            | ..            | 0            | ..            |
|                             | 2017        | 0                         | 0             | ..            | ..            | 0            | ..            |
|                             | 2018        | 0                         | 0             | ..            | ..            | 0            | ..            |
|                             | 2019        | 0                         | 0             | ..            | ..            | 0            | ..            |
| Canada                      | 2016        | 20,294                    | 1,713         | 9,497         | 6,474         | 1,513        | 1,097         |
|                             | 2017        | 21,617                    | 1,799         | 10,463        | 6,713         | 1,547        | 1,096         |
|                             | 2018        | 22,506                    | 1,734         | 11,232        | 6,927         | 1,522        | 1,090         |
|                             | 2019        | 22,413                    | 1,718         | 11,457        | 6,644         | 1,499        | 1,095         |
| Cayman Islands              | 2016        | ..                        | ..            | ..            | ..            | ..           | ..            |
|                             | 2017        | ..                        | ..            | ..            | ..            | ..           | ..            |
|                             | 2018        | ..                        | ..            | ..            | ..            | ..           | ..            |
|                             | 2019        | ..                        | ..            | ..            | ..            | ..           | ..            |
| Costa Rica                  | 2016        | 101                       | 19            | 1             | 0             | 33           | 48            |
|                             | 2017        | 94                        | 18            | 1             | 0             | 36           | 40            |
|                             | 2018        | 89                        | 16            | 1             | 0             | 37           | 35            |
|                             | 2019        | 106                       | 16            | 1             | 0             | 35           | 54            |



Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Imports       | Exports       | International bunkers |              | Stock changes | Supply         |            |
|---------------|---------------|-----------------------|--------------|---------------|----------------|------------|
|               |               | Aviation              | Marine       |               | Total          | Per capita |
| 57            | 8             | 2                     | ..           | -38           | 444            | 32         |
| 60            | 5             | 2                     | ..           | 12            | 443            | 31         |
| 67            | 6             | 3                     | ..           | 7             | 474            | 33         |
| 62            | 8             | 2                     | ..           | 2             | 464            | 32         |
| <b>34,949</b> | <b>30,287</b> | <b>1,325</b>          | <b>1,183</b> | <b>-1,348</b> | <b>114,087</b> | <b>199</b> |
| <b>35,091</b> | <b>34,399</b> | <b>1,343</b>          | <b>1,351</b> | <b>-1,530</b> | <b>113,953</b> | <b>197</b> |
| <b>34,892</b> | <b>38,246</b> | <b>1,376</b>          | <b>1,211</b> | <b>-853</b>   | <b>117,019</b> | <b>201</b> |
| <b>33,017</b> | <b>40,462</b> | <b>1,392</b>          | <b>1,335</b> | <b>984</b>    | <b>116,720</b> | <b>199</b> |
| *2            | ..            | ..                    | ..           | ..            | *2             | *153       |
| *2            | ..            | ..                    | ..           | ..            | *2             | *139       |
| *2            | ..            | ..                    | ..           | ..            | *2             | *141       |
| *2            | ..            | ..                    | ..           | ..            | *2             | *147       |
| *10           | 0             | *3                    | 0            | ..            | *7             | *75        |
| *10           | 0             | *3                    | 0            | ..            | *7             | *74        |
| *10           | 0             | *3                    | 0            | ..            | *7             | *75        |
| *10           | 0             | *3                    | 0            | ..            | *7             | *74        |
| *16           | ..            | *4                    | 0            | ..            | *13            | *120       |
| *16           | ..            | *4                    | 0            | ..            | *13            | *120       |
| *16           | ..            | *4                    | 0            | ..            | *13            | *118       |
| *17           | ..            | *4                    | 0            | ..            | *13            | *123       |
| 22            | 0             | *1                    | *1           | -8            | 29             | 76         |
| 28            | 0             | *1                    | *3           | *-6           | 30             | 79         |
| 38            | 0             | *2                    | *2           | *-5           | 39             | 101        |
| 42            | 0             | *2                    | *2           | *2            | 37             | 94         |
| 22            | 1             | *5                    | ..           | 1             | 17             | 61         |
| 21            | 1             | *6                    | ..           | 1             | 16             | 56         |
| 20            | 1             | *5                    | ..           | 0             | 17             | 61         |
| 20            | 1             | *7                    | ..           | -1            | 16             | 55         |
| 10            | 2             | 1                     | ..           | 0             | 15             | 41         |
| 10            | 2             | 1                     | ..           | 0             | 16             | 43         |
| 10            | 1             | 1                     | ..           | 0             | 16             | 41         |
| 12            | 1             | 1                     | ..           | 0             | 17             | 44         |
| 9             | ..            | *1                    | 0            | 0             | 9              | 146        |
| 10            | ..            | *1                    | 0            | *1            | 9              | 147        |
| 11            | ..            | *1                    | 0            | 0             | 10             | 164        |
| 9             | ..            | *1                    | 0            | 0             | 9              | 138        |
| *4            | ..            | 0                     | *2           | 0             | *2             | *63        |
| *4            | ..            | 0                     | *2           | 0             | *2             | *65        |
| *3            | ..            | 0                     | *2           | 0             | *2             | *63        |
| *4            | ..            | 0                     | *2           | 0             | *2             | *66        |
| *3            | ..            | ..                    | ..           | ..            | *3             | *102       |
| *2            | ..            | ..                    | ..           | ..            | *2             | *81        |
| *2            | ..            | ..                    | ..           | ..            | *2             | *76        |
| *2            | ..            | ..                    | ..           | ..            | *2             | *79        |
| 3,799         | 12,103        | 26                    | 14           | -196          | 12,146         | 334        |
| 3,598         | 12,575        | 26                    | 16           | -52           | 12,651         | 344        |
| 3,541         | 13,043        | 37                    | 19           | 114           | 12,834         | 346        |
| 3,723         | 13,356        | 36                    | 24           | -59           | 12,779         | 342        |
| 9             | ..            | 2                     | ..           | ..            | 8              | 126        |
| 10            | ..            | 2                     | ..           | ..            | 8              | 131        |
| 10            | ..            | 2                     | ..           | ..            | 9              | 136        |
| 11            | ..            | 1                     | ..           | ..            | 10             | 152        |
| 116           | 3             | 8                     | ..           | -2            | 208            | 43         |
| 123           | 3             | 8                     | ..           | 3             | 203            | 41         |
| 118           | 3             | 9                     | ..           | -4            | 198            | 40         |
| 123           | 3             | 10                    | ..           | 2             | 214            | 42         |

Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Country or area    | Year | Primary energy production |        |         |       |             |      |
|--------------------|------|---------------------------|--------|---------|-------|-------------|------|
|                    |      | Total                     | Solids | Liquids | Gases | Electricity | Heat |
| Cuba               | 2016 | 193                       | 39     | 111     | 42    | 0           | ..   |
|                    | 2017 | 195                       | 50     | 107     | 37    | 1           | ..   |
|                    | 2018 | 197                       | 57     | 105     | 34    | *1          | ..   |
|                    | 2019 | 184                       | 49     | 101     | 33    | *1          | ..   |
| Curaçao            | 2016 | 1                         | ..     | ..      | ..    | 1           | ..   |
|                    | 2017 | 1                         | ..     | ..      | ..    | 1           | ..   |
|                    | 2018 | 1                         | ..     | ..      | ..    | 1           | ..   |
|                    | 2019 | 1                         | ..     | ..      | ..    | 1           | ..   |
| Dominica           | 2016 | 0                         | 0      | ..      | ..    | 0           | ..   |
|                    | 2017 | 0                         | 0      | ..      | ..    | 0           | ..   |
|                    | 2018 | 0                         | 0      | ..      | ..    | 0           | ..   |
|                    | 2019 | 0                         | 0      | ..      | ..    | 0           | ..   |
| Dominican Republic | 2016 | 27                        | 20     | ..      | 0     | 7           | ..   |
|                    | 2017 | 32                        | 22     | ..      | 0     | 10          | ..   |
|                    | 2018 | 32                        | 23     | ..      | 0     | 9           | ..   |
|                    | 2019 | *29                       | *22    | ..      | 0     | 6           | ..   |
| El Salvador        | 2016 | 82                        | 19     | ..      | 1     | 5           | 57   |
|                    | 2017 | 87                        | 23     | ..      | 1     | 7           | 56   |
|                    | 2018 | 85                        | 22     | ..      | 0     | 7           | 56   |
|                    | 2019 | 82                        | 22     | ..      | 1     | 7           | 53   |
| Greenland          | 2016 | 2                         | 0      | ..      | ..    | 1           | ..   |
|                    | 2017 | 1                         | 0      | ..      | ..    | 1           | ..   |
|                    | 2018 | *2                        | 0      | ..      | ..    | *1          | ..   |
|                    | 2019 | *2                        | 0      | ..      | ..    | *1          | ..   |
| Grenada            | 2016 | 0                         | 0      | ..      | ..    | 0           | ..   |
|                    | 2017 | 0                         | 0      | ..      | ..    | 0           | ..   |
|                    | 2018 | 0                         | 0      | ..      | ..    | 0           | ..   |
|                    | 2019 | 0                         | 0      | ..      | ..    | 0           | ..   |
| Guatemala          | 2016 | 354                       | 309    | 19      | 0     | 16          | 10   |
|                    | 2017 | 343                       | 291    | 20      | 0     | 22          | 9    |
|                    | 2018 | 343                       | 294    | 19      | 0     | 21          | 9    |
|                    | 2019 | 350                       | 301    | 20      | 0     | 18          | 11   |
| Haiti              | 2016 | 141                       | 140    | 0       | ..    | 0           | ..   |
|                    | 2017 | 143                       | 142    | 0       | ..    | 0           | ..   |
|                    | 2018 | 145                       | 144    | 0       | ..    | 1           | ..   |
|                    | 2019 | 147                       | 146    | 0       | ..    | 1           | ..   |
| Honduras           | 2016 | 101                       | 87     | ..      | ..    | 13          | ..   |
|                    | 2017 | 94                        | 74     | ..      | ..    | 16          | 3    |
|                    | 2018 | 108                       | 79     | ..      | ..    | 18          | 11   |
|                    | 2019 | 98                        | 71     | ..      | ..    | 16          | 11   |
| Jamaica            | 2016 | 9                         | 8      | ..      | ..    | 1           | ..   |
|                    | 2017 | 9                         | 7      | ..      | ..    | 2           | ..   |
|                    | 2018 | *8                        | *7     | ..      | ..    | 2           | ..   |
|                    | 2019 | 8                         | 7      | ..      | ..    | 2           | ..   |
| Mexico             | 2016 | 7,644                     | 652    | 5,220   | 1,276 | 150         | 346  |
|                    | 2017 | 6,938                     | 604    | 4,721   | 1,114 | 157         | 342  |
|                    | 2018 | 6,733                     | 609    | 4,425   | 1,177 | 168         | 354  |
|                    | 2019 | 6,328                     | 569    | 4,109   | 1,151 | 172         | 327  |
| Montserrat         | 2016 | ..                        | ..     | ..      | ..    | ..          | ..   |
|                    | 2017 | ..                        | ..     | ..      | ..    | ..          | ..   |
|                    | 2018 | ..                        | ..     | ..      | ..    | ..          | ..   |
|                    | 2019 | 0                         | ..     | ..      | ..    | 0           | ..   |
| Nicaragua          | 2016 | 91                        | 61     | ..      | ..    | 4           | 25   |
|                    | 2017 | 94                        | 63     | ..      | ..    | 4           | 27   |
|                    | 2018 | 97                        | 64     | ..      | ..    | 4           | 29   |
|                    | 2019 | 96                        | 64     | ..      | 0     | 4           | 28   |

Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Imports | Exports | International bunkers |        | Stock changes | Supply |            |
|---------|---------|-----------------------|--------|---------------|--------|------------|
|         |         | Aviation              | Marine |               | Total  | Per capita |
| 294     | *19     | 8                     | 26     | *-1           | 435    | 38         |
| 266     | *31     | 7                     | *19    | ..            | 404    | 36         |
| 237     | *39     | 3                     | *18    | ..            | 375    | 33         |
| 241     | *38     | *3                    | *17    | ..            | 367    | 32         |
| 469     | 316     | 3                     | 65     | ..            | 86     | 534        |
| 298     | 163     | 3                     | 65     | ..            | 68     | 421        |
| 246     | 120     | 3                     | 65     | ..            | 60     | 368        |
| 99      | 0       | 3                     | 65     | ..            | 32     | 195        |
| *3      | 0       | 0                     | 0      | 0             | *3     | *38        |
| *2      | 0       | 0                     | 0      | 0             | *2     | *34        |
| *2      | 0       | 0                     | 0      | 0             | *2     | *34        |
| *3      | 0       | 0                     | 0      | 0             | *3     | *35        |
| 345     | 0       | 22                    | 0      | 0             | 350    | 34         |
| 337     | 0       | 24                    | 1      | 3             | 341    | 32         |
| 355     | 0       | 24                    | 1      | -2            | 364    | 34         |
| 386     | 0       | 20                    | 2      | -2            | 395    | 37         |
| 101     | 1       | 7                     | ..     | ..            | 174    | 27         |
| 95      | 1       | 7                     | ..     | ..            | 173    | 27         |
| 101     | 1       | 8                     | ..     | ..            | 177    | 28         |
| 114     | 1       | 8                     | ..     | ..            | 188    | 29         |
| 8       | ..      | ..                    | 1      | 0             | 9      | 153        |
| 8       | ..      | ..                    | 1      | 0             | 9      | 156        |
| *7      | ..      | ..                    | *1     | 0             | *8     | *138       |
| *7      | ..      | ..                    | *1     | ..            | *8     | *140       |
| 4       | ..      | 0                     | ..     | 0             | 4      | 37         |
| 4       | ..      | 0                     | ..     | 0             | 4      | 39         |
| 5       | ..      | 0                     | ..     | 0             | 5      | 43         |
| 5       | ..      | 0                     | ..     | 0             | 5      | 46         |
| 250     | 38      | 3                     | 17     | 9             | 537    | 32         |
| 250     | 37      | 4                     | 18     | 4             | 531    | 31         |
| 257     | 34      | 5                     | 18     | -3            | 547    | 32         |
| 303     | 30      | 4                     | 18     | 29            | 571    | 32         |
| 42      | ..      | 1                     | ..     | ..            | 182    | 17         |
| 44      | ..      | 1                     | ..     | ..            | 186    | 17         |
| 48      | ..      | 1                     | ..     | ..            | 192    | 17         |
| 43      | ..      | 1                     | ..     | ..            | 190    | 17         |
| 124     | 17      | ..                    | ..     | -17           | 225    | 24         |
| 148     | 0       | ..                    | ..     | 18            | 223    | 24         |
| 148     | 20      | ..                    | ..     | 4             | 231    | 24         |
| 163     | 21      | ..                    | ..     | -1            | 241    | 25         |
| 130     | 11      | 9                     | 1      | -2            | 120    | 41         |
| 131     | 12      | 8                     | 2      | 2             | 115    | 39         |
| 131     | 12      | 9                     | 2      | 0             | 117    | 40         |
| 130     | 13      | 9                     | 3      | -2            | 115    | 39         |
| 3,530   | 3,151   | 154                   | 38     | 6             | 7,826  | 63         |
| 3,935   | 3,066   | 165                   | 34     | 37            | 7,572  | 61         |
| 4,472   | 3,081   | 173                   | 35     | 67            | 7,849  | 62         |
| 4,309   | 2,844   | 172                   | 33     | -176          | 7,764  | 61         |
| 0       | ..      | 0                     | 0      | 0             | 0      | 84         |
| 0       | ..      | 0                     | 0      | 0             | 0      | 74         |
| 0       | ..      | 0                     | 0      | ..            | 0      | 84         |
| 0       | ..      | 0                     | 0      | ..            | 0      | 70         |
| 72      | 1       | 1                     | ..     | -3            | 164    | 26         |
| 76      | 1       | 1                     | ..     | 0             | 168    | 26         |
| 72      | 1       | 1                     | ..     | *-1           | 167    | 26         |
| 77      | 2       | 1                     | ..     | 2             | 168    | 26         |

Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Country or area           | Year        | Primary energy production |              |               |              |              | Heat       |
|---------------------------|-------------|---------------------------|--------------|---------------|--------------|--------------|------------|
|                           |             | Total                     | Solids       | Liquids       | Gases        | Electricity  |            |
| Panama                    | 2016        | 39                        | 13           | ..            | ..           | 26           | ..         |
|                           | 2017        | 42                        | 13           | ..            | ..           | 28           | ..         |
|                           | 2018        | 44                        | 13           | ..            | ..           | 31           | ..         |
|                           | 2019        | 34                        | 12           | ..            | ..           | 22           | ..         |
| Puerto Rico               | 2016        | 1                         | ..           | ..            | ..           | 1            | ..         |
|                           | 2017        | 1                         | ..           | ..            | ..           | 1            | ..         |
|                           | 2018        | 1                         | ..           | ..            | ..           | 1            | ..         |
|                           | 2019        | 2                         | ..           | ..            | ..           | 2            | ..         |
| Sint Maarten (Dutch part) | 2016        | ..                        | ..           | ..            | ..           | ..           | ..         |
|                           | 2017        | ..                        | ..           | ..            | ..           | ..           | ..         |
|                           | 2018        | ..                        | ..           | ..            | ..           | ..           | ..         |
|                           | 2019        | ..                        | ..           | ..            | ..           | ..           | ..         |
| St. Kitts-Nevis           | 2016        | 0                         | 0            | ..            | ..           | 0            | ..         |
|                           | 2017        | 0                         | 0            | ..            | ..           | 0            | ..         |
|                           | 2018        | 0                         | 0            | ..            | ..           | 0            | ..         |
|                           | 2019        | 0                         | 0            | ..            | ..           | 0            | ..         |
| St. Lucia                 | 2016        | *1                        | *1           | ..            | ..           | ..           | ..         |
|                           | 2017        | *1                        | *1           | ..            | ..           | ..           | ..         |
|                           | 2018        | *1                        | *1           | ..            | ..           | 0            | ..         |
|                           | 2019        | *1                        | *1           | ..            | ..           | 0            | ..         |
| St. Pierre-Miquelon       | 2016        | 0                         | 0            | ..            | ..           | 0            | ..         |
|                           | 2017        | 0                         | 0            | ..            | ..           | ..           | ..         |
|                           | 2018        | 0                         | 0            | ..            | ..           | ..           | ..         |
|                           | 2019        | 0                         | 0            | ..            | ..           | ..           | ..         |
| St. Vincent-Grenadines    | 2016        | 0                         | 0            | ..            | ..           | 0            | ..         |
|                           | 2017        | 0                         | 0            | ..            | ..           | 0            | ..         |
|                           | 2018        | 0                         | 0            | ..            | ..           | 0            | ..         |
|                           | 2019        | 0                         | 0            | ..            | ..           | 0            | ..         |
| Trinidad and Tobago       | 2016        | 1,360                     | 0            | 195           | 1,165        | 0            | ..         |
|                           | 2017        | 1,367                     | 0            | 197           | 1,170        | 0            | ..         |
|                           | 2018        | 1,435                     | 0            | 174           | 1,260        | 0            | ..         |
|                           | 2019        | 1,444                     | 0            | 164           | 1,280        | 0            | ..         |
| Turks and Caicos Islands  | 2016        | 0                         | 0            | ..            | ..           | ..           | ..         |
|                           | 2017        | 0                         | 0            | ..            | ..           | ..           | ..         |
|                           | 2018        | 0                         | 0            | ..            | ..           | 0            | ..         |
|                           | 2019        | 0                         | 0            | ..            | ..           | 0            | ..         |
| United States             | 2016        | 80,132                    | 17,105       | 24,768        | 26,419       | 1,965        | 9,874      |
|                           | 2017        | 83,352                    | 18,106       | 26,107        | 27,022       | 2,257        | 9,861      |
|                           | 2018        | 90,268                    | 18,217       | 30,106        | 29,643       | 2,349        | 9,953      |
|                           | 2019        | 96,539                    | 17,206       | 33,307        | 33,637       | 2,455        | 9,934      |
| United States Virgin Is.  | 2016        | 0                         | ..           | ..            | ..           | 0            | ..         |
|                           | 2017        | 0                         | ..           | ..            | ..           | 0            | ..         |
|                           | 2018        | 0                         | ..           | ..            | ..           | 0            | ..         |
|                           | 2019        | 0                         | ..           | ..            | ..           | 0            | ..         |
| <b>America, South</b>     | <b>2016</b> | <b>31,731</b>             | <b>6,575</b> | <b>17,065</b> | <b>5,269</b> | <b>2,557</b> | <b>264</b> |
|                           | <b>2017</b> | <b>31,101</b>             | <b>6,651</b> | <b>16,374</b> | <b>5,214</b> | <b>2,621</b> | <b>242</b> |
|                           | <b>2018</b> | <b>29,714</b>             | <b>6,537</b> | <b>15,154</b> | <b>5,039</b> | <b>2,733</b> | <b>251</b> |
|                           | <b>2019</b> | <b>29,056</b>             | <b>6,484</b> | <b>14,617</b> | <b>4,922</b> | <b>2,762</b> | <b>272</b> |
| Argentina                 | 2016        | 3,111                     | 78           | 1,389         | 1,417        | 137          | *89        |
|                           | 2017        | 3,035                     | 85           | 1,329         | 1,405        | 151          | 66         |
|                           | 2018        | 3,152                     | 96           | 1,353         | 1,480        | 153          | 70         |
|                           | 2019        | 3,292                     | 107          | 1,394         | 1,553        | 152          | 86         |
| Bolivia (Plur. State of)  | 2016        | 899                       | 27           | 140           | 725          | 6            | ..         |
|                           | 2017        | 873                       | 26           | 136           | 703          | 8            | ..         |
|                           | 2018        | 821                       | *26          | 129           | 656          | 10           | ..         |
|                           | 2019        | 733                       | 25           | 120           | 576          | 13           | ..         |

Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Imports      | Exports       | International bunkers |            | Stock changes | Supply        |            |
|--------------|---------------|-----------------------|------------|---------------|---------------|------------|
|              |               | Aviation              | Marine     |               | Total         | Per capita |
| 299          | 1             | 30                    | 143        | -6            | 170           | 42         |
| 339          | 1             | 30                    | 173        | -11           | 188           | 46         |
| 341          | 1             | 32                    | 167        | -1            | 186           | 45         |
| 403          | 2             | 34                    | 192        | 0             | 210           | 49         |
| 61           | ..            | ..                    | ..         | ..            | 62            | 19         |
| 46           | ..            | ..                    | ..         | ..            | 47            | 15         |
| 60           | ..            | ..                    | ..         | ..            | 61            | 20         |
| 68           | ..            | ..                    | ..         | ..            | 70            | 24         |
| *22          | ..            | *2                    | *8         | ..            | *12           | *287       |
| *21          | ..            | *2                    | *8         | ..            | *11           | *268       |
| *20          | ..            | *2                    | *8         | ..            | *11           | *257       |
| *21          | ..            | *2                    | *8         | ..            | *11           | *256       |
| *4           | ..            | 0                     | ..         | ..            | *3            | *67        |
| *4           | ..            | 0                     | ..         | ..            | *3            | *67        |
| *4           | ..            | 0                     | ..         | ..            | *4            | *67        |
| *4           | ..            | 0                     | ..         | ..            | *4            | *68        |
| *9           | ..            | 1                     | 0          | ..            | *8            | *42        |
| *9           | ..            | 1                     | 0          | ..            | *8            | *44        |
| *9           | ..            | 1                     | 0          | ..            | *8            | *44        |
| *9           | ..            | *1                    | 0          | ..            | *8            | *44        |
| *1           | ..            | ..                    | 0          | ..            | *1            | *156       |
| *1           | ..            | ..                    | 0          | ..            | *1            | *157       |
| *1           | ..            | ..                    | 0          | ..            | *1            | *146       |
| *1           | ..            | ..                    | 0          | ..            | *1            | *159       |
| 4            | 0             | 0                     | ..         | 0             | 4             | 33         |
| 3            | 0             | 0                     | ..         | 0             | 3             | 29         |
| 4            | 0             | 0                     | ..         | 0             | 4             | 33         |
| 3            | 0             | 0                     | ..         | 0             | 3             | 31         |
| 221          | 830           | 14                    | 26         | 14            | 698           | 507        |
| 193          | 816           | 10                    | 22         | 10            | 703           | 508        |
| 137          | 832           | 8                     | 17         | 6             | 708           | 509        |
| 90           | 807           | 7                     | 3          | -1            | 718           | 515        |
| *6           | ..            | *1                    | ..         | ..            | *5            | *130       |
| *6           | ..            | *1                    | ..         | ..            | *5            | *138       |
| *6           | ..            | *1                    | ..         | ..            | *5            | *138       |
| *6           | ..            | *1                    | ..         | ..            | *5            | *138       |
| 24,928       | 13,793        | 1,019                 | 839        | -1,142        | 90,550        | 280        |
| 25,038       | 17,691        | 1,027                 | 986        | -1,539        | 90,227        | 278        |
| 24,446       | 21,056        | 1,042                 | 854        | -1,029        | 92,790        | 284        |
| 22,556       | 23,343        | 1,060                 | 965        | 1,192         | 92,534        | 281        |
| ..           | ..            | ..                    | ..         | ..            | 0             | *1         |
| ..           | ..            | ..                    | ..         | ..            | 0             | *1         |
| ..           | ..            | ..                    | ..         | ..            | 0             | *1         |
| ..           | ..            | ..                    | ..         | ..            | 0             | *1         |
| <b>5,877</b> | <b>13,114</b> | <b>235</b>            | <b>205</b> | <b>-62</b>    | <b>24,116</b> | <b>58</b>  |
| <b>6,143</b> | <b>13,379</b> | <b>227</b>            | <b>207</b> | <b>-607</b>   | <b>24,037</b> | <b>57</b>  |
| <b>6,063</b> | <b>12,278</b> | <b>238</b>            | <b>218</b> | <b>-211</b>   | <b>23,256</b> | <b>55</b>  |
| <b>5,793</b> | <b>11,110</b> | <b>236</b>            | <b>215</b> | <b>11</b>     | <b>23,278</b> | <b>55</b>  |
| 640          | 255           | 41                    | 28         | -1            | 3,428         | 79         |
| 650          | 219           | 43                    | 33         | 4             | 3,385         | 77         |
| 562          | 355           | 39                    | 30         | 1             | 3,288         | 74         |
| 400          | 362           | 39                    | 19         | -21           | 3,293         | 74         |
| 43           | 579           | 4                     | ..         | -12           | 372           | 34         |
| 52           | 554           | 3                     | ..         | -15           | 384           | 34         |
| 61           | 498           | 3                     | ..         | -9            | 390           | 34         |
| 77           | 423           | 3                     | ..         | 2             | 382           | 33         |

Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Country or area           | Year        | Primary energy production |                |               |               |               |              |
|---------------------------|-------------|---------------------------|----------------|---------------|---------------|---------------|--------------|
|                           |             | Total                     | Solids         | Liquids       | Gases         | Electricity   | Heat         |
| Brazil                    | 2016        | 11,927                    | 3,052          | 6,405         | 806           | 1,492         | 171          |
|                           | 2017        | 12,366                    | 3,124          | 6,676         | 905           | 1,491         | 170          |
|                           | 2018        | 12,538                    | 3,206          | 6,720         | 855           | 1,587         | 169          |
|                           | 2019        | 12,975                    | 3,047          | 7,218         | 877           | 1,658         | 174          |
| Chile                     | 2016        | 525                       | 365            | 11            | 46            | 102           | 2            |
|                           | 2017        | 543                       | 376            | 13            | 47            | 104           | 4            |
|                           | 2018        | 571                       | 379            | 17            | 48            | 116           | 10           |
|                           | 2019        | 572                       | 360            | 22            | 58            | 122           | 10           |
| Colombia                  | 2016        | 5,678                     | 2,619          | 2,069         | 822           | 169           | ..           |
|                           | 2017        | 5,605                     | 2,616          | 2,004         | 778           | 207           | ..           |
|                           | 2018        | 5,380                     | 2,446          | 1,982         | 747           | 205           | ..           |
|                           | 2019        | 5,507                     | 2,568          | 2,027         | 715           | 197           | ..           |
| Ecuador                   | 2016        | 1,287                     | 23             | 1,176         | 31            | 57            | 0            |
|                           | 2017        | 1,263                     | 24             | 1,137         | 29            | 73            | 0            |
|                           | 2018        | 1,239                     | 22             | 1,116         | 26            | 75            | 0            |
|                           | 2019        | 1,281                     | 22             | 1,146         | 23            | 89            | 0            |
| Falkland Is. (Malvinas)   | 2016        | 0                         | 0              | ..            | ..            | 0             | ..           |
|                           | 2017        | 0                         | 0              | ..            | ..            | 0             | ..           |
|                           | 2018        | 0                         | 0              | ..            | ..            | 0             | ..           |
|                           | 2019        | 0                         | 0              | ..            | ..            | 0             | ..           |
| Guyana                    | 2016        | 7                         | 7              | ..            | ..            | 0             | ..           |
|                           | 2017        | 7                         | 7              | ..            | ..            | 0             | ..           |
|                           | 2018        | 5                         | 5              | ..            | ..            | 0             | ..           |
|                           | 2019        | 4                         | 4              | ..            | ..            | 0             | ..           |
| Paraguay                  | 2016        | 374                       | 138            | 6             | ..            | 230           | ..           |
|                           | 2017        | 362                       | 141            | 6             | ..            | 215           | ..           |
|                           | 2018        | 346                       | 126            | 7             | ..            | 213           | ..           |
|                           | 2019        | 309                       | 122            | 8             | ..            | 178           | ..           |
| Peru                      | 2016        | 971                       | 112            | 233           | 531           | 94            | 1            |
|                           | 2017        | 925                       | 109            | 233           | 471           | 110           | 1            |
|                           | 2018        | 923                       | 101            | 238           | 464           | 119           | 1            |
|                           | 2019        | 964                       | 101            | 250           | 489           | 122           | 1            |
| Suriname                  | 2016        | 39                        | 2              | 35            | 0             | 3             | ..           |
|                           | 2017        | 40                        | 2              | 34            | 0             | 3             | ..           |
|                           | 2018        | 40                        | 2              | 35            | 0             | 4             | ..           |
|                           | 2019        | 40                        | 2              | 35            | 0             | 3             | ..           |
| Uruguay                   | 2016        | 132                       | 89             | 3             | ..            | 40            | ..           |
|                           | 2017        | 137                       | 92             | 3             | ..            | 42            | ..           |
|                           | 2018        | 137                       | 92             | 3             | ..            | 42            | ..           |
|                           | 2019        | 142                       | 90             | 3             | ..            | 48            | ..           |
| Venezuela (Bolivar. Rep.) | 2016        | 6,780                     | 63             | 5,598         | 892           | 227           | ..           |
|                           | 2017        | 5,945                     | 49             | 4,803         | 875           | 218           | ..           |
|                           | 2018        | 4,563                     | 37             | 3,553         | 763           | 210           | ..           |
|                           | 2019        | 3,238                     | 36             | 2,393         | 631           | 179           | ..           |
| <b>Asia</b>               | <b>2016</b> | <b>263,352</b>            | <b>118,033</b> | <b>85,559</b> | <b>45,589</b> | <b>7,805</b>  | <b>6,365</b> |
|                           | <b>2017</b> | <b>267,395</b>            | <b>121,364</b> | <b>84,204</b> | <b>46,579</b> | <b>8,458</b>  | <b>6,790</b> |
|                           | <b>2018</b> | <b>277,362</b>            | <b>128,418</b> | <b>84,080</b> | <b>47,906</b> | <b>9,345</b>  | <b>7,614</b> |
|                           | <b>2019</b> | <b>281,061</b>            | <b>132,617</b> | <b>80,236</b> | <b>49,443</b> | <b>10,243</b> | <b>8,522</b> |
| Afghanistan               | 2016        | 71                        | 60             | ..            | 6             | 4             | ..           |
|                           | 2017        | 83                        | 73             | ..            | 5             | 4             | ..           |
|                           | 2018        | 90                        | 80             | ..            | 5             | 4             | ..           |
|                           | 2019        | 82                        | 73             | ..            | 5             | 5             | ..           |
| Armenia                   | 2016        | 43                        | 8              | ..            | ..            | 8             | 26           |
|                           | 2017        | 45                        | 9              | ..            | ..            | 8             | 28           |
|                           | 2018        | 37                        | 6              | ..            | ..            | 8             | 23           |
|                           | 2019        | 38                        | 5              | ..            | ..            | 9             | 24           |

Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Imports        | Exports        | International bunkers |              | Stock changes | Supply         |            |
|----------------|----------------|-----------------------|--------------|---------------|----------------|------------|
|                |                | Aviation              | Marine       |               | Total          | Per capita |
| 2,444          | 2,100          | 95                    | 143          | 29            | 12,004         | 58         |
| 2,697          | 2,521          | 93                    | 141          | 18            | 12,289         | 59         |
| 2,649          | 2,716          | 105                   | 121          | 48            | 12,196         | 58         |
| 2,589          | 3,047          | 102                   | 140          | 88            | 12,186         | 58         |
| 1,143          | 50             | 24                    | 5            | 6             | 1,582          | 87         |
| 1,141          | 46             | 26                    | 6            | 4             | 1,603          | 87         |
| 1,149          | 45             | 28                    | 5            | 7             | 1,635          | 87         |
| 1,220          | 23             | 32                    | 4            | 5             | 1,728          | 91         |
| 338            | 3,892          | ..                    | ..           | -55           | 2,180          | 45         |
| 236            | 4,483          | ..                    | ..           | -543          | 1,902          | 39         |
| 198            | 3,900          | ..                    | ..           | -194          | 1,872          | 38         |
| 243            | 3,696          | ..                    | ..           | 11            | 2,043          | 41         |
| 246            | 929            | 10                    | 12           | -15           | 597            | 36         |
| 254            | 902            | 11                    | 15           | -26           | 614            | 37         |
| 269            | 890            | 11                    | 29           | -16           | 594            | 35         |
| 294            | 933            | 11                    | 23           | -19           | 626            | 36         |
| 0              | ..             | ..                    | ..           | ..            | 1              | 194        |
| 0              | ..             | ..                    | ..           | ..            | 1              | 173        |
| 0              | ..             | ..                    | ..           | ..            | 1              | 174        |
| 1              | ..             | ..                    | ..           | ..            | 1              | 172        |
| 31             | 0              | 1                     | ..           | 0             | 37             | 48         |
| 31             | 1              | 1                     | ..           | -1            | 37             | 47         |
| 33             | 0              | 1                     | ..           | 0             | 38             | 48         |
| 38             | 0              | 1                     | ..           | 0             | 41             | 52         |
| 103            | 177            | 2                     | ..           | 3             | 295            | 44         |
| 108            | 160            | 3                     | ..           | -5            | 313            | 46         |
| 121            | 155            | 3                     | ..           | 1             | 307            | 44         |
| 116            | 117            | 3                     | ..           | 0             | 304            | 43         |
| 464            | 441            | 42                    | ..           | -14           | 967            | 31         |
| 535            | 482            | 30                    | ..           | -38           | 986            | 31         |
| 500            | 414            | 30                    | 19           | -48           | 1,008          | 32         |
| 469            | 384            | 31                    | 17           | -47           | 1,048          | 32         |
| 22             | 19             | *2                    | 2            | 0             | 38             | 68         |
| 14             | 15             | *2                    | 2            | ..            | 35             | 61         |
| 10             | 15             | *2                    | 2            | ..            | 32             | 55         |
| 14             | 8              | *2                    | *2           | ..            | 43             | 74         |
| 96             | 3              | 4                     | 6            | -4            | 219            | 64         |
| 90             | 5              | 4                     | 4            | -5            | 217            | 63         |
| 101            | 4              | 5                     | 6            | -1            | 224            | 65         |
| 95             | 11             | 4                     | 7            | -7            | 221            | 64         |
| 305            | 4,669          | 11                    | 8            | 0             | 2,396          | 80         |
| 336            | 3,991          | 12                    | 7            | 0             | 2,272          | 77         |
| 409            | 3,285          | 10                    | 6            | ..            | 1,671          | 58         |
| 238            | 2,104          | 7                     | 4            | ..            | 1,362          | 48         |
| <b>112,129</b> | <b>99,458</b>  | <b>3,233</b>          | <b>4,286</b> | <b>-3,732</b> | <b>272,235</b> | <b>61</b>  |
| <b>119,123</b> | <b>99,603</b>  | <b>3,386</b>          | <b>4,479</b> | <b>-1,482</b> | <b>280,531</b> | <b>62</b>  |
| <b>123,692</b> | <b>102,103</b> | <b>3,576</b>          | <b>4,419</b> | <b>1,597</b>  | <b>289,358</b> | <b>63</b>  |
| <b>124,520</b> | <b>98,040</b>  | <b>3,613</b>          | <b>4,533</b> | <b>1,948</b>  | <b>297,447</b> | <b>65</b>  |
| 114            | 21             | *1                    | ..           | 0             | 163            | 5          |
| 115            | 28             | *3                    | ..           | -4            | 172            | 5          |
| 126            | 31             | *2                    | ..           | *-2           | 184            | 5          |
| 136            | 22             | 0                     | ..           | *8            | 189            | 5          |
| 94             | 4              | 2                     | ..           | 0             | 130            | 44         |
| 101            | 5              | 2                     | ..           | 1             | 137            | 46         |
| 103            | 6              | 3                     | ..           | 0             | 131            | 44         |
| 112            | 5              | 3                     | ..           | 1             | 141            | 48         |

Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Country or area        | Year | Primary energy production |        |         |        |             |       |
|------------------------|------|---------------------------|--------|---------|--------|-------------|-------|
|                        |      | Total                     | Solids | Liquids | Gases  | Electricity | Heat  |
| Azerbaijan             | 2016 | 2,429                     | 4      | 1,760   | 658    | 7           | ..    |
|                        | 2017 | 2,308                     | 4      | 1,658   | 639    | 7           | ..    |
|                        | 2018 | 2,349                     | 5      | 1,663   | 675    | 7           | ..    |
|                        | 2019 | 2,475                     | 5      | 1,602   | 862    | 6           | ..    |
| Bahrain                | 2016 | 940                       | 0      | 443     | 497    | 0           | ..    |
|                        | 2017 | 942                       | 0      | 431     | 512    | 0           | ..    |
|                        | 2018 | 946                       | 0      | 427     | 520    | 0           | ..    |
|                        | 2019 | 1,045                     | 0      | 438     | 606    | 0           | ..    |
| Bangladesh             | 2016 | 1,602                     | 615    | 14      | 968    | 5           | ..    |
|                        | 2017 | 1,605                     | 619    | 18      | 964    | 5           | ..    |
|                        | 2018 | 1,602                     | 615    | 18      | 963    | 5           | ..    |
|                        | 2019 | 1,561                     | 586    | 17      | 953    | 4           | ..    |
| Bhutan                 | 2016 | 79                        | 50     | ..      | ..     | 29          | ..    |
|                        | 2017 | 79                        | 52     | ..      | ..     | 28          | ..    |
|                        | 2018 | 78                        | 53     | ..      | ..     | 25          | ..    |
|                        | 2019 | 85                        | 53     | ..      | ..     | 32          | ..    |
| Brunei Darussalam      | 2016 | 633                       | 0      | 252     | 380    | 0           | ..    |
|                        | 2017 | 652                       | 0      | 235     | 416    | 0           | ..    |
|                        | 2018 | 639                       | 0      | 232     | 407    | 0           | ..    |
|                        | 2019 | 637                       | 0      | 253     | 384    | 0           | ..    |
| Cambodia               | 2016 | 148                       | 139    | ..      | ..     | 10          | ..    |
|                        | 2017 | 152                       | 142    | ..      | ..     | 10          | ..    |
|                        | 2018 | 162                       | 144    | ..      | ..     | 18          | ..    |
|                        | 2019 | 162                       | 148    | ..      | ..     | 15          | ..    |
| China                  | 2016 | 95,893                    | 74,411 | 8,737   | 5,215  | 5,227       | 2,303 |
|                        | 2017 | 99,407                    | 76,934 | 8,447   | 5,700  | 5,647       | 2,679 |
|                        | 2018 | 104,741                   | 80,663 | 8,358   | 6,269  | 6,273       | 3,179 |
|                        | 2019 | 109,745                   | 83,746 | 8,407   | 6,978  | 6,851       | 3,762 |
| China, Hong Kong SAR   | 2016 | ..                        | ..     | ..      | ..     | ..          | ..    |
|                        | 2017 | ..                        | ..     | ..      | ..     | ..          | ..    |
|                        | 2018 | ..                        | ..     | ..      | ..     | ..          | ..    |
|                        | 2019 | ..                        | ..     | ..      | ..     | ..          | ..    |
| China, Macao SAR       | 2016 | 3                         | 3      | ..      | ..     | ..          | ..    |
|                        | 2017 | 3                         | 3      | ..      | ..     | ..          | ..    |
|                        | 2018 | 3                         | 3      | ..      | ..     | ..          | ..    |
|                        | 2019 | 4                         | 4      | ..      | ..     | ..          | ..    |
| Cyprus                 | 2016 | 6                         | 1      | 0       | 0      | 1           | 3     |
|                        | 2017 | 6                         | 1      | 0       | 1      | 1           | 3     |
|                        | 2018 | 6                         | 1      | ..      | 1      | 2           | 3     |
|                        | 2019 | 7                         | 1      | ..      | 1      | 2           | 3     |
| Georgia                | 2016 | 58                        | 21     | 2       | 0      | 34          | 1     |
|                        | 2017 | 56                        | 20     | 1       | 0      | 33          | 1     |
|                        | 2018 | 52                        | 14     | 1       | 0      | 36          | 1     |
|                        | 2019 | 46                        | 11     | 2       | 0      | 32          | 1     |
| India                  | 2016 | 22,412                    | 18,536 | 1,747   | 1,106  | 614         | 409   |
|                        | 2017 | 22,877                    | 18,903 | 1,746   | 1,132  | 682         | 414   |
|                        | 2018 | 23,978                    | 19,889 | 1,665   | 1,154  | 861         | 408   |
|                        | 2019 | 24,030                    | 19,899 | *1,571  | *1,062 | 996         | 502   |
| Indonesia              | 2016 | 18,149                    | 13,314 | 2,028   | 2,345  | 77          | 384   |
|                        | 2017 | 18,253                    | 13,406 | 2,072   | 2,247  | 67          | 460   |
|                        | 2018 | 20,501                    | 15,580 | 2,101   | 2,288  | 71          | 461   |
|                        | 2019 | 21,267                    | 16,505 | 2,097   | 2,137  | 71          | 456   |
| Iran (Islamic Rep. of) | 2016 | 16,412                    | *115   | 9,087   | 7,079  | 60          | 71    |
|                        | 2017 | 17,273                    | *126   | 9,369   | 7,641  | 56          | 81    |
|                        | 2018 | 17,030                    | *130   | 8,783   | 7,979  | 57          | 81    |
|                        | 2019 | 14,786                    | *126   | 6,281   | 8,241  | 61          | 77    |



Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Imports | Exports | International bunkers |        | Stock changes | Supply  |            |
|---------|---------|-----------------------|--------|---------------|---------|------------|
|         |         | Aviation              | Marine |               | Total   | Per capita |
| 25      | 1,857   | 8                     | 2      | -13           | 599     | 62         |
| 97      | 1,770   | 7                     | 2      | 21            | 604     | 61         |
| 78      | 1,806   | 5                     | 2      | 7             | 607     | 61         |
| 13      | 1,802   | 14                    | 1      | 7             | 664     | 66         |
| 462     | 821     | 19                    | ..     | 6             | 556     | 390        |
| 484     | 844     | 20                    | ..     | -16           | 579     | 387        |
| 485     | 835     | 21                    | ..     | -7            | 582     | 371        |
| 493     | 863     | 22                    | ..     | -16           | 669     | 408        |
| 286     | 5       | 15                    | 5      | -16           | 1,879   | 12         |
| 343     | 2       | 17                    | 5      | -18           | 1,943   | 12         |
| 336     | 0       | 18                    | 5      | -49           | 1,964   | 12         |
| 532     | 0       | 19                    | 6      | ..            | 2,068   | 13         |
| 8       | 21      | 0                     | ..     | ..            | 66      | 89         |
| 9       | 21      | 0                     | ..     | ..            | 67      | 90         |
| 10      | 17      | 0                     | ..     | ..            | 70      | 93         |
| 10      | 23      | 0                     | ..     | ..            | 71      | 94         |
| 16      | 523     | 3                     | 2      | -3            | 124     | 295        |
| 19      | 521     | 3                     | ..     | -5            | 153     | 359        |
| 16      | 488     | 4                     | ..     | 8             | 156     | 364        |
| 97      | 553     | 5                     | ..     | 7             | 169     | 390        |
| 134     | ..      | 3                     | ..     | ..            | 279     | 18         |
| 142     | ..      | 5                     | ..     | ..            | 289     | 18         |
| 156     | ..      | 6                     | ..     | ..            | 312     | 19         |
| 187     | ..      | 7                     | ..     | 4             | 338     | 21         |
| 25,618  | 3,041   | 369                   | 391    | -2,919        | 120,629 | 85         |
| 28,464  | 3,211   | 409                   | 412    | -1,208        | 125,047 | 88         |
| 31,612  | 3,392   | 445                   | 440    | 1,417         | 130,659 | 92         |
| 34,033  | 3,624   | 467                   | 426    | 2,658         | 136,602 | 95         |
| 1,314   | 20      | 276                   | 375    | 53            | 590     | 81         |
| 1,344   | 17      | 292                   | 450    | -2            | 587     | 80         |
| 1,363   | 11      | 302                   | 455    | 6             | 589     | 80         |
| 1,291   | 12      | 273                   | 404    | 17            | 585     | 79         |
| 44      | ..      | ..                    | 3      | 0             | 44      | 71         |
| 46      | ..      | ..                    | 3      | 1             | 46      | 74         |
| 39      | ..      | ..                    | 3      | 0             | 40      | 63         |
| 38      | ..      | ..                    | 2      | 0             | 40      | 63         |
| 111     | 1       | 12                    | 12     | 1             | 91      | 78         |
| 113     | 0       | 13                    | 11     | 1             | 94      | 80         |
| 113     | ..      | 14                    | 11     | -1            | 95      | 80         |
| 113     | ..      | 13                    | 12     | 0             | 95      | 79         |
| 160     | 11      | 3                     | ..     | 0             | 204     | 51         |
| 165     | 11      | 4                     | ..     | -1            | 206     | 51         |
| 165     | 7       | 5                     | 0      | 2             | 204     | 51         |
| 176     | 2       | 4                     | 0      | 0             | 215     | 54         |
| 16,514  | 2,869   | *216                  | 61     | -214          | 35,995  | 27         |
| 17,906  | 3,254   | *167                  | 64     | -252          | 37,550  | 28         |
| 18,783  | 3,106   | *182                  | *68    | 90            | 39,315  | 29         |
| *19,411 | 3,005   | *175                  | *70    | -374          | 40,566  | 30         |
| 2,174   | 11,028  | 34                    | 14     | -152          | 9,399   | 36         |
| 2,303   | 11,438  | 43                    | 14     | 4             | 9,057   | 34         |
| 2,444   | 12,492  | 46                    | 9      | 76            | 10,323  | 39         |
| 2,123   | 12,149  | 40                    | 9      | 45            | 11,146  | 41         |
| 393     | 6,594   | *30                   | 84     | -170          | 10,266  | 129        |
| 367     | 6,509   | *30                   | 58     | -1            | 11,043  | 137        |
| 342     | 5,968   | *35                   | 58     | ..            | 11,310  | 138        |
| 293     | 3,523   | 37                    | 58     | 0             | 11,460  | 138        |

Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Country or area        | Year | Primary energy production |        |         |       |             |       |
|------------------------|------|---------------------------|--------|---------|-------|-------------|-------|
|                        |      | Total                     | Solids | Liquids | Gases | Electricity | Heat  |
| Iraq                   | 2016 | 9,667                     | 2      | 9,391   | 261   | 12          | ..    |
|                        | 2017 | 9,882                     | 2      | 9,575   | 297   | 8           | ..    |
|                        | 2018 | 9,994                     | 2      | 9,580   | 404   | 8           | ..    |
|                        | 2019 | 10,308                    | 2      | 9,881   | 418   | 7           | ..    |
| Israel                 | 2016 | 305                       | 2      | 4       | 277   | 6           | 16    |
|                        | 2017 | 320                       | 2      | 3       | 293   | 6           | 16    |
|                        | 2018 | 329                       | 2      | 3       | 303   | 6           | 15    |
|                        | 2019 | 336                       | 2      | 4       | 303   | 13          | 15    |
| Japan                  | 2016 | 1,441                     | 539    | 19      | 109   | 473         | 301   |
|                        | 2017 | 1,701                     | 589    | 19      | 112   | 523         | 459   |
|                        | 2018 | 2,073                     | 602    | 17      | 103   | 544         | 806   |
|                        | 2019 | 2,079                     | 598    | 18      | 97    | 562         | 804   |
| Jordan                 | 2016 | 10                        | 3      | 0       | 3     | 3           | ..    |
|                        | 2017 | 12                        | 3      | 0       | 4     | 5           | ..    |
|                        | 2018 | 14                        | 3      | 0       | 3     | 8           | ..    |
|                        | 2019 | 17                        | 3      | 0       | 3     | 11          | ..    |
| Kazakhstan             | 2016 | 6,753                     | 1,917  | 3,324   | 1,468 | 43          | ..    |
|                        | 2017 | 7,471                     | 2,094  | 3,671   | 1,663 | 42          | ..    |
|                        | 2018 | 7,337                     | 2,040  | 3,847   | 1,410 | 40          | ..    |
|                        | 2019 | 6,984                     | 1,883  | 3,853   | 1,206 | 42          | ..    |
| Korea, Dem.Ppl's.Rep.  | 2016 | 891                       | 845    | ..      | ..    | 46          | ..    |
|                        | 2017 | 646                       | 603    | ..      | ..    | 43          | ..    |
|                        | 2018 | 558                       | 511    | ..      | ..    | 46          | ..    |
|                        | 2019 | 606                       | 566    | ..      | ..    | 40          | ..    |
| Korea, Republic of     | 2016 | 2,125                     | 258    | 58      | 13    | 37          | 1,760 |
|                        | 2017 | 2,028                     | 288    | 60      | 20    | 45          | 1,615 |
|                        | 2018 | 1,866                     | 267    | 70      | 18    | 56          | 1,455 |
|                        | 2019 | 1,992                     | 244    | 73      | 17    | 68          | 1,589 |
| Kuwait                 | 2016 | 7,281                     | 0      | 6,689   | 591   | 0           | ..    |
|                        | 2017 | 6,775                     | 0      | 6,190   | 585   | 0           | ..    |
|                        | 2018 | 6,873                     | 0      | 6,266   | 607   | 0           | ..    |
|                        | 2019 | 6,766                     | 0      | 6,097   | 669   | 0           | 1     |
| Kyrgyzstan             | 2016 | 77                        | 28     | 6       | 1     | 41          | ..    |
|                        | 2017 | 88                        | 28     | 7       | 1     | 51          | ..    |
|                        | 2018 | 97                        | 36     | 8       | 1     | 52          | ..    |
|                        | 2019 | 100                       | 40     | 10      | 1     | 50          | ..    |
| Lao People's Dem. Rep. | 2016 | 267                       | 202    | ..      | ..    | 65          | ..    |
|                        | 2017 | 280                       | 205    | ..      | ..    | 75          | ..    |
|                        | 2018 | 296                       | 213    | ..      | ..    | 83          | ..    |
|                        | 2019 | 276                       | 208    | ..      | ..    | 68          | ..    |
| Lebanon                | 2016 | 7                         | 5      | ..      | ..    | 1           | 1     |
|                        | 2017 | *8                        | *5     | ..      | ..    | 2           | *1    |
|                        | 2018 | *8                        | *5     | ..      | 0     | 1           | *1    |
|                        | 2019 | 10                        | 5      | ..      | 0     | 4           | 1     |
| Malaysia               | 2016 | 3,812                     | 99     | 1,485   | 2,154 | 73          | ..    |
|                        | 2017 | 3,830                     | 111    | 1,435   | 2,188 | 97          | ..    |
|                        | 2018 | 3,951                     | 106    | 1,439   | 2,309 | 97          | ..    |
|                        | 2019 | 4,085                     | 108    | 1,334   | 2,544 | 99          | ..    |
| Maldives               | 2016 | 0                         | 0      | ..      | ..    | 0           | ..    |
|                        | 2017 | 0                         | 0      | ..      | ..    | 0           | ..    |
|                        | 2018 | 0                         | 0      | ..      | ..    | 0           | ..    |
|                        | 2019 | 0                         | 0      | ..      | ..    | 0           | ..    |
| Mongolia               | 2016 | 960                       | 918    | 41      | ..    | 1           | ..    |
|                        | 2017 | 1,312                     | 1,273  | 38      | ..    | 1           | ..    |
|                        | 2018 | 1,396                     | 1,362  | 32      | ..    | 2           | ..    |
|                        | 2019 | 1,409                     | 1,373  | 34      | ..    | *2          | ..    |

Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Imports | Exports | International bunkers |        | Stock changes | Supply |            |
|---------|---------|-----------------------|--------|---------------|--------|------------|
|         |         | Aviation              | Marine |               | Total  | Per capita |
| 754     | 7,939   | 29                    | 11     | 133           | 2,309  | 63         |
| 797     | 8,048   | 28                    | 12     | 15            | 2,576  | 69         |
| 828     | 8,079   | 27                    | 12     | 27            | 2,677  | 70         |
| 473     | 8,464   | 28                    | 12     | -16           | 2,292  | 58         |
| 891     | 261     | 40                    | 6      | -29           | 918    | 113        |
| 938     | 265     | 45                    | 10     | 33            | 905    | 110        |
| 910     | 274     | 48                    | 13     | -26           | 930    | 111        |
| 938     | 283     | 49                    | 14     | 16            | 911    | 107        |
| 17,662  | 797     | 280                   | 181    | -74           | 17,919 | 140        |
| 17,705  | 770     | 293                   | 169    | -52           | 18,225 | 143        |
| 17,181  | 778     | 302                   | 178    | 6             | 17,990 | 141        |
| 16,671  | 839     | 258                   | 179    | 38            | 17,437 | 137        |
| 396     | 26      | 4                     | 4      | 2             | 370    | 39         |
| 431     | 39      | 3                     | 3      | 6             | 392    | 40         |
| 383     | 11      | 3                     | *2     | 0             | 382    | 38         |
| 395     | 11      | *3                    | 1      | *-2           | 399    | 40         |
| 348     | 3,786   | *15                   | 0      | -60           | 3,360  | 188        |
| 336     | 4,306   | *21                   | 0      | -53           | 3,533  | 195        |
| 457     | 4,697   | 27                    | 1      | 30            | 3,040  | 166        |
| 653     | 4,609   | 20                    | 7      | -3            | 3,003  | 162        |
| 81      | 599     | ..                    | ..     | ..            | 374    | 15         |
| 63      | 71      | ..                    | ..     | ..            | 638    | 25         |
| 43      | ..      | ..                    | ..     | ..            | 601    | 24         |
| 47      | ..      | ..                    | ..     | ..            | 653    | 25         |
| 13,025  | 2,695   | 204                   | 422    | -1            | 11,829 | 232        |
| 13,252  | 2,799   | 209                   | 409    | 42            | 11,821 | 231        |
| 13,558  | 2,967   | 220                   | 382    | 37            | 11,818 | 231        |
| 13,256  | 2,905   | 234                   | 334    | 37            | 11,738 | 229        |
| 172     | 5,944   | 32                    | 45     | -108          | 1,540  | 389        |
| 192     | 5,543   | 40                    | 39     | -127          | 1,471  | 363        |
| 173     | 5,610   | 40                    | 39     | -130          | 1,487  | 359        |
| 179     | 5,339   | 41                    | 38     | -72           | 1,598  | 380        |
| 96      | 10      | 5                     | ..     | -4            | 162    | 27         |
| 96      | 16      | 1                     | ..     | 5             | 162    | 26         |
| 117     | 24      | 0                     | ..     | -2            | 192    | 30         |
| 82      | 26      | 0                     | ..     | -3            | 159    | 25         |
| 49      | 71      | 2                     | ..     | 19            | 224    | 33         |
| 49      | 92      | 2                     | ..     | -12           | 247    | 36         |
| 50      | 102     | 3                     | ..     | *-10          | 252    | 36         |
| *54     | *86     | *2                    | ..     | *-4           | 246    | 34         |
| 352     | ..      | *11                   | *1     | ..            | 348    | 52         |
| 374     | ..      | *12                   | *1     | ..            | 369    | 54         |
| 353     | ..      | *12                   | 1      | ..            | 348    | 51         |
| 353     | ..      | *12                   | *1     | ..            | 350    | 51         |
| 2,068   | 2,266   | 103                   | 12     | -46           | 3,545  | 116        |
| 2,042   | 2,264   | 110                   | 16     | 3             | 3,478  | 112        |
| 2,346   | 2,329   | 107                   | 17     | 13            | 3,830  | 121        |
| 2,262   | 2,356   | 116                   | 18     | *-39          | 3,896  | 122        |
| 24      | ..      | *1                    | *2     | ..            | 21     | 43         |
| 24      | ..      | *1                    | *2     | ..            | 22     | 44         |
| 28      | ..      | *1                    | *3     | ..            | 25     | 48         |
| 31      | ..      | *1                    | *3     | ..            | 28     | 53         |
| 47      | 711     | 1                     | ..     | -3            | 297    | 97         |
| 60      | 851     | 1                     | ..     | 126           | 394    | 126        |
| 64      | 928     | 2                     | ..     | 12            | 517    | 163        |
| 80      | 945     | *2                    | ..     | *2            | 541    | 168        |

Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Country or area      | Year | Primary energy production |        |         |       |             |      |
|----------------------|------|---------------------------|--------|---------|-------|-------------|------|
|                      |      | Total                     | Solids | Liquids | Gases | Electricity | Heat |
| Myanmar              | 2016 | 1,210                     | 468    | 28      | 670   | 44          | ..   |
|                      | 2017 | 1,180                     | 475    | 25      | 639   | 40          | ..   |
|                      | 2018 | 1,149                     | 495    | 33      | 581   | 40          | 0    |
|                      | 2019 | 1,214                     | 495    | 19      | 665   | 34          | 1    |
| Nepal                | 2016 | 430                       | 403    | ..      | 12    | 15          | ..   |
|                      | 2017 | 438                       | 410    | ..      | 12    | 17          | ..   |
|                      | 2018 | 445                       | 415    | ..      | 12    | 18          | ..   |
|                      | 2019 | 457                       | 423    | ..      | 12    | 22          | ..   |
| Oman                 | 2016 | 3,310                     | 0      | 2,101   | 1,209 | 0           | ..   |
|                      | 2017 | 3,242                     | 0      | 2,028   | 1,214 | 0           | ..   |
|                      | 2018 | 3,446                     | 0      | 2,074   | 1,371 | 0           | ..   |
|                      | 2019 | 3,448                     | 0      | 2,060   | 1,387 | 0           | ..   |
| Other Asia           | 2016 | 454                       | 63     | 1       | 11    | 33          | 346  |
|                      | 2017 | 355                       | 61     | 6       | 9     | 32          | 247  |
|                      | 2018 | 412                       | 63     | 7       | 7     | 32          | 303  |
|                      | 2019 | 475                       | 63     | 12      | 6     | 41          | 353  |
| Pakistan             | 2016 | 2,322                     | *796   | 201     | 1,147 | 128         | 50   |
|                      | 2017 | 2,333                     | *790   | 208     | 1,138 | 123         | 74   |
|                      | 2018 | 2,350                     | *798   | 210     | 1,126 | 110         | 106  |
|                      | 2019 | 2,366                     | *816   | 211     | 1,108 | 132         | 99   |
| Philippines          | 2016 | 1,204                     | 584    | 45      | 140   | 37          | 399  |
|                      | 2017 | 1,199                     | 608    | 41      | 138   | 43          | 370  |
|                      | 2018 | 1,223                     | 609    | 42      | 154   | 42          | 376  |
|                      | 2019 | 1,274                     | 655    | 42      | 155   | 37          | 385  |
| Qatar                | 2016 | 9,452                     | 0      | 3,226   | 6,226 | ..          | ..   |
|                      | 2017 | 9,290                     | 0      | 3,086   | 6,204 | ..          | ..   |
|                      | 2018 | 9,297                     | 0      | 3,126   | 6,170 | ..          | ..   |
|                      | 2019 | 9,363                     | 0      | 3,118   | 6,245 | ..          | ..   |
| Saudi Arabia         | 2016 | 28,663                    | ..     | 24,238  | 4,425 | 0           | ..   |
|                      | 2017 | 28,103                    | ..     | 23,572  | 4,530 | 0           | 0    |
|                      | 2018 | 28,569                    | ..     | 23,861  | 4,706 | 0           | 2    |
|                      | 2019 | 27,418                    | ..     | 22,732  | 4,682 | 2           | 2    |
| Singapore            | 2016 | 28                        | 28     | ..      | ..    | 1           | ..   |
|                      | 2017 | 28                        | 27     | ..      | ..    | 1           | ..   |
|                      | 2018 | 26                        | 25     | ..      | ..    | 1           | ..   |
|                      | 2019 | 27                        | 25     | ..      | ..    | 1           | ..   |
| Sri Lanka            | 2016 | 169                       | 153    | ..      | ..    | 17          | ..   |
|                      | 2017 | 167                       | 150    | ..      | ..    | 17          | ..   |
|                      | 2018 | 175                       | 150    | ..      | ..    | 25          | ..   |
|                      | 2019 | *178                      | *158   | ..      | ..    | 20          | ..   |
| State of Palestine   | 2016 | 10                        | 4      | ..      | ..    | 0           | 5    |
|                      | 2017 | 8                         | 3      | ..      | ..    | 0           | 6    |
|                      | 2018 | 8                         | 2      | ..      | ..    | 0           | 6    |
|                      | 2019 | 10                        | 3      | ..      | ..    | 0           | 6    |
| Syrian Arab Republic | 2016 | 175                       | 0      | 44      | 127   | 3           | ..   |
|                      | 2017 | 173                       | 0      | 44      | 126   | 3           | ..   |
|                      | 2018 | 169                       | 0      | 42      | 125   | 3           | ..   |
|                      | 2019 | 186                       | 0      | 64      | 120   | 3           | ..   |
| Tajikistan           | 2016 | 144                       | 83     | 1       | 0     | 60          | ..   |
|                      | 2017 | *157                      | *94    | 1       | 0     | 62          | ..   |
|                      | 2018 | *165                      | *97    | 1       | 0     | 66          | ..   |
|                      | 2019 | 170                       | 100    | 1       | 0     | 69          | ..   |
| Thailand             | 2016 | 3,273                     | 1,260  | 893     | 1,092 | 27          | 0    |
|                      | 2017 | 3,107                     | 1,158  | 884     | 1,027 | 38          | 0    |
|                      | 2018 | 3,024                     | 1,097  | 867     | 1,009 | 50          | 0    |
|                      | 2019 | 3,125                     | 1,136  | 869     | 1,064 | 55          | 0    |

Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Imports | Exports | International bunkers |        | Stock changes | Supply |            |
|---------|---------|-----------------------|--------|---------------|--------|------------|
|         |         | Aviation              | Marine |               | Total  | Per capita |
| 165     | 536     | 4                     | ..     | 10            | 825    | 16         |
| 167     | *500    | 3                     | ..     | -2            | 845    | 16         |
| 279     | 448     | 3                     | 0      | -5            | 981    | 18         |
| 286     | 532     | 3                     | 0      | ..            | 965    | 18         |
| 119     | 0       | 6                     | ..     | 0             | 544    | 20         |
| 141     | 0       | 6                     | ..     | ..            | 574    | 21         |
| 169     | 0       | 5                     | ..     | ..            | 608    | 22         |
| 145     | 0       | 4                     | ..     | ..            | 597    | 21         |
| 85      | 2,291   | 23                    | *1     | 7             | 1,073  | 239        |
| 95      | 2,182   | 25                    | *1     | 0             | 1,130  | 242        |
| 79      | 2,361   | 18                    | *2     | 0             | 1,143  | 237        |
| 94      | 2,490   | 27                    | *4     | 0             | 1,021  | 205        |
| 5,110   | 729     | 121                   | 52     | -31           | 4,692  | 199        |
| 5,229   | 717     | 125                   | 49     | 0             | 4,693  | 198        |
| 5,140   | 769     | 128                   | 47     | -28           | 4,635  | 195        |
| 5,097   | 811     | 133                   | 53     | 19            | 4,558  | 192        |
| 1,431   | 20      | 11                    | 4      | 2             | 3,717  | 18         |
| 1,704   | 33      | *11                   | 2      | *-3           | 3,994  | 19         |
| 1,531   | 37      | *9                    | 2      | 0             | 3,834  | 18         |
| 1,522   | 27      | *11                   | 1      | ..            | 3,849  | 18         |
| 1,376   | 233     | 58                    | 2      | 5             | 2,281  | 22         |
| 1,487   | 224     | 71                    | 4      | -35           | 2,422  | 23         |
| 1,618   | 207     | 73                    | 4      | 60            | 2,498  | 23         |
| 1,572   | 286     | 72                    | 2      | -36           | 2,520  | 23         |
| 24      | 7,798   | 76                    | ..     | 117           | 1,485  | 559        |
| 5       | 7,473   | 145                   | ..     | -15           | 1,691  | 621        |
| 10      | 7,476   | 191                   | ..     | 13            | 1,627  | 585        |
| 11      | 7,448   | 203                   | ..     | 0             | 1,723  | 608        |
| 1,194   | 19,916  | 124                   | 140    | -300          | 9,977  | 308        |
| 1,228   | 19,212  | 135                   | 134    | -186          | 10,036 | 303        |
| 1,973   | 20,506  | 152                   | 142    | *-210         | 9,952  | 295        |
| *1,236  | 18,567  | *151                  | *136   | *-329         | 10,129 | 296        |
| 7,333   | 4,182   | *322                  | 1,969  | -23           | 911    | 161        |
| 7,858   | 4,335   | *332                  | 2,051  | 28            | 1,140  | 200        |
| 7,236   | 3,846   | *359                  | 2,018  | -31           | 1,070  | 186        |
| 6,722   | 3,658   | *348                  | 1,928  | -8            | 823    | 142        |
| 300     | 4       | 23                    | 24     | -49           | 467    | 22         |
| 308     | 0       | 24                    | 23     | -33           | 461    | 22         |
| 317     | 4       | 22                    | 25     | -3            | 444    | 21         |
| 329     | 2       | 22                    | 25     | 1             | 457    | 21         |
| 67      | 0       | ..                    | ..     | 0             | 77     | 17         |
| 68      | 0       | ..                    | ..     | ..            | 76     | 16         |
| 65      | 0       | ..                    | ..     | 0             | 74     | 15         |
| 71      | 0       | ..                    | ..     | ..            | 80     | 16         |
| 303     | 32      | 0                     | 17     | ..            | 429    | 25         |
| 339     | 37      | 0                     | 16     | ..            | 459    | 27         |
| 318     | 35      | 0                     | 15     | ..            | 437    | 26         |
| 249     | 30      | 0                     | 15     | ..            | 390    | 23         |
| 42      | 6       | 2                     | ..     | ..            | 178    | 21         |
| 36      | 5       | 1                     | ..     | ..            | 187    | 21         |
| 47      | 12      | 1                     | ..     | ..            | 199    | 22         |
| 51      | 12      | 2                     | ..     | ..            | 208    | 22         |
| 3,303   | 543     | 175                   | 49     | 8             | 5,800  | 84         |
| 3,477   | 591     | 183                   | 47     | -6            | 5,769  | 83         |
| 3,675   | 630     | 198                   | 56     | 165           | 5,649  | 81         |
| 3,456   | 502     | 203                   | 47     | 34            | 5,795  | 83         |

Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Country or area        | Year        | Primary energy production |               |               |               |              |               |
|------------------------|-------------|---------------------------|---------------|---------------|---------------|--------------|---------------|
|                        |             | Total                     | Solids        | Liquids       | Gases         | Electricity  | Heat          |
| Timor-Leste            | 2016        | 310                       | 1             | 104           | 205           | 0            | ..            |
|                        | 2017        | 271                       | 1             | 85            | 185           | 0            | ..            |
|                        | 2018        | 259                       | 1             | 69            | 188           | 0            | ..            |
|                        | 2019        | 224                       | 1             | 59            | 165           | 0            | ..            |
| Turkey                 | 2016        | 1,495                     | 760           | 118           | 27            | 302          | 287           |
|                        | 2017        | 1,527                     | 761           | 118           | 30            | 284          | 334           |
|                        | 2018        | 1,671                     | 801           | 132           | 35            | 316          | 386           |
|                        | 2019        | 1,891                     | 841           | 139           | 41            | 431          | 439           |
| Turkmenistan           | 2016        | 3,230                     | 0             | 510           | 2,720         | ..           | ..            |
|                        | 2017        | 3,223                     | 0             | 477           | 2,745         | 0            | ..            |
|                        | 2018        | 3,331                     | 0             | 452           | 2,879         | 0            | ..            |
|                        | 2019        | 3,399                     | 0             | 442           | 2,956         | 0            | ..            |
| United Arab Emirates   | 2016        | 10,293                    | ..            | 8,145         | 2,145         | 0            | *2            |
|                        | 2017        | 9,790                     | ..            | 7,885         | 1,899         | 2            | 3             |
|                        | 2018        | 9,626                     | ..            | 7,935         | 1,685         | 4            | 3             |
|                        | 2019        | 9,723                     | ..            | 7,772         | 1,935         | 13           | 2             |
| Uzbekistan             | 2016        | 2,111                     | 59            | 119           | 1,909         | 25           | ..            |
|                        | 2017        | 2,141                     | 61            | 126           | 1,926         | 29           | ..            |
|                        | 2018        | 2,310                     | 63            | 132           | 2,094         | 21           | ..            |
|                        | 2019        | 2,286                     | 61            | 137           | 2,064         | 23           | ..            |
| Viet Nam               | 2016        | 2,532                     | 1,268         | 657           | 373           | 235          | ..            |
|                        | 2017        | 2,499                     | 1,264         | 587           | 327           | 321          | ..            |
|                        | 2018        | 2,629                     | 1,461         | 524           | 339           | 305          | ..            |
|                        | 2019        | 2,776                     | 1,638         | 484           | 346           | 308          | ..            |
| Yemen                  | 2016        | 66                        | 5             | 42            | 18            | 1            | ..            |
|                        | 2017        | 71                        | 5             | 54            | 11            | 1            | ..            |
|                        | 2018        | 74                        | 5             | 64            | 4             | 2            | ..            |
|                        | 2019        | 113                       | 5             | 102           | 4             | 2            | ..            |
| <b>Europe</b>          | <b>2016</b> | <b>102,674</b>            | <b>21,618</b> | <b>31,055</b> | <b>32,670</b> | <b>4,241</b> | <b>13,089</b> |
|                        | <b>2017</b> | <b>104,674</b>            | <b>21,746</b> | <b>31,004</b> | <b>34,543</b> | <b>4,279</b> | <b>13,102</b> |
|                        | <b>2018</b> | <b>106,872</b>            | <b>22,981</b> | <b>31,318</b> | <b>34,805</b> | <b>4,607</b> | <b>13,161</b> |
|                        | <b>2019</b> | <b>107,259</b>            | <b>22,332</b> | <b>31,353</b> | <b>35,692</b> | <b>4,715</b> | <b>13,168</b> |
| Albania                | 2016        | 82                        | 8             | 45            | 3             | 26           | 1             |
|                        | 2017        | 68                        | 8             | 41            | 3             | 16           | 1             |
|                        | 2018        | 81                        | 9             | 39            | 3             | 31           | 1             |
|                        | 2019        | 71                        | 7             | 43            | 2             | 19           | 1             |
| Andorra                | 2016        | 1                         | 0             | ..            | ..            | 0            | ..            |
|                        | 2017        | 1                         | 0             | ..            | ..            | 0            | ..            |
|                        | 2018        | 1                         | 0             | ..            | ..            | 0            | ..            |
|                        | 2019        | *1                        | 0             | ..            | ..            | 0            | ..            |
| Austria                | 2016        | 511                       | 231           | 50            | 53            | 167          | 9             |
|                        | 2017        | 513                       | 235           | 46            | 57            | 166          | 9             |
|                        | 2018        | 486                       | 225           | 44            | 45            | 162          | 9             |
|                        | 2019        | 498                       | 226           | 43            | 41            | 179          | 9             |
| Belarus                | 2016        | 166                       | 86            | 73            | 6             | 1            | ..            |
|                        | 2017        | 180                       | 98            | 74            | 6             | 2            | ..            |
|                        | 2018        | 170                       | 86            | 76            | 6             | 2            | ..            |
|                        | 2019        | 177                       | 92            | 77            | 6             | 3            | ..            |
| Belgium                | 2016        | 639                       | 99            | 15            | 10            | 32           | 482           |
|                        | 2017        | 628                       | 96            | 18            | 9             | 36           | 468           |
|                        | 2018        | 486                       | 97            | 17            | 10            | 42           | 320           |
|                        | 2019        | 656                       | 96            | 18            | 10            | 51           | 481           |
| Bosnia and Herzegovina | 2016        | 199                       | 178           | ..            | ..            | 20           | ..            |
|                        | 2017        | 194                       | 180           | ..            | 0             | 14           | ..            |
|                        | 2018        | 237                       | 214           | ..            | 0             | 24           | ..            |
|                        | 2019        | 226                       | 203           | ..            | 0             | 23           | ..            |

Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Imports       | Exports       | International bunkers |              | Stock changes | Supply         |            |
|---------------|---------------|-----------------------|--------------|---------------|----------------|------------|
|               |               | Aviation              | Marine       |               | Total          | Per capita |
| 7             | 309           | 0                     | ..           | ..            | 8              | 7          |
| 8             | 270           | 0                     | ..           | ..            | 9              | 7          |
| 8             | 258           | 0                     | ..           | ..            | 8              | 6          |
| 9             | 224           | 0                     | ..           | ..            | 10             | 8          |
| 4,743         | 307           | 147                   | 36           | 33            | 5,715          | 72         |
| 5,205         | 326           | 152                   | 35           | 79            | 6,139          | 76         |
| 4,842         | 250           | 163                   | 38           | 31            | 6,030          | 73         |
| 4,840         | 403           | 189                   | 37           | -15           | 6,118          | 73         |
| 0             | 2,052         | 21                    | ..           | ..            | 1,158          | 204        |
| 0             | 2,044         | 21                    | ..           | ..            | 1,158          | 201        |
| 0             | 2,151         | 21                    | ..           | ..            | 1,160          | 198        |
| 0             | 2,187         | 21                    | ..           | ..            | 1,191          | 200        |
| 1,759         | 7,740         | 365                   | *345         | *2            | 3,600          | 385        |
| 1,967         | 8,083         | 326                   | 425          | 74            | 2,848          | 300        |
| 2,043         | 8,301         | 301                   | 358          | 60            | 2,649          | 275        |
| 2,130         | 8,673         | 316                   | 677          | *-2           | 2,189          | 224        |
| 141           | 378           | *4                    | ..           | 23            | 1,847          | 59         |
| 145           | 429           | *3                    | ..           | 15            | 1,839          | 58         |
| 89            | 518           | *4                    | ..           | -69           | 1,946          | 60         |
| 96            | 428           | *3                    | ..           | -48           | 1,999          | 61         |
| 1,103         | 452           | 34                    | 8            | *62           | 3,078          | 33         |
| 1,195         | 435           | 41                    | 9            | 92            | 3,117          | 33         |
| 1,518         | 322           | 50                    | 12           | 111           | 3,653          | 38         |
| 2,003         | 292           | 56                    | 7            | 22            | 4,401          | 46         |
| 94            | *9            | 0                     | 4            | ..            | 147            | 5          |
| 80            | *11           | 0                     | 4            | ..            | 136            | 5          |
| 75            | *14           | 0                     | 4            | 0             | 131            | 5          |
| 70            | *22           | 0                     | 5            | ..            | 155            | 5          |
| <b>67,422</b> | <b>60,677</b> | <b>2,336</b>          | <b>2,699</b> | <b>-774</b>   | <b>105,158</b> | <b>141</b> |
| <b>70,248</b> | <b>62,345</b> | <b>2,525</b>          | <b>2,767</b> | <b>228</b>    | <b>107,057</b> | <b>143</b> |
| <b>68,767</b> | <b>61,478</b> | <b>2,621</b>          | <b>2,593</b> | <b>-325</b>   | <b>109,272</b> | <b>146</b> |
| <b>68,757</b> | <b>63,164</b> | <b>2,663</b>          | <b>2,199</b> | <b>1,878</b>  | <b>106,113</b> | <b>142</b> |
| 61            | 45            | 0                     | 1            | 5             | 91             | 31         |
| 67            | 28            | 0                     | 2            | 6             | 100            | 35         |
| 54            | 38            | 0                     | 1            | 5             | 91             | 32         |
| 64            | 37            | 1                     | 1            | 5             | 91             | 32         |
| 8             | 0             | 0                     | ..           | ..            | 9              | 116        |
| 8             | 0             | 0                     | ..           | ..            | 9              | 116        |
| 9             | 0             | 0                     | ..           | ..            | 9              | 122        |
| 8             | 0             | 0                     | ..           | ..            | 9              | 119        |
| 1,344         | 450           | 33                    | 1            | -16           | 1,388          | 159        |
| 1,349         | 414           | 31                    | 1            | 3             | 1,413          | 160        |
| 1,334         | 415           | 35                    | 1            | -6            | 1,374          | 155        |
| 1,381         | 336           | 41                    | 1            | 107           | 1,396          | 156        |
| 1,534         | 662           | 5                     | ..           | -27           | 1,060          | 112        |
| 1,546         | 640           | 6                     | ..           | -1            | 1,081          | 114        |
| 1,585         | 609           | 6                     | ..           | 10            | 1,129          | 119        |
| 1,558         | 631           | 8                     | ..           | 15            | 1,081          | 114        |
| 3,314         | 1,318         | 62                    | 282          | -19           | 2,310          | 203        |
| 3,499         | 1,491         | 68                    | 317          | -53           | 2,304          | 202        |
| 3,679         | 1,459         | 72                    | 393          | 21            | 2,221          | 193        |
| 3,689         | 1,601         | 73                    | 347          | 36            | 2,288          | 198        |
| 143           | 55            | 0                     | ..           | 4             | 282            | 83         |
| 146           | 51            | 0                     | ..           | 7             | 282            | 84         |
| 142           | 67            | 0                     | ..           | 0             | 312            | 94         |
| 132           | 49            | 0                     | ..           | 6             | 303            | 92         |

Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Country or area | Year | Primary energy production |        |         |       |             |       |
|-----------------|------|---------------------------|--------|---------|-------|-------------|-------|
|                 |      | Total                     | Solids | Liquids | Gases | Electricity | Heat  |
| Bulgaria        | 2016 | 474                       | 265    | 4       | 6     | 24          | 175   |
|                 | 2017 | 493                       | 289    | 5       | 5     | 21          | 173   |
|                 | 2018 | 506                       | 289    | 6       | 3     | 28          | 179   |
|                 | 2019 | 492                       | 277    | 7       | 3     | 20          | 184   |
| Croatia         | 2016 | 185                       | 65     | 32      | 59    | 29          | 1     |
|                 | 2017 | 176                       | 65     | 32      | 54    | 24          | 1     |
|                 | 2018 | 175                       | 63     | 32      | 46    | 33          | 1     |
|                 | 2019 | 164                       | 63     | 31      | 39    | 27          | 4     |
| Czechia         | 2016 | 1,144                     | 816    | 16      | 33    | 17          | 262   |
|                 | 2017 | 1,157                     | 782    | 17      | 33    | 17          | 308   |
|                 | 2018 | 1,154                     | 762    | 17      | 33    | 17          | 325   |
|                 | 2019 | 1,119                     | 722    | 18      | 32    | 18          | 329   |
| Denmark         | 2016 | 633                       | 105    | 298     | 179   | 49          | 2     |
|                 | 2017 | 646                       | 105    | 290     | 193   | 56          | 2     |
|                 | 2018 | 571                       | 102    | 244     | 168   | 54          | 3     |
|                 | 2019 | 512                       | 99     | 216     | 132   | 62          | 3     |
| Estonia         | 2016 | 208                       | 205    | ..      | 1     | 2           | ..    |
|                 | 2017 | 242                       | 239    | ..      | 1     | 3           | ..    |
|                 | 2018 | 277                       | 273    | ..      | 1     | 2           | ..    |
|                 | 2019 | 226                       | 223    | ..      | 1     | 3           | ..    |
| Faeroe Islands  | 2016 | 1                         | ..     | ..      | ..    | 1           | ..    |
|                 | 2017 | 1                         | ..     | ..      | ..    | 1           | ..    |
|                 | 2018 | 1                         | ..     | ..      | ..    | 1           | ..    |
|                 | 2019 | 1                         | ..     | ..      | ..    | 1           | ..    |
| Finland         | 2016 | 737                       | 403    | 5       | 5     | 68          | 256   |
|                 | 2017 | 753                       | 416    | 12      | 7     | 71          | 248   |
|                 | 2018 | 812                       | 473    | 11      | 8     | 69          | 251   |
|                 | 2019 | 796                       | 446    | 13      | 8     | 67          | 262   |
| France          | 2016 | 5,446                     | 571    | 138     | 32    | 329         | 4,375 |
|                 | 2017 | 5,357                     | 557    | 133     | 35    | 305         | 4,327 |
|                 | 2018 | 5,600                     | 553    | 146     | 37    | 378         | 4,486 |
|                 | 2019 | 5,444                     | 552    | 139     | 41    | 376         | 4,336 |
| Germany         | 2016 | 4,810                     | 2,476  | 287     | 595   | 499         | 953   |
|                 | 2017 | 4,795                     | 2,474  | 287     | 576   | 499         | 863   |
|                 | 2018 | 4,694                     | 2,402  | 289     | 514   | 624         | 865   |
|                 | 2019 | 4,362                     | 2,032  | 283     | 499   | 691         | 855   |
| Gibraltar       | 2016 | 0                         | ..     | ..      | ..    | 0           | ..    |
|                 | 2017 | 0                         | ..     | ..      | ..    | 0           | ..    |
|                 | 2018 | 0                         | ..     | ..      | ..    | 0           | ..    |
|                 | 2019 | 0                         | ..     | ..      | ..    | 0           | ..    |
| Greece          | 2016 | 283                       | 202    | 12      | 5     | 53          | 11    |
|                 | 2017 | 301                       | 225    | 11      | 5     | 49          | 12    |
|                 | 2018 | 301                       | 213    | 14      | 5     | 57          | 12    |
|                 | 2019 | 252                       | 163    | 14      | 6     | 57          | 12    |
| Guernsey        | 2016 | ..                        | ..     | ..      | ..    | ..          | ..    |
|                 | 2017 | ..                        | ..     | ..      | ..    | ..          | ..    |
|                 | 2018 | ..                        | ..     | ..      | ..    | ..          | ..    |
|                 | 2019 | 0                         | ..     | ..      | ..    | 0           | ..    |
| Hungary         | 2016 | 478                       | 170    | 59      | 64    | 4           | 182   |
|                 | 2017 | 473                       | 160    | 61      | 63    | 5           | 183   |
|                 | 2018 | 465                       | 150    | 65      | 65    | 5           | 179   |
|                 | 2019 | 458                       | 135    | 68      | 59    | 9           | 186   |
| Iceland         | 2016 | 297                       | 0      | ..      | 0     | 49          | 248   |
|                 | 2017 | 300                       | 1      | ..      | 0     | 51          | 248   |
|                 | 2018 | 337                       | 1      | ..      | 0     | 50          | 286   |
|                 | 2019 | 335                       | ..     | ..      | 0     | 48          | 286   |



Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Imports | Exports | International bunkers |        | Stock changes | Supply |            |
|---------|---------|-----------------------|--------|---------------|--------|------------|
|         |         | Aviation              | Marine |               | Total  | Per capita |
| 538     | 241     | 9                     | 3      | 1             | 757    | 106        |
| 558     | 246     | 10                    | 3      | 9             | 782    | 110        |
| 486     | 196     | 11                    | 3      | 0             | 781    | 111        |
| 525     | 225     | 10                    | 3      | 8             | 771    | 110        |
| 314     | 140     | 5                     | 0      | 1             | 353    | 84         |
| 344     | 146     | 6                     | 0      | 3             | 364    | 87         |
| 337     | 145     | 8                     | 1      | 3             | 354    | 85         |
| 338     | 130     | 8                     | 1      | 2             | 361    | 87         |
| 904     | 326     | 13                    | ..     | -34           | 1,742  | 164        |
| 999     | 316     | 15                    | ..     | 8             | 1,817  | 171        |
| 962     | 288     | 17                    | ..     | -2            | 1,813  | 170        |
| 1,008   | 269     | 18                    | ..     | 52            | 1,789  | 167        |
| 767     | 661     | 40                    | 28     | -26           | 697    | 122        |
| 675     | 586     | 41                    | 22     | -30           | 701    | 122        |
| 682     | 497     | 43                    | 25     | -16           | 703    | 122        |
| 756     | 462     | 44                    | 31     | 61            | 669    | 116        |
| 110     | 88      | 2                     | 12     | -24           | 240    | 183        |
| 108     | 96      | 3                     | 13     | -1            | 239    | 182        |
| 118     | 115     | 3                     | 12     | 6             | 259    | 196        |
| 117     | 105     | 3                     | 8      | 6             | 220    | 166        |
| *10     | ..      | 0                     | 1      | ..            | *9     | *191       |
| *11     | ..      | 0                     | 2      | ..            | *10    | *214       |
| *12     | ..      | 0                     | 2      | ..            | *11    | *219       |
| *12     | ..      | 0                     | 2      | ..            | *11    | *221       |
| 1,063   | 404     | 27                    | 12     | -46           | 1,403  | 255        |
| 1,033   | 398     | 29                    | 15     | -47           | 1,392  | 253        |
| 1,053   | 391     | 33                    | 14     | 11            | 1,415  | 256        |
| 1,038   | 428     | 36                    | 14     | -32           | 1,388  | 251        |
| 6,393   | 1,273   | 237                   | 69     | -75           | 10,335 | 155        |
| 6,622   | 1,351   | 240                   | 73     | -8            | 10,322 | 154        |
| 6,442   | 1,400   | 249                   | 82     | 41            | 10,270 | 153        |
| 6,507   | 1,448   | 262                   | 72     | 56            | 10,114 | 150        |
| 10,813  | 2,193   | 372                   | 118    | -29           | 12,968 | 158        |
| 11,237  | 2,548   | 411                   | 96     | -36           | 13,012 | 157        |
| 9,804   | 1,407   | 424                   | 71     | -76           | 12,672 | 152        |
| 10,063  | 1,364   | 420                   | 57     | 269           | 12,314 | 147        |
| 166     | ..      | 0                     | 156    | ..            | 9      | 277        |
| 184     | ..      | 0                     | 174    | ..            | 10     | 286        |
| 181     | ..      | 0                     | 170    | ..            | 11     | 314        |
| 187     | ..      | 0                     | 174    | 2             | 11     | 332        |
| 1,549   | 780     | 38                    | 73     | -4            | 945    | 89         |
| 1,608   | 823     | 42                    | 90     | -4            | 958    | 91         |
| 1,632   | 869     | 47                    | 92     | -4            | 929    | 88         |
| 1,593   | 791     | 49                    | 106    | -16           | 915    | 87         |
| 1       | ..      | ..                    | ..     | ..            | 1      | 16         |
| 1       | ..      | ..                    | ..     | ..            | 1      | 17         |
| 1       | ..      | ..                    | ..     | ..            | 1      | 18         |
| 1       | ..      | ..                    | ..     | ..            | 1      | 12         |
| 813     | 213     | 8                     | ..     | 0             | 1,069  | 110        |
| 1,014   | 313     | 10                    | ..     | 50            | 1,114  | 114        |
| 1,032   | 381     | 12                    | ..     | -13           | 1,117  | 115        |
| 1,223   | 442     | 12                    | ..     | 112           | 1,114  | 115        |
| 45      | ..      | 13                    | 2      | 0             | 326    | 981        |
| 47      | ..      | 16                    | 3      | 0             | 327    | 978        |
| 53      | ..      | 18                    | 3      | 3             | 366    | 1,088      |
| 43      | ..      | 13                    | 3      | -2            | 363    | 1,072      |

Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Country or area | Year | Primary energy production |        |         |       |             |      |
|-----------------|------|---------------------------|--------|---------|-------|-------------|------|
|                 |      | Total                     | Solids | Liquids | Gases | Electricity | Heat |
| Ireland         | 2016 | 176                       | 43     | 1       | 106   | 25          | 1    |
|                 | 2017 | 203                       | 50     | 1       | 122   | 29          | 1    |
|                 | 2018 | 208                       | 56     | 1       | 117   | 34          | 1    |
|                 | 2019 | 171                       | 38     | 1       | 92    | 39          | 1    |
| Isle of Man     | 2016 | 0                         | 0      | ..      | ..    | 0           | ..   |
|                 | 2017 | 0                         | 0      | ..      | ..    | 0           | ..   |
|                 | 2018 | *1                        | *1     | ..      | ..    | 0           | ..   |
|                 | 2019 | *1                        | *1     | ..      | ..    | 0           | ..   |
| Italy           | 2016 | 1,401                     | 389    | 197     | 277   | 296         | 242  |
|                 | 2017 | 1,421                     | 411    | 220     | 269   | 282         | 239  |
|                 | 2018 | 1,452                     | 379    | 250     | 266   | 321         | 236  |
|                 | 2019 | 1,437                     | 390    | 238     | 249   | 325         | 235  |
| Jersey          | 2016 | *1                        | *1     | ..      | ..    | ..          | ..   |
|                 | 2017 | *1                        | *1     | ..      | ..    | ..          | ..   |
|                 | 2018 | *1                        | *1     | ..      | ..    | ..          | ..   |
|                 | 2019 | *1                        | *1     | ..      | ..    | ..          | ..   |
| Kosovo          | 2016 | 84                        | 83     | ..      | ..    | 1           | 0    |
|                 | 2017 | 75                        | 74     | ..      | ..    | 1           | 0    |
|                 | 2018 | 76                        | 75     | ..      | ..    | 1           | 0    |
|                 | 2019 | 77                        | 76     | ..      | ..    | 1           | 0    |
| Latvia          | 2016 | 102                       | 87     | 2       | 4     | 10          | ..   |
|                 | 2017 | 108                       | 86     | 2       | 4     | 16          | ..   |
|                 | 2018 | 119                       | 103    | 3       | 4     | 9           | ..   |
|                 | 2019 | 118                       | 104    | 3       | 3     | 8           | 0    |
| Liechtenstein   | 2016 | *1                        | *1     | ..      | 0     | 0           | 0    |
|                 | 2017 | *1                        | *1     | ..      | 0     | 0           | 0    |
|                 | 2018 | *1                        | *1     | ..      | 0     | 0           | 0    |
|                 | 2019 | *1                        | *1     | ..      | 0     | 0           | 0    |
| Lithuania       | 2016 | 77                        | 54     | 7       | 1     | 6           | 10   |
|                 | 2017 | 85                        | 58     | 7       | 1     | 7           | 12   |
|                 | 2018 | 83                        | 56     | 8       | 2     | 6           | 11   |
|                 | 2019 | 83                        | 55     | 8       | 2     | 7           | 11   |
| Luxembourg      | 2016 | 7                         | 5      | ..      | 1     | 1           | 0    |
|                 | 2017 | 8                         | 5      | ..      | 1     | 2           | 0    |
|                 | 2018 | 9                         | 6      | ..      | 1     | 2           | 0    |
|                 | 2019 | 10                        | 7      | ..      | 1     | 2           | 0    |
| Malta           | 2016 | 1                         | ..     | 0       | 0     | 0           | 0    |
|                 | 2017 | 1                         | ..     | 0       | 0     | 1           | 0    |
|                 | 2018 | 1                         | ..     | ..      | 0     | 1           | 0    |
|                 | 2019 | 1                         | ..     | ..      | 0     | 1           | 0    |
| Montenegro      | 2016 | 28                        | 21     | ..      | ..    | 7           | ..   |
|                 | 2017 | 27                        | 23     | ..      | ..    | 4           | ..   |
|                 | 2018 | 31                        | 23     | ..      | ..    | 8           | ..   |
|                 | 2019 | 32                        | 25     | ..      | ..    | 7           | ..   |
| Netherlands     | 2016 | 1,934                     | 116    | 120     | 1,608 | 36          | 55   |
|                 | 2017 | 1,725                     | 117    | 133     | 1,379 | 46          | 49   |
|                 | 2018 | 1,528                     | 116    | 131     | 1,177 | 52          | 51   |
|                 | 2019 | 1,376                     | 121    | 118     | 1,017 | 61          | 58   |
| North Macedonia | 2016 | 51                        | 43     | 0       | ..    | 7           | 0    |
|                 | 2017 | 53                        | 48     | 0       | ..    | 4           | 0    |
|                 | 2018 | 51                        | 44     | 0       | ..    | 7           | 0    |
|                 | 2019 | 51                        | 46     | ..      | ..    | 5           | 0    |
| Norway          | 2016 | 8,793                     | 77     | 3,905   | 4,286 | 522         | 3    |
|                 | 2017 | 9,036                     | 60     | 3,896   | 4,553 | 523         | 4    |
|                 | 2018 | 8,679                     | 61     | 3,628   | 4,473 | 514         | 4    |
|                 | 2019 | 8,188                     | 62     | 3,424   | 4,227 | 472         | 4    |

Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Imports | Exports | International bunkers |        | Stock changes | Supply |            |
|---------|---------|-----------------------|--------|---------------|--------|------------|
|         |         | Aviation              | Marine |               | Total  | Per capita |
| 511     | 74      | 36                    | 7      | -16           | 586    | 125        |
| 504     | 85      | 43                    | 6      | -2            | 575    | 121        |
| 506     | 77      | 46                    | 7      | 3             | 581    | 121        |
| 503     | 69      | 46                    | 6      | -22           | 574    | 118        |
| 5       | 0       | ..                    | ..     | ..            | 5      | 55         |
| 4       | 0       | ..                    | ..     | ..            | 4      | 54         |
| 4       | 0       | ..                    | ..     | ..            | 4      | 53         |
| 5       | 1       | ..                    | ..     | ..            | 5      | 58         |
| 6,390   | 1,311   | 142                   | 93     | -61           | 6,307  | 104        |
| 6,615   | 1,407   | 147                   | 97     | -24           | 6,408  | 106        |
| 6,407   | 1,308   | 165                   | 115    | -18           | 6,289  | 104        |
| 6,362   | 1,241   | 170                   | 112    | 55            | 6,221  | 103        |
| 2       | ..      | ..                    | ..     | ..            | 3      | 29         |
| 2       | ..      | ..                    | ..     | ..            | 3      | 29         |
| 2       | ..      | ..                    | ..     | ..            | 3      | 28         |
| 2       | ..      | ..                    | ..     | ..            | 3      | 28         |
| 31      | 4       | 0                     | ..     | -2            | 113    | 64         |
| 36      | 3       | 0                     | ..     | 0             | 108    | 60         |
| 35      | 3       | 0                     | ..     | 0             | 109    | 60         |
| 39      | 4       | 0                     | ..     | 0             | 112    | 63         |
| 183     | 89      | 5                     | 13     | -1            | 179    | 91         |
| 176     | 87      | 6                     | 11     | -4            | 185    | 95         |
| 186     | 96      | 7                     | 2      | 8             | 194    | 101        |
| 181     | 89      | 7                     | 12     | 3             | 188    | 99         |
| 2       | ..      | ..                    | ..     | ..            | 3      | 88         |
| 2       | ..      | ..                    | ..     | ..            | 3      | 89         |
| 2       | ..      | ..                    | ..     | ..            | 3      | 90         |
| 2       | ..      | ..                    | ..     | ..            | 3      | 90         |
| 620     | 387     | 4                     | 7      | 0             | 299    | 103        |
| 619     | 385     | 5                     | 7      | -5            | 313    | 110        |
| 599     | 353     | 5                     | 9      | -1            | 317    | 113        |
| 616     | 365     | 5                     | 8      | 3             | 318    | 115        |
| 178     | 7       | 22                    | ..     | 0             | 156    | 270        |
| 183     | 7       | 25                    | ..     | 0             | 159    | 269        |
| 188     | 6       | 26                    | ..     | 0             | 165    | 273        |
| 188     | 4       | 26                    | ..     | 0             | 167    | 272        |
| 117     | 12      | 5                     | 74     | 2             | 25     | 58         |
| 135     | 6       | 6                     | 90     | 5             | 28     | 65         |
| 141     | 15      | 7                     | 93     | -2            | 29     | 65         |
| 146     | 16      | 7                     | 96     | -2            | 30     | 69         |
| 20      | 5       | 1                     | ..     | 1             | 41     | 65         |
| 23      | 5       | 1                     | ..     | 0             | 43     | 68         |
| 21      | 7       | 1                     | ..     | -1            | 45     | 72         |
| 22      | 7       | 1                     | ..     | -1            | 47     | 75         |
| 8,483   | 6,782   | 166                   | 491    | -80           | 3,059  | 180        |
| 8,552   | 6,611   | 170                   | 482    | -78           | 3,092  | 182        |
| 8,654   | 6,465   | 172                   | 463    | 44            | 3,037  | 178        |
| 8,435   | 6,075   | 169                   | 495    | 102           | 2,971  | 174        |
| 71      | 5       | ..                    | ..     | 1             | 116    | 56         |
| 70      | 5       | ..                    | ..     | -2            | 119    | 57         |
| 69      | 6       | ..                    | ..     | 2             | 112    | 54         |
| 78      | 9       | ..                    | ..     | -1            | 121    | 58         |
| 331     | 7,914   | 22                    | 5      | 12            | 1,171  | 223        |
| 409     | 8,225   | 23                    | 8      | -38           | 1,227  | 232        |
| 465     | 7,837   | 24                    | 10     | 23            | 1,249  | 234        |
| 504     | 7,535   | 24                    | 9      | -35           | 1,160  | 216        |

Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Country or area     | Year | Primary energy production |        |         |        |             |       |
|---------------------|------|---------------------------|--------|---------|--------|-------------|-------|
|                     |      | Total                     | Solids | Liquids | Gases  | Electricity | Heat  |
| Poland              | 2016 | 2,791                     | 2,493  | 81      | 160    | 53          | 4     |
|                     | 2017 | 2,690                     | 2,384  | 80      | 159    | 63          | 4     |
|                     | 2018 | 2,611                     | 2,315  | 81      | 157    | 54          | 4     |
|                     | 2019 | 2,484                     | 2,177  | 83      | 156    | 64          | 5     |
| Portugal            | 2016 | 251                       | 121    | 12      | 3      | 105         | 10    |
|                     | 2017 | 218                       | 121    | 13      | 4      | 69          | 12    |
|                     | 2018 | 245                       | 122    | 13      | 3      | 94          | 12    |
|                     | 2019 | 246                       | 130    | 14      | 3      | 86          | 12    |
| Republic of Moldova | 2016 | 30                        | 29     | 0       | 0      | 0           | ..    |
|                     | 2017 | 32                        | 32     | 0       | 0      | 0           | ..    |
|                     | 2018 | 36                        | 35     | 0       | 0      | 0           | 0     |
|                     | 2019 | 30                        | 29     | 0       | 0      | 0           | 0     |
| Romania             | 2016 | 1,045                     | 331    | 170     | 327    | 95          | 123   |
|                     | 2017 | 1,071                     | 340    | 162     | 358    | 86          | 126   |
|                     | 2018 | 1,053                     | 320    | 160     | 356    | 93          | 124   |
|                     | 2019 | 1,031                     | 315    | 161     | 344    | 87          | 123   |
| Russian Federation  | 2016 | 57,679                    | 9,098  | 23,219  | 22,542 | 667         | 2,155 |
|                     | 2017 | 60,017                    | 9,627  | 23,173  | 24,323 | 669         | 2,224 |
|                     | 2018 | 62,422                    | 10,952 | 23,560  | 24,980 | 692         | 2,239 |
|                     | 2019 | 64,239                    | 11,011 | 23,795  | 26,439 | 707         | 2,287 |
| Serbia              | 2016 | 446                       | 348    | 41      | 18     | 39          | 0     |
|                     | 2017 | 438                       | 348    | 40      | 17     | 33          | 0     |
|                     | 2018 | 418                       | 324    | 39      | 16     | 39          | 0     |
|                     | 2019 | 426                       | 335    | 38      | 16     | 37          | 0     |
| Slovakia            | 2016 | 266                       | 70     | 8       | 10     | 18          | 162   |
|                     | 2017 | 265                       | 63     | 7       | 11     | 17          | 166   |
|                     | 2018 | 256                       | 61     | 8       | 9      | 15          | 163   |
|                     | 2019 | 287                       | 83     | 8       | 10     | 18          | 168   |
| Slovenia            | 2016 | 145                       | 63     | ..      | 1      | 17          | 63    |
|                     | 2017 | 153                       | 67     | 0       | 1      | 15          | 69    |
|                     | 2018 | 147                       | 64     | 0       | 2      | 18          | 63    |
|                     | 2019 | 145                       | 62     | 0       | 1      | 17          | 64    |
| Spain               | 2016 | 1,391                     | 274    | 63      | 12     | 336         | 707   |
|                     | 2017 | 1,367                     | 298    | 79      | 12     | 273         | 704   |
|                     | 2018 | 1,386                     | 289    | 78      | 14     | 335         | 669   |
|                     | 2019 | 1,387                     | 255    | 86      | 16     | 323         | 707   |
| Sweden              | 2016 | 1,438                     | 458    | 11      | 7      | 280         | 682   |
|                     | 2017 | 1,490                     | 465    | 9       | 7      | 299         | 710   |
|                     | 2018 | 1,502                     | 452    | 16      | 7      | 285         | 741   |
|                     | 2019 | 1,513                     | 463    | 19      | 8      | 309         | 715   |
| Switzerland         | 2016 | 468                       | 101    | 0       | 5      | 130         | 232   |
|                     | 2017 | 461                       | 102    | 0       | 5      | 129         | 224   |
|                     | 2018 | 518                       | 100    | 0       | 5      | 133         | 279   |
|                     | 2019 | 544                       | 103    | 1       | 6      | 145         | 289   |
| Ukraine             | 2016 | 2,754                     | 1,081  | 98      | 637    | 33          | 906   |
|                     | 2017 | 2,431                     | 695    | 95      | 649    | 38          | 953   |
|                     | 2018 | 2,529                     | 751    | 100     | 692    | 46          | 940   |
|                     | 2019 | 2,503                     | 739    | 108     | 685    | 41          | 930   |
| United Kingdom      | 2016 | 5,020                     | 351    | 2,086   | 1,616  | 191         | 777   |
|                     | 2017 | 5,023                     | 339    | 2,060   | 1,620  | 241         | 762   |
|                     | 2018 | 5,157                     | 362    | 2,241   | 1,579  | 270         | 705   |
|                     | 2019 | 5,087                     | 363    | 2,278   | 1,537  | 300         | 609   |
| Oceania             | 2016 | 17,229                    | 12,604 | 868     | 3,200  | 230         | 327   |
|                     | 2017 | 17,990                    | 12,660 | 759     | 4,003  | 239         | 329   |
|                     | 2018 | 18,242                    | 12,432 | 714     | 4,512  | 258         | 327   |
|                     | 2019 | 19,624                    | 12,984 | 795     | 5,230  | 282         | 332   |

Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Imports      | Exports       | International bunkers |           | Stock changes | Supply       |            |
|--------------|---------------|-----------------------|-----------|---------------|--------------|------------|
|              |               | Aviation              | Marine    |               | Total        | Per capita |
| 2,177        | 852           | 29                    | 8         | -111          | 4,190        | 110        |
| 2,430        | 710           | 37                    | 11        | -22           | 4,384        | 116        |
| 2,657        | 655           | 43                    | 11        | 109           | 4,451        | 117        |
| 2,664        | 594           | 46                    | 12        | 172           | 4,324        | 114        |
| 1,069        | 334           | 49                    | 32        | -6            | 910          | 88         |
| 1,168        | 337           | 55                    | 33        | 10            | 951          | 92         |
| 1,057        | 271           | 59                    | 34        | 19            | 919          | 90         |
| 1,009        | 240           | 63                    | 40        | 2             | 910          | 89         |
| 85           | 1             | 1                     | ..        | 0             | 113          | 28         |
| 90           | 1             | 2                     | ..        | 0             | 118          | 29         |
| 94           | 1             | 2                     | ..        | 0             | 126          | 31         |
| 92           | 0             | 2                     | ..        | 0             | 119          | 29         |
| 559          | 261           | 11                    | 1         | -5            | 1,336        | 67         |
| 582          | 249           | 13                    | 1         | -11           | 1,400        | 71         |
| 604          | 256           | 5                     | 1         | -16           | 1,411        | 72         |
| 677          | 249           | 6                     | 1         | 59            | 1,392        | 72         |
| *995         | 28,124        | *214                  | 692       | 48            | 29,596       | 204        |
| *1,130       | 28,804        | 238                   | 729       | 669           | 30,706       | 211        |
| *1,121       | 29,899        | 246                   | *497      | -325          | 33,226       | 228        |
| *981         | 32,733        | 251                   | 96        | 461           | 31,678       | 217        |
| 247          | 60            | 5                     | 1         | -6            | 633          | 89         |
| 278          | 60            | 6                     | 1         | 3             | 647          | 92         |
| 285          | 65            | 6                     | 1         | -5            | 635          | 91         |
| 280          | 56            | 6                     | 1         | 11            | 633          | 91         |
| 635          | 223           | 2                     | ..        | -9            | 686          | 126        |
| 688          | 222           | 2                     | ..        | 13            | 717          | 132        |
| 645          | 191           | 2                     | ..        | -8            | 716          | 131        |
| 691          | 195           | 2                     | ..        | 75            | 705          | 129        |
| 261          | 122           | 1                     | 5         | 0             | 278          | 134        |
| 275          | 124           | 1                     | 6         | 3             | 293          | 141        |
| 278          | 125           | 2                     | 9         | -1            | 290          | 139        |
| 285          | 133           | 1                     | 8         | 2             | 285          | 137        |
| 5,228        | 1,292         | 176                   | 315       | -104          | 4,941        | 106        |
| 5,615        | 1,371         | 192                   | 280       | -68           | 5,208        | 112        |
| 5,554        | 1,322         | 200                   | 293       | -58           | 5,183        | 111        |
| 5,420        | 1,208         | 205                   | 301       | 58            | 5,035        | 108        |
| 1,533        | 822           | 35                    | 84        | 53            | 1,977        | 201        |
| 1,472        | 886           | 38                    | 98        | -87           | 2,026        | 205        |
| 1,488        | 849           | 40                    | 75        | -37           | 2,063        | 207        |
| 1,288        | 637           | 38                    | 85        | 39            | 2,002        | 199        |
| 722          | 129           | 73                    | 0         | 3             | 986          | 118        |
| 728          | 127           | 75                    | 0         | -6            | 992          | 117        |
| 675          | 136           | 79                    | 0         | -19           | 997          | 117        |
| 715          | 148           | 80                    | 0         | 8             | 1,023        | 119        |
| 1,246        | 54            | *5                    | ..        | -19           | 3,960        | 89         |
| 1,481        | 74            | 12                    | ..        | 93            | 3,732        | 84         |
| 1,421        | 56            | ..                    | ..        | -28           | 3,922        | 89         |
| 1,460        | 66            | ..                    | ..        | 161           | 3,736        | 85         |
| 5,831        | 2,963         | 466                   | 112       | -185          | 7,496        | 113        |
| 5,925        | 3,106         | 500                   | 95        | -131          | 7,378        | 111        |
| 6,011        | 3,200         | 504                   | 103       | 4             | 7,357        | 110        |
| 5,868        | 3,170         | 508                   | 98        | 40            | 7,139        | 106        |
| <b>2,645</b> | <b>13,191</b> | <b>224</b>            | <b>38</b> | <b>-175</b>   | <b>6,596</b> | <b>163</b> |
| <b>2,693</b> | <b>13,628</b> | <b>245</b>            | <b>39</b> | <b>112</b>    | <b>6,659</b> | <b>162</b> |
| <b>2,864</b> | <b>14,142</b> | <b>260</b>            | <b>41</b> | <b>-25</b>    | <b>6,688</b> | <b>161</b> |
| <b>2,858</b> | <b>15,168</b> | <b>272</b>            | <b>49</b> | <b>260</b>    | <b>6,733</b> | <b>160</b> |

Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Country or area             | Year | Primary energy production |        |         |       |             |      |
|-----------------------------|------|---------------------------|--------|---------|-------|-------------|------|
|                             |      | Total                     | Solids | Liquids | Gases | Electricity | Heat |
| American Samoa              | 2016 | 0                         | ..     | ..      | ..    | 0           | ..   |
|                             | 2017 | 0                         | ..     | ..      | ..    | 0           | ..   |
|                             | 2018 | 0                         | ..     | ..      | ..    | 0           | ..   |
|                             | 2019 | 0                         | ..     | ..      | ..    | 0           | ..   |
| Australia                   | 2016 | 16,201                    | 12,412 | 742     | 2,912 | 120         | 15   |
|                             | 2017 | 16,970                    | 12,466 | 645     | 3,711 | 132         | 16   |
|                             | 2018 | 17,266                    | 12,233 | 617     | 4,253 | 147         | 17   |
|                             | 2019 | 18,623                    | 12,782 | 696     | 4,954 | 173         | 18   |
| Cook Islands                | 2016 | 0                         | ..     | ..      | ..    | 0           | ..   |
|                             | 2017 | 0                         | ..     | ..      | ..    | 0           | ..   |
|                             | 2018 | 0                         | ..     | ..      | ..    | 0           | ..   |
|                             | 2019 | 0                         | ..     | ..      | ..    | 0           | ..   |
| Fiji                        | 2016 | 6                         | 4      | ..      | ..    | 2           | ..   |
|                             | 2017 | 7                         | 5      | ..      | ..    | 2           | ..   |
|                             | 2018 | 6                         | 4      | ..      | ..    | 2           | ..   |
|                             | 2019 | 7                         | 5      | ..      | ..    | 2           | ..   |
| French Polynesia            | 2016 | 1                         | 0      | ..      | ..    | 1           | 0    |
|                             | 2017 | 1                         | 0      | ..      | ..    | 1           | 0    |
|                             | 2018 | 1                         | 0      | ..      | ..    | 1           | 0    |
|                             | 2019 | 1                         | 0      | ..      | ..    | 1           | 0    |
| Guam                        | 2016 | 0                         | ..     | ..      | ..    | 0           | ..   |
|                             | 2017 | 0                         | ..     | ..      | ..    | 0           | ..   |
|                             | 2018 | 0                         | ..     | ..      | ..    | 0           | ..   |
|                             | 2019 | 0                         | ..     | ..      | ..    | 0           | ..   |
| Kiribati                    | 2016 | *1                        | *1     | ..      | ..    | 0           | ..   |
|                             | 2017 | *1                        | *1     | ..      | ..    | 0           | ..   |
|                             | 2018 | *1                        | *1     | ..      | ..    | 0           | ..   |
|                             | 2019 | *1                        | *1     | ..      | ..    | 0           | ..   |
| Marshall Islands            | 2016 | 0                         | 0      | ..      | ..    | 0           | ..   |
|                             | 2017 | 0                         | 0      | ..      | ..    | 0           | ..   |
|                             | 2018 | 0                         | 0      | ..      | ..    | 0           | ..   |
|                             | 2019 | 0                         | 0      | ..      | ..    | 0           | ..   |
| Micronesia (Fed. States of) | 2016 | 0                         | 0      | ..      | ..    | 0           | ..   |
|                             | 2017 | 0                         | 0      | ..      | ..    | 0           | ..   |
|                             | 2018 | 0                         | 0      | ..      | ..    | 0           | ..   |
|                             | 2019 | 0                         | 0      | ..      | ..    | 0           | ..   |
| Nauru                       | 2016 | 0                         | ..     | ..      | ..    | 0           | ..   |
|                             | 2017 | 0                         | ..     | ..      | ..    | 0           | ..   |
|                             | 2018 | 0                         | ..     | ..      | ..    | 0           | ..   |
|                             | 2019 | 0                         | ..     | ..      | ..    | 0           | ..   |
| New Caledonia               | 2016 | 1                         | 0      | 0       | ..    | 1           | 0    |
|                             | 2017 | 2                         | 0      | 0       | ..    | 2           | 0    |
|                             | 2018 | 2                         | 0      | 0       | ..    | 1           | 0    |
|                             | 2019 | 2                         | 0      | 0       | ..    | 2           | 0    |
| New Zealand                 | 2016 | 769                       | 114    | 77      | 180   | 102         | 296  |
|                             | 2017 | 758                       | 114    | 70      | 178   | 98          | 298  |
|                             | 2018 | 731                       | 119    | 55      | 158   | 102         | 295  |
|                             | 2019 | 744                       | 119    | 56      | 170   | 101         | 298  |
| Niue                        | 2016 | 0                         | 0      | ..      | ..    | 0           | 0    |
|                             | 2017 | 0                         | 0      | ..      | ..    | 0           | 0    |
|                             | 2018 | 0                         | 0      | ..      | ..    | 0           | 0    |
|                             | 2019 | 0                         | 0      | ..      | ..    | 0           | 0    |
| Northern Mariana Islands    | 2016 | ..                        | ..     | ..      | ..    | ..          | ..   |
|                             | 2017 | ..                        | ..     | ..      | ..    | ..          | ..   |
|                             | 2018 | ..                        | ..     | ..      | ..    | ..          | ..   |
|                             | 2019 | ..                        | ..     | ..      | ..    | ..          | ..   |

Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Imports | Exports | International bunkers |        | Stock changes | Supply |            |
|---------|---------|-----------------------|--------|---------------|--------|------------|
|         |         | Aviation              | Marine |               | Total  | Per capita |
| *5      | ..      | 0                     | 0      | ..            | *4     | *76        |
| *5      | ..      | 0                     | 0      | ..            | *4     | *77        |
| *5      | ..      | 0                     | 0      | ..            | *4     | *77        |
| *5      | ..      | 0                     | 0      | ..            | *4     | *77        |
| 2,041   | 12,904  | 170                   | 22     | -174          | 5,321  | 219        |
| 2,091   | 13,353  | 186                   | 22     | 119           | 5,381  | 219        |
| 2,230   | 13,893  | 198                   | 23     | -38           | 5,422  | 218        |
| 2,217   | 14,907  | 209                   | 31     | 268           | 5,424  | 215        |
| *1      | ..      | 0                     | 0      | ..            | *1     | *61        |
| *2      | ..      | 0                     | 0      | ..            | *1     | *66        |
| *2      | ..      | 0                     | 0      | ..            | *1     | *67        |
| *2      | ..      | 0                     | 0      | ..            | *1     | *68        |
| 33      | 15      | *1                    | *2     | *-2           | 23     | 26         |
| 35      | 13      | *1                    | *2     | *-1           | 25     | 29         |
| *39     | *14     | *1                    | *3     | *1            | *26    | *29        |
| *38     | *15     | *1                    | *3     | 0             | *26    | *29        |
| 12      | ..      | ..                    | ..     | 0             | 13     | 48         |
| 12      | ..      | ..                    | ..     | 0             | 13     | 47         |
| 13      | ..      | ..                    | ..     | 0             | 13     | 47         |
| 13      | ..      | ..                    | ..     | 0             | 13     | 47         |
| ..      | ..      | ..                    | ..     | ..            | 0      | 1          |
| ..      | ..      | ..                    | ..     | ..            | 0      | 1          |
| ..      | ..      | ..                    | ..     | ..            | 0      | 1          |
| ..      | ..      | ..                    | ..     | ..            | 0      | 1          |
| 1       | ..      | 0                     | ..     | ..            | 1      | 12         |
| 1       | ..      | 0                     | ..     | ..            | 2      | 14         |
| *1      | ..      | 0                     | ..     | ..            | *2     | *14        |
| *1      | ..      | 0                     | ..     | ..            | *2     | *13        |
| *2      | ..      | 0                     | ..     | ..            | *2     | *38        |
| *2      | ..      | 0                     | ..     | ..            | *2     | *39        |
| *2      | ..      | 0                     | ..     | ..            | *2     | *39        |
| *2      | ..      | 0                     | ..     | ..            | *2     | *39        |
| *3      | ..      | 0                     | 0      | ..            | *2     | *20        |
| *3      | ..      | 0                     | 0      | ..            | *2     | *19        |
| *3      | ..      | 0                     | 0      | ..            | *2     | *19        |
| *3      | ..      | 0                     | 0      | ..            | *2     | *19        |
| *1      | ..      | 0                     | 0      | 0             | *1     | *70        |
| *1      | ..      | 0                     | 0      | ..            | *1     | *74        |
| *1      | ..      | 0                     | 0      | ..            | *1     | *70        |
| *1      | ..      | 0                     | 0      | ..            | *1     | *68        |
| 68      | ..      | 1                     | 0      | 0             | 67     | 246        |
| 66      | ..      | 1                     | 0      | -1            | 68     | 245        |
| 69      | ..      | 1                     | 1      | 1             | 68     | 243        |
| 65      | ..      | 1                     | 0      | 0             | 66     | 232        |
| 355     | 110     | 46                    | 12     | 4             | 951    | 204        |
| 349     | 103     | 51                    | 12     | -10           | 952    | 202        |
| 361     | 92      | 54                    | 12     | 8             | 926    | 195        |
| 366     | 95      | 54                    | 13     | -11           | 960    | 201        |
| 0       | ..      | 0                     | ..     | ..            | 0      | *62        |
| 0       | ..      | 0                     | ..     | ..            | 0      | *60        |
| 0       | ..      | 0                     | ..     | ..            | 0      | *64        |
| 0       | ..      | 0                     | ..     | ..            | 0      | *66        |
| *8      | ..      | 0                     | *1     | ..            | *7     | *131       |
| *9      | ..      | 0                     | *1     | ..            | *8     | *138       |
| *9      | ..      | 0                     | *1     | ..            | *8     | *134       |
| *9      | ..      | 0                     | *1     | ..            | *8     | *134       |

Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Country or area       | Year | Primary energy production |        |         |       |             |      |
|-----------------------|------|---------------------------|--------|---------|-------|-------------|------|
|                       |      | Total                     | Solids | Liquids | Gases | Electricity | Heat |
| Palau                 | 2016 | 0                         | ..     | ..      | ..    | 0           | ..   |
|                       | 2017 | 0                         | ..     | ..      | ..    | 0           | ..   |
|                       | 2018 | 0                         | ..     | ..      | ..    | 0           | ..   |
|                       | 2019 | 0                         | ..     | ..      | ..    | 0           | ..   |
| Papua New Guinea      | 2016 | 244                       | 68     | 49      | 108   | 4           | 15   |
|                       | 2017 | 245                       | 69     | 44      | 113   | 4           | 15   |
|                       | 2018 | 229                       | 69     | 41      | 101   | 3           | 15   |
|                       | 2019 | *240                      | *72    | *43     | *106  | *3          | *16  |
| Samoa                 | 2016 | 2                         | 1      | ..      | 0     | 0           | 0    |
|                       | 2017 | *2                        | *1     | ..      | 0     | 0           | 0    |
|                       | 2018 | *2                        | *1     | ..      | 0     | 0           | 0    |
|                       | 2019 | *2                        | *1     | ..      | 0     | 0           | 0    |
| Solomon Islands       | 2016 | *3                        | *3     | ..      | ..    | 0           | ..   |
|                       | 2017 | *3                        | *3     | ..      | ..    | 0           | ..   |
|                       | 2018 | *3                        | *3     | ..      | ..    | 0           | ..   |
|                       | 2019 | *3                        | *3     | ..      | ..    | 0           | ..   |
| Tonga                 | 2016 | 0                         | 0      | ..      | ..    | 0           | ..   |
|                       | 2017 | 0                         | 0      | ..      | ..    | 0           | ..   |
|                       | 2018 | 0                         | 0      | ..      | ..    | 0           | ..   |
|                       | 2019 | 0                         | 0      | ..      | ..    | 0           | ..   |
| Tuvalu                | 2016 | 0                         | ..     | ..      | ..    | 0           | ..   |
|                       | 2017 | 0                         | ..     | ..      | ..    | 0           | ..   |
|                       | 2018 | 0                         | ..     | ..      | ..    | 0           | ..   |
|                       | 2019 | 0                         | ..     | ..      | ..    | 0           | ..   |
| Vanuatu               | 2016 | 1                         | 1      | 0       | ..    | 0           | ..   |
|                       | 2017 | 1                         | 1      | 0       | ..    | 0           | ..   |
|                       | 2018 | 1                         | 1      | 0       | ..    | 0           | ..   |
|                       | 2019 | 1                         | 1      | 0       | ..    | 0           | ..   |
| Wallis and Futuna Is. | 2016 | 0                         | ..     | ..      | ..    | 0           | ..   |
|                       | 2017 | 0                         | ..     | ..      | ..    | 0           | ..   |
|                       | 2018 | 0                         | ..     | ..      | ..    | 0           | ..   |
|                       | 2019 | 0                         | ..     | ..      | ..    | 0           | ..   |



Table 2

## Components of Total Energy Supply

Petajoules and gigajoules per capita

| Imports | Exports | International bunkers |        | Stock changes | Supply |            |
|---------|---------|-----------------------|--------|---------------|--------|------------|
|         |         | Aviation              | Marine |               | Total  | Per capita |
| *3      | ..      | 0                     | ..     | ..            | *3     | *164       |
| *4      | ..      | *1                    | ..     | ..            | *3     | *168       |
| *4      | ..      | *1                    | ..     | ..            | *3     | *166       |
| *4      | ..      | *1                    | ..     | ..            | *3     | *169       |
| 98      | 161     | *3                    | 0      | -3            | 181    | 22         |
| 100     | 160     | *3                    | 0      | 4             | 178    | 21         |
| 112     | 144     | 3                     | 0      | 2             | 192    | 22         |
| *118    | *151    | *3                    | 0      | *3            | *202   | *23        |
| 4       | 0       | 1                     | ..     | 0             | 5      | 26         |
| 4       | 0       | *1                    | ..     | 0             | 5      | 27         |
| 4       | 0       | *1                    | ..     | 0             | 5      | 27         |
| 5       | 0       | *1                    | ..     | 0             | 6      | 29         |
| *5      | 0       | 0                     | 0      | ..            | *7     | *12        |
| *5      | 0       | 0                     | 0      | ..            | *7     | *12        |
| *5      | 0       | 0                     | 0      | ..            | *8     | *12        |
| *5      | ..      | 0                     | 0      | ..            | *8     | *11        |
| 2       | ..      | 0                     | 0      | 0             | 2      | 18         |
| 2       | ..      | 0                     | 0      | 0             | 2      | 18         |
| 2       | ..      | 0                     | 0      | 0             | 2      | 18         |
| 2       | ..      | 0                     | 0      | 0             | 2      | 22         |
| 0       | ..      | 0                     | ..     | ..            | 0      | *10        |
| 0       | ..      | 0                     | ..     | ..            | 0      | *10        |
| 0       | ..      | 0                     | ..     | ..            | 0      | *11        |
| 0       | ..      | 0                     | ..     | ..            | 0      | *11        |
| 3       | 0       | 0                     | 0      | 0             | 3      | 11         |
| 3       | 0       | 0                     | 0      | ..            | 3      | 10         |
| 3       | 0       | 0                     | 0      | ..            | 3      | 12         |
| 3       | 0       | 0                     | 0      | ..            | 3      | 11         |
| 0       | ..      | 0                     | ..     | ..            | 0      | 29         |
| 0       | ..      | 0                     | ..     | ..            | 0      | 29         |
| 0       | ..      | 0                     | ..     | ..            | 0      | 31         |
| 0       | ..      | 0                     | ..     | ..            | 0      | 32         |



### Total final consumption and its components

Petajoules and Gigajoules per capita

#### Table Notes

**Total final consumption** refers to all fuel and energy that is delivered to users for both their energy and non-energy uses which do not involve a transformation process.

**Non-energy use** consists of the use of energy products as raw materials for the manufacture of products outside the scope of energy statistics, as well as for direct uses that do not involve using the products as a source of energy, nor as a transformation input. Examples are lubrication, sealing, preservation, road surfacing, and use as a solvent.

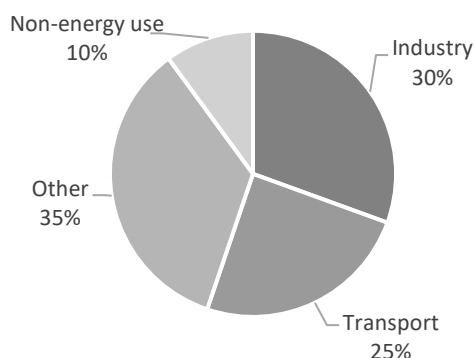
**Industry** refers to the use of energy products for energy purposes by economic units belonging to manufacturing, construction and non-fuel mining industries, namely the following: Iron and steel, Chemical and petrochemical, Non-ferrous metals, Non-metallic minerals; Transport equipment; Machinery; Mining and quarrying; Food and Tobacco; Paper, pulp and print; Wood and wood products (other than pulp and paper); Textile and leather; Construction; and Industries not elsewhere specified. It excludes the use of energy products for transport.

**Transport** refers to the consumption of fuels and electricity by any economic entity to transport goods or persons between points of departure and destination within the national territory. As such, it excludes international aviation and shipping, which are included under international marine and aviation bunkers respectively.

**Other** refers to energy consumed by consumers not classified under Industry. It includes Households, Commerce and public services, Agriculture, Forestry, Fishing, and Not elsewhere specified.

Please refer to the Definitions Section on pages ix to xv for the appropriate product description/ classification, and xvi to xvii for the descriptions of relevant flows.

**Figure 9: World total final consumption by component, 2019**



**Figure 10: Total final consumption by region, 1990-2019**

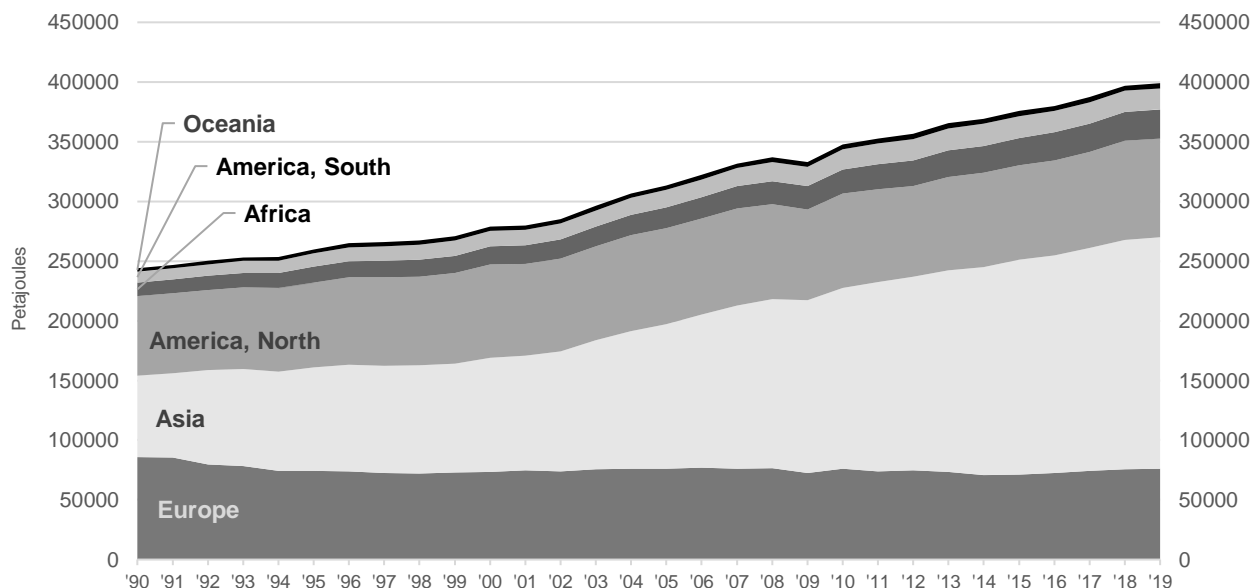


Table 3

## Total final consumption and its components

Petajoules and gigajoules per capita

| Country or area      | Year        | Total final consumption | Non-energy use | Energy use     |               |                | TFC per capita |
|----------------------|-------------|-------------------------|----------------|----------------|---------------|----------------|----------------|
|                      |             |                         |                | Industry       | Transport     | Other          |                |
| <b>World</b>         | <b>2016</b> | <b>380,051</b>          | <b>36,674</b>  | <b>115,855</b> | <b>96,757</b> | <b>130,765</b> | <b>51</b>      |
|                      | <b>2017</b> | <b>387,487</b>          | <b>37,891</b>  | <b>117,433</b> | <b>96,496</b> | <b>135,667</b> | <b>51</b>      |
|                      | <b>2018</b> | <b>397,018</b>          | <b>38,894</b>  | <b>121,913</b> | <b>97,809</b> | <b>138,403</b> | <b>52</b>      |
|                      | <b>2019</b> | <b>399,016</b>          | <b>40,139</b>  | <b>121,888</b> | <b>98,358</b> | <b>138,630</b> | <b>52</b>      |
| <b>Africa</b>        | <b>2016</b> | <b>23,361</b>           | <b>767</b>     | <b>3,870</b>   | <b>4,298</b>  | <b>14,427</b>  | <b>19</b>      |
|                      | <b>2017</b> | <b>23,862</b>           | <b>830</b>     | <b>3,852</b>   | <b>4,528</b>  | <b>14,651</b>  | <b>19</b>      |
|                      | <b>2018</b> | <b>24,180</b>           | <b>742</b>     | <b>3,946</b>   | <b>4,705</b>  | <b>14,786</b>  | <b>19</b>      |
|                      | <b>2019</b> | <b>24,247</b>           | <b>860</b>     | <b>3,754</b>   | <b>5,035</b>  | <b>14,598</b>  | <b>19</b>      |
| Algeria              | 2016        | 1,571                   | 165            | 249            | 632           | 525            | 39             |
|                      | 2017        | 1,591                   | 133            | 270            | 626           | 563            | 38             |
|                      | 2018        | 1,776                   | 209            | 284            | 634           | 649            | 42             |
|                      | 2019        | 1,776                   | 169            | 303            | 612           | 692            | 41             |
| Angola               | 2016        | *401                    | 4              | 56             | *69           | *272           | *14            |
|                      | 2017        | *389                    | 4              | 38             | *81           | *265           | *13            |
|                      | 2018        | *392                    | 3              | 40             | *79           | *269           | *13            |
|                      | 2019        | *415                    | 4              | 45             | *85           | *281           | *13            |
| Benin                | 2016        | 167                     | ..             | 6              | 81            | *80            | 15             |
|                      | 2017        | 170                     | ..             | 5              | 84            | *82            | 15             |
|                      | 2018        | 183                     | ..             | 3              | 94            | *85            | 16             |
|                      | 2019        | *183                    | 0              | 7              | 82            | *94            | *16            |
| Botswana             | 2016        | 58                      | 1              | 13             | 31            | 14             | 27             |
|                      | 2017        | 59                      | 1              | 12             | 32            | 14             | 27             |
|                      | 2018        | 60                      | 1              | 11             | 33            | 14             | 26             |
|                      | 2019        | 60                      | 1              | 12             | 33            | 14             | 26             |
| Burkina Faso         | 2016        | *153                    | 0              | *13            | 24            | *116           | *8             |
|                      | 2017        | *161                    | 0              | *15            | 28            | *117           | *8             |
|                      | 2018        | *168                    | 0              | *17            | 32            | *119           | *9             |
|                      | 2019        | *176                    | 0              | *21            | 34            | *121           | *9             |
| Burundi              | 2016        | *56                     | *1             | *1             | *5            | *49            | *5             |
|                      | 2017        | *56                     | *1             | *1             | *6            | *49            | *5             |
|                      | 2018        | *58                     | 0              | *1             | 8             | *49            | *5             |
|                      | 2019        | *58                     | 0              | *1             | 8             | *49            | *5             |
| Cabo Verde           | 2016        | *7                      | 0              | 0              | *4            | *3             | *13            |
|                      | 2017        | *7                      | 0              | 0              | *4            | *3             | *13            |
|                      | 2018        | *7                      | 0              | 0              | *4            | *3             | *13            |
|                      | 2019        | *7                      | 0              | 0              | *4            | *3             | *13            |
| Cameroon             | 2016        | *311                    | 3              | 16             | 45            | *247           | *13            |
|                      | 2017        | *318                    | 3              | 17             | 44            | *254           | *13            |
|                      | 2018        | *326                    | 3              | 18             | 43            | *261           | *13            |
|                      | 2019        | *332                    | 3              | 18             | 45            | *266           | *13            |
| Central African Rep. | 2016        | *36                     | 0              | 0              | *3            | *33            | *8             |
|                      | 2017        | *36                     | 0              | 0              | *3            | *33            | *8             |
|                      | 2018        | *36                     | 0              | 0              | *3            | *33            | *8             |
|                      | 2019        | *37                     | 0              | 0              | *3            | *33            | *8             |
| Chad                 | 2016        | *77                     | 0              | *1             | *15           | *61            | *5             |
|                      | 2017        | *78                     | 0              | *1             | 14            | *62            | *5             |
|                      | 2018        | *79                     | 0              | *1             | 15            | *63            | *5             |
|                      | 2019        | *80                     | 0              | *2             | 15            | *64            | *5             |
| Comoros              | 2016        | *6                      | ..             | 0              | *2            | *4             | *8             |
|                      | 2017        | 7                       | ..             | 0              | *2            | 4              | 8              |
|                      | 2018        | *7                      | ..             | 0              | *2            | *4             | *8             |
|                      | 2019        | *7                      | ..             | 0              | *3            | *4             | *8             |

Table 3

## Total final consumption and its components

Petajoules and gigajoules per capita

| Country or area        | Year | Total final consumption | Non-energy use | Energy use |           |        | TFC per capita |
|------------------------|------|-------------------------|----------------|------------|-----------|--------|----------------|
|                        |      |                         |                | Industry   | Transport | Other  |                |
| Congo                  | 2016 | 80                      | 1              | 3          | 20        | 57     | 16             |
|                        | 2017 | 80                      | 1              | 3          | 18        | 58     | 16             |
|                        | 2018 | 82                      | 1              | 3          | 18        | 59     | 16             |
|                        | 2019 | 82                      | 1              | 3          | 18        | 60     | 15             |
| Côte d'Ivoire          | 2016 | 290                     | 3              | 34         | 49        | 204    | 12             |
|                        | 2017 | 307                     | 3              | 30         | 55        | 218    | 13             |
|                        | 2018 | 300                     | 4              | 22         | 55        | 219    | 12             |
|                        | 2019 | 311                     | 2              | 28         | 58        | 224    | 12             |
| Dem. Rep. of the Congo | 2016 | *916                    | 0              | 147        | 26        | *742   | *12            |
|                        | 2017 | *1,053                  | 0              | 167        | 29        | *856   | *13            |
|                        | 2018 | 739                     | 0              | 27         | 29        | 683    | 9              |
|                        | 2019 | *810                    | 0              | 34         | 30        | *746   | *9             |
| Djibouti               | 2016 | *7                      | 0              | 0          | *2        | *5     | *8             |
|                        | 2017 | *8                      | 0              | 0          | *2        | *5     | *8             |
|                        | 2018 | *8                      | 0              | 0          | *2        | *5     | *8             |
|                        | 2019 | *8                      | 0              | 0          | *2        | *6     | *8             |
| Egypt                  | 2016 | 2,879                   | 284            | 838        | 535       | 1,223  | 30             |
|                        | 2017 | 2,867                   | 282            | 806        | 538       | 1,242  | 30             |
|                        | 2018 | 2,852                   | 113            | 975        | 527       | 1,238  | 29             |
|                        | 2019 | 2,620                   | 296            | 777        | 736       | 810    | 26             |
| Equatorial Guinea      | 2016 | *112                    | 0              | *96        | *8        | *7     | *92            |
|                        | 2017 | *125                    | 0              | *109       | 9         | *7     | *99            |
|                        | 2018 | *90                     | 0              | *75        | 8         | *7     | *69            |
|                        | 2019 | *67                     | 0              | *51        | 9         | *7     | *50            |
| Eritrea                | 2016 | 15                      | 0              | 1          | 3         | 12     | 4              |
|                        | 2017 | 15                      | 0              | 1          | 3         | 12     | 5              |
|                        | 2018 | 16                      | 0              | 1          | 3         | 12     | 5              |
|                        | 2019 | 16                      | 0              | 1          | 4         | 12     | 5              |
| Eswatini               | 2016 | *43                     | 0              | *19        | 6         | *18    | *39            |
|                        | 2017 | 39                      | 0              | 15         | 9         | 15     | 35             |
|                        | 2018 | 40                      | 0              | 16         | 8         | 16     | 35             |
|                        | 2019 | 42                      | 0              | 17         | 9         | 16     | 37             |
| Ethiopia               | 2016 | *1,388                  | 4              | 67         | 78        | *1,239 | *13            |
|                        | 2017 | *1,422                  | 4              | 69         | 88        | *1,261 | *13            |
|                        | 2018 | *1,451                  | 4              | 76         | 97        | *1,275 | *13            |
|                        | 2019 | *1,485                  | 4              | 82         | 105       | *1,294 | *13            |
| Gabon                  | 2016 | *93                     | 1              | 29         | 12        | *52    | *46            |
|                        | 2017 | *85                     | 1              | *26        | *8        | *50    | *41            |
|                        | 2018 | *84                     | 0              | *25        | *8        | *50    | *40            |
|                        | 2019 | *85                     | 0              | *24        | *10       | *50    | *39            |
| Gambia                 | 2016 | *11                     | ..             | *2         | *1        | *8     | *5             |
|                        | 2017 | *11                     | ..             | *2         | *1        | *7     | *5             |
|                        | 2018 | *11                     | ..             | *2         | *1        | *8     | *5             |
|                        | 2019 | *11                     | ..             | *2         | *1        | *8     | *5             |
| Ghana                  | 2016 | 295                     | *3             | 41         | 113       | 139    | 10             |
|                        | 2017 | 294                     | *3             | 43         | 103       | 146    | 10             |
|                        | 2018 | 320                     | *4             | 46         | 118       | 152    | 11             |
|                        | 2019 | 331                     | *4             | 48         | 127       | 152    | 11             |
| Guinea                 | 2016 | *142                    | *1             | *16        | *19       | *105   | *12            |
|                        | 2017 | *150                    | *2             | *18        | *23       | *106   | *12            |
|                        | 2018 | *155                    | *2             | *26        | *20       | *107   | *12            |
|                        | 2019 | *166                    | *2             | *28        | *28       | *107   | *13            |

Table 3

## Total final consumption and its components

Petajoules and gigajoules per capita

| Country or area | Year | Total final consumption | Non-energy use | Energy use |           |       | TFC per capita |
|-----------------|------|-------------------------|----------------|------------|-----------|-------|----------------|
|                 |      |                         |                | Industry   | Transport | Other |                |
| Guinea-Bissau   | 2016 | *29                     | *1             | 0          | *1        | *26   | *16            |
|                 | 2017 | *29                     | *1             | 0          | *1        | *26   | *16            |
|                 | 2018 | *29                     | *1             | 0          | *2        | *27   | *16            |
|                 | 2019 | *30                     | *1             | 0          | *2        | *27   | *15            |
| Kenya           | 2016 | *573                    | 2              | 60         | 141       | *371  | *12            |
|                 | 2017 | 586                     | 2              | 61         | 138       | 385   | 12             |
|                 | 2018 | *553                    | 3              | 75         | 128       | *348  | *11            |
|                 | 2019 | 540                     | 3              | 56         | 147       | 334   | 10             |
| Lesotho         | 2016 | *44                     | 0              | *17        | 7         | *19   | *21            |
|                 | 2017 | *46                     | 0              | *20        | 7         | *19   | *22            |
|                 | 2018 | *44                     | 0              | *19        | 7         | *18   | *21            |
|                 | 2019 | *44                     | 0              | *19        | 7         | *18   | *21            |
| Liberia         | 2016 | *86                     | 0              | *2         | *11       | *73   | *19            |
|                 | 2017 | *87                     | 0              | *2         | *10       | *75   | *19            |
|                 | 2018 | *88                     | 0              | *1         | *8        | *78   | *18            |
|                 | 2019 | *90                     | 0              | *1         | *8        | *80   | *18            |
| Libya           | 2016 | 484                     | 78             | 76         | 255       | 74    | 75             |
|                 | 2017 | 467                     | 77             | 72         | 242       | 76    | 71             |
|                 | 2018 | 464                     | 72             | 68         | 236       | 88    | 69             |
|                 | 2019 | 456                     | 66             | 63         | 238       | 88    | 67             |
| Madagascar      | 2016 | 220                     | *3             | 24         | 18        | 176   | 9              |
|                 | 2017 | 234                     | *3             | 29         | 19        | 184   | 9              |
|                 | 2018 | 253                     | *3             | 30         | *20       | 200   | 10             |
|                 | 2019 | 265                     | *2             | 32         | *21       | 210   | 10             |
| Malawi          | 2016 | *65                     | 0              | *11        | *11       | *43   | *4             |
|                 | 2017 | *65                     | 0              | *10        | *13       | *42   | *4             |
|                 | 2018 | *68                     | 0              | *9         | *15       | *43   | *4             |
|                 | 2019 | *70                     | 0              | *10        | *16       | *43   | *4             |
| Mali            | 2016 | *142                    | ..             | *7         | *18       | *117  | *8             |
|                 | 2017 | *144                    | ..             | *8         | *19       | *118  | *8             |
|                 | 2018 | *145                    | ..             | *8         | *20       | *117  | *8             |
|                 | 2019 | *148                    | ..             | *8         | *20       | *119  | *8             |
| Mauritania      | 2016 | *45                     | *1             | *8         | *16       | *21   | *11            |
|                 | 2017 | *55                     | *1             | *12        | *19       | *22   | *13            |
|                 | 2018 | *61                     | *2             | 15         | *22       | *22   | *14            |
|                 | 2019 | *62                     | *3             | 15         | *23       | *22   | *14            |
| Mauritius       | 2016 | 40                      | 1              | 8          | 21        | 10    | 32             |
|                 | 2017 | 41                      | 1              | 8          | 22        | 10    | 33             |
|                 | 2018 | 42                      | 1              | 8          | 23        | 10    | 33             |
|                 | 2019 | 43                      | 1              | 8          | 23        | 11    | 34             |
| Morocco         | 2016 | 653                     | 21             | 125        | 232       | 275   | 18             |
|                 | 2017 | 683                     | 21             | 141        | 240       | 282   | 19             |
|                 | 2018 | 690                     | 19             | 141        | 247       | 284   | 19             |
|                 | 2019 | 713                     | 23             | 139        | 258       | 293   | 19             |
| Mozambique      | 2016 | 349                     | 7              | 53         | 55        | 234   | 13             |
|                 | 2017 | 334                     | 7              | 57         | 45        | 224   | 12             |
|                 | 2018 | *337                    | 7              | 59         | 45        | *225  | *11            |
|                 | 2019 | *348                    | 8              | 60         | 50        | *231  | *11            |
| Namibia         | 2016 | 75                      | 1              | 7          | 30        | 37    | 32             |
|                 | 2017 | 75                      | 1              | 7          | 28        | 39    | 31             |
|                 | 2018 | 75                      | 1              | 7          | 28        | 39    | 31             |
|                 | 2019 | 74                      | 1              | 7          | 27        | 39    | 30             |

Table 3

## Total final consumption and its components

Petajoules and gigajoules per capita

| Country or area        | Year | Total final consumption | Non-energy use | Energy use |           |        | TFC per capita |
|------------------------|------|-------------------------|----------------|------------|-----------|--------|----------------|
|                        |      |                         |                | Industry   | Transport | Other  |                |
| Niger                  | 2016 | *82                     | 0              | 4          | 11        | *67    | *4             |
|                        | 2017 | *72                     | ..             | *5         | 11        | *56    | *3             |
|                        | 2018 | *82                     | ..             | *3         | *10       | *69    | *4             |
|                        | 2019 | *90                     | ..             | *3         | *15       | *72    | *4             |
| Nigeria                | 2016 | *5,365                  | 65             | *305       | 722       | *4,272 | *29            |
|                        | 2017 | *5,429                  | 57             | *301       | 722       | *4,349 | *28            |
|                        | 2018 | *5,524                  | 61             | *308       | 728       | *4,427 | *28            |
|                        | 2019 | *5,661                  | 58             | *311       | 788       | *4,504 | *28            |
| Rwanda                 | 2016 | *80                     | 0              | *7         | *8        | *65    | *7             |
|                        | 2017 | *81                     | 0              | *7         | *8        | *66    | *7             |
|                        | 2018 | *83                     | 0              | *7         | *8        | *68    | *7             |
|                        | 2019 | *91                     | 0              | *7         | *14       | *69    | *7             |
| Sao Tome and Principe  | 2016 | *2                      | 0              | 0          | 0         | *1     | *10            |
|                        | 2017 | *2                      | 0              | 0          | 0         | *1     | *10            |
|                        | 2018 | *2                      | 0              | 0          | 0         | *1     | *10            |
|                        | 2019 | *2                      | 0              | 0          | 0         | *1     | *10            |
| Senegal                | 2016 | 126                     | ..             | 25         | 40        | 61     | 8              |
|                        | 2017 | 117                     | ..             | *20        | 43        | 53     | 8              |
|                        | 2018 | 123                     | ..             | *24        | 36        | 63     | 8              |
|                        | 2019 | 129                     | ..             | *34        | 41        | 55     | 8              |
| Seychelles             | 2016 | *5                      | 0              | *1         | *2        | *3     | *51            |
|                        | 2017 | *5                      | 0              | *1         | *2        | 2      | *51            |
|                        | 2018 | *5                      | 0              | *1         | *3        | 2      | *54            |
|                        | 2019 | *5                      | 0              | *1         | *2        | 2      | *51            |
| Sierra Leone           | 2016 | *58                     | 0              | *2         | 10        | *47    | *8             |
|                        | 2017 | *58                     | 0              | *2         | 8         | *48    | *8             |
|                        | 2018 | *57                     | 0              | *2         | 9         | *46    | *7             |
|                        | 2019 | *58                     | 0              | *1         | 9         | *47    | *7             |
| Somalia                | 2016 | *111                    | ..             | *2         | 2         | *107   | *8             |
|                        | 2017 | *113                    | ..             | *2         | *2        | *110   | *8             |
|                        | 2018 | *116                    | ..             | *2         | *2        | *112   | *8             |
|                        | 2019 | *118                    | ..             | *2         | *2        | *115   | *8             |
| South Africa           | 2016 | 2,606                   | 86             | 1,053      | 477       | 989    | 46             |
|                        | 2017 | 2,718                   | 191            | 986        | 679       | 863    | 48             |
|                        | 2018 | 2,938                   | 195            | 1,021      | 811       | 910    | 51             |
|                        | 2019 | 2,843                   | 179            | 996        | 810       | 858    | 49             |
| South Sudan            | 2016 | 23                      | ..             | 0          | 13        | 9      | 2              |
|                        | 2017 | 19                      | ..             | 1          | 10        | 8      | 2              |
|                        | 2018 | 19                      | ..             | 1          | 10        | 8      | 2              |
|                        | 2019 | 21                      | ..             | 2          | 11        | 8      | 2              |
| St. Helena and Depend. | 2016 | 0                       | ..             | ..         | 0         | 0      | *28            |
|                        | 2017 | 0                       | ..             | ..         | 0         | 0      | *16            |
|                        | 2018 | 0                       | ..             | ..         | 0         | 0      | *25            |
|                        | 2019 | 0                       | ..             | ..         | 0         | 0      | *25            |
| Sudan                  | 2016 | *393                    | 11             | *69        | *130      | *183   | *10            |
|                        | 2017 | *409                    | *11            | *70        | *133      | *195   | *10            |
|                        | 2018 | *407                    | *11            | *72        | *135      | *189   | *10            |
|                        | 2019 | *413                    | *11            | *73        | *137      | *192   | *10            |
| Togo                   | 2016 | 82                      | 0              | 5          | 9         | 68     | 11             |
|                        | 2017 | 80                      | ..             | 4          | 12        | 64     | 10             |
|                        | 2018 | 85                      | ..             | 4          | 14        | 67     | 11             |
|                        | 2019 | 88                      | ..             | 4          | 15        | 69     | 11             |

Table 3

## Total final consumption and its components

Petajoules and gigajoules per capita

| Country or area         | Year        | Total final consumption | Non-energy use | Energy use    |               |               | TFC per capita |
|-------------------------|-------------|-------------------------|----------------|---------------|---------------|---------------|----------------|
|                         |             |                         |                | Industry      | Transport     | Other         |                |
| Tunisia                 | 2016        | 335                     | 12             | 89            | 100           | 134           | 30             |
|                         | 2017        | 351                     | 13             | 91            | 108           | 140           | 31             |
|                         | 2018        | 353                     | 12             | 91            | 107           | 142           | 31             |
|                         | 2019        | 346                     | 9              | 88            | 102           | 146           | 30             |
| Uganda                  | 2016        | 683                     | *1             | 74            | 41            | 568           | 17             |
|                         | 2017        | 713                     | 0              | 83            | 43            | 586           | 17             |
|                         | 2018        | 745                     | *1             | 93            | 47            | 605           | 17             |
|                         | 2019        | 785                     | *1             | 110           | 50            | 624           | 18             |
| United Rep. of Tanzania | 2016        | 778                     | 2              | 79            | 74            | 624           | 15             |
|                         | 2017        | 792                     | 2              | 85            | 74            | 631           | 14             |
|                         | 2018        | 806                     | 2              | 87            | 77            | 639           | 14             |
|                         | 2019        | 802                     | 2              | 91            | 68            | 641           | 14             |
| Zambia                  | 2016        | 329                     | 3              | 82            | 30            | 215           | 20             |
|                         | 2017        | 335                     | 3              | 86            | 29            | 217           | 20             |
|                         | 2018        | 336                     | 3              | 86            | *26           | 222           | 19             |
|                         | 2019        | 342                     | 3              | 79            | 29            | 231           | 19             |
| Zimbabwe                | 2016        | *383                    | 1              | 28            | 31            | *323          | *27            |
|                         | 2017        | *391                    | 1              | 30            | 32            | *328          | *27            |
|                         | 2018        | *410                    | 1              | 32            | 41            | *335          | *28            |
|                         | 2019        | *403                    | 1              | 29            | 37            | *336          | *28            |
| <b>America, North</b>   | <b>2016</b> | <b>79,848</b>           | <b>7,233</b>   | <b>14,927</b> | <b>31,975</b> | <b>25,713</b> | <b>139</b>     |
|                         | <b>2017</b> | <b>80,199</b>           | <b>7,498</b>   | <b>14,780</b> | <b>32,170</b> | <b>25,750</b> | <b>139</b>     |
|                         | <b>2018</b> | <b>83,101</b>           | <b>7,634</b>   | <b>15,143</b> | <b>32,758</b> | <b>27,566</b> | <b>143</b>     |
|                         | <b>2019</b> | <b>82,851</b>           | <b>7,921</b>   | <b>14,908</b> | <b>32,760</b> | <b>27,263</b> | <b>141</b>     |
| Anguilla                | 2016        | *2                      | ..             | ..            | *1            | *1            | *111           |
|                         | 2017        | *1                      | ..             | ..            | *1            | *1            | *100           |
|                         | 2018        | *2                      | ..             | ..            | *1            | *1            | *102           |
|                         | 2019        | *2                      | ..             | ..            | *1            | *1            | *105           |
| Antigua and Barbuda     | 2016        | *4                      | 0              | 0             | *3            | *1            | *43            |
|                         | 2017        | *4                      | 0              | 0             | *3            | *1            | *43            |
|                         | 2018        | *4                      | 0              | 0             | *3            | *1            | *45            |
|                         | 2019        | *4                      | 0              | 0             | *3            | *1            | *44            |
| Aruba                   | 2016        | *7                      | 0              | ..            | *3            | *3            | *63            |
|                         | 2017        | *7                      | 0              | ..            | *3            | *3            | *65            |
|                         | 2018        | *7                      | 0              | ..            | *3            | *3            | *65            |
|                         | 2019        | *7                      | 0              | ..            | *3            | *4            | *65            |
| Bahamas                 | 2016        | *19                     | 0              | 7             | *4            | *7            | *49            |
|                         | 2017        | *20                     | 0              | *7            | *6            | *7            | *52            |
|                         | 2018        | *28                     | 0              | *8            | *10           | *10           | *72            |
|                         | 2019        | *25                     | 0              | *8            | *8            | *9            | *65            |
| Barbados                | 2016        | 12                      | ..             | 1             | 6             | 5             | 41             |
|                         | 2017        | 12                      | ..             | 2             | 6             | 5             | 42             |
|                         | 2018        | 12                      | ..             | 2             | 6             | 4             | 42             |
|                         | 2019        | 12                      | ..             | 2             | 6             | 5             | 42             |
| Belize                  | 2016        | *13                     | 0              | 3             | *7            | 4             | *36            |
|                         | 2017        | 14                      | 0              | 3             | 7             | 4             | 36             |
|                         | 2018        | 13                      | 0              | 3             | 6             | 4             | 34             |
|                         | 2019        | 14                      | 0              | 3             | 7             | 4             | 36             |
| Bermuda                 | 2016        | *6                      | 0              | 0             | *2            | *5            | *99            |
|                         | 2017        | 5                       | 0              | 0             | *2            | 3             | 74             |
|                         | 2018        | *6                      | 0              | 0             | *2            | *4            | *93            |
|                         | 2019        | 5                       | 0              | 0             | *1            | 4             | 78             |



Table 3

## Total final consumption and its components

Petajoules and gigajoules per capita

| Country or area             | Year | Total final consumption | Non-energy use | Energy use |           |       | TFC per capita |
|-----------------------------|------|-------------------------|----------------|------------|-----------|-------|----------------|
|                             |      |                         |                | Industry   | Transport | Other |                |
| Bonaire, St Eustatius, Saba | 2016 | *1                      | 0              | 0          | 0         | 0     | *38            |
|                             | 2017 | *1                      | 0              | 0          | 0         | 0     | *39            |
|                             | 2018 | *1                      | 0              | 0          | 0         | 0     | *39            |
|                             | 2019 | *1                      | 0              | 0          | 0         | 0     | *40            |
| British Virgin Islands      | 2016 | *2                      | ..             | 0          | *1        | *1    | *64            |
|                             | 2017 | *1                      | ..             | 0          | *1        | *1    | *47            |
|                             | 2018 | *1                      | ..             | 0          | *1        | *1    | *45            |
|                             | 2019 | *1                      | ..             | 0          | *1        | *1    | *48            |
| Canada                      | 2016 | 8,296                   | 976            | 1,913      | 2,706     | 2,701 | 228            |
|                             | 2017 | 8,440                   | 881            | 1,940      | 2,790     | 2,828 | 230            |
|                             | 2018 | 8,691                   | 879            | 1,955      | 2,890     | 2,967 | 234            |
|                             | 2019 | 8,626                   | 801            | 1,972      | 2,883     | 2,971 | 231            |
| Cayman Islands              | 2016 | 5                       | 0              | 1          | 2         | 1     | 78             |
|                             | 2017 | 5                       | 0              | 1          | 2         | 1     | 80             |
|                             | 2018 | 5                       | 0              | 1          | 3         | 1     | 85             |
|                             | 2019 | 6                       | 0              | 1          | 3         | 2     | 92             |
| Costa Rica                  | 2016 | 157                     | 4              | 37         | 80        | 37    | 32             |
|                             | 2017 | 160                     | 5              | 37         | 81        | 37    | 32             |
|                             | 2018 | 159                     | 5              | 35         | 82        | 37    | 32             |
|                             | 2019 | 158                     | 5              | 33         | 83        | 38    | 31             |
| Cuba                        | 2016 | 244                     | 5              | 140        | 19        | 80    | 22             |
|                             | 2017 | *243                    | 4              | *135       | 19        | 84    | *21            |
|                             | 2018 | 240                     | 5              | 137        | 16        | 82    | 21             |
|                             | 2019 | 247                     | 3              | 143        | 16        | 85    | 22             |
| Curaçao                     | 2016 | 29                      | 4              | 6          | 15        | 4     | 180            |
|                             | 2017 | 29                      | 4              | 6          | 15        | 4     | 179            |
|                             | 2018 | 29                      | 4              | 6          | 15        | 4     | 177            |
|                             | 2019 | 29                      | 4              | 6          | 15        | 4     | 176            |
| Dominica                    | 2016 | *2                      | ..             | 0          | *1        | *1    | *24            |
|                             | 2017 | *2                      | ..             | 0          | *1        | *1    | *22            |
|                             | 2018 | *2                      | ..             | 0          | *1        | *1    | *24            |
|                             | 2019 | *2                      | ..             | 0          | *1        | *1    | *23            |
| Dominican Republic          | 2016 | 249                     | 19             | 61         | 96        | 74    | 24             |
|                             | 2017 | 247                     | 13             | 65         | 95        | 73    | 23             |
|                             | 2018 | 254                     | 14             | 61         | 103       | 75    | 24             |
|                             | 2019 | 283                     | 17             | 76         | 109       | 81    | 26             |
| El Salvador                 | 2016 | 97                      | 1              | 20         | 48        | 28    | 15             |
|                             | 2017 | 98                      | 1              | 23         | 47        | 28    | 15             |
|                             | 2018 | 105                     | 1              | 25         | 48        | 31    | 16             |
|                             | 2019 | 116                     | 1              | 27         | 53        | 34    | 18             |
| Greenland                   | 2016 | 8                       | 0              | 1          | 2         | 6     | 141            |
|                             | 2017 | 8                       | 0              | 1          | 2         | 6     | 144            |
|                             | 2018 | *7                      | 0              | *1         | *2        | *5    | *126           |
|                             | 2019 | *7                      | 0              | *1         | *2        | *5    | *127           |
| Grenada                     | 2016 | 3                       | ..             | 0          | 1         | 1     | 26             |
|                             | 2017 | 3                       | ..             | 0          | 1         | 2     | 27             |
|                             | 2018 | 3                       | ..             | 0          | 1         | 2     | 30             |
|                             | 2019 | 4                       | ..             | 0          | 2         | 2     | 32             |
| Guatemala                   | 2016 | 398                     | 1              | 38         | 105       | 255   | 24             |
|                             | 2017 | *433                    | 1              | 43         | 115       | *273  | *26            |
|                             | 2018 | *441                    | 3              | 39         | 119       | *280  | *26            |
|                             | 2019 | *471                    | 4              | 50         | 132       | *286  | *27            |

Table 3

## Total final consumption and its components

Petajoules and gigajoules per capita

| Country or area           | Year | Total final consumption | Non-energy use | Energy use |           |       | TFC per capita |
|---------------------------|------|-------------------------|----------------|------------|-----------|-------|----------------|
|                           |      |                         |                | Industry   | Transport | Other |                |
| Haiti                     | 2016 | 137                     | 1              | 12         | 20        | 105   | 13             |
|                           | 2017 | 139                     | 0              | 12         | 20        | 106   | 13             |
|                           | 2018 | 141                     | 1              | 12         | 20        | 108   | 13             |
|                           | 2019 | 143                     | 0              | 13         | 20        | 110   | 13             |
| Honduras                  | 2016 | 198                     | 0              | 46         | 60        | 92    | 21             |
|                           | 2017 | 193                     | 0              | 52         | 64        | 76    | 20             |
|                           | 2018 | 172                     | 0              | 30         | 64        | 78    | 18             |
|                           | 2019 | 179                     | 1              | 31         | 68        | 80    | 18             |
| Jamaica                   | 2016 | 83                      | 3              | 33         | 31        | 16    | 29             |
|                           | 2017 | 77                      | 2              | 28         | 29        | 18    | 26             |
|                           | 2018 | 96                      | 0              | 45         | 35        | 16    | 33             |
|                           | 2019 | 96                      | 0              | 35         | 45        | 16    | 33             |
| Mexico                    | 2016 | 5,087                   | 217            | 1,476      | 2,205     | 1,189 | 41             |
|                           | 2017 | 5,081                   | 211            | 1,540      | 2,142     | 1,188 | 41             |
|                           | 2018 | 4,831                   | 185            | 1,361      | 2,086     | 1,199 | 38             |
|                           | 2019 | 4,809                   | 171            | 1,386      | 2,084     | 1,168 | 38             |
| Montserrat                | 2016 | 0                       | 0              | 0          | 0         | 0     | *53            |
|                           | 2017 | 0                       | 0              | 0          | 0         | 0     | *48            |
|                           | 2018 | 0                       | 0              | 0          | 0         | 0     | *55            |
|                           | 2019 | 0                       | 0              | 0          | 0         | 0     | *45            |
| Nicaragua                 | 2016 | *109                    | 2              | 15         | 31        | *61   | *17            |
|                           | 2017 | *111                    | 1              | 15         | 33        | *62   | *17            |
|                           | 2018 | *109                    | 1              | 15         | 31        | *63   | *17            |
|                           | 2019 | *109                    | 2              | 14         | 30        | *63   | *17            |
| Panama                    | 2016 | 145                     | ..             | 33         | 68        | 44    | 36             |
|                           | 2017 | 155                     | ..             | 36         | 70        | 49    | 38             |
|                           | 2018 | 154                     | ..             | 34         | 69        | 51    | 37             |
|                           | 2019 | 160                     | ..             | 34         | 72        | 54    | 38             |
| Puerto Rico               | 2016 | 62                      | ..             | 8          | ..        | 54    | 19             |
|                           | 2017 | 49                      | ..             | 6          | ..        | 43    | 15             |
|                           | 2018 | 59                      | ..             | 8          | ..        | 51    | 19             |
|                           | 2019 | 58                      | ..             | 7          | ..        | 51    | 20             |
| Sint Maarten (Dutch part) | 2016 | *10                     | *2             | *2         | *5        | 1     | *238           |
|                           | 2017 | *9                      | *1             | *2         | *5        | *1    | *227           |
|                           | 2018 | *9                      | *1             | *2         | *5        | *1    | *218           |
|                           | 2019 | *9                      | *1             | *2         | *5        | *1    | *216           |
| St. Kitts-Nevis           | 2016 | *2                      | 0              | 0          | *1        | *1    | *38            |
|                           | 2017 | *2                      | 0              | 0          | *1        | *1    | *37            |
|                           | 2018 | *2                      | 0              | 0          | *1        | *1    | *38            |
|                           | 2019 | *2                      | 0              | 0          | *1        | *1    | *38            |
| St. Lucia                 | 2016 | 5                       | 0              | 0          | 3         | 2     | 29             |
|                           | 2017 | 6                       | 0              | 0          | 3         | 2     | 31             |
|                           | 2018 | 6                       | 0              | 0          | 3         | 2     | 31             |
|                           | 2019 | 6                       | 0              | 0          | 3         | 2     | 31             |
| St. Pierre-Miquelon       | 2016 | *1                      | ..             | ..         | 0         | 0     | *99            |
|                           | 2017 | *1                      | ..             | ..         | 0         | 0     | *101           |
|                           | 2018 | *1                      | ..             | ..         | 0         | 0     | *88            |
|                           | 2019 | *1                      | ..             | ..         | 0         | 0     | *104           |
| St. Vincent-Grenadines    | 2016 | *3                      | 0              | 0          | *2        | 1     | *25            |
|                           | 2017 | *2                      | 0              | 0          | *1        | 1     | *22            |
|                           | 2018 | *3                      | 0              | 0          | *2        | 1     | *26            |
|                           | 2019 | *3                      | 0              | 0          | *2        | *1    | *23            |

Table 3

## Total final consumption and its components

Petajoules and gigajoules per capita

| Country or area          | Year        | Total final consumption | Non-energy use | Energy use   |              |              | TFC per capita |
|--------------------------|-------------|-------------------------|----------------|--------------|--------------|--------------|----------------|
|                          |             |                         |                | Industry     | Transport    | Other        |                |
| Trinidad and Tobago      | 2016        | 486                     | 372            | 54           | 42           | 19           | 353            |
|                          | 2017        | 495                     | 380            | 54           | 42           | 19           | 358            |
|                          | 2018        | 490                     | 385            | 52           | 35           | 18           | 352            |
|                          | 2019        | 517                     | 407            | 53           | 38           | 18           | 370            |
| Turks and Caicos Islands | 2016        | *3                      | 0              | ..           | *2           | 1            | *82            |
|                          | 2017        | *3                      | 0              | ..           | *2           | 1            | *93            |
|                          | 2018        | *3                      | 0              | ..           | *2           | 1            | *87            |
|                          | 2019        | *3                      | 0              | ..           | *2           | *1           | *86            |
| United States            | 2016        | 63,961                  | 5,627          | 11,019       | 26,404       | 20,911       | 198            |
|                          | 2017        | 64,140                  | 5,990          | 10,769       | 26,560       | 20,821       | 197            |
|                          | 2018        | 67,012                  | 6,148          | 11,308       | 27,093       | 22,462       | 205            |
|                          | 2019        | 66,735                  | 6,501          | 11,011       | 27,062       | 22,161       | 203            |
| United States Virgin Is. | 2016        | *2                      | ..             | *1           | ..           | *1           | *22            |
|                          | 2017        | *2                      | ..             | *1           | ..           | *1           | *17            |
|                          | 2018        | *2                      | ..             | *1           | ..           | *1           | *18            |
|                          | 2019        | *2                      | ..             | *1           | ..           | *1           | *19            |
| <b>America, South</b>    | <b>2016</b> | <b>17,984</b>           | <b>947</b>     | <b>5,574</b> | <b>6,874</b> | <b>4,588</b> | <b>43</b>      |
|                          | <b>2017</b> | <b>18,078</b>           | <b>925</b>     | <b>5,602</b> | <b>6,968</b> | <b>4,585</b> | <b>43</b>      |
|                          | <b>2018</b> | <b>17,766</b>           | <b>808</b>     | <b>5,502</b> | <b>6,832</b> | <b>4,623</b> | <b>42</b>      |
|                          | <b>2019</b> | <b>17,728</b>           | <b>867</b>     | <b>5,323</b> | <b>6,960</b> | <b>4,578</b> | <b>42</b>      |
| Argentina                | 2016        | 2,421                   | 125            | 533          | 815          | 949          | 56             |
|                          | 2017        | 2,439                   | 136            | 525          | 857          | 920          | 56             |
|                          | 2018        | 2,348                   | 130            | 529          | 800          | 889          | 53             |
|                          | 2019        | 2,329                   | 132            | 540          | 794          | 863          | 52             |
| Bolivia (Plur. State of) | 2016        | 259                     | 2              | 57           | 142          | 58           | 23             |
|                          | 2017        | 269                     | 2              | 57           | 151          | 58           | 24             |
|                          | 2018        | 277                     | 2              | 57           | 158          | 60           | 24             |
|                          | 2019        | 288                     | 13             | 57           | 159          | 59           | 25             |
| Brazil                   | 2016        | 9,716                   | 592            | 3,380        | 3,710        | 2,035        | 47             |
|                          | 2017        | 9,912                   | 602            | 3,424        | 3,738        | 2,149        | 48             |
|                          | 2018        | 9,736                   | 560            | 3,280        | 3,687        | 2,209        | 46             |
|                          | 2019        | 9,823                   | 564            | 3,202        | 3,808        | 2,250        | 47             |
| Chile                    | 2016        | 1,108                   | 24             | 445          | 367          | 272          | 61             |
|                          | 2017        | 1,121                   | 23             | 421          | 380          | 296          | 61             |
|                          | 2018        | 1,172                   | 31             | 442          | 393          | 306          | 63             |
|                          | 2019        | 1,180                   | 36             | 441          | 400          | 304          | 62             |
| Colombia                 | 2016        | 1,370                   | 81             | 319          | 532          | 437          | 28             |
|                          | 2017        | 1,281                   | 66             | 317          | 527          | 371          | 26             |
|                          | 2018        | 1,302                   | 41             | 339          | 545          | 377          | 26             |
|                          | 2019        | 1,380                   | 81             | 350          | 573          | 376          | 27             |
| Ecuador                  | 2016        | 470                     | ..             | 68           | 247          | 154          | 28             |
|                          | 2017        | 490                     | ..             | 72           | 262          | 156          | 29             |
|                          | 2018        | 495                     | ..             | 83           | 251          | 160          | 29             |
|                          | 2019        | 499                     | ..             | 80           | 255          | 163          | 29             |
| Falkland Is. (Malvinas)  | 2016        | 0                       | ..             | 0            | 0            | 0            | 167            |
|                          | 2017        | 0                       | ..             | 0            | 0            | 0            | 150            |
|                          | 2018        | 0                       | ..             | 0            | 0            | 0            | 149            |
|                          | 2019        | 0                       | ..             | 0            | 0            | 0            | 147            |
| Guyana                   | 2016        | 29                      | 0              | 7            | 11           | 11           | 38             |
|                          | 2017        | 29                      | 0              | 7            | 10           | 11           | 37             |
|                          | 2018        | 29                      | 0              | 6            | 11           | 12           | 37             |
|                          | 2019        | 31                      | 2              | 5            | 12           | 13           | 40             |

Table 3

## Total final consumption and its components

Petajoules and gigajoules per capita

| Country or area           | Year        | Total final consumption | Non-energy use | Energy use    |               |               | TFC per capita |
|---------------------------|-------------|-------------------------|----------------|---------------|---------------|---------------|----------------|
|                           |             |                         |                | Industry      | Transport     | Other         |                |
| Paraguay                  | 2016        | 258                     | 2              | 75            | 101           | 81            | 38             |
|                           | 2017        | 273                     | 2              | 75            | 113           | 83            | 40             |
|                           | 2018        | 283                     | 2              | 78            | 120           | 83            | 41             |
|                           | 2019        | 280                     | 2              | 76            | 118           | 83            | 40             |
| Peru                      | 2016        | 785                     | 11             | 223           | 340           | 211           | 25             |
|                           | 2017        | 804                     | 13             | 225           | 361           | 205           | 26             |
|                           | 2018        | 805                     | 12             | 227           | 363           | 203           | 25             |
|                           | 2019        | 833                     | 12             | 243           | 374           | 204           | 26             |
| Suriname                  | 2016        | 23                      | 0              | 5             | 7             | 10            | 40             |
|                           | 2017        | 24                      | 0              | 5             | 9             | 10            | 42             |
|                           | 2018        | 24                      | 0              | 5             | 9             | 10            | 42             |
|                           | 2019        | 25                      | 0              | 5             | 9             | 11            | 43             |
| Uruguay                   | 2016        | 200                     | 3              | 83            | 54            | 60            | 58             |
|                           | 2017        | 203                     | 4              | 85            | 56            | 59            | 59             |
|                           | 2018        | 203                     | 5              | 86            | 51            | 61            | 59             |
|                           | 2019        | 205                     | 5              | 87            | 55            | 58            | 59             |
| Venezuela (Bolivar. Rep.) | 2016        | 1,344                   | 107            | 379           | 549           | 309           | 45             |
|                           | 2017        | 1,233                   | 77             | 387           | 503           | 266           | 42             |
|                           | 2018        | 1,092                   | 24             | 371           | 444           | 254           | 38             |
|                           | 2019        | 855                     | 21             | 237           | 404           | 194           | 30             |
| <b>Asia</b>               | <b>2016</b> | <b>182,109</b>          | <b>20,408</b>  | <b>72,406</b> | <b>33,065</b> | <b>56,231</b> | <b>41</b>      |
|                           | <b>2017</b> | <b>186,978</b>          | <b>20,703</b>  | <b>73,913</b> | <b>31,897</b> | <b>60,465</b> | <b>41</b>      |
|                           | <b>2018</b> | <b>191,919</b>          | <b>21,295</b>  | <b>77,959</b> | <b>32,258</b> | <b>60,406</b> | <b>42</b>      |
|                           | <b>2019</b> | <b>193,789</b>          | <b>22,209</b>  | <b>77,743</b> | <b>32,279</b> | <b>61,559</b> | <b>42</b>      |
| Afghanistan               | 2016        | *155                    | *7             | *38           | *46           | *65           | *4             |
|                           | 2017        | *163                    | *5             | *43           | *54           | *60           | *5             |
|                           | 2018        | *175                    | *5             | *48           | 61            | *62           | *5             |
|                           | 2019        | *180                    | *5             | *48           | 62            | *64           | *5             |
| Armenia                   | 2016        | 92                      | 1              | 13            | 26            | 52            | 31             |
|                           | 2017        | 97                      | 1              | 14            | 27            | 54            | 33             |
|                           | 2018        | 94                      | 2              | 13            | 30            | 49            | 32             |
|                           | 2019        | 105                     | *2             | 13            | 34            | 56            | 35             |
| Azerbaijan                | 2016        | 378                     | 35             | 61            | 92            | 190           | 39             |
|                           | 2017        | 376                     | 45             | 43            | 109           | 178           | 38             |
|                           | 2018        | 399                     | 52             | 42            | 120           | 185           | 40             |
|                           | 2019        | 454                     | 55             | 64            | 119           | 216           | 45             |
| Bahrain                   | 2016        | 262                     | 69             | 89            | 51            | 53            | 184            |
|                           | 2017        | 262                     | 70             | 85            | 53            | 53            | 175            |
|                           | 2018        | 274                     | 73             | 92            | 55            | 56            | 175            |
|                           | 2019        | 290                     | 76             | 98            | 53            | 63            | 177            |
| Bangladesh                | 2016        | 1,422                   | 56             | 344           | 144           | 879           | 9              |
|                           | 2017        | 1,505                   | 54             | 378           | 159           | 914           | 9              |
|                           | 2018        | 1,540                   | 47             | 389           | 174           | 931           | 10             |
|                           | 2019        | 1,624                   | 62             | 462           | 168           | 931           | 10             |
| Bhutan                    | 2016        | *65                     | *1             | 9             | 6             | *49           | *88            |
|                           | 2017        | *67                     | *1             | 10            | 7             | *50           | *90            |
|                           | 2018        | *69                     | *1             | 11            | 7             | *49           | *91            |
|                           | 2019        | *69                     | *1             | 10            | 7             | *51           | *91            |
| Brunei Darussalam         | 2016        | 55                      | 19             | 5             | 19            | 13            | 132            |
|                           | 2017        | 75                      | 20             | 23            | 19            | 13            | 177            |
|                           | 2018        | 77                      | 12             | 32            | 19            | 14            | 180            |
|                           | 2019        | 65                      | 25             | 8             | 18            | 13            | 150            |

Table 3

## Total final consumption and its components

Petajoules and gigajoules per capita

| Country or area        | Year | Total final consumption | Non-energy use | Energy use |           |        | TFC per capita |
|------------------------|------|-------------------------|----------------|------------|-----------|--------|----------------|
|                        |      |                         |                | Industry   | Transport | Other  |                |
| Cambodia               | 2016 | 237                     | 1              | 54         | 63        | 118    | 15             |
|                        | 2017 | 248                     | 1              | 59         | 68        | 120    | 15             |
|                        | 2018 | 266                     | 1              | 65         | 74        | 127    | 16             |
|                        | 2019 | 285                     | 1              | 74         | 80        | 131    | 17             |
| China                  | 2016 | 77,720                  | 8,170          | 38,425     | 10,065    | 21,061 | 55             |
|                        | 2017 | 78,934                  | 8,043          | 38,396     | 10,586    | 21,909 | 56             |
|                        | 2018 | 82,463                  | 8,542          | 40,559     | 10,955    | 22,407 | 58             |
|                        | 2019 | 82,666                  | 9,227          | 39,869     | 10,889    | 22,681 | 58             |
| China, Hong Kong SAR   | 2016 | 328                     | 1              | *30        | *88       | 210    | 45             |
|                        | 2017 | 340                     | 2              | *32        | *96       | 210    | 47             |
|                        | 2018 | 336                     | 2              | *32        | *94       | 209    | 46             |
|                        | 2019 | 340                     | 1              | *32        | *96       | 211    | 46             |
| China, Macao SAR       | 2016 | 37                      | 2              | 2          | 6         | 27     | 60             |
|                        | 2017 | 37                      | 2              | 2          | 6         | 26     | 59             |
|                        | 2018 | 34                      | 2              | 2          | 6         | 23     | 53             |
|                        | 2019 | 33                      | 2              | 2          | 6         | 23     | 52             |
| Cyprus                 | 2016 | 64                      | 2              | 9          | 28        | 26     | 55             |
|                        | 2017 | 67                      | 2              | 10         | 29        | 27     | 57             |
|                        | 2018 | 66                      | 2              | 10         | 29        | 26     | 56             |
|                        | 2019 | 68                      | 2              | 10         | 29        | 28     | 57             |
| Georgia                | 2016 | 185                     | 13             | 28         | 64        | 79     | 46             |
|                        | 2017 | 188                     | 14             | 32         | 58        | 83     | 47             |
|                        | 2018 | 186                     | 15             | 33         | 57        | 81     | 46             |
|                        | 2019 | 194                     | 18             | 31         | 59        | 85     | 48             |
| India                  | 2016 | 26,758                  | 1,479          | 11,951     | *4,278    | 9,050  | 20             |
|                        | 2017 | 28,000                  | 1,388          | 12,719     | 1,997     | 11,896 | 21             |
|                        | 2018 | 28,091                  | 1,420          | 12,994     | 2,481     | 11,196 | 21             |
|                        | 2019 | 28,465                  | *1,567         | 13,195     | 2,180     | 11,523 | 21             |
| Indonesia              | 2016 | 5,941                   | 403            | 1,562      | 1,337     | 2,639  | 23             |
|                        | 2017 | 6,005                   | 401            | 1,609      | 1,368     | 2,626  | 23             |
|                        | 2018 | 6,665                   | 416            | 2,636      | 1,195     | 2,419  | 25             |
|                        | 2019 | 7,002                   | 519            | 2,848      | 1,093     | 2,542  | 26             |
| Iran (Islamic Rep. of) | 2016 | 7,936                   | 1,076          | 1,854      | 1,869     | 3,137  | 100            |
|                        | 2017 | 8,369                   | 1,259          | 1,930      | 2,129     | 3,051  | 104            |
|                        | 2018 | 8,430                   | 1,299          | 1,996      | 2,026     | 3,108  | 103            |
|                        | 2019 | 8,473                   | 1,285          | 2,021      | 2,013     | 3,154  | 102            |
| Iraq                   | 2016 | 775                     | 15             | 149        | 352       | 259    | 21             |
|                        | 2017 | 843                     | 26             | 156        | 400       | 261    | 22             |
|                        | 2018 | 932                     | 27             | 176        | 467       | 262    | 24             |
|                        | 2019 | 966                     | 28             | 178        | 478       | 283    | 25             |
| Israel                 | 2016 | 623                     | 73             | 112        | 243       | 195    | 77             |
|                        | 2017 | 649                     | 79             | 121        | 249       | 200    | 79             |
|                        | 2018 | 644                     | 79             | 117        | 250       | 198    | 77             |
|                        | 2019 | 661                     | 73             | 123        | 252       | 213    | 78             |
| Japan                  | 2016 | 12,126                  | 1,450          | 3,492      | 3,018     | 4,166  | 95             |
|                        | 2017 | 12,294                  | 1,513          | 3,515      | 2,994     | 4,272  | 96             |
|                        | 2018 | 11,987                  | 1,415          | 3,530      | 2,958     | 4,084  | 94             |
|                        | 2019 | 11,749                  | 1,404          | 3,442      | 2,906     | 3,998  | 93             |
| Jordan                 | 2016 | 267                     | 11             | 41         | 130       | 85     | 28             |
|                        | 2017 | 283                     | 10             | 41         | 137       | 95     | 29             |
|                        | 2018 | 279                     | 6              | 39         | 138       | 95     | 28             |
|                        | 2019 | 276                     | 3              | 31         | 145       | 97     | 27             |

Table 3

## Total final consumption and its components

Petajoules and gigajoules per capita

| Country or area        | Year | Total final consumption | Non-energy use | Energy use |           |       | TFC per capita |
|------------------------|------|-------------------------|----------------|------------|-----------|-------|----------------|
|                        |      |                         |                | Industry   | Transport | Other |                |
| Kazakhstan             | 2016 | 1,733                   | *45            | 868        | *229      | 591   | 97             |
|                        | 2017 | 1,858                   | 46             | 943        | 242       | 628   | 103            |
|                        | 2018 | 1,748                   | *50            | 638        | 264       | 795   | 95             |
|                        | 2019 | 1,711                   | *54            | 540        | 248       | 869   | 92             |
| Korea, Dem.Ppl's.Rep.  | 2016 | 328                     | ..             | 197        | 20        | 112   | 13             |
|                        | 2017 | 584                     | 7              | 355        | 56        | 165   | 23             |
|                        | 2018 | 549                     | 7              | 331        | 53        | 158   | 21             |
|                        | 2019 | 599                     | 8              | 364        | 58        | 169   | 23             |
| Korea, Republic of     | 2016 | 7,557                   | 2,139          | 2,025      | 1,464     | 1,929 | 148            |
|                        | 2017 | 7,743                   | 2,250          | 2,045      | 1,495     | 1,954 | 152            |
|                        | 2018 | 7,701                   | 2,176          | 2,086      | 1,475     | 1,964 | 150            |
|                        | 2019 | 7,688                   | 2,254          | 1,993      | 1,538     | 1,903 | 150            |
| Kuwait                 | 2016 | 682                     | 127            | 197        | 198       | 159   | 172            |
|                        | 2017 | 715                     | 124            | 213        | 210       | 168   | 176            |
|                        | 2018 | 700                     | 128            | 180        | 222       | 171   | 169            |
|                        | 2019 | 703                     | 112            | 195        | 224       | 172   | 167            |
| Kyrgyzstan             | 2016 | 146                     | 1              | 18         | 48        | 79    | 24             |
|                        | 2017 | 149                     | 0              | 18         | 48        | 82    | 24             |
|                        | 2018 | 176                     | *8             | 21         | 49        | 98    | 28             |
|                        | 2019 | 144                     | *1             | 18         | 38        | 88    | 23             |
| Lao People's Dem. Rep. | 2016 | *124                    | 0              | *16        | 41        | *66   | *18            |
|                        | 2017 | *124                    | 0              | *17        | 42        | *65   | *18            |
|                        | 2018 | *126                    | 0              | *18        | 43        | *65   | *18            |
|                        | 2019 | 135                     | 0              | 22         | *43       | 69    | 19             |
| Lebanon                | 2016 | *227                    | 4              | *31        | *93       | *99   | *34            |
|                        | 2017 | *242                    | 4              | *34        | *97       | *108  | *35            |
|                        | 2018 | *224                    | 4              | *33        | *90       | *97   | *33            |
|                        | 2019 | *224                    | 2              | *31        | *95       | 97    | *33            |
| Malaysia               | 2016 | 2,290                   | 369            | 648        | 894       | 378   | 75             |
|                        | 2017 | 2,493                   | 506            | 703        | 868       | 415   | 80             |
|                        | 2018 | 2,554                   | 528            | 764        | 871       | 391   | 81             |
|                        | 2019 | 2,727                   | 587            | 833        | 904       | 403   | 85             |
| Maldives               | 2016 | *15                     | 0              | *1         | *12       | *3    | *33            |
|                        | 2017 | *16                     | 0              | *1         | *12       | *3    | *32            |
|                        | 2018 | *19                     | 0              | *1         | *14       | *3    | *36            |
|                        | 2019 | *21                     | 0              | *1         | *16       | *4    | *40            |
| Mongolia               | 2016 | 221                     | ..             | 25         | 19        | 178   | 72             |
|                        | 2017 | 372                     | ..             | 26         | 20        | 326   | 120            |
|                        | 2018 | 419                     | ..             | 29         | 21        | 368   | 132            |
|                        | 2019 | 446                     | ..             | 32         | 26        | 387   | 138            |
| Myanmar                | 2016 | *717                    | 17             | 81         | 82        | *536  | *14            |
|                        | 2017 | *718                    | 23             | 74         | 64        | *557  | *13            |
|                        | 2018 | *862                    | 11             | 142        | 118       | *591  | *16            |
|                        | 2019 | *845                    | 21             | 151        | 90        | *583  | *16            |
| Nepal                  | 2016 | *539                    | 2              | 50         | 50        | *437  | *20            |
|                        | 2017 | *571                    | 3              | 56         | 63        | *450  | *21            |
|                        | 2018 | *600                    | 5              | 66         | 69        | *460  | *21            |
|                        | 2019 | *590                    | 8              | 57         | 60        | *465  | *21            |
| Oman                   | 2016 | 851                     | 101            | 263        | 174       | 312   | 190            |
|                        | 2017 | 878                     | 117            | 290        | 173       | 299   | 188            |
|                        | 2018 | 984                     | 157            | 254        | 170       | 403   | 204            |
|                        | 2019 | 1,000                   | 151            | 258        | 168       | 423   | 201            |

Table 3

## Total final consumption and its components

Petajoules and gigajoules per capita

| Country or area      | Year | Total final consumption | Non-energy use | Energy use |           |        | TFC per capita |
|----------------------|------|-------------------------|----------------|------------|-----------|--------|----------------|
|                      |      |                         |                | Industry   | Transport | Other  |                |
| Other Asia           | 2016 | 2,952                   | 905            | 1,006      | 529       | 513    | 125            |
|                      | 2017 | 2,936                   | 893            | 1,006      | 524       | 513    | 124            |
|                      | 2018 | 2,966                   | 931            | 1,020      | 509       | 506    | 125            |
|                      | 2019 | 2,870                   | 850            | 1,001      | 513       | 506    | 121            |
| Pakistan             | 2016 | 2,973                   | *188           | 900        | 702       | 1,184  | 15             |
|                      | 2017 | 3,158                   | 221            | 972        | 778       | 1,187  | 15             |
|                      | 2018 | 3,203                   | 217            | 1,042      | 750       | 1,194  | 15             |
|                      | 2019 | 3,148                   | 217            | 979        | 725       | 1,226  | 15             |
| Philippines          | 2016 | 1,423                   | 55             | 311        | 500       | 556    | 14             |
|                      | 2017 | 1,506                   | 68             | 331        | 518       | 590    | 14             |
|                      | 2018 | 1,518                   | 60             | 314        | 536       | 609    | 14             |
|                      | 2019 | 1,543                   | 48             | 305        | 556       | 634    | 14             |
| Qatar                | 2016 | 809                     | 199            | 331        | 181       | 97     | 305            |
|                      | 2017 | 814                     | 198            | 321        | 185       | 110    | 299            |
|                      | 2018 | 800                     | 200            | 324        | 162       | *114   | 288            |
|                      | 2019 | 854                     | 201            | 365        | 168       | *120   | 302            |
| Saudi Arabia         | 2016 | 6,590                   | 1,324          | 1,608      | 1,942     | *1,717 | 203            |
|                      | 2017 | 6,291                   | 1,280          | 1,596      | 1,737     | 1,679  | 190            |
|                      | 2018 | 6,639                   | 1,472          | 2,047      | 1,409     | *1,712 | 197            |
|                      | 2019 | *6,526                  | *1,305         | *1,605     | 1,894     | *1,723 | *190           |
| Singapore            | 2016 | 764                     | 301            | 270        | 91        | 103    | 135            |
|                      | 2017 | 1,043                   | 528            | 312        | 100       | 103    | 183            |
|                      | 2018 | 834                     | 320            | 304        | 105       | 104    | 145            |
|                      | 2019 | 803                     | 286            | 305        | 104       | 108    | 138            |
| Sri Lanka            | 2016 | 393                     | *4             | 96         | 148       | 145    | 19             |
|                      | 2017 | 382                     | *1             | 86         | 150       | 145    | 18             |
|                      | 2018 | 377                     | 3              | 91         | 135       | 148    | 18             |
|                      | 2019 | *391                    | 3              | *95        | 138       | *155   | *18            |
| State of Palestine   | 2016 | 69                      | 1              | 3          | 32        | 32     | 15             |
|                      | 2017 | 68                      | 1              | 4          | 32        | 31     | 14             |
|                      | 2018 | 66                      | 2              | 4          | 30        | 31     | 14             |
|                      | 2019 | 70                      | 1              | 4          | 30        | 35     | 14             |
| Syrian Arab Republic | 2016 | 252                     | 28             | 54         | 85        | 84     | 14             |
|                      | 2017 | 273                     | 30             | 58         | 95        | 91     | 16             |
|                      | 2018 | 260                     | 29             | 56         | 89        | 87     | 15             |
|                      | 2019 | 230                     | 26             | 50         | 77        | 78     | 13             |
| Tajikistan           | 2016 | 165                     | 1              | 26         | 18        | 120    | 19             |
|                      | 2017 | 164                     | 1              | 31         | 16        | 116    | 18             |
|                      | 2018 | 172                     | 1              | 28         | 17        | 126    | 19             |
|                      | 2019 | 180                     | 1              | 33         | 19        | 127    | 19             |
| Thailand             | 2016 | 4,057                   | 948            | 1,343      | 1,020     | 747    | 59             |
|                      | 2017 | 4,134                   | 945            | 1,346      | 1,110     | 733    | 60             |
|                      | 2018 | 4,194                   | 1,017          | 1,322      | 1,117     | 738    | 60             |
|                      | 2019 | 4,283                   | 976            | 1,404      | 1,145     | 758    | 62             |
| Timor-Leste          | 2016 | 7                       | 0              | ..         | 5         | 2      | 6              |
|                      | 2017 | 6                       | 0              | ..         | 4         | 2      | 5              |
|                      | 2018 | 7                       | 0              | ..         | 4         | 2      | 5              |
|                      | 2019 | 7                       | 1              | ..         | 4         | 2      | 5              |
| Turkey               | 2016 | 4,040                   | 337            | 1,065      | 1,126     | 1,512  | 51             |
|                      | 2017 | 4,338                   | 206            | 1,312      | 1,177     | 1,643  | 53             |
|                      | 2018 | 4,243                   | 197            | 1,318      | 1,187     | 1,541  | 52             |
|                      | 2019 | 4,301                   | 223            | 1,234      | 1,190     | 1,654  | 52             |

Table 3

## Total final consumption and its components

Petajoules and gigajoules per capita

| Country or area        | Year        | Total final consumption | Non-energy use | Energy use    |               |               | TFC per capita |
|------------------------|-------------|-------------------------|----------------|---------------|---------------|---------------|----------------|
|                        |             |                         |                | Industry      | Transport     | Other         |                |
| Turkmenistan           | 2016        | 755                     | ..             | 58            | 182           | 515           | 133            |
|                        | 2017        | 757                     | ..             | 58            | 182           | 517           | 131            |
|                        | 2018        | 759                     | ..             | 58            | 182           | 519           | 130            |
|                        | 2019        | 777                     | ..             | 58            | 182           | 537           | 131            |
| United Arab Emirates   | 2016        | *2,624                  | *350           | *1,406        | 485           | *383          | *280           |
|                        | 2017        | *2,311                  | *279           | *1,120        | 528           | 384           | *244           |
|                        | 2018        | *2,291                  | *286           | *1,062        | 529           | 414           | *238           |
|                        | 2019        | 2,605                   | *480           | 1,211         | 502           | 412           | 267            |
| Uzbekistan             | 2016        | 1,229                   | *9             | *415          | 199           | 606           | 39             |
|                        | 2017        | 1,235                   | *13            | *393          | 213           | 616           | 39             |
|                        | 2018        | 1,241                   | *14            | 272           | 238           | 717           | 38             |
|                        | 2019        | 1,280                   | *18            | 301           | 250           | 711           | 39             |
| Viet Nam               | 2016        | 2,059                   | 72             | 813           | 535           | 639           | 22             |
|                        | 2017        | 2,210                   | 22             | 963           | 578           | 648           | 23             |
|                        | 2018        | 2,593                   | 54             | 1,307         | 566           | 665           | 27             |
|                        | 2019        | 3,017                   | 22             | 1,721         | 536           | 737           | 31             |
| Yemen                  | 2016        | 93                      | 0              | 12            | 38            | 42            | 3              |
|                        | 2017        | 88                      | 0              | 13            | 37            | 38            | 3              |
|                        | 2018        | 90                      | 0              | 14            | 39            | 37            | 3              |
|                        | 2019        | 105                     | 1              | 18            | 47            | 39            | 4              |
| <b>Europe</b>          | <b>2016</b> | <b>72,504</b>           | <b>7,008</b>   | <b>17,916</b> | <b>18,899</b> | <b>28,680</b> | <b>97</b>      |
|                        | <b>2017</b> | <b>74,093</b>           | <b>7,643</b>   | <b>18,117</b> | <b>19,248</b> | <b>29,085</b> | <b>99</b>      |
|                        | <b>2018</b> | <b>75,736</b>           | <b>8,126</b>   | <b>18,180</b> | <b>19,546</b> | <b>29,884</b> | <b>101</b>     |
|                        | <b>2019</b> | <b>76,081</b>           | <b>7,991</b>   | <b>18,985</b> | <b>19,608</b> | <b>29,496</b> | <b>102</b>     |
| Albania                | 2016        | 81                      | 6              | 12            | 32            | 32            | 28             |
|                        | 2017        | 89                      | 3              | 15            | 35            | 35            | 31             |
|                        | 2018        | 82                      | 2              | 14            | 30            | 36            | 28             |
|                        | 2019        | 81                      | 2              | 13            | 30            | 36            | 28             |
| Andorra                | 2016        | 9                       | 0              | 0             | 5             | 4             | 112            |
|                        | 2017        | 9                       | 0              | 0             | 5             | 4             | 112            |
|                        | 2018        | 9                       | 0              | 0             | 5             | 4             | 117            |
|                        | 2019        | 9                       | 0              | 0             | 5             | 4             | 114            |
| Austria                | 2016        | 1,199                   | 76             | 348           | 372           | 404           | 137            |
|                        | 2017        | 1,208                   | 68             | 350           | 377           | 413           | 137            |
|                        | 2018        | 1,194                   | 76             | 346           | 381           | 391           | 134            |
|                        | 2019        | 1,211                   | 86             | 341           | 384           | 400           | 135            |
| Belarus                | 2016        | 772                     | 106            | 166           | 160           | 340           | 82             |
|                        | 2017        | 791                     | 105            | 173           | 166           | 347           | 84             |
|                        | 2018        | 831                     | 124            | 180           | 175           | 352           | 88             |
|                        | 2019        | 799                     | 112            | 177           | 173           | 336           | 85             |
| Belgium                | 2016        | 1,745                   | 319            | 470           | 384           | 571           | 154            |
|                        | 2017        | 1,723                   | 315            | 463           | 379           | 566           | 151            |
|                        | 2018        | 1,746                   | 329            | 475           | 380           | 562           | 152            |
|                        | 2019        | 1,697                   | 305            | 456           | 378           | 558           | 147            |
| Bosnia and Herzegovina | 2016        | 152                     | 3              | 32            | 50            | 67            | 45             |
|                        | 2017        | 149                     | 3              | 35            | 53            | 60            | 45             |
|                        | 2018        | 181                     | 4              | 36            | 52            | 89            | 54             |
|                        | 2019        | 180                     | 5              | 30            | 56            | 89            | 54             |
| Bulgaria               | 2016        | 419                     | 21             | 112           | 139           | 147           | 59             |
|                        | 2017        | 426                     | 20             | 116           | 141           | 149           | 60             |
|                        | 2018        | 427                     | 21             | 114           | 143           | 149           | 61             |
|                        | 2019        | 423                     | 19             | 112           | 145           | 147           | 60             |



Table 3

## Total final consumption and its components

Petajoules and gigajoules per capita

| Country or area | Year | Total final consumption | Non-energy use | Energy use |           |       | TFC per capita |
|-----------------|------|-------------------------|----------------|------------|-----------|-------|----------------|
|                 |      |                         |                | Industry   | Transport | Other |                |
| Croatia         | 2016 | 296                     | 23             | 44         | 86        | 143   | 70             |
|                 | 2017 | 308                     | 23             | 48         | 92        | 144   | 74             |
|                 | 2018 | 301                     | 21             | 49         | 90        | 141   | 72             |
|                 | 2019 | 306                     | 25             | 49         | 94        | 138   | 74             |
| Czechia         | 2016 | 1,056                   | 70             | 268        | 272       | 446   | 99             |
|                 | 2017 | 1,136                   | 119            | 280        | 281       | 456   | 107            |
|                 | 2018 | 1,126                   | 120            | 279        | 283       | 444   | 106            |
|                 | 2019 | 1,130                   | 121            | 276        | 288       | 446   | 106            |
| Denmark         | 2016 | 583                     | 10             | 91         | 183       | 299   | 102            |
|                 | 2017 | 584                     | 10             | 94         | 184       | 296   | 102            |
|                 | 2018 | 584                     | 10             | 96         | 186       | 291   | 101            |
|                 | 2019 | 571                     | 8              | 93         | 183       | 285   | 99             |
| Estonia         | 2016 | 123                     | 4              | 20         | 33        | 65    | 94             |
|                 | 2017 | 124                     | 5              | 21         | 34        | 65    | 94             |
|                 | 2018 | 127                     | 5              | 21         | 35        | 66    | 96             |
|                 | 2019 | 125                     | 5              | 20         | 36        | 64    | 94             |
| Faeroe Islands  | 2016 | 8                       | 0              | 1          | 1         | 6     | 172            |
|                 | 2017 | 9                       | 0              | 1          | 1         | 7     | 196            |
|                 | 2018 | 10                      | 0              | 1          | 1         | 7     | 198            |
|                 | 2019 | 9                       | 0              | 1          | 2         | 7     | 195            |
| Finland         | 2016 | 1,075                   | 62             | 446        | 177       | 389   | 196            |
|                 | 2017 | 1,077                   | 61             | 453        | 179       | 384   | 196            |
|                 | 2018 | 1,096                   | 61             | 472        | 181       | 382   | 198            |
|                 | 2019 | 1,078                   | 61             | 462        | 178       | 377   | 195            |
| France          | 2016 | 6,590                   | 566            | 1,248      | 1,962     | 2,813 | 99             |
|                 | 2017 | 6,549                   | 597            | 1,184      | 1,977     | 2,792 | 98             |
|                 | 2018 | 6,400                   | 563            | 1,183      | 1,938     | 2,716 | 95             |
|                 | 2019 | 6,345                   | 569            | 1,154      | 1,939     | 2,684 | 94             |
| Germany         | 2016 | 9,447                   | 908            | 2,357      | 2,432     | 3,750 | 115            |
|                 | 2017 | 9,562                   | 971            | 2,388      | 2,469     | 3,735 | 116            |
|                 | 2018 | 9,401                   | 927            | 2,409      | 2,400     | 3,665 | 113            |
|                 | 2019 | 9,348                   | 923            | 2,331      | 2,431     | 3,663 | 112            |
| Gibraltar       | 2016 | 8                       | 1              | ..         | 6         | 1     | 238            |
|                 | 2017 | 9                       | 1              | ..         | 7         | 1     | 253            |
|                 | 2018 | 9                       | 1              | ..         | 7         | 1     | 275            |
|                 | 2019 | 10                      | 1              | ..         | 8         | 1     | 293            |
| Greece          | 2016 | 695                     | 25             | 129        | 250       | 290   | 65             |
|                 | 2017 | 687                     | 37             | 116        | 247       | 288   | 65             |
|                 | 2018 | 664                     | 38             | 115        | 250       | 260   | 63             |
|                 | 2019 | 675                     | 39             | 109        | 257       | 270   | 64             |
| Guernsey        | 2016 | 1                       | ..             | ..         | ..        | 1     | 20             |
|                 | 2017 | 1                       | ..             | ..         | ..        | 1     | 21             |
|                 | 2018 | 1                       | ..             | ..         | ..        | 1     | 20             |
|                 | 2019 | 1                       | ..             | ..         | ..        | 1     | 20             |
| Hungary         | 2016 | 807                     | 81             | 169        | 181       | 377   | 83             |
|                 | 2017 | 845                     | 95             | 180        | 191       | 379   | 87             |
|                 | 2018 | 845                     | 97             | 186        | 204       | 359   | 87             |
|                 | 2019 | 848                     | 92             | 188        | 215       | 352   | 88             |
| Iceland         | 2016 | 123                     | 5              | 56         | 14        | 48    | 370            |
|                 | 2017 | 125                     | 5              | 58         | 15        | 47    | 373            |
|                 | 2018 | 133                     | 7              | 59         | 15        | 52    | 395            |
|                 | 2019 | 129                     | 6              | 55         | 15        | 53    | 379            |

Table 3

## Total final consumption and its components

Petajoules and gigajoules per capita

| Country or area | Year | Total final consumption | Non-energy use | Energy use |           |       | TFC per capita |
|-----------------|------|-------------------------|----------------|------------|-----------|-------|----------------|
|                 |      |                         |                | Industry   | Transport | Other |                |
| Ireland         | 2016 | 461                     | 12             | 87         | 171       | 190   | 98             |
|                 | 2017 | 461                     | 11             | 90         | 170       | 189   | 97             |
|                 | 2018 | 481                     | 10             | 96         | 172       | 203   | 100            |
|                 | 2019 | 479                     | 11             | 96         | 173       | 199   | 98             |
| Isle of Man     | 2016 | 2                       | ..             | 1          | ..        | 2     | 28             |
|                 | 2017 | 2                       | ..             | 0          | ..        | 2     | 28             |
|                 | 2018 | 2                       | ..             | 0          | ..        | 2     | 27             |
|                 | 2019 | 2                       | ..             | 1          | ..        | 2     | 28             |
| Italy           | 2016 | 4,962                   | 264            | 1,054      | 1,521     | 2,124 | 82             |
|                 | 2017 | 5,006                   | 332            | 1,048      | 1,466     | 2,160 | 82             |
|                 | 2018 | 5,008                   | 300            | 1,038      | 1,512     | 2,158 | 83             |
|                 | 2019 | 4,959                   | 296            | 1,049      | 1,524     | 2,089 | 82             |
| Jersey          | 2016 | 6                       | ..             | *1         | 2         | 3     | 59             |
|                 | 2017 | 6                       | ..             | *1         | 2         | 3     | 57             |
|                 | 2018 | 6                       | ..             | *2         | 2         | 3     | 59             |
|                 | 2019 | 6                       | ..             | *2         | 2         | 3     | 56             |
| Kosovo          | 2016 | 62                      | 2              | 12         | 16        | 32    | 35             |
|                 | 2017 | 66                      | 2              | 13         | 17        | 33    | 37             |
|                 | 2018 | 64                      | 2              | 12         | 18        | 32    | 36             |
|                 | 2019 | 66                      | 2              | 13         | 18        | 33    | 37             |
| Latvia          | 2016 | 160                     | 4              | 31         | 44        | 80    | 81             |
|                 | 2017 | 167                     | 4              | 33         | 46        | 84    | 86             |
|                 | 2018 | 174                     | 4              | 38         | 47        | 85    | 90             |
|                 | 2019 | 169                     | 4              | 36         | 47        | 83    | 89             |
| Liechtenstein   | 2016 | 3                       | ..             | ..         | ..        | 3     | 79             |
|                 | 2017 | 3                       | ..             | ..         | ..        | 3     | 80             |
|                 | 2018 | 3                       | ..             | ..         | ..        | 3     | 80             |
|                 | 2019 | 3                       | ..             | ..         | ..        | 3     | 80             |
| Lithuania       | 2016 | 254                     | 44             | 41         | 79        | 90    | 88             |
|                 | 2017 | 271                     | 51             | 45         | 83        | 92    | 95             |
|                 | 2018 | 276                     | 47             | 46         | 88        | 94    | 99             |
|                 | 2019 | 279                     | 50             | 47         | 91        | 91    | 101            |
| Luxembourg      | 2016 | 151                     | 2              | 28         | 82        | 40    | 261            |
|                 | 2017 | 154                     | 1              | 26         | 84        | 43    | 261            |
|                 | 2018 | 160                     | 2              | 27         | 90        | 42    | 265            |
|                 | 2019 | 163                     | 2              | 26         | 93        | 43    | 264            |
| Malta           | 2016 | 20                      | 0              | 2          | 8         | 9     | 45             |
|                 | 2017 | 21                      | 0              | 2          | 9         | 9     | 47             |
|                 | 2018 | 22                      | 0              | 2          | 10        | 9     | 49             |
|                 | 2019 | 23                      | 1              | 2          | 11        | 10    | 53             |
| Montenegro      | 2016 | 30                      | 1              | 5          | 9         | 15    | 48             |
|                 | 2017 | 32                      | 2              | 6          | 10        | 15    | 51             |
|                 | 2018 | 32                      | 2              | 6          | 11        | 14    | 52             |
|                 | 2019 | 34                      | 2              | 6          | 11        | 15    | 54             |
| Netherlands     | 2016 | 2,430                   | 539            | 594        | 444       | 853   | 143            |
|                 | 2017 | 2,476                   | 573            | 598        | 457       | 849   | 145            |
|                 | 2018 | 2,456                   | 539            | 590        | 468       | 859   | 144            |
|                 | 2019 | 2,398                   | 506            | 582        | 468       | 843   | 140            |
| North Macedonia | 2016 | 85                      | 6              | 15         | 29        | 35    | 41             |
|                 | 2017 | 85                      | 3              | 14         | 30        | 37    | 41             |
|                 | 2018 | 82                      | 2              | 16         | 31        | 34    | 40             |
|                 | 2019 | 86                      | 2              | 17         | 33        | 33    | 41             |

Table 3

## Total final consumption and its components

Petajoules and gigajoules per capita

| Country or area     | Year | Total final consumption | Non-energy use | Energy use |           |       | TFC per capita |
|---------------------|------|-------------------------|----------------|------------|-----------|-------|----------------|
|                     |      |                         |                | Industry   | Transport | Other |                |
| Norway              | 2016 | 867                     | 97             | 247        | 213       | 310   | 165            |
|                     | 2017 | 866                     | 104            | 253        | 199       | 311   | 164            |
|                     | 2018 | 877                     | 105            | 256        | 197       | 319   | 164            |
|                     | 2019 | 869                     | 107            | 256        | 191       | 315   | 162            |
| Poland              | 2016 | 2,959                   | 241            | 620        | 791       | 1,307 | 78             |
|                     | 2017 | 3,142                   | 256            | 669        | 913       | 1,305 | 83             |
|                     | 2018 | 3,172                   | 241            | 690        | 953       | 1,289 | 84             |
|                     | 2019 | 3,142                   | 238            | 696        | 973       | 1,236 | 83             |
| Portugal            | 2016 | 683                     | 49             | 184        | 241       | 208   | 66             |
|                     | 2017 | 694                     | 51             | 190        | 245       | 208   | 67             |
|                     | 2018 | 683                     | 31             | 191        | 247       | 214   | 67             |
|                     | 2019 | 709                     | 49             | 193        | 253       | 213   | 69             |
| Republic of Moldova | 2016 | 105                     | 1              | 8          | 29        | 66    | 26             |
|                     | 2017 | 110                     | 2              | 9          | 29        | 71    | 27             |
|                     | 2018 | 118                     | 3              | 11         | 30        | 75    | 29             |
|                     | 2019 | 112                     | 2              | 10         | 30        | 70    | 28             |
| Romania             | 2016 | 953                     | 51             | 243        | 243       | 416   | 48             |
|                     | 2017 | 992                     | 47             | 251        | 261       | 433   | 50             |
|                     | 2018 | 1,013                   | 45             | 260        | 267       | 440   | 52             |
|                     | 2019 | 1,029                   | 51             | 262        | 278       | 438   | 53             |
| Russian Federation  | 2016 | 18,854                  | 2,558          | 5,584      | 3,970     | 6,742 | 130            |
|                     | 2017 | 19,825                  | 2,908          | 5,610      | 4,034     | 7,273 | 136            |
|                     | 2018 | 21,464                  | 3,539          | 5,487      | 4,254     | 8,184 | 147            |
|                     | 2019 | 22,293                  | 3,459          | 6,518      | 4,177     | 8,139 | 153            |
| Serbia              | 2016 | 372                     | 35             | 86         | 85        | 165   | 53             |
|                     | 2017 | 383                     | 36             | 93         | 88        | 166   | 54             |
|                     | 2018 | 380                     | 31             | 97         | 90        | 162   | 54             |
|                     | 2019 | 377                     | 29             | 89         | 97        | 161   | 54             |
| Slovakia            | 2016 | 434                     | 41             | 142        | 104       | 147   | 80             |
|                     | 2017 | 467                     | 46             | 148        | 119       | 154   | 86             |
|                     | 2018 | 476                     | 53             | 158        | 118       | 147   | 87             |
|                     | 2019 | 477                     | 42             | 149        | 120       | 166   | 87             |
| Slovenia            | 2016 | 210                     | 6              | 52         | 80        | 73    | 101            |
|                     | 2017 | 213                     | 6              | 54         | 82        | 71    | 103            |
|                     | 2018 | 214                     | 7              | 55         | 84        | 68    | 103            |
|                     | 2019 | 210                     | 7              | 55         | 82        | 66    | 101            |
| Spain               | 2016 | 3,465                   | 208            | 754        | 1,291     | 1,212 | 74             |
|                     | 2017 | 3,543                   | 206            | 816        | 1,338     | 1,183 | 76             |
|                     | 2018 | 3,633                   | 218            | 838        | 1,374     | 1,202 | 78             |
|                     | 2019 | 3,612                   | 224            | 827        | 1,391     | 1,170 | 77             |
| Sweden              | 2016 | 1,394                   | 91             | 467        | 309       | 527   | 142            |
|                     | 2017 | 1,401                   | 104            | 468        | 310       | 519   | 141            |
|                     | 2018 | 1,375                   | 91             | 467        | 303       | 513   | 138            |
|                     | 2019 | 1,365                   | 96             | 467        | 298       | 504   | 136            |
| Switzerland         | 2016 | 794                     | 19             | 150        | 242       | 384   | 95             |
|                     | 2017 | 785                     | 19             | 150        | 239       | 376   | 93             |
|                     | 2018 | 764                     | 19             | 145        | 242       | 358   | 90             |
|                     | 2019 | 764                     | 18             | 144        | 242       | 360   | 89             |
| Ukraine             | 2016 | 2,187                   | 121            | 634        | 394       | 1,038 | 49             |
|                     | 2017 | 2,122                   | 104            | 639        | 416       | 963   | 48             |
|                     | 2018 | 2,195                   | 111            | 699        | 415       | 970   | 50             |
|                     | 2019 | 2,111                   | 115            | 682        | 433       | 880   | 48             |

Table 3

## Total final consumption and its components

Petajoules and gigajoules per capita

| Country or area             | Year        | Total final consumption | Non-energy use | Energy use   |              |              | TFC per capita |
|-----------------------------|-------------|-------------------------|----------------|--------------|--------------|--------------|----------------|
|                             |             |                         |                | Industry     | Transport    | Other        |                |
| United Kingdom              | 2016        | 5,413                   | 328            | 903          | 1,763        | 2,419        | 82             |
|                             | 2017        | 5,388                   | 337            | 916          | 1,768        | 2,366        | 81             |
|                             | 2018        | 5,441                   | 320            | 917          | 1,765        | 2,439        | 81             |
|                             | 2019        | 5,369                   | 300            | 892          | 1,755        | 2,422        | 80             |
| <b>Oceania</b>              | <b>2016</b> | <b>4,244</b>            | <b>312</b>     | <b>1,162</b> | <b>1,645</b> | <b>1,126</b> | <b>105</b>     |
|                             | <b>2017</b> | <b>4,277</b>            | <b>293</b>     | <b>1,168</b> | <b>1,685</b> | <b>1,132</b> | <b>104</b>     |
|                             | <b>2018</b> | <b>4,317</b>            | <b>289</b>     | <b>1,182</b> | <b>1,709</b> | <b>1,137</b> | <b>104</b>     |
|                             | <b>2019</b> | <b>4,321</b>            | <b>292</b>     | <b>1,176</b> | <b>1,716</b> | <b>1,138</b> | <b>103</b>     |
| American Samoa              | 2016        | *3                      | 0              | *1           | *1           | *1           | *55            |
|                             | 2017        | *3                      | 0              | *1           | *1           | *1           | *57            |
|                             | 2018        | *3                      | 0              | *1           | *1           | *1           | *57            |
|                             | 2019        | *3                      | 0              | *1           | *1           | *1           | *57            |
| Australia                   | 2016        | 3,397                   | 236            | 912          | 1,375        | 874          | 140            |
|                             | 2017        | 3,419                   | 223            | 916          | 1,399        | 880          | 139            |
|                             | 2018        | 3,465                   | 227            | 931          | 1,419        | 888          | 139            |
|                             | 2019        | 3,433                   | 219            | 911          | 1,422        | 882          | 136            |
| Cook Islands                | 2016        | *1                      | ..             | ..           | *1           | 0            | *49            |
|                             | 2017        | *1                      | ..             | ..           | *1           | 0            | *53            |
|                             | 2018        | *1                      | ..             | ..           | *1           | 0            | *53            |
|                             | 2019        | *1                      | ..             | ..           | *1           | 0            | *55            |
| Fiji                        | 2016        | *20                     | 0              | *7           | *9           | 4            | *22            |
|                             | 2017        | *22                     | 0              | *8           | *9           | 4            | *25            |
|                             | 2018        | *23                     | 0              | *8           | *10          | 4            | *26            |
|                             | 2019        | *23                     | 0              | *8           | *10          | 4            | *26            |
| French Polynesia            | 2016        | 10                      | 0              | ..           | 7            | 3            | 38             |
|                             | 2017        | 10                      | 0              | ..           | 7            | 3            | 37             |
|                             | 2018        | 10                      | 0              | ..           | 7            | 3            | 37             |
|                             | 2019        | 10                      | 0              | ..           | 7            | 3            | 37             |
| Guam                        | 2016        | 6                       | ..             | ..           | ..           | 6            | 35             |
|                             | 2017        | 6                       | ..             | ..           | ..           | 6            | 35             |
|                             | 2018        | 6                       | ..             | ..           | ..           | 6            | 34             |
|                             | 2019        | 6                       | ..             | ..           | ..           | 6            | 34             |
| Kiribati                    | 2016        | *1                      | 0              | 0            | 0            | *1           | *10            |
|                             | 2017        | *1                      | 0              | 0            | 0            | *1           | *12            |
|                             | 2018        | *1                      | 0              | 0            | 0            | *1           | *12            |
|                             | 2019        | *1                      | 0              | 0            | 0            | *1           | *11            |
| Marshall Islands            | 2016        | *2                      | ..             | 0            | *1           | 0            | *29            |
|                             | 2017        | *2                      | ..             | 0            | *1           | 0            | *29            |
|                             | 2018        | *2                      | ..             | 0            | *1           | 0            | *29            |
|                             | 2019        | *2                      | ..             | 0            | *1           | 0            | *30            |
| Micronesia (Fed. States of) | 2016        | *1                      | 0              | 0            | *1           | 0            | *13            |
|                             | 2017        | *1                      | 0              | 0            | *1           | 0            | *13            |
|                             | 2018        | *1                      | 0              | 0            | *1           | 0            | *13            |
|                             | 2019        | *1                      | 0              | 0            | *1           | 0            | *13            |
| Nauru                       | 2016        | 0                       | 0              | 0            | 0            | 0            | *44            |
|                             | 2017        | *1                      | 0              | 0            | 0            | 0            | *48            |
|                             | 2018        | *1                      | 0              | 0            | 0            | 0            | *47            |
|                             | 2019        | *1                      | 0              | 0            | 0            | 0            | *47            |
| New Caledonia               | 2016        | 41                      | 7              | 21           | 9            | 3            | 148            |
|                             | 2017        | 42                      | 7              | 22           | 9            | 3            | 151            |
|                             | 2018        | 43                      | 6              | 23           | 9            | 4            | 152            |
|                             | 2019        | 42                      | 6              | 23           | 9            | 4            | 148            |

Table 3

## Total final consumption and its components

Petajoules and gigajoules per capita

| Country or area          | Year | Total final consumption | Non-energy use | Energy use |           |       | TFC per capita |
|--------------------------|------|-------------------------|----------------|------------|-----------|-------|----------------|
|                          |      |                         |                | Industry   | Transport | Other |                |
| New Zealand              | 2016 | 608                     | 68             | 187        | 206       | 148   | 131            |
|                          | 2017 | 614                     | 62             | 186        | 219       | 147   | 130            |
|                          | 2018 | 602                     | 55             | 180        | 224       | 143   | 127            |
|                          | 2019 | 631                     | 66             | 192        | 226       | 146   | 132            |
| Niue                     | 2016 | 0                       | ..             | 0          | 0         | 0     | *47            |
|                          | 2017 | 0                       | ..             | 0          | 0         | 0     | *46            |
|                          | 2018 | 0                       | ..             | 0          | 0         | 0     | *47            |
|                          | 2019 | 0                       | ..             | 0          | 0         | 0     | *49            |
| Northern Mariana Islands | 2016 | *3                      | ..             | ..         | *2        | *1    | *61            |
|                          | 2017 | *4                      | ..             | ..         | *3        | *1    | *71            |
|                          | 2018 | *4                      | ..             | ..         | *2        | *1    | *65            |
|                          | 2019 | *4                      | ..             | ..         | *2        | *1    | *65            |
| Palau                    | 2016 | *2                      | 0              | 0          | *2        | 0     | *120           |
|                          | 2017 | *2                      | 0              | 0          | *2        | 0     | *124           |
|                          | 2018 | 2                       | 0              | 0          | 2         | 0     | 123            |
|                          | 2019 | *2                      | 0              | 0          | *2        | 0     | *125           |
| Papua New Guinea         | 2016 | *133                    | ..             | 33         | 24        | *75   | *16            |
|                          | 2017 | *134                    | ..             | 34         | 24        | *76   | *16            |
|                          | 2018 | *137                    | ..             | 38         | 23        | *76   | *16            |
|                          | 2019 | *144                    | ..             | *40        | *24       | *80   | *16            |
| Samoa                    | 2016 | 4                       | 0              | 0          | 2         | 2     | 23             |
|                          | 2017 | *5                      | 0              | 0          | *2        | *2    | *24            |
|                          | 2018 | *5                      | 0              | 0          | *2        | *2    | *24            |
|                          | 2019 | *5                      | 0              | 0          | *2        | *2    | *26            |
| Solomon Islands          | 2016 | *7                      | 0              | 0          | *3        | *4    | *11            |
|                          | 2017 | *7                      | 0              | 0          | *3        | *4    | *11            |
|                          | 2018 | *7                      | 0              | 0          | *3        | *4    | *10            |
|                          | 2019 | *7                      | 0              | 0          | *3        | *4    | *10            |
| Tonga                    | 2016 | *1                      | 0              | ..         | *1        | 0     | *14            |
|                          | 2017 | *2                      | 0              | ..         | *1        | 0     | *15            |
|                          | 2018 | *1                      | 0              | ..         | *1        | 0     | *14            |
|                          | 2019 | *2                      | 0              | ..         | *2        | 0     | *18            |
| Tuvalu                   | 2016 | 0                       | ..             | ..         | 0         | 0     | 6              |
|                          | 2017 | 0                       | ..             | ..         | 0         | 0     | 6              |
|                          | 2018 | 0                       | ..             | ..         | 0         | 0     | *7             |
|                          | 2019 | 0                       | ..             | ..         | 0         | 0     | *7             |
| Vanuatu                  | 2016 | *3                      | 0              | 0          | *1        | *1    | *10            |
|                          | 2017 | *2                      | 0              | 0          | *1        | *1    | *9             |
|                          | 2018 | *3                      | 0              | 0          | *2        | *1    | *10            |
|                          | 2019 | *3                      | 0              | 0          | *2        | *1    | *10            |
| Wallis and Futuna Is.    | 2016 | 0                       | ..             | ..         | 0         | 0     | *19            |
|                          | 2017 | 0                       | ..             | ..         | 0         | 0     | *19            |
|                          | 2018 | 0                       | ..             | ..         | 0         | 0     | *20            |
|                          | 2019 | 0                       | ..             | ..         | 0         | 0     | *21            |



## Production, trade and supply of coal

Thousand metric tons of coal equivalent and kilograms per capita

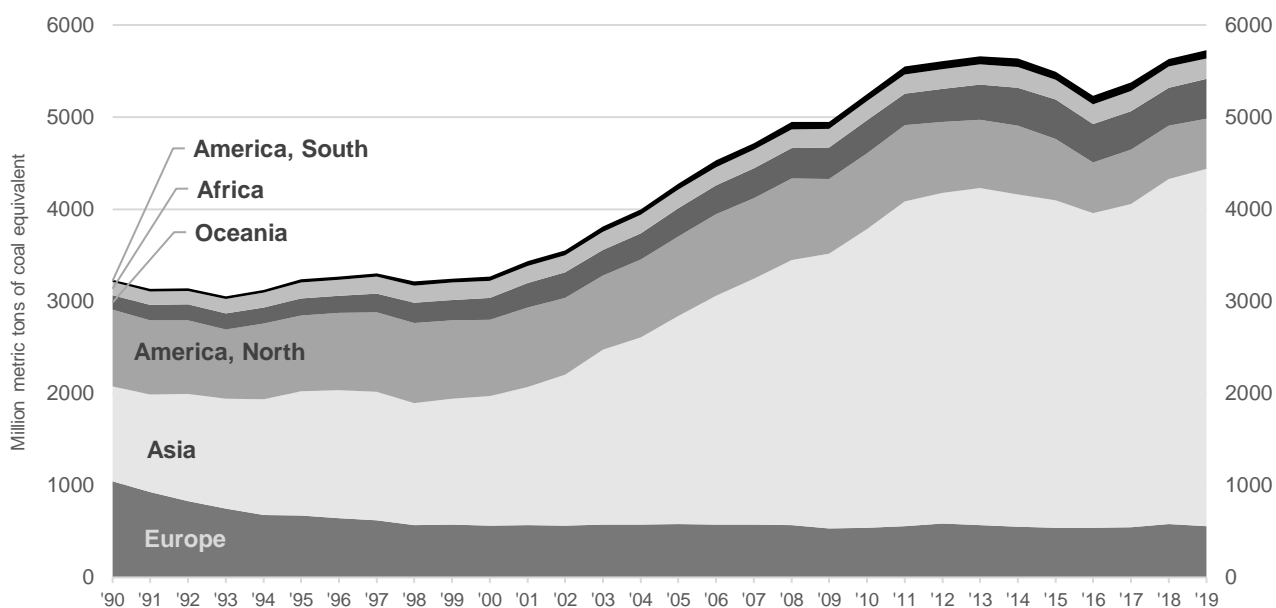
### Table Notes

**Production** includes hard coal, brown coal, oil shale and peat. Production from other sources of hard coal and brown coal is also included, representing recovered slurries, middlings, and other low-grade coal products which cannot be classified according to type of coal and which includes coal recovered from waste piles and other waste receptacles.

**Imports, Exports and Changes in stocks** refer to hard coal, brown coal, oil shale, peat, coke oven coke, gas coke, coal tar, patent fuel, brown coal briquettes, peat products and other coal products.

Please refer to the Definitions Section on pages ix to xv for the appropriate product description/classification, and xvi to xvii for the descriptions of relevant flows.

Figure 11: Production of coal by region, 1990-2019



**Table 4****Production, trade and supply of coal**

Thousand metric tons of coal equivalent and kilograms per capita

| Country or area | Year        | Production       | Imports          | Exports          | Changes in stocks | Supply           |            |
|-----------------|-------------|------------------|------------------|------------------|-------------------|------------------|------------|
|                 |             |                  |                  |                  |                   | Total            | Per capita |
| <b>World</b>    | <b>2016</b> | <b>5,228,977</b> | <b>1,100,146</b> | <b>1,176,768</b> | <b>-168,624</b>   | <b>5,320,979</b> | <b>713</b> |
|                 | <b>2017</b> | <b>5,374,118</b> | <b>1,162,597</b> | <b>1,247,047</b> | <b>-79,450</b>    | <b>5,369,119</b> | <b>711</b> |
|                 | <b>2018</b> | <b>5,630,643</b> | <b>1,196,949</b> | <b>1,321,862</b> | <b>8,822</b>      | <b>5,496,908</b> | <b>720</b> |
|                 | <b>2019</b> | <b>5,726,211</b> | <b>1,210,234</b> | <b>1,288,690</b> | <b>108,049</b>    | <b>5,539,706</b> | <b>718</b> |
| <b>Africa</b>   | <b>2016</b> | <b>214,357</b>   | <b>12,379</b>    | <b>70,349</b>    | <b>-3,107</b>     | <b>159,493</b>   | <b>132</b> |
|                 | <b>2017</b> | <b>220,906</b>   | <b>16,017</b>    | <b>83,830</b>    | <b>-4,152</b>     | <b>157,245</b>   | <b>126</b> |
|                 | <b>2018</b> | <b>228,028</b>   | <b>21,156</b>    | <b>90,832</b>    | <b>1,874</b>      | <b>156,478</b>   | <b>123</b> |
|                 | <b>2019</b> | <b>224,670</b>   | <b>21,652</b>    | <b>74,095</b>    | <b>458</b>        | <b>171,769</b>   | <b>131</b> |
| Algeria         | 2016        | ..               | 75               | ..               | 75                | 0                | 0          |
|                 | 2017        | ..               | 290              | ..               | -30               | 319              | 8          |
|                 | 2018        | ..               | 493              | ..               | -42               | 535              | 13         |
|                 | 2019        | ..               | 428              | ..               | -12               | 440              | 10         |
| Benin           | 2016        | ..               | 70               | ..               | ..                | 70               | 6          |
|                 | 2017        | ..               | 67               | ..               | ..                | 67               | 6          |
|                 | 2018        | ..               | 105              | ..               | 105               | 0                | 0          |
|                 | 2019        | ..               | 90               | ..               | ..                | 90               | 8          |
| Botswana        | 2016        | 1,508            | ..               | 165              | *-3               | 1,346            | 623        |
|                 | 2017        | 1,787            | ..               | 184              | ..                | 1,603            | 727        |
|                 | 2018        | 1,999            | ..               | 255              | ..                | 1,743            | 773        |
|                 | 2019        | 1,700            | ..               | 245              | ..                | 1,455            | 631        |
| Burundi         | 2016        | 5                | 9                | ..               | ..                | 14               | 1          |
|                 | 2017        | 7                | 1                | ..               | ..                | 8                | 1          |
|                 | 2018        | 6                | 0                | ..               | ..                | 6                | 1          |
|                 | 2019        | 8                | 9                | ..               | ..                | 17               | 1          |
| Egypt           | 2016        | ..               | 668              | *61              | 0                 | 607              | 6          |
|                 | 2017        | ..               | 2,595            | *143             | ..                | 2,452            | 25         |
|                 | 2018        | ..               | 4,863            | ..               | -39               | 4,902            | 50         |
|                 | 2019        | ..               | 3,972            | 156              | ..                | 3,816            | 38         |
| Eswatini        | 2016        | 139              | 72               | *139             | *-10              | 82               | 73         |
|                 | 2017        | 160              | 54               | 160              | ..                | 54               | 48         |
|                 | 2018        | 114              | 54               | 114              | ..                | 54               | 47         |
|                 | 2019        | 103              | 67               | 103              | ..                | 67               | 58         |
| Ethiopia        | 2016        | 2                | 463              | ..               | ..                | 465              | 4          |
|                 | 2017        | 2                | 511              | ..               | ..                | 512              | 5          |
|                 | 2018        | 2                | 368              | ..               | ..                | 370              | 3          |
|                 | 2019        | 2                | 398              | ..               | ..                | 400              | 4          |
| Kenya           | 2016        | ..               | 432              | ..               | ..                | 432              | 9          |
|                 | 2017        | ..               | 408              | ..               | ..                | 408              | 8          |
|                 | 2018        | ..               | 610              | ..               | ..                | 610              | 12         |
|                 | 2019        | ..               | 539              | ..               | ..                | 539              | 10         |
| Lesotho         | 2016        | ..               | *519             | ..               | ..                | *519             | *250       |
|                 | 2017        | ..               | *616             | ..               | ..                | *616             | *295       |
|                 | 2018        | ..               | *558             | ..               | ..                | *558             | *265       |
|                 | 2019        | ..               | *555             | ..               | ..                | *555             | *261       |
| Madagascar      | 2016        | ..               | 340              | ..               | ..                | 340              | 14         |
|                 | 2017        | ..               | 483              | ..               | ..                | 483              | 19         |
|                 | 2018        | ..               | 420              | ..               | ..                | 420              | 16         |
|                 | 2019        | ..               | 473              | ..               | ..                | 473              | 18         |
| Malawi          | 2016        | 38               | 37               | 7                | ..                | 68               | 4          |
|                 | 2017        | *42              | 34               | *7               | ..                | *69              | *4         |
|                 | 2018        | *44              | 42               | *8               | ..                | *77              | *4         |
|                 | 2019        | *48              | 32               | *9               | ..                | *71              | *4         |



Table 4

## Production, trade and supply of coal

Thousand metric tons of coal equivalent and kilograms per capita

| Country or area         | Year        | Production     | Imports       | Exports        | Changes in stocks | Supply         |            |
|-------------------------|-------------|----------------|---------------|----------------|-------------------|----------------|------------|
|                         |             |                |               |                |                   | Total          | Per capita |
| Mauritius               | 2016        | ..             | 815           | ..             | 168               | 647            | 512        |
|                         | 2017        | ..             | 1,267         | ..             | 594               | 673            | 532        |
|                         | 2018        | ..             | 1,136         | ..             | 497               | 639            | 504        |
|                         | 2019        | ..             | 1,039         | ..             | 451               | 588            | 463        |
| Morocco                 | 2016        | ..             | 6,340         | ..             | 221               | 6,119          | 172        |
|                         | 2017        | ..             | 6,420         | ..             | 59                | 6,361          | 176        |
|                         | 2018        | ..             | 7,976         | ..             | 619               | 7,357          | 201        |
|                         | 2019        | ..             | 9,535         | ..             | 14                | 9,522          | 257        |
| Mozambique              | 2016        | 5,039          | ..            | 7,291          | *-2,271           | 19             | 1          |
|                         | 2017        | 10,772         | ..            | 15,956         | -5,193            | 9              | 0          |
|                         | 2018        | 14,719         | ..            | 14,220         | 476               | 24             | 1          |
|                         | 2019        | 9,928          | ..            | 9,968          | -58               | 17             | 1          |
| Namibia                 | 2016        | ..             | 26            | ..             | ..                | 26             | 11         |
|                         | 2017        | ..             | 33            | ..             | ..                | 33             | 14         |
|                         | 2018        | ..             | 17            | ..             | 7                 | 10             | 4          |
|                         | 2019        | ..             | 26            | ..             | 7                 | 19             | 8          |
| Niger                   | 2016        | 135            | ..            | ..             | 0                 | 135            | 6          |
|                         | 2017        | 127            | ..            | ..             | 0                 | 127            | 6          |
|                         | 2018        | 122            | ..            | ..             | ..                | 122            | 5          |
|                         | 2019        | 123            | ..            | ..             | ..                | 123            | 5          |
| Nigeria                 | 2016        | 46             | ..            | ..             | ..                | 46             | 0          |
|                         | 2017        | 45             | ..            | ..             | ..                | 45             | 0          |
|                         | 2018        | 42             | ..            | ..             | ..                | 42             | 0          |
|                         | 2019        | 48             | ..            | ..             | ..                | 48             | 0          |
| Rwanda                  | 2016        | *2             | ..            | ..             | ..                | *2             | 0          |
|                         | 2017        | *3             | ..            | ..             | ..                | *3             | 0          |
|                         | 2018        | *5             | ..            | ..             | ..                | *5             | 0          |
|                         | 2019        | *7             | ..            | ..             | ..                | *7             | *1         |
| Senegal                 | 2016        | ..             | 455           | ..             | ..                | 455            | 30         |
|                         | 2017        | ..             | 542           | ..             | ..                | 542            | 35         |
|                         | 2018        | ..             | 852           | ..             | ..                | 852            | 54         |
|                         | 2019        | ..             | 787           | ..             | ..                | 787            | 48         |
| South Africa            | 2016        | 205,416        | 1,957         | 62,455         | ..                | 144,918        | 2,578      |
|                         | 2017        | 204,095        | 2,587         | 67,262         | ..                | 139,420        | 2,446      |
|                         | 2018        | 206,349        | 3,560         | 76,054         | ..                | 133,855        | 2,316      |
|                         | 2019        | 208,402        | 3,626         | 63,405         | ..                | 148,624        | 2,538      |
| United Rep. of Tanzania | 2016        | 243            | ..            | ..             | ..                | 243            | 5          |
|                         | 2017        | 496            | ..            | ..             | ..                | 496            | 9          |
|                         | 2018        | 553            | ..            | ..             | ..                | 553            | 10         |
|                         | 2019        | 627            | ..            | ..             | ..                | 627            | 11         |
| Zambia                  | 2016        | 277            | *50           | *2             | ..                | 325            | 20         |
|                         | 2017        | 672            | *50           | *2             | ..                | 720            | 43         |
|                         | 2018        | 990            | *50           | *2             | ..                | 1,038          | 60         |
|                         | 2019        | 840            | *50           | *2             | ..                | 888            | 50         |
| Zimbabwe                | 2016        | 1,507          | 50            | 229            | -1,287            | 2,615          | 186        |
|                         | 2017        | 2,697          | 60            | 115            | 417               | 2,225          | 156        |
|                         | 2018        | 3,083          | 52            | 179            | 250               | 2,706          | 187        |
|                         | 2019        | 2,834          | 25            | 207            | 56                | 2,596          | 177        |
| <b>America, North</b>   | <b>2016</b> | <b>549,460</b> | <b>25,675</b> | <b>76,441</b>  | <b>-36,077</b>    | <b>534,771</b> | <b>934</b> |
|                         | <b>2017</b> | <b>586,784</b> | <b>26,306</b> | <b>106,667</b> | <b>-14,773</b>    | <b>521,195</b> | <b>903</b> |
|                         | <b>2018</b> | <b>577,525</b> | <b>24,404</b> | <b>123,727</b> | <b>-22,768</b>    | <b>500,971</b> | <b>861</b> |
|                         | <b>2019</b> | <b>542,429</b> | <b>27,146</b> | <b>107,786</b> | <b>27,391</b>     | <b>434,398</b> | <b>740</b> |

Table 4

**Production, trade and supply of coal**  
 Thousand metric tons of coal equivalent and kilograms per capita

| Country or area    | Year | Production | Imports | Exports | Changes in stocks | Supply  |            |
|--------------------|------|------------|---------|---------|-------------------|---------|------------|
|                    |      |            |         |         |                   | Total   | Per capita |
| Bahamas            | 2016 | ..         | *1      | ..      | ..                | *1      | *4         |
|                    | 2017 | ..         | *1      | ..      | ..                | *1      | *4         |
|                    | 2018 | ..         | *1      | ..      | ..                | *1      | *4         |
|                    | 2019 | ..         | *1      | ..      | ..                | *1      | *4         |
| Bermuda            | 2016 | ..         | 0       | ..      | ..                | 0       | 1          |
|                    | 2017 | ..         | 0       | ..      | ..                | 0       | 1          |
|                    | 2018 | ..         | 0       | ..      | ..                | 0       | 1          |
|                    | 2019 | ..         | 0       | ..      | ..                | 0       | 1          |
| Canada             | 2016 | 41,707     | 6,756   | 26,047  | -2,401            | 24,818  | 682        |
|                    | 2017 | 44,264     | 7,775   | 26,542  | -152              | 25,649  | 698        |
|                    | 2018 | 41,806     | 7,832   | 27,556  | 1,556             | 20,526  | 554        |
|                    | 2019 | 41,234     | 8,528   | 29,728  | 374               | 19,661  | 526        |
| Costa Rica         | 2016 | ..         | 0       | ..      | ..                | 0       | 0          |
|                    | 2017 | ..         | 6       | ..      | ..                | 6       | 1          |
|                    | 2018 | ..         | 0       | ..      | ..                | 0       | 0          |
|                    | 2019 | ..         | 0       | ..      | ..                | 0       | 0          |
| Cuba               | 2016 | ..         | 3       | ..      | ..                | 3       | 0          |
|                    | 2017 | ..         | 4       | ..      | ..                | 4       | 0          |
|                    | 2018 | ..         | 5       | ..      | ..                | 5       | 0          |
|                    | 2019 | ..         | 2       | ..      | ..                | 2       | 0          |
| Dominican Republic | 2016 | ..         | 988     | ..      | 34                | 954     | 92         |
|                    | 2017 | ..         | 1,105   | ..      | -5                | 1,109   | 106        |
|                    | 2018 | ..         | 1,112   | ..      | 21                | 1,090   | 103        |
|                    | 2019 | ..         | 1,062   | ..      | -20               | 1,083   | 101        |
| El Salvador        | 2016 | ..         | 1       | ..      | ..                | 1       | 0          |
|                    | 2017 | ..         | 1       | ..      | ..                | 1       | 0          |
|                    | 2018 | ..         | 1       | ..      | ..                | 1       | 0          |
|                    | 2019 | ..         | 1       | ..      | ..                | 1       | 0          |
| Guatemala          | 2016 | ..         | 2,016   | ..      | 239               | 1,777   | 107        |
|                    | 2017 | ..         | 1,609   | ..      | 135               | 1,475   | 87         |
|                    | 2018 | ..         | 1,780   | ..      | 39                | 1,741   | 101        |
|                    | 2019 | ..         | 2,504   | ..      | 805               | 1,700   | 97         |
| Honduras           | 2016 | ..         | 57      | ..      | ..                | 57      | 6          |
|                    | 2017 | ..         | 1       | ..      | ..                | 1       | 0          |
|                    | 2018 | ..         | ..      | ..      | ..                | ..      | ..         |
|                    | 2019 | ..         | ..      | ..      | ..                | ..      | ..         |
| Jamaica            | 2016 | ..         | 86      | ..      | 1                 | 86      | 30         |
|                    | 2017 | ..         | 85      | ..      | 12                | 72      | 25         |
|                    | 2018 | ..         | 93      | ..      | 17                | 77      | 26         |
|                    | 2019 | ..         | 77      | ..      | -12               | 89      | 30         |
| Mexico             | 2016 | 9,943      | 8,053   | 2       | 308               | 17,686  | 143        |
|                    | 2017 | 9,401      | 9,819   | 99      | 1,010             | 18,111  | 145        |
|                    | 2018 | 8,593      | 8,924   | 48      | -104              | 17,573  | 139        |
|                    | 2019 | 7,071      | 9,241   | 5       | -540              | 16,847  | 132        |
| Panama             | 2016 | ..         | 276     | ..      | ..                | 276     | 68         |
|                    | 2017 | ..         | 77      | ..      | ..                | 77      | 19         |
|                    | 2018 | ..         | 193     | ..      | ..                | 193     | 46         |
|                    | 2019 | ..         | 789     | ..      | ..                | 789     | 186        |
| United States      | 2016 | 497,810    | 7,437   | 50,392  | -34,257           | 489,112 | 1,514      |
|                    | 2017 | 533,119    | 5,823   | 80,026  | -15,773           | 474,689 | 1,460      |
|                    | 2018 | 527,126    | 4,463   | 96,123  | -24,297           | 459,763 | 1,406      |
|                    | 2019 | 494,124    | 4,939   | 78,053  | 26,786            | 394,224 | 1,198      |

Table 4

## Production, trade and supply of coal

Thousand metric tons of coal equivalent and kilograms per capita

| Country or area           | Year        | Production       | Imports        | Exports        | Changes in stocks | Supply           |            |
|---------------------------|-------------|------------------|----------------|----------------|-------------------|------------------|------------|
|                           |             |                  |                |                |                   | Total            | Per capita |
| <b>America, South</b>     | <b>2016</b> | <b>90,472</b>    | <b>31,290</b>  | <b>80,120</b>  | <b>-1,686</b>     | <b>43,327</b>    | <b>104</b> |
|                           | <b>2017</b> | <b>89,060</b>    | <b>33,167</b>  | <b>98,407</b>  | <b>-19,092</b>    | <b>42,912</b>    | <b>102</b> |
|                           | <b>2018</b> | <b>82,766</b>    | <b>32,984</b>  | <b>80,763</b>  | <b>-6,563</b>     | <b>41,550</b>    | <b>98</b>  |
|                           | <b>2019</b> | <b>87,341</b>    | <b>31,250</b>  | <b>76,502</b>  | <b>-486</b>       | <b>42,575</b>    | <b>100</b> |
| Argentina                 | 2016        | 20               | 1,554          | 8              | -13               | 1,581            | 36         |
|                           | 2017        | 17               | 1,486          | 0              | -110              | 1,613            | 37         |
|                           | 2018        | 51               | 1,666          | 2              | 72                | 1,642            | 37         |
|                           | 2019        | 88               | 955            | 50             | 186               | 807              | 18         |
| Bolivia (Plur. State of)  | 2016        | ..               | 5              | ..             | ..                | 5                | 0          |
|                           | 2017        | ..               | 8              | ..             | ..                | 8                | 1          |
|                           | 2018        | ..               | 7              | ..             | ..                | 7                | 1          |
|                           | 2019        | ..               | 8              | ..             | ..                | 8                | 1          |
| Brazil                    | 2016        | 3,766            | 19,532         | ..             | 485               | 22,813           | 111        |
|                           | 2017        | 2,759            | 21,563         | ..             | 204               | 24,118           | 116        |
|                           | 2018        | 2,757            | 21,539         | ..             | 758               | 23,539           | 112        |
|                           | 2019        | 3,090            | 19,056         | ..             | 75                | 22,070           | 105        |
| Chile                     | 2016        | 1,448            | 9,464          | 641            | 91                | 10,179           | 559        |
|                           | 2017        | 1,403            | 9,554          | 579            | -79               | 10,456           | 566        |
|                           | 2018        | 1,286            | 9,356          | 272            | 176               | 10,194           | 544        |
|                           | 2019        | 813              | 10,730         | 53             | -201              | 11,690           | 617        |
| Colombia                  | 2016        | 84,046           | 0              | 78,590         | -1,864            | 7,321            | 152        |
|                           | 2017        | 84,081           | 0              | 97,083         | -18,538           | 5,536            | 113        |
|                           | 2018        | 78,263           | 0              | 79,746         | -6,653            | 5,170            | 104        |
|                           | 2019        | 82,767           | 0              | 75,459         | 363               | 6,945            | 138        |
| Falkland Is. (Malvinas)   | 2016        | *2               | ..             | ..             | ..                | *2               | *778       |
|                           | 2017        | 2                | ..             | ..             | ..                | 2                | 529        |
|                           | 2018        | 2                | ..             | ..             | ..                | 2                | 502        |
|                           | 2019        | 2                | ..             | ..             | ..                | 2                | 482        |
| Guyana                    | 2016        | ..               | 0              | ..             | 0                 | 0                | 0          |
|                           | 2017        | ..               | 0              | 14             | -14               | 0                | 0          |
|                           | 2018        | ..               | 2              | 0              | 2                 | 0                | 0          |
|                           | 2019        | ..               | 19             | ..             | 0                 | 19               | 24         |
| Paraguay                  | 2016        | ..               | 2              | ..             | ..                | 2                | 0          |
|                           | 2017        | ..               | 1              | ..             | ..                | 1                | 0          |
|                           | 2018        | ..               | 5              | ..             | ..                | 5                | 1          |
|                           | 2019        | ..               | 2              | ..             | ..                | 2                | 0          |
| Peru                      | 2016        | 251              | 730            | 154            | -384              | 1,211            | 39         |
|                           | 2017        | 278              | 553            | 326            | -554              | 1,059            | 34         |
|                           | 2018        | 198              | 408            | 581            | -917              | 943              | 29         |
|                           | 2019        | 170              | 480            | 591            | -911              | 970              | 30         |
| Uruguay                   | 2016        | ..               | 2              | ..             | ..                | 2                | 1          |
|                           | 2017        | ..               | 1              | ..             | ..                | 1                | 0          |
|                           | 2018        | ..               | 1              | ..             | ..                | 1                | 0          |
|                           | 2019        | ..               | 1              | ..             | ..                | 1                | 0          |
| Venezuela (Bolivar. Rep.) | 2016        | 939              | ..             | 728            | ..                | 211              | 7          |
|                           | 2017        | 521              | ..             | 405            | ..                | 117              | 4          |
|                           | 2018        | 209              | ..             | 162            | ..                | 47               | 2          |
|                           | 2019        | 411              | ..             | 349            | ..                | 62               | 2          |
| <b>Asia</b>               | <b>2016</b> | <b>3,413,732</b> | <b>824,907</b> | <b>411,597</b> | <b>-107,481</b>   | <b>3,934,522</b> | <b>879</b> |
|                           | <b>2017</b> | <b>3,513,194</b> | <b>872,759</b> | <b>417,538</b> | <b>-49,312</b>    | <b>4,017,728</b> | <b>889</b> |
|                           | <b>2018</b> | <b>3,746,851</b> | <b>908,612</b> | <b>450,843</b> | <b>32,276</b>     | <b>4,172,343</b> | <b>915</b> |
|                           | <b>2019</b> | <b>3,885,321</b> | <b>949,482</b> | <b>454,044</b> | <b>55,620</b>     | <b>4,325,140</b> | <b>940</b> |

**Table 4**

**Production, trade and supply of coal**  
 Thousand metric tons of coal equivalent and kilograms per capita

| Country or area      | Year | Production | Imports | Exports | Changes in stocks | Supply    |            |
|----------------------|------|------------|---------|---------|-------------------|-----------|------------|
|                      |      |            |         |         |                   | Total     | Per capita |
| Afghanistan          | 2016 | 1,495      | *193    | 709     | ..                | 979       | 28         |
|                      | 2017 | 1,929      | *195    | 957     | ..                | 1,167     | 32         |
|                      | 2018 | 2,152      | *195    | 1,048   | ..                | 1,300     | 35         |
|                      | 2019 | 1,883      | *195    | 744     | ..                | 1,334     | 35         |
| Armenia              | 2016 | ..         | 1       | ..      | ..                | 1         | 0          |
|                      | 2017 | ..         | 1       | ..      | ..                | 1         | 0          |
|                      | 2018 | ..         | 2       | ..      | ..                | 2         | 1          |
|                      | 2019 | ..         | 4       | ..      | ..                | 4         | 1          |
| Azerbaijan           | 2016 | ..         | 1       | ..      | -1                | 2         | 0          |
|                      | 2017 | ..         | 2       | ..      | 0                 | 2         | 0          |
|                      | 2018 | ..         | 1       | ..      | ..                | 1         | 0          |
|                      | 2019 | ..         | 1       | ..      | 0                 | 1         | 0          |
| Bangladesh           | 2016 | 729        | 1,559   | ..      | ..                | 2,289     | 14         |
|                      | 2017 | 829        | 1,866   | ..      | ..                | 2,695     | 17         |
|                      | 2018 | 659        | 2,424   | ..      | ..                | 3,083     | 19         |
|                      | 2019 | 659        | 4,996   | ..      | ..                | 5,655     | 35         |
| Bhutan               | 2016 | 104        | ..      | 0       | ..                | 104       | 141        |
|                      | 2017 | 142        | ..      | 17      | ..                | 126       | 168        |
|                      | 2018 | 164        | ..      | 24      | ..                | 141       | 187        |
|                      | 2019 | 163        | ..      | 23      | ..                | 140       | 184        |
| Brunei Darussalam    | 2016 | ..         | ..      | ..      | ..                | ..        | ..         |
|                      | 2017 | ..         | ..      | ..      | ..                | ..        | ..         |
|                      | 2018 | ..         | ..      | ..      | ..                | ..        | ..         |
|                      | 2019 | ..         | 163     | ..      | ..                | 163       | 376        |
| Cambodia             | 2016 | ..         | 1,105   | ..      | ..                | 1,105     | 70         |
|                      | 2017 | 29         | 1,279   | ..      | ..                | 1,307     | 82         |
|                      | 2018 | 17         | 1,371   | ..      | ..                | 1,389     | 85         |
|                      | 2019 | 18         | 1,713   | ..      | 133               | 1,598     | 97         |
| China                | 2016 | 2,415,315  | 160,992 | 16,054  | -105,199          | 2,665,452 | 1,885      |
|                      | 2017 | 2,496,752  | 169,202 | 13,579  | -47,675           | 2,700,050 | 1,900      |
|                      | 2018 | 2,622,819  | 171,719 | 12,957  | 23,843            | 2,757,738 | 1,932      |
|                      | 2019 | 2,729,792  | 185,641 | 10,600  | 61,684            | 2,843,149 | 1,983      |
| China, Hong Kong SAR | 2016 | ..         | 10,042  | 0       | 478               | 9,565     | 1,320      |
|                      | 2017 | ..         | 9,450   | ..      | 490               | 8,960     | 1,226      |
|                      | 2018 | ..         | 9,793   | ..      | 592               | 9,201     | 1,248      |
|                      | 2019 | ..         | 9,028   | ..      | 217               | 8,812     | 1,185      |
| Cyprus               | 2016 | ..         | 0       | ..      | 0                 | 0         | 0          |
|                      | 2017 | ..         | 15      | ..      | 10                | 4         | 4          |
|                      | 2018 | ..         | 19      | ..      | 0                 | 20        | 17         |
|                      | 2019 | ..         | 29      | ..      | 4                 | 24        | 20         |
| Georgia              | 2016 | 172        | 245     | 1       | 34                | 382       | 95         |
|                      | 2017 | 156        | 289     | 14      | 0                 | 430       | 107        |
|                      | 2018 | 81         | 406     | 3       | 32                | 452       | 113        |
|                      | 2019 | 10         | 386     | 2       | 27                | 367       | 92         |
| India                | 2016 | 384,883    | 176,775 | 1,085   | -7,385            | 567,959   | 429        |
|                      | 2017 | 385,495    | 193,663 | 930     | -8,617            | 586,845   | 438        |
|                      | 2018 | 412,754    | 220,142 | 755     | 2,907             | 629,234   | 465        |
|                      | 2019 | 410,951    | 229,249 | 621     | -12,873           | 652,452   | 477        |
| Indonesia            | 2016 | 402,358    | 3,959   | 326,101 | -364              | 80,581    | 308        |
|                      | 2017 | 407,258    | 4,694   | 344,127 | 346               | 67,479    | 255        |
|                      | 2018 | 485,069    | 5,323   | 379,789 | -875              | 111,478   | 416        |
|                      | 2019 | 514,671    | 5,812   | 383,507 | 3,206             | 133,770   | 494        |

Table 4

## Production, trade and supply of coal

Thousand metric tons of coal equivalent and kilograms per capita

| Country or area        | Year | Production | Imports | Exports | Changes in stocks | Supply  |            |
|------------------------|------|------------|---------|---------|-------------------|---------|------------|
|                        |      |            |         |         |                   | Total   | Per capita |
| Iran (Islamic Rep. of) | 2016 | 1,056      | 345     | 99      | 1                 | 1,302   | 16         |
|                        | 2017 | 1,452      | 440     | 114     | 1                 | 1,777   | 22         |
|                        | 2018 | 1,570      | 607     | 305     | ..                | 1,872   | 23         |
|                        | 2019 | 1,446      | 491     | 532     | -2                | 1,408   | 17         |
| Israel                 | 2016 | 57         | 7,465   | ..      | -331              | 7,853   | 968        |
|                        | 2017 | 61         | 7,240   | ..      | 202               | 7,099   | 861        |
|                        | 2018 | 56         | 6,557   | ..      | -220              | 6,833   | 815        |
|                        | 2019 | 55         | 7,118   | ..      | 384               | 6,788   | 797        |
| Japan                  | 2016 | 942        | 166,550 | 1,024   | 77                | 166,392 | 1,302      |
|                        | 2017 | 1,105      | 170,090 | 1,229   | -79               | 170,046 | 1,334      |
|                        | 2018 | 764        | 168,184 | 1,456   | 62                | 167,430 | 1,316      |
|                        | 2019 | 614        | 165,738 | 1,591   | -33               | 164,794 | 1,299      |
| Jordan                 | 2016 | ..         | 324     | ..      | ..                | 324     | 34         |
|                        | 2017 | ..         | 221     | ..      | ..                | 221     | 23         |
|                        | 2018 | ..         | 301     | ..      | ..                | 301     | 30         |
|                        | 2019 | ..         | 299     | ..      | ..                | 299     | 30         |
| Kazakhstan             | 2016 | 65,346     | 778     | 16,506  | -1,121            | 50,738  | 2,846      |
|                        | 2017 | 71,376     | 876     | 18,635  | -1,669            | 55,286  | 3,058      |
|                        | 2018 | 69,537     | 1,189   | 17,288  | -212              | 53,649  | 2,929      |
|                        | 2019 | 64,165     | 1,250   | 15,634  | 460               | 49,322  | 2,659      |
| Korea, Dem.Ppl's.Rep.  | 2016 | 27,262     | 1,284   | 20,435  | ..                | 8,112   | 321        |
|                        | 2017 | 18,994     | 794     | 2,414   | ..                | 17,374  | 683        |
|                        | 2018 | 15,856     | 128     | ..      | ..                | 15,984  | 626        |
|                        | 2019 | 17,724     | 124     | ..      | ..                | 17,848  | 695        |
| Korea, Republic of     | 2016 | 1,097      | 116,238 | ..      | 812               | 116,523 | 2,286      |
|                        | 2017 | 983        | 116,667 | ..      | -198              | 117,848 | 2,306      |
|                        | 2018 | 754        | 114,014 | ..      | -222              | 114,989 | 2,247      |
|                        | 2019 | 718        | 114,377 | ..      | 563               | 114,533 | 2,236      |
| Kyrgyzstan             | 2016 | 959        | 567     | 204     | 37                | 1,284   | 211        |
|                        | 2017 | 969        | 648     | 268     | 97                | 1,251   | 202        |
|                        | 2018 | 1,241      | 585     | 433     | -91               | 1,484   | 235        |
|                        | 2019 | 1,347      | 354     | 584     | -38               | 1,155   | 180        |
| Lao People's Dem. Rep. | 2016 | 4,993      | ..      | ..      | 659               | 4,335   | 633        |
|                        | 2017 | 5,070      | ..      | 77      | -411              | 5,404   | 777        |
|                        | 2018 | 5,351      | ..      | 136     | *-349             | 5,564   | 788        |
|                        | 2019 | 5,158      | ..      | *181    | *-149             | 5,126   | 715        |
| Lebanon                | 2016 | ..         | *236    | ..      | ..                | *236    | *35        |
|                        | 2017 | ..         | *236    | ..      | ..                | *236    | *35        |
|                        | 2018 | ..         | *236    | ..      | ..                | *236    | *34        |
|                        | 2019 | ..         | *236    | ..      | ..                | *236    | *34        |
| Malaysia               | 2016 | 2,175      | 24,447  | 22      | -178              | 26,779  | 873        |
|                        | 2017 | 2,692      | 27,401  | 547     | -82               | 29,628  | 953        |
|                        | 2018 | 2,389      | 29,633  | 0       | 305               | 31,717  | 1,006      |
|                        | 2019 | 2,493      | 29,760  | 191     | ..                | 32,061  | 1,003      |
| Mongolia               | 2016 | 31,123     | 0       | 22,902  | -131              | 8,352   | 2,733      |
|                        | 2017 | 43,242     | 2       | 27,750  | 4,289             | 11,205  | 3,598      |
|                        | 2018 | 46,279     | 2       | 30,619  | 364               | 15,298  | 4,826      |
|                        | 2019 | 46,670     | 53      | 31,124  | ..                | 15,599  | 4,837      |
| Myanmar                | 2016 | 436        | ..      | 13      | ..                | 424     | 8          |
|                        | 2017 | 585        | ..      | 0       | ..                | 585     | 11         |
|                        | 2018 | 1,225      | ..      | ..      | ..                | 1,225   | 23         |
|                        | 2019 | 1,482      | ..      | ..      | ..                | 1,482   | 27         |

Table 4

### Production, trade and supply of coal

Thousand metric tons of coal equivalent and kilograms per capita

| Country or area      | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|----------------------|------|------------|---------|---------|-------------------|--------|------------|
|                      |      |            |         |         |                   | Total  | Per capita |
| Nepal                | 2016 | 19         | 967     | ..      | ..                | 986    | 36         |
|                      | 2017 | 20         | 1,109   | ..      | ..                | 1,129  | 41         |
|                      | 2018 | 22         | 1,613   | ..      | ..                | 1,635  | 58         |
|                      | 2019 | 23         | 1,268   | ..      | ..                | 1,291  | 45         |
| Other Asia           | 2016 | ..         | 57,984  | 1       | -547              | 58,530 | 2,478      |
|                      | 2017 | ..         | 59,969  | 45      | 208               | 59,716 | 2,522      |
|                      | 2018 | ..         | 55,528  | 25      | -729              | 56,232 | 2,370      |
|                      | 2019 | ..         | 56,962  | 20      | 1,146             | 55,796 | 2,347      |
| Pakistan             | 2016 | 2,406      | 6,623   | ..      | ..                | 9,029  | 44         |
|                      | 2017 | 2,538      | 12,908  | ..      | ..                | 15,445 | 74         |
|                      | 2018 | 2,874      | 14,796  | ..      | ..                | 17,670 | 83         |
|                      | 2019 | 3,470      | 15,490  | ..      | ..                | 18,961 | 88         |
| Philippines          | 2016 | 8,453      | 15,061  | 5,134   | -273              | 18,654 | 180        |
|                      | 2017 | 8,997      | 17,003  | 4,636   | -956              | 22,320 | 212        |
|                      | 2018 | 8,864      | 19,979  | 3,797   | 1,541             | 23,505 | 220        |
|                      | 2019 | 10,369     | 21,080  | 7,525   | -1,250            | 25,174 | 233        |
| Singapore            | 2016 | ..         | 609     | 1       | ..                | 609    | 108        |
|                      | 2017 | ..         | 1,284   | 1       | ..                | 1,283  | 225        |
|                      | 2018 | ..         | 683     | 1       | ..                | 682    | 118        |
|                      | 2019 | ..         | 654     | 0       | ..                | 654    | 113        |
| Sri Lanka            | 2016 | ..         | 2,405   | ..      | 323               | 2,082  | 99         |
|                      | 2017 | ..         | 2,527   | ..      | *370              | 2,157  | 102        |
|                      | 2018 | ..         | 2,166   | ..      | 82                | 2,084  | 98         |
|                      | 2019 | ..         | 2,389   | ..      | 164               | 2,224  | 104        |
| Syrian Arab Republic | 2016 | ..         | 1       | ..      | ..                | 1      | 0          |
|                      | 2017 | ..         | 1       | ..      | ..                | 1      | 0          |
|                      | 2018 | ..         | 1       | ..      | ..                | 1      | 0          |
|                      | 2019 | ..         | 1       | ..      | ..                | 1      | 0          |
| Tajikistan           | 2016 | 1,117      | 8       | 0       | ..                | 1,125  | 130        |
|                      | 2017 | 1,491      | 6       | 4       | ..                | 1,492  | 168        |
|                      | 2018 | 1,609      | 6       | 37      | ..                | 1,578  | 173        |
|                      | 2019 | 1,713      | 22      | 16      | ..                | 1,719  | 184        |
| Thailand             | 2016 | 6,151      | 20,375  | 31      | 4,474             | 22,022 | 319        |
|                      | 2017 | 5,864      | 21,101  | 41      | 3,512             | 23,412 | 338        |
|                      | 2018 | 5,357      | 23,276  | 76      | 5,939             | 22,619 | 326        |
|                      | 2019 | 5,046      | 20,394  | 53      | 2,045             | 23,342 | 335        |
| Turkey               | 2016 | 22,139     | 33,623  | 179     | 777               | 54,805 | 687        |
|                      | 2017 | 22,403     | 35,587  | 204     | 435               | 57,351 | 707        |
|                      | 2018 | 23,637     | 34,970  | 184     | -45               | 58,468 | 710        |
|                      | 2019 | 24,898     | 34,726  | 183     | -514              | 59,955 | 719        |
| United Arab Emirates | 2016 | ..         | 2,630   | 0       | ..                | 2,630  | 281        |
|                      | 2017 | ..         | 3,042   | 1       | ..                | 3,041  | 321        |
|                      | 2018 | ..         | 2,744   | 0       | ..                | 2,743  | 285        |
|                      | 2019 | ..         | 2,539   | 1       | ..                | 2,539  | 260        |
| Uzbekistan           | 2016 | 1,955      | 468     | 0       | -155              | 2,578  | 82         |
|                      | 2017 | 2,036      | 481     | 0       | 87                | 2,430  | 76         |
|                      | 2018 | 2,111      | 757     | 0       | -648              | 3,517  | 108        |
|                      | 2019 | 2,056      | 851     | 0       | -118              | 3,025  | 92         |
| Viet Nam             | 2016 | 30,988     | 10,937  | 1,098   | 534               | 40,293 | 430        |
|                      | 2017 | 30,727     | 12,372  | 1,950   | 329               | 40,820 | 432        |
|                      | 2018 | 33,637     | 19,159  | 1,911   | ..                | 50,886 | 533        |
|                      | 2019 | 37,726     | 35,971  | 914     | 564               | 72,219 | 749        |

Table 4

## Production, trade and supply of coal

Thousand metric tons of coal equivalent and kilograms per capita

| Country or area        | Year        | Production     | Imports        | Exports        | Changes in stocks | Supply         |            |
|------------------------|-------------|----------------|----------------|----------------|-------------------|----------------|------------|
|                        |             |                |                |                |                   | Total          | Per capita |
| Yemen                  | 2016        | ..             | 107            | ..             | ..                | 107            | 4          |
|                        | 2017        | ..             | 102            | ..             | ..                | 102            | 4          |
|                        | 2018        | ..             | 103            | ..             | ..                | 103            | 4          |
|                        | 2019        | ..             | 118            | ..             | ..                | 118            | 4          |
| <b>Europe</b>          | <b>2016</b> | <b>541,655</b> | <b>204,376</b> | <b>177,895</b> | <b>-13,795</b>    | <b>581,930</b> | <b>780</b> |
|                        | <b>2017</b> | <b>543,603</b> | <b>212,813</b> | <b>190,132</b> | <b>3,534</b>      | <b>562,750</b> | <b>753</b> |
|                        | <b>2018</b> | <b>582,266</b> | <b>207,932</b> | <b>223,070</b> | <b>6,444</b>      | <b>560,684</b> | <b>749</b> |
|                        | <b>2019</b> | <b>554,056</b> | <b>178,337</b> | <b>213,311</b> | <b>16,813</b>     | <b>502,269</b> | <b>670</b> |
| Albania                | 2016        | 2              | 70             | ..             | ..                | 72             | 25         |
|                        | 2017        | 32             | 92             | 21             | ..                | 103            | 36         |
|                        | 2018        | 68             | 111            | 1              | ..                | 177            | 61         |
|                        | 2019        | 22             | 100            | ..             | ..                | 122            | 42         |
| Andorra                | 2016        | ..             | 0              | ..             | ..                | 0              | *1         |
|                        | 2017        | ..             | 0              | ..             | ..                | 0              | *1         |
|                        | 2018        | ..             | 0              | ..             | ..                | 0              | *1         |
|                        | 2019        | ..             | 0              | ..             | ..                | 0              | *1         |
| Austria                | 2016        | 0              | 4,132          | 37             | -219              | 4,314          | 493        |
|                        | 2017        | ..             | 4,480          | 40             | -4                | 4,444          | 504        |
|                        | 2018        | ..             | 3,874          | 42             | -98               | 3,930          | 442        |
|                        | 2019        | ..             | 3,932          | 36             | -125              | 4,021          | 449        |
| Belarus                | 2016        | 465            | 676            | 62             | -101              | 1,180          | 125        |
|                        | 2017        | 654            | 694            | 176            | -44               | 1,216          | 129        |
|                        | 2018        | 777            | 1,392          | 746            | 183               | 1,240          | 131        |
|                        | 2019        | 767            | 3,430          | 2,773          | 110               | 1,314          | 139        |
| Belgium                | 2016        | 62             | 4,113          | 76             | -231              | 4,330          | 381        |
|                        | 2017        | 56             | 4,212          | 105            | -205              | 4,368          | 382        |
|                        | 2018        | 76             | 4,616          | 76             | 234               | 4,382          | 382        |
|                        | 2019        | 79             | 4,534          | 126            | 142               | 4,345          | 377        |
| Bosnia and Herzegovina | 2016        | 5,029          | 1,340          | 462            | 33                | 5,874          | 1,735      |
|                        | 2017        | 5,160          | 1,442          | 386            | 232               | 5,984          | 1,785      |
|                        | 2018        | 5,227          | 1,520          | 621            | 83                | 6,043          | 1,818      |
|                        | 2019        | 4,861          | 1,606          | 502            | 382               | 5,583          | 1,691      |
| Bulgaria               | 2016        | 7,309          | 822            | 4              | -34               | 8,160          | 1,141      |
|                        | 2017        | 8,135          | 832            | 5              | 193               | 8,768          | 1,235      |
|                        | 2018        | 7,535          | 842            | 10             | 260               | 8,107          | 1,150      |
|                        | 2019        | 6,974          | 573            | 12             | -11               | 7,546          | 1,078      |
| Croatia                | 2016        | ..             | 949            | ..             | 19                | 930            | 221        |
|                        | 2017        | ..             | 565            | ..             | 4                 | 560            | 134        |
|                        | 2018        | ..             | 478            | ..             | -44               | 522            | 126        |
|                        | 2019        | ..             | 641            | ..             | 40                | 602            | 146        |
| Czechia                | 2016        | 23,034         | 4,165          | 4,284          | -947              | 23,863         | 2,247      |
|                        | 2017        | 21,832         | 4,222          | 3,308          | -112              | 22,857         | 2,148      |
|                        | 2018        | 20,999         | 4,151          | 2,843          | -254              | 22,560         | 2,115      |
|                        | 2019        | 19,194         | 4,130          | 2,283          | 610               | 20,430         | 1,911      |
| Denmark                | 2016        | ..             | 2,403          | 17             | -434              | 2,819          | 494        |
|                        | 2017        | ..             | 2,564          | 0              | 351               | 2,212          | 386        |
|                        | 2018        | ..             | 2,520          | 15             | 51                | 2,453          | 426        |
|                        | 2019        | ..             | 1,957          | 37             | 665               | 1,254          | 217        |
| Estonia                | 2016        | 4,895          | 21             | 19             | -832              | 5,728          | 4,351      |
|                        | 2017        | 5,935          | 34             | 29             | -132              | 6,072          | 4,602      |
|                        | 2018        | 6,885          | 33             | 13             | 288               | 6,617          | 5,002      |
|                        | 2019        | 4,995          | 41             | 20             | 64                | 4,952          | 3,736      |

Table 4

**Production, trade and supply of coal**  
 Thousand metric tons of coal equivalent and kilograms per capita

| Country or area | Year | Production | Imports | Exports | Changes in stocks | Supply  |            |
|-----------------|------|------------|---------|---------|-------------------|---------|------------|
|                 |      |            |         |         |                   | Total   | Per capita |
| Finland         | 2016 | 1,029      | 3,994   | 89      | -1,271            | 6,205   | 1,129      |
|                 | 2017 | 1,044      | 3,872   | 135     | -1,143            | 5,923   | 1,075      |
|                 | 2018 | 2,588      | 4,077   | 105     | 552               | 6,008   | 1,088      |
|                 | 2019 | 1,499      | 3,247   | 200     | -466              | 5,011   | 906        |
| France          | 2016 | ..         | 12,318  | 79      | -895              | 13,133  | 196        |
|                 | 2017 | ..         | 14,453  | 5       | 305               | 14,142  | 211        |
|                 | 2018 | ..         | 13,234  | 48      | 128               | 13,058  | 194        |
|                 | 2019 | ..         | 10,416  | 6       | -78               | 10,489  | 156        |
| Germany         | 2016 | 56,750     | 56,663  | 1,985   | 1,187             | 110,241 | 1,341      |
|                 | 2017 | 56,346     | 48,289  | 2,112   | 608               | 101,915 | 1,233      |
|                 | 2018 | 53,737     | 43,257  | 2,082   | -3,546            | 98,459  | 1,184      |
|                 | 2019 | 40,598     | 40,254  | 2,132   | 1,826             | 76,894  | 921        |
| Greece          | 2016 | 5,675      | 272     | ..      | -295              | 6,242   | 588        |
|                 | 2017 | 6,525      | 327     | ..      | -29               | 6,881   | 651        |
|                 | 2018 | 6,107      | 335     | ..      | -78               | 6,520   | 620        |
|                 | 2019 | 4,411      | 290     | ..      | 135               | 4,566   | 436        |
| Hungary         | 2016 | 2,089      | 1,624   | 514     | -27               | 3,226   | 331        |
|                 | 2017 | 1,833      | 1,798   | 376     | 44                | 3,211   | 330        |
|                 | 2018 | 1,816      | 1,795   | 303     | 77                | 3,231   | 333        |
|                 | 2019 | 1,419      | 1,522   | 318     | -16               | 2,639   | 273        |
| Iceland         | 2016 | ..         | 142     | ..      | ..                | 142     | 429        |
|                 | 2017 | ..         | 142     | ..      | ..                | 142     | 424        |
|                 | 2018 | ..         | 161     | ..      | 0                 | 161     | 478        |
|                 | 2019 | ..         | 152     | ..      | ..                | 152     | 448        |
| Ireland         | 2016 | 970        | 1,683   | 14      | -386              | 3,025   | 644        |
|                 | 2017 | 1,063      | 1,829   | 15      | 220               | 2,655   | 559        |
|                 | 2018 | 1,145      | 1,284   | 6       | 332               | 2,091   | 434        |
|                 | 2019 | 558        | 298     | 4       | -626              | 1,478   | 303        |
| Italy           | 2016 | 0          | 15,663  | 370     | -396              | 15,689  | 258        |
|                 | 2017 | ..         | 13,706  | 338     | 36                | 13,332  | 220        |
|                 | 2018 | ..         | 12,683  | 357     | 131               | 12,196  | 201        |
|                 | 2019 | ..         | 9,411   | 283     | -130              | 9,258   | 153        |
| Kosovo          | 2016 | 2,343      | 2       | 5       | -71               | 2,411   | 1,357      |
|                 | 2017 | 2,017      | 4       | 4       | -9                | 2,026   | 1,131      |
|                 | 2018 | 2,039      | 3       | 2       | -9                | 2,049   | 1,140      |
|                 | 2019 | 2,146      | 3       | 7       | -7                | 2,149   | 1,198      |
| Latvia          | 2016 | 1          | 54      | 5       | -8                | 59      | 30         |
|                 | 2017 | 1          | 56      | 5       | -7                | 59      | 30         |
|                 | 2018 | 2          | 67      | 9       | -8                | 68      | 35         |
|                 | 2019 | 3          | 66      | 4       | 7                 | 58      | 30         |
| Lithuania       | 2016 | 7          | 229     | 2       | -23               | 257     | 89         |
|                 | 2017 | 10         | 271     | 2       | 5                 | 274     | 96         |
|                 | 2018 | 11         | 269     | 1       | -12               | 291     | 104        |
|                 | 2019 | 12         | 281     | 1       | 18                | 274     | 99         |
| Luxembourg      | 2016 | ..         | 75      | ..      | ..                | 75      | 130        |
|                 | 2017 | ..         | 65      | ..      | ..                | 65      | 109        |
|                 | 2018 | ..         | 60      | ..      | ..                | 60      | 100        |
|                 | 2019 | ..         | 61      | ..      | ..                | 61      | 99         |
| Montenegro      | 2016 | 439        | 2       | 13      | ..                | 428     | 682        |
|                 | 2017 | 464        | 2       | 30      | ..                | 435     | 693        |
|                 | 2018 | 523        | 2       | 31      | -21               | 515     | 820        |
|                 | 2019 | 566        | 2       | 39      | 2                 | 526     | 838        |



Table 4

## Production, trade and supply of coal

Thousand metric tons of coal equivalent and kilograms per capita

| Country or area     | Year | Production | Imports | Exports  | Changes in stocks | Supply  |            |
|---------------------|------|------------|---------|----------|-------------------|---------|------------|
|                     |      |            |         |          |                   | Total   | Per capita |
| Netherlands         | 2016 | ..         | 14,263  | 98       | -61               | 14,226  | 838        |
|                     | 2017 | ..         | 13,450  | 191      | 90                | 13,169  | 774        |
|                     | 2018 | ..         | 11,899  | 103      | -15               | 11,811  | 692        |
|                     | 2019 | ..         | 9,511   | 136      | 201               | 9,174   | 537        |
| North Macedonia     | 2016 | 1,065      | 161     | 0        | -18               | 1,243   | 597        |
|                     | 2017 | 1,218      | 130     | 0        | -33               | 1,381   | 663        |
|                     | 2018 | 1,143      | 168     | 1        | 75                | 1,235   | 593        |
|                     | 2019 | 1,229      | 175     | 0        | -64               | 1,468   | 705        |
| Norway              | 2016 | 784        | 1,047   | 874      | -125              | 1,082   | 206        |
|                     | 2017 | 126        | 1,148   | 72       | -9                | 1,211   | 229        |
|                     | 2018 | 144        | 1,120   | 108      | -20               | 1,176   | 220        |
|                     | 2019 | 116        | 1,111   | 76       | 7                 | 1,145   | 213        |
| Poland              | 2016 | 74,742     | 7,181   | 14,535   | -3,943            | 71,330  | 1,878      |
|                     | 2017 | 71,156     | 11,214  | 12,362   | -1,740            | 71,749  | 1,890      |
|                     | 2018 | 68,685     | 16,161  | 10,685   | 2,869             | 71,292  | 1,880      |
|                     | 2019 | 63,729     | 14,384  | 9,827    | 4,694             | 63,591  | 1,678      |
| Portugal            | 2016 | ..         | 4,160   | ..       | 94                | 4,066   | 394        |
|                     | 2017 | ..         | 4,869   | ..       | 259               | 4,610   | 448        |
|                     | 2018 | ..         | 3,810   | ..       | -42               | 3,852   | 376        |
|                     | 2019 | ..         | 2,186   | ..       | 396               | 1,790   | 175        |
| Republic of Moldova | 2016 | ..         | 84      | ..       | -22               | 106     | 26         |
|                     | 2017 | ..         | 172     | ..       | 21                | 151     | 37         |
|                     | 2018 | ..         | 122     | ..       | 6                 | 116     | 29         |
|                     | 2019 | ..         | 125     | ..       | -14               | 138     | 34         |
| Romania             | 2016 | 6,051      | 1,481   | 1        | -13               | 7,543   | 381        |
|                     | 2017 | 6,383      | 1,429   | 1        | 84                | 7,727   | 393        |
|                     | 2018 | 5,740      | 1,287   | 2        | -194              | 7,220   | 370        |
|                     | 2019 | 5,611      | 1,562   | 0        | 101               | 7,071   | 365        |
| Russian Federation  | 2016 | 298,801    | *20,001 | 152,746  | 1,216             | 164,840 | 1,135      |
|                     | 2017 | 317,480    | *24,602 | 168,843  | 7,695             | 165,544 | 1,138      |
|                     | 2018 | 361,269    | *24,127 | *203,710 | 6,648             | 175,039 | 1,201      |
|                     | 2019 | 360,965    | *20,522 | 192,147  | 7,013             | 182,326 | 1,250      |
| Serbia              | 2016 | 10,287     | 913     | 20       | -92               | 11,272  | 1,593      |
|                     | 2017 | 10,309     | 980     | 23       | 16                | 11,250  | 1,598      |
|                     | 2018 | 9,442      | 1,113   | 21       | -215              | 10,749  | 1,534      |
|                     | 2019 | 9,751      | 1,148   | 24       | 130               | 10,745  | 1,540      |
| Slovakia            | 2016 | 870        | 3,912   | 69       | -140              | 4,853   | 892        |
|                     | 2017 | 638        | 4,312   | 67       | 49                | 4,834   | 887        |
|                     | 2018 | 522        | 4,507   | 56       | 141               | 4,831   | 886        |
|                     | 2019 | 508        | 3,716   | 119      | 208               | 3,897   | 714        |
| Slovenia            | 2016 | 1,170      | 216     | 0        | -7                | 1,393   | 671        |
|                     | 2017 | 1,333      | 283     | ..       | -6                | 1,622   | 781        |
|                     | 2018 | 1,288      | 306     | ..       | -22               | 1,616   | 778        |
|                     | 2019 | 1,258      | 312     | ..       | 39                | 1,532   | 737        |
| Spain               | 2016 | 1,052      | 11,558  | 428      | -2,507            | 14,689  | 315        |
|                     | 2017 | 1,611      | 15,931  | 299      | -923              | 18,166  | 389        |
|                     | 2018 | 1,261      | 13,617  | 432      | -1,371            | 15,817  | 339        |
|                     | 2019 | ..         | 7,907   | 1,398    | -469              | 6,978   | 149        |
| Sweden              | 2016 | 181        | 3,204   | 27       | 409               | 2,949   | 300        |
|                     | 2017 | 161        | 2,826   | 29       | 29                | 2,929   | 296        |
|                     | 2018 | 228        | 2,932   | 9        | 11                | 3,141   | 315        |
|                     | 2019 | 151        | 2,816   | 47       | 81                | 2,840   | 283        |

Table 4

### Production, trade and supply of coal

Thousand metric tons of coal equivalent and kilograms per capita

| Country or area | Year        | Production     | Imports      | Exports        | Changes in stocks | Supply        |              |
|-----------------|-------------|----------------|--------------|----------------|-------------------|---------------|--------------|
|                 |             |                |              |                |                   | Total         | Per capita   |
| Switzerland     | 2016        | ..             | 162          | ..             | -1                | 163           | 19           |
|                 | 2017        | ..             | 156          | 0              | -1                | 157           | 19           |
|                 | 2018        | ..             | 115          | 0              | -31               | 145           | 17           |
|                 | 2019        | ..             | 114          | 0              | -16               | 130           | 15           |
| Ukraine         | 2016        | 32,979         | 15,168       | 657            | 815               | 46,675        | 1,044        |
|                 | 2017        | 19,481         | 18,561       | 711            | 573               | 36,759        | 826          |
|                 | 2018        | 20,801         | 19,723       | 78             | 141               | 40,304        | 911          |
|                 | 2019        | 20,652         | 18,912       | 64             | 2,138             | 37,362        | 849          |
| United Kingdom  | 2016        | 3,573          | 9,455        | 401            | -4,470            | 17,098        | 258          |
|                 | 2017        | 2,601          | 8,801        | 443            | -2,886            | 13,845        | 207          |
|                 | 2018        | 2,207          | 10,160       | 554            | 212               | 11,600        | 173          |
|                 | 2019        | 1,982          | 6,890        | 688            | -175              | 8,360         | 124          |
| <b>Oceania</b>  | <b>2016</b> | <b>419,301</b> | <b>1,521</b> | <b>360,366</b> | <b>-6,480</b>     | <b>66,935</b> | <b>1,655</b> |
|                 | <b>2017</b> | <b>420,571</b> | <b>1,535</b> | <b>350,472</b> | <b>4,345</b>      | <b>67,289</b> | <b>1,641</b> |
|                 | <b>2018</b> | <b>413,208</b> | <b>1,862</b> | <b>352,628</b> | <b>-2,440</b>     | <b>64,882</b> | <b>1,561</b> |
|                 | <b>2019</b> | <b>432,394</b> | <b>2,367</b> | <b>362,952</b> | <b>8,253</b>      | <b>63,556</b> | <b>1,509</b> |
| Australia       | 2016        | 416,972        | 233          | 359,145        | -6,325            | 64,385        | 2,654        |
|                 | 2017        | 418,210        | 270          | 349,288        | 4,599             | 64,594        | 2,627        |
|                 | 2018        | 410,631        | 435          | 351,384        | -2,579            | 62,260        | 2,501        |
|                 | 2019        | 429,801        | 581          | 361,528        | 8,383             | 60,472        | 2,399        |
| New Caledonia   | 2016        | ..             | 960          | ..             | 45                | 914           | 3,335        |
|                 | 2017        | ..             | 927          | ..             | -105              | 1,033         | 3,725        |
|                 | 2018        | ..             | 995          | ..             | 54                | 941           | 3,362        |
|                 | 2019        | ..             | 912          | ..             | -24               | 936           | 3,312        |
| New Zealand     | 2016        | 2,329          | 328          | 1,222          | -200              | 1,636         | 351          |
|                 | 2017        | 2,361          | 338          | 1,184          | -148              | 1,662         | 353          |
|                 | 2018        | 2,577          | 432          | 1,244          | 84                | 1,680         | 354          |
|                 | 2019        | 2,593          | 874          | 1,424          | -105              | 2,148         | 449          |





### Production, trade and supply of hard coal

Thousand metric tons and kilograms per capita

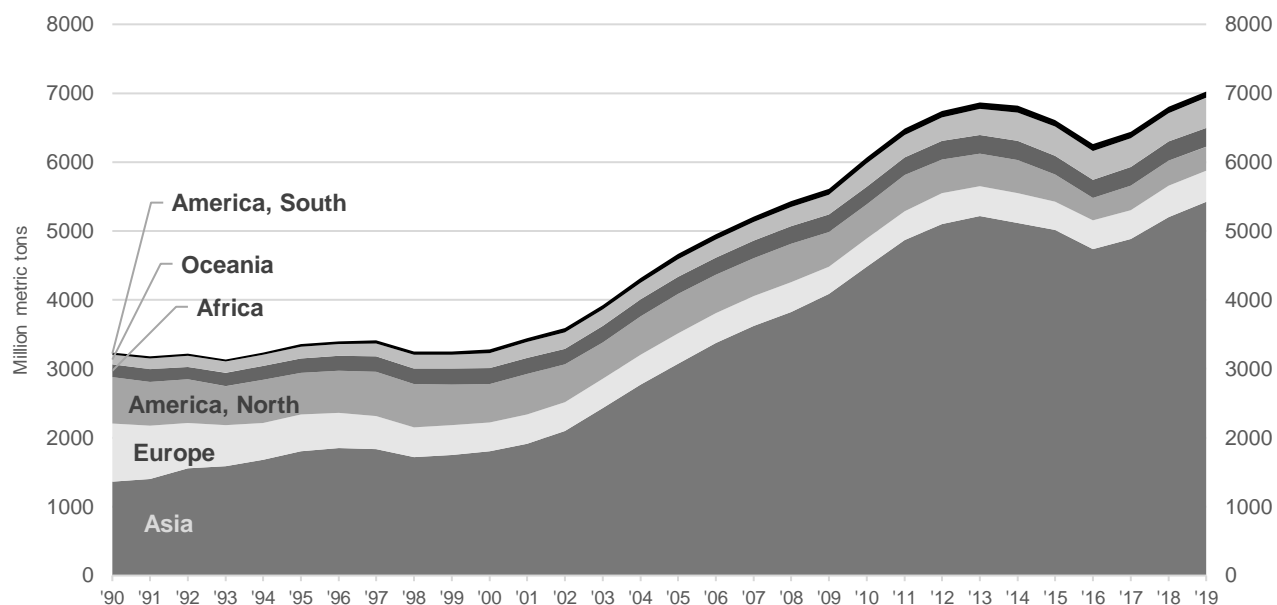
#### Table Notes

**Production** includes production from other sources as defined in the previous table.

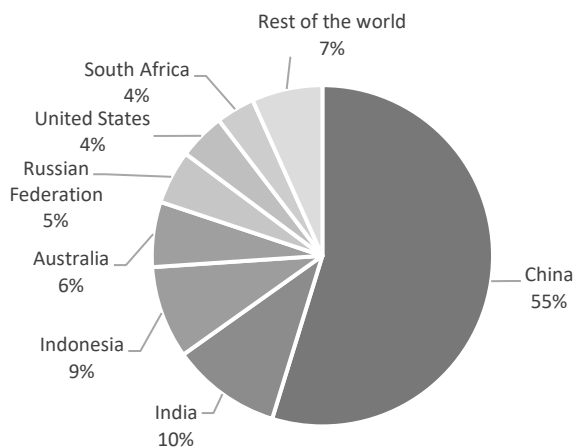
Data for China include brown coal.

Please refer to the Definitions Section on pages ix to xv for the appropriate product description/ classification, and xvi to xvii for the descriptions of relevant flows.

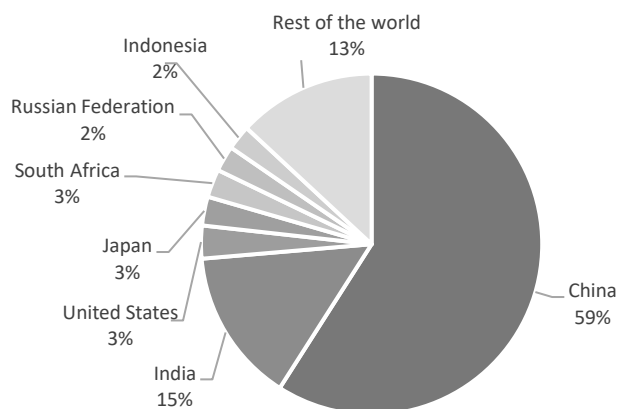
**Figure 12: Production of hard coal by region, 1990-2019**



**Figure 13: Major hard coal producing countries, 2019**



**Figure 14: Major hard coal consuming countries, 2019**



**Table 5****Production, trade and supply of hard coal**

Thousand metric tons and kilograms per capita

| Country or area | Year        | Production       | Imports          | Exports          | Changes in stocks | Supply           |            |
|-----------------|-------------|------------------|------------------|------------------|-------------------|------------------|------------|
|                 |             |                  |                  |                  |                   | Total            | Per capita |
| <b>World</b>    | <b>2016</b> | <b>6,261,555</b> | <b>1,238,291</b> | <b>1,277,098</b> | <b>-187,775</b>   | <b>6,410,523</b> | <b>859</b> |
|                 | <b>2017</b> | <b>6,443,172</b> | <b>1,310,139</b> | <b>1,350,648</b> | <b>-82,660</b>    | <b>6,485,322</b> | <b>859</b> |
|                 | <b>2018</b> | <b>6,802,449</b> | <b>1,355,531</b> | <b>1,431,304</b> | <b>22,927</b>     | <b>6,703,749</b> | <b>878</b> |
|                 | <b>2019</b> | <b>7,023,953</b> | <b>1,377,465</b> | <b>1,415,353</b> | <b>118,438</b>    | <b>6,867,627</b> | <b>890</b> |
| <b>Africa</b>   | <b>2016</b> | <b>264,044</b>   | <b>12,663</b>    | <b>85,541</b>    | <b>-3,448</b>     | <b>194,615</b>   | <b>161</b> |
|                 | <b>2017</b> | <b>271,114</b>   | <b>16,634</b>    | <b>101,031</b>   | <b>-4,481</b>     | <b>191,198</b>   | <b>154</b> |
|                 | <b>2018</b> | <b>279,234</b>   | <b>21,964</b>    | <b>110,108</b>   | <b>2,143</b>      | <b>188,947</b>   | <b>148</b> |
|                 | <b>2019</b> | <b>276,082</b>   | <b>22,601</b>    | <b>89,919</b>    | <b>521</b>        | <b>208,243</b>   | <b>159</b> |
| Algeria         | 2016        | ..               | 0                | ..               | 0                 | 0                | 0          |
|                 | 2017        | ..               | 0                | ..               | -5                | 5                | 0          |
|                 | 2018        | ..               | 12               | ..               | 4                 | 8                | 0          |
|                 | 2019        | ..               | 8                | ..               | -9                | 17               | 0          |
| Benin           | 2016        | ..               | 80               | ..               | ..                | 80               | 7          |
|                 | 2017        | ..               | 76               | ..               | ..                | 76               | 7          |
|                 | 2018        | ..               | 120              | ..               | 120               | 0                | 0          |
|                 | 2019        | ..               | 102              | ..               | ..                | 102              | 9          |
| Botswana        | 2016        | 1,874            | ..               | 205              | *-3               | 1,672            | 774        |
|                 | 2017        | 2,220            | ..               | 229              | ..                | 1,991            | 903        |
|                 | 2018        | 2,482            | ..               | 317              | ..                | 2,165            | 960        |
|                 | 2019        | 2,111            | ..               | 304              | ..                | 1,807            | 784        |
| Burundi         | 2016        | ..               | 10               | ..               | ..                | 10               | 1          |
|                 | 2017        | ..               | 1                | ..               | ..                | 1                | 0          |
|                 | 2018        | ..               | 0                | ..               | ..                | 0                | 0          |
|                 | 2019        | ..               | 10               | ..               | ..                | 10               | 1          |
| Egypt           | 2016        | ..               | 387              | ..               | ..                | 387              | 4          |
|                 | 2017        | ..               | 2,792            | ..               | ..                | 2,792            | 29         |
|                 | 2018        | ..               | 5,403            | ..               | ..                | 5,403            | 55         |
|                 | 2019        | ..               | 4,513            | ..               | ..                | 4,513            | 45         |
| Eswatini        | 2016        | 158              | 82               | *158             | *-11              | 93               | 83         |
|                 | 2017        | 182              | 61               | 182              | ..                | 61               | 54         |
|                 | 2018        | 129              | 61               | 129              | ..                | 61               | 54         |
|                 | 2019        | 117              | 76               | 117              | ..                | 76               | 66         |
| Ethiopia        | 2016        | 2                | 526              | ..               | ..                | 528              | 5          |
|                 | 2017        | 2                | 580              | ..               | ..                | 582              | 5          |
|                 | 2018        | 2                | 418              | ..               | ..                | 420              | 4          |
|                 | 2019        | 2                | 453              | ..               | ..                | 455              | 4          |
| Kenya           | 2016        | ..               | 491              | ..               | ..                | 491              | 10         |
|                 | 2017        | ..               | 463              | ..               | ..                | 463              | 9          |
|                 | 2018        | ..               | 693              | ..               | ..                | 693              | 13         |
|                 | 2019        | ..               | 612              | ..               | ..                | 612              | 12         |
| Lesotho         | 2016        | ..               | *590             | ..               | ..                | *590             | *284       |
|                 | 2017        | ..               | *700             | ..               | ..                | *700             | *335       |
|                 | 2018        | ..               | *634             | ..               | ..                | *634             | *301       |
|                 | 2019        | ..               | *630             | ..               | ..                | *630             | *296       |
| Madagascar      | 2016        | ..               | 386              | ..               | ..                | 386              | 16         |
|                 | 2017        | ..               | 549              | ..               | ..                | 549              | 21         |
|                 | 2018        | ..               | 451              | ..               | ..                | 451              | 17         |
|                 | 2019        | ..               | 511              | ..               | ..                | 511              | 19         |
| Malawi          | 2016        | 43               | 42               | 8                | ..                | 77               | 4          |
|                 | 2017        | *48              | 39               | *8               | ..                | *79              | *4         |
|                 | 2018        | *50              | 48               | *10              | ..                | *88              | *5         |
|                 | 2019        | *55              | 36               | *10              | ..                | *81              | *4         |

Table 5

## Production, trade and supply of hard coal

Thousand metric tons and kilograms per capita

| Country or area         | Year        | Production     | Imports       | Exports        | Changes in stocks | Supply         |            |
|-------------------------|-------------|----------------|---------------|----------------|-------------------|----------------|------------|
|                         |             |                |               |                |                   | Total          | Per capita |
| Mauritius               | 2016        | ..             | 926           | ..             | 191               | 734            | 582        |
|                         | 2017        | ..             | 1,431         | ..             | 671               | 760            | 601        |
|                         | 2018        | ..             | 1,283         | ..             | 561               | 722            | 570        |
|                         | 2019        | ..             | 1,173         | ..             | 509               | 664            | 523        |
| Morocco                 | 2016        | ..             | 6,724         | ..             | 234               | 6,490          | 182        |
|                         | 2017        | ..             | 6,809         | ..             | 63                | 6,746          | 187        |
|                         | 2018        | ..             | 8,459         | ..             | 657               | 7,803          | 213        |
|                         | 2019        | ..             | 10,113        | ..             | 15                | 10,099         | 273        |
| Mozambique              | 2016        | 5,462          | ..            | 7,903          | *-2,462           | 21             | 1          |
|                         | 2017        | 11,746         | ..            | 17,399         | -5,663            | 10             | 0          |
|                         | 2018        | 16,095         | ..            | 15,549         | 520               | 26             | 1          |
|                         | 2019        | 10,878         | ..            | 10,923         | -64               | 19             | 1          |
| Namibia                 | 2016        | ..             | 34            | ..             | ..                | 34             | 14         |
|                         | 2017        | ..             | 42            | ..             | ..                | 42             | 17         |
|                         | 2018        | ..             | 22            | ..             | 9                 | 13             | 5          |
|                         | 2019        | ..             | 34            | ..             | 9                 | 25             | 10         |
| Niger                   | 2016        | 247            | ..            | ..             | 0                 | 247            | 12         |
|                         | 2017        | 233            | ..            | ..             | 0                 | 233            | 11         |
|                         | 2018        | 224            | ..            | ..             | ..                | 224            | 10         |
|                         | 2019        | 226            | ..            | ..             | ..                | 226            | 10         |
| Nigeria                 | 2016        | 52             | ..            | ..             | ..                | 52             | 0          |
|                         | 2017        | 51             | ..            | ..             | ..                | 51             | 0          |
|                         | 2018        | 48             | ..            | ..             | ..                | 48             | 0          |
|                         | 2019        | 55             | ..            | ..             | ..                | 55             | 0          |
| Senegal                 | 2016        | ..             | 514           | ..             | ..                | 514            | 34         |
|                         | 2017        | ..             | 613           | ..             | ..                | 613            | 40         |
|                         | 2018        | ..             | 963           | ..             | ..                | 963            | 61         |
|                         | 2019        | ..             | 890           | ..             | ..                | 890            | 55         |
| South Africa            | 2016        | 253,966        | 1,850         | 77,216         | ..                | 178,600        | 3,178      |
|                         | 2017        | 252,343        | 2,446         | 83,163         | ..                | 171,626        | 3,010      |
|                         | 2018        | 255,054        | 3,366         | 94,005         | ..                | 164,415        | 2,845      |
|                         | 2019        | 257,853        | 3,429         | 78,450         | ..                | 182,832        | 3,122      |
| United Rep. of Tanzania | 2016        | 276            | ..            | ..             | ..                | 276            | 5          |
|                         | 2017        | 563            | ..            | ..             | ..                | 563            | 10         |
|                         | 2018        | 628            | ..            | ..             | ..                | 628            | 11         |
|                         | 2019        | 712            | ..            | ..             | ..                | 712            | 12         |
| Zambia                  | 2016        | 328            | ..            | ..             | ..                | 328            | 20         |
|                         | 2017        | 797            | ..            | ..             | ..                | 797            | 47         |
|                         | 2018        | 1,174          | ..            | ..             | ..                | 1,174          | 68         |
|                         | 2019        | 996            | ..            | ..             | ..                | 996            | 56         |
| Zimbabwe                | 2016        | 1,636          | 21            | 50             | -1,397            | 3,004          | 214        |
|                         | 2017        | 2,928          | 33            | 50             | 453               | 2,458          | 173        |
|                         | 2018        | 3,348          | 30            | 98             | 272               | 3,008          | 208        |
|                         | 2019        | 3,076          | 11            | 115            | 61                | 2,911          | 199        |
| <b>America, North</b>   | <b>2016</b> | <b>327,054</b> | <b>22,187</b> | <b>82,167</b>  | <b>-26,181</b>    | <b>293,255</b> | <b>512</b> |
|                         | <b>2017</b> | <b>356,058</b> | <b>22,924</b> | <b>111,092</b> | <b>-11,198</b>    | <b>279,088</b> | <b>483</b> |
|                         | <b>2018</b> | <b>362,114</b> | <b>20,786</b> | <b>129,978</b> | <b>-10,608</b>    | <b>263,530</b> | <b>453</b> |
|                         | <b>2019</b> | <b>347,107</b> | <b>24,064</b> | <b>113,820</b> | <b>21,774</b>     | <b>235,576</b> | <b>402</b> |
| Bermuda                 | 2016        | ..             | 0             | ..             | ..                | 0              | 0          |
|                         | 2017        | ..             | 0             | ..             | ..                | 0              | 1          |
|                         | 2018        | ..             | 0             | ..             | ..                | 0              | 0          |
|                         | 2019        | ..             | 0             | ..             | ..                | 0              | 0          |

**Table 5****Production, trade and supply of hard coal**

Thousand metric tons and kilograms per capita

| Country or area          | Year        | Production     | Imports       | Exports        | Changes in stocks | Supply        |            |
|--------------------------|-------------|----------------|---------------|----------------|-------------------|---------------|------------|
|                          |             |                |               |                |                   | Total         | Per capita |
| Canada                   | 2016        | 27,761         | 5,047         | 30,382         | -2,938            | 5,364         | 147        |
|                          | 2017        | 31,221         | 6,075         | 30,967         | 531               | 5,798         | 158        |
|                          | 2018        | 32,394         | 6,303         | 32,047         | 1,875             | 4,775         | 129        |
|                          | 2019        | 33,942         | 7,065         | 34,649         | 296               | 6,062         | 162        |
| Costa Rica               | 2016        | ..             | 1             | ..             | ..                | 1             | 0          |
|                          | 2017        | ..             | 7             | ..             | ..                | 7             | 1          |
|                          | 2018        | ..             | 0             | ..             | ..                | 0             | 0          |
|                          | 2019        | ..             | 0             | ..             | ..                | 0             | 0          |
| Cuba                     | 2016        | ..             | 2             | ..             | ..                | 2             | 0          |
|                          | 2017        | ..             | 4             | ..             | ..                | 4             | 0          |
|                          | 2018        | ..             | 4             | ..             | ..                | 4             | 0          |
|                          | 2019        | ..             | 1             | ..             | ..                | 1             | 0          |
| Dominican Republic       | 2016        | ..             | 1,122         | ..             | 39                | 1,084         | 104        |
|                          | 2017        | ..             | 1,255         | ..             | -5                | 1,260         | 120        |
|                          | 2018        | ..             | 1,263         | ..             | 24                | 1,238         | 117        |
|                          | 2019        | ..             | 1,207         | ..             | -23               | 1,230         | 115        |
| Guatemala                | 2016        | ..             | 2,045         | ..             | 242               | 1,803         | 109        |
|                          | 2017        | ..             | 1,633         | ..             | 137               | 1,496         | 88         |
|                          | 2018        | ..             | 1,807         | ..             | 40                | 1,767         | 102        |
|                          | 2019        | ..             | 2,542         | ..             | 817               | 1,725         | 98         |
| Honduras                 | 2016        | ..             | 58            | ..             | ..                | 58            | 6          |
|                          | 2017        | ..             | 1             | ..             | ..                | 1             | 0          |
|                          | 2018        | ..             | ..            | ..             | ..                | ..            | ..         |
|                          | 2019        | ..             | ..            | ..             | ..                | ..            | ..         |
| Jamaica                  | 2016        | ..             | 98            | ..             | 1                 | 98            | 34         |
|                          | 2017        | ..             | 96            | ..             | 14                | 82            | 28         |
|                          | 2018        | ..             | 106           | ..             | 19                | 87            | 30         |
|                          | 2019        | ..             | 87            | ..             | -14               | 101           | 34         |
| Mexico                   | 2016        | 4,437          | 6,656         | 2              | 3                 | 11,088        | 90         |
|                          | 2017        | 4,605          | 8,178         | 3              | -915              | 13,695        | 110        |
|                          | 2018        | 3,930          | 7,271         | 5              | 111               | 11,085        | 88         |
|                          | 2019        | 3,303          | 8,085         | 5              | -121              | 11,504        | 90         |
| Panama                   | 2016        | ..             | 313           | ..             | ..                | 313           | 78         |
|                          | 2017        | ..             | 87            | ..             | ..                | 87            | 21         |
|                          | 2018        | ..             | 219           | ..             | ..                | 219           | 52         |
|                          | 2019        | ..             | 897           | ..             | ..                | 897           | 211        |
| United States            | 2016        | 294,856        | 6,845         | 51,783         | -23,527           | 273,445       | 847        |
|                          | 2017        | 320,232        | 5,588         | 80,122         | -10,959           | 256,657       | 790        |
|                          | 2018        | 325,790        | 3,813         | 97,926         | -12,677           | 244,354       | 747        |
|                          | 2019        | 309,862        | 4,180         | 79,166         | 20,820            | 214,056       | 650        |
| <b>America, South</b>    | <b>2016</b> | <b>101,236</b> | <b>33,283</b> | <b>85,068</b>  | <b>-1,328</b>     | <b>50,779</b> | <b>122</b> |
|                          | <b>2017</b> | <b>98,614</b>  | <b>34,794</b> | <b>104,344</b> | <b>-20,650</b>    | <b>49,714</b> | <b>118</b> |
|                          | <b>2018</b> | <b>91,855</b>  | <b>34,477</b> | <b>84,805</b>  | <b>-7,451</b>     | <b>48,977</b> | <b>116</b> |
|                          | <b>2019</b> | <b>91,860</b>  | <b>33,273</b> | <b>75,720</b>  | <b>-673</b>       | <b>50,086</b> | <b>117</b> |
| Argentina                | 2016        | 24             | 1,602         | 9              | -16               | 1,633         | 38         |
|                          | 2017        | 20             | 1,510         | 0              | -131              | 1,661         | 38         |
|                          | 2018        | 60             | 1,696         | 2              | 86                | 1,668         | 38         |
|                          | 2019        | 105            | 933           | 59             | 221               | 758           | 17         |
| Bolivia (Plur. State of) | 2016        | ..             | 6             | ..             | ..                | 6             | 1          |
|                          | 2017        | ..             | 10            | ..             | ..                | 10            | 1          |
|                          | 2018        | ..             | 8             | ..             | ..                | 8             | 1          |
|                          | 2019        | ..             | 9             | ..             | ..                | 9             | 1          |



Table 5

## Production, trade and supply of hard coal

Thousand metric tons and kilograms per capita

| Country or area           | Year        | Production       | Imports          | Exports        | Changes in stocks | Supply           |              |
|---------------------------|-------------|------------------|------------------|----------------|-------------------|------------------|--------------|
|                           |             |                  |                  |                |                   | Total            | Per capita   |
| Brazil                    | 2016        | 7,006            | 19,503           | ..             | 860               | 25,649           | 124          |
|                           | 2017        | 4,819            | 21,207           | ..             | 162               | 25,864           | 124          |
|                           | 2018        | 4,838            | 20,986           | ..             | 409               | 25,415           | 121          |
|                           | 2019        | 5,410            | 18,859           | ..             | 51                | 24,218           | 115          |
| Chile                     | 2016        | 2,525            | 11,585           | 870            | 281               | 12,959           | 712          |
|                           | 2017        | 2,425            | 11,595           | 914            | -131              | 13,237           | 717          |
|                           | 2018        | 2,257            | 11,463           | 422            | 220               | 13,077           | 698          |
|                           | 2019        | 1,427            | 13,107           | ..             | -296              | 14,830           | 783          |
| Colombia                  | 2016        | 90,512           | 0                | 83,326         | -2,007            | 9,193            | 191          |
|                           | 2017        | 90,549           | 0                | 102,689        | -19,964           | 7,824            | 160          |
|                           | 2018        | 84,284           | 0                | 83,593         | -7,165            | 7,856            | 158          |
|                           | 2019        | 84,343           | 0                | 74,696         | 370               | 9,277            | 184          |
| Paraguay                  | 2016        | ..               | 2                | ..             | ..                | 2                | 0            |
|                           | 2017        | ..               | 1                | ..             | ..                | 1                | 0            |
|                           | 2018        | ..               | 5                | ..             | ..                | 5                | 1            |
|                           | 2019        | ..               | 2                | ..             | ..                | 2                | 0            |
| Peru                      | 2016        | 269              | 585              | 165            | -446              | 1,135            | 37           |
|                           | 2017        | 301              | 471              | 353            | -586              | 1,005            | 32           |
|                           | 2018        | 216              | 319              | 633            | -1,001            | 903              | 28           |
|                           | 2019        | 181              | 364              | 630            | -1,019            | 933              | 29           |
| Venezuela (Bolivar. Rep.) | 2016        | 900              | ..               | 698            | ..                | 202              | 7            |
|                           | 2017        | 500              | ..               | 388            | ..                | 112              | 4            |
|                           | 2018        | 200              | ..               | 155            | ..                | 45               | 2            |
|                           | 2019        | 394              | ..               | 334            | ..                | 60               | 2            |
| <b>Asia</b>               | <b>2016</b> | <b>4,734,523</b> | <b>959,217</b>   | <b>452,662</b> | <b>-135,424</b>   | <b>5,376,503</b> | <b>1,201</b> |
|                           | <b>2017</b> | <b>4,884,668</b> | <b>1,012,438</b> | <b>461,639</b> | <b>-56,157</b>    | <b>5,491,623</b> | <b>1,215</b> |
|                           | <b>2018</b> | <b>5,198,049</b> | <b>1,060,210</b> | <b>495,060</b> | <b>35,905</b>     | <b>5,727,294</b> | <b>1,256</b> |
|                           | <b>2019</b> | <b>5,422,958</b> | <b>1,114,182</b> | <b>524,074</b> | <b>70,063</b>     | <b>5,943,003</b> | <b>1,292</b> |
| Afghanistan               | 2016        | 1,698            | ..               | 733            | ..                | 965              | 27           |
|                           | 2017        | 2,191            | ..               | 1,014          | ..                | 1,177            | 32           |
|                           | 2018        | 2,445            | ..               | 1,117          | ..                | 1,328            | 36           |
|                           | 2019        | 2,139            | 1                | 772            | ..                | 1,368            | 36           |
| Armenia                   | 2016        | ..               | 1                | ..             | ..                | 1                | 0            |
|                           | 2017        | ..               | 1                | ..             | ..                | 1                | 0            |
|                           | 2018        | ..               | 1                | ..             | ..                | 1                | 0            |
|                           | 2019        | ..               | 4                | ..             | ..                | 4                | 1            |
| Azerbaijan                | 2016        | ..               | 1                | ..             | -1                | 2                | 0            |
|                           | 2017        | ..               | 2                | ..             | 0                 | 2                | 0            |
|                           | 2018        | ..               | 1                | ..             | ..                | 1                | 0            |
|                           | 2019        | ..               | 1                | ..             | 0                 | 1                | 0            |
| Bangladesh                | 2016        | 1,022            | 2,184            | ..             | ..                | 3,206            | 20           |
|                           | 2017        | 1,161            | 2,614            | ..             | ..                | 3,775            | 24           |
|                           | 2018        | 923              | 3,395            | ..             | ..                | 4,318            | 27           |
|                           | 2019        | 923              | 6,997            | ..             | ..                | 7,920            | 49           |
| Bhutan                    | 2016        | 118              | ..               | 0              | ..                | 118              | 160          |
|                           | 2017        | 162              | ..               | 19             | ..                | 143              | 191          |
|                           | 2018        | 187              | ..               | 27             | ..                | 160              | 212          |
|                           | 2019        | 185              | ..               | 26             | ..                | 159              | 209          |
| China                     | 2016        | 3,410,604        | 255,553          | 8,790          | -127,576          | 3,784,943        | 2,677        |
|                           | 2017        | 3,523,562        | 270,933          | 8,088          | -48,390           | 3,834,797        | 2,699        |
|                           | 2018        | 3,697,736        | 282,098          | 4,936          | 26,418            | 3,948,480        | 2,766        |
|                           | 2019        | 3,846,330        | 299,770          | 6,030          | 84,700            | 4,055,370        | 2,828        |

Table 5

## Production, trade and supply of hard coal

Thousand metric tons and kilograms per capita

| Country or area        | Year | Production | Imports | Exports | Changes in stocks | Supply    |            |
|------------------------|------|------------|---------|---------|-------------------|-----------|------------|
|                        |      |            |         |         |                   | Total     | Per capita |
| China, Hong Kong SAR   | 2016 | ..         | 11,161  | 0       | 531               | 10,630    | 1,468      |
|                        | 2017 | ..         | 10,503  | ..      | 545               | 9,958     | 1,363      |
|                        | 2018 | ..         | 10,884  | ..      | 658               | 10,226    | 1,387      |
|                        | 2019 | ..         | 10,035  | ..      | 241               | 9,794     | 1,317      |
| Cyprus                 | 2016 | ..         | 0       | ..      | 0                 | 0         | 0          |
|                        | 2017 | ..         | 17      | ..      | 11                | 5         | 4          |
|                        | 2018 | ..         | 22      | ..      | -1                | 23        | 19         |
|                        | 2019 | ..         | 32      | ..      | 5                 | 28        | 23         |
| Georgia                | 2016 | ..         | 104     | 0       | 9                 | 95        | 24         |
|                        | 2017 | ..         | 162     | 0       | 18                | 144       | 36         |
|                        | 2018 | ..         | 258     | ..      | 32                | 226       | 56         |
|                        | 2019 | ..         | 254     | ..      | 9                 | 245       | 61         |
| India                  | 2016 | 657,868    | 190,953 | 1,773   | -11,924           | 858,972   | 649        |
|                        | 2017 | 675,400    | 208,273 | 1,503   | -15,905           | 898,075   | 671        |
|                        | 2018 | 728,720    | 235,240 | 1,313   | 4,401             | 958,246   | 708        |
|                        | 2019 | 730,873    | 248,537 | 1,047   | -23,791           | 1,002,154 | 733        |
| Indonesia              | 2016 | 456,000    | 3,564   | 369,576 | -456              | 90,444    | 346        |
|                        | 2017 | 461,000    | 4,352   | 389,538 | 355               | 75,459    | 285        |
|                        | 2018 | 548,000    | 5,358   | 429,061 | -1,030            | 125,327   | 468        |
|                        | 2019 | 616,167    | 6,770   | 459,136 | 3,774             | 160,027   | 591        |
| Iran (Islamic Rep. of) | 2016 | 1,115      | 334     | 103     | ..                | 1,346     | 17         |
|                        | 2017 | 1,521      | 362     | 68      | ..                | 1,815     | 22         |
|                        | 2018 | 1,646      | 302     | 228     | ..                | 1,720     | 21         |
|                        | 2019 | 1,515      | 170     | 193     | ..                | 1,492     | 18         |
| Israel                 | 2016 | ..         | 8,795   | ..      | -390              | 9,185     | 1,133      |
|                        | 2017 | ..         | 8,516   | ..      | 237               | 8,279     | 1,004      |
|                        | 2018 | ..         | 7,721   | ..      | -259              | 7,980     | 952        |
|                        | 2019 | ..         | 8,417   | ..      | 454               | 7,963     | 935        |
| Japan                  | 2016 | 1,288      | 189,434 | 2       | ..                | 190,720   | 1,493      |
|                        | 2017 | 1,328      | 191,103 | 3       | ..                | 192,428   | 1,509      |
|                        | 2018 | 964        | 188,548 | 32      | ..                | 189,480   | 1,490      |
|                        | 2019 | 775        | 186,892 | 4       | ..                | 187,664   | 1,479      |
| Jordan                 | 2016 | ..         | 326     | ..      | ..                | 326       | 34         |
|                        | 2017 | ..         | 196     | ..      | ..                | 196       | 20         |
|                        | 2018 | ..         | 264     | ..      | ..                | 264       | 26         |
|                        | 2019 | ..         | 260     | ..      | ..                | 260       | 26         |
| Kazakhstan             | 2016 | 97,324     | 24      | 23,789  | -1,974            | 75,532    | 4,236      |
|                        | 2017 | 106,199    | 4       | 26,986  | -2,053            | 81,270    | 4,495      |
|                        | 2018 | 101,086    | 441     | 23,877  | -448              | 78,097    | 4,263      |
|                        | 2019 | 98,593     | 288     | 22,615  | 786               | 75,480    | 4,069      |
| Korea, Dem.Ppl's.Rep.  | 2016 | 28,305     | 1,240   | 22,586  | ..                | 6,959     | 275        |
|                        | 2017 | 19,739     | 706     | 2,671   | ..                | 17,774    | 699        |
|                        | 2018 | 16,478     | ..      | ..      | ..                | 16,478    | 645        |
|                        | 2019 | 18,419     | 19      | ..      | ..                | 18,438    | 718        |
| Korea, Republic of     | 2016 | 1,726      | 127,892 | ..      | 1,277             | 128,341   | 2,517      |
|                        | 2017 | 1,486      | 129,113 | ..      | -300              | 130,899   | 2,562      |
|                        | 2018 | 1,140      | 125,750 | ..      | -335              | 127,225   | 2,486      |
|                        | 2019 | 1,086      | 127,380 | ..      | 851               | 127,615   | 2,491      |
| Kyrgyzstan             | 2016 | 248        | 794     | 250     | -119              | 911       | 150        |
|                        | 2017 | 247        | 926     | 208     | 44                | 921       | 149        |
|                        | 2018 | 324        | 819     | 394     | 2                 | 747       | 118        |
|                        | 2019 | 329        | 488     | 568     | -39               | 288       | 45         |

Table 5

## Production, trade and supply of hard coal

Thousand metric tons and kilograms per capita

| Country or area        | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|------------------------|------|------------|---------|---------|-------------------|--------|------------|
|                        |      |            |         |         |                   | Total  | Per capita |
| Lao People's Dem. Rep. | 2016 | 139        | ..      | ..      | ..                | 139    | 20         |
|                        | 2017 | 133        | ..      | ..      | ..                | 133    | 19         |
|                        | 2018 | 143        | ..      | ..      | ..                | 143    | 20         |
|                        | 2019 | 161        | ..      | ..      | ..                | 161    | 23         |
| Lebanon                | 2016 | ..         | *250    | ..      | ..                | *250   | *37        |
|                        | 2017 | ..         | *250    | ..      | ..                | *250   | *37        |
|                        | 2018 | ..         | *250    | ..      | ..                | *250   | *36        |
|                        | 2019 | ..         | *250    | ..      | ..                | *250   | *36        |
| Malaysia               | 2016 | 2,415      | 27,146  | 24      | -198              | 29,735 | 969        |
|                        | 2017 | 2,989      | 30,426  | 607     | -91               | 32,899 | 1,058      |
|                        | 2018 | 2,653      | 32,904  | 0       | 339               | 35,218 | 1,117      |
|                        | 2019 | 2,768      | 33,045  | 212     | ..                | 35,601 | 1,114      |
| Mongolia               | 2016 | 28,851     | 1       | 23,680  | -54               | 5,225  | 1,710      |
|                        | 2017 | 41,362     | 2       | 28,553  | 4,416             | 8,395  | 2,696      |
|                        | 2018 | 44,386     | 2       | 31,472  | 388               | 12,528 | 3,952      |
|                        | 2019 | 44,822     | 54      | 32,192  | ..                | 12,685 | 3,933      |
| Myanmar                | 2016 | 550        | ..      | 16      | ..                | 534    | 10         |
|                        | 2017 | 737        | ..      | 0       | ..                | 737    | 14         |
|                        | 2018 | 1,544      | ..      | ..      | ..                | 1,544  | 29         |
|                        | 2019 | 1,867      | ..      | ..      | ..                | 1,867  | 35         |
| Nepal                  | 2016 | 22         | 1,128   | ..      | ..                | 1,150  | 42         |
|                        | 2017 | 24         | 1,294   | ..      | ..                | 1,318  | 48         |
|                        | 2018 | 25         | 1,882   | ..      | ..                | 1,907  | 68         |
|                        | 2019 | 27         | 1,479   | ..      | ..                | 1,507  | 53         |
| Other Asia             | 2016 | ..         | 53,100  | 1       | -918              | 54,017 | 2,287      |
|                        | 2017 | ..         | 55,287  | 1       | -122              | 55,407 | 2,340      |
|                        | 2018 | ..         | 54,947  | 1       | -574              | 55,519 | 2,340      |
|                        | 2019 | ..         | 55,582  | 1       | 1,056             | 54,524 | 2,293      |
| Pakistan               | 2016 | 3,749      | 7,021   | ..      | ..                | 10,770 | 53         |
|                        | 2017 | 3,954      | 13,684  | ..      | ..                | 17,638 | 85         |
|                        | 2018 | 4,478      | 15,686  | ..      | ..                | 20,164 | 95         |
|                        | 2019 | 5,407      | 16,422  | ..      | ..                | 21,829 | 101        |
| Singapore              | 2016 | ..         | 692     | 1       | ..                | 691    | 122        |
|                        | 2017 | ..         | 1,458   | 1       | ..                | 1,458  | 255        |
|                        | 2018 | ..         | 776     | 1       | ..                | 775    | 135        |
|                        | 2019 | ..         | 743     | 0       | ..                | 743    | 128        |
| Sri Lanka              | 2016 | ..         | 2,405   | ..      | 323               | 2,082  | 99         |
|                        | 2017 | ..         | 2,527   | ..      | *370              | 2,157  | 102        |
|                        | 2018 | ..         | 2,166   | ..      | 82                | 2,084  | 98         |
|                        | 2019 | ..         | 2,389   | ..      | 164               | 2,224  | 104        |
| Tajikistan             | 2016 | 1,275      | 10      | 0       | ..                | 1,285  | 148        |
|                        | 2017 | 1,707      | 6       | 5       | ..                | 1,708  | 192        |
|                        | 2018 | 1,842      | 7       | 43      | ..                | 1,805  | 198        |
|                        | 2019 | 1,964      | 19      | 18      | ..                | 1,965  | 211        |
| Thailand               | 2016 | ..         | 22,581  | 34      | 4,972             | 17,575 | 255        |
|                        | 2017 | ..         | 23,262  | 45      | 3,805             | 19,412 | 280        |
|                        | 2018 | ..         | 25,739  | 84      | 6,448             | 19,207 | 277        |
|                        | 2019 | ..         | 22,463  | 59      | 2,176             | 20,228 | 291        |
| Turkey                 | 2016 | 1,313      | 36,216  | 61      | 444               | 37,024 | 464        |
|                        | 2017 | 1,234      | 38,251  | 100     | 506               | 38,879 | 479        |
|                        | 2018 | 1,102      | 38,329  | 85      | -200              | 39,546 | 480        |
|                        | 2019 | 1,206      | 38,141  | 57      | -997              | 40,288 | 483        |

Table 5

## Production, trade and supply of hard coal

Thousand metric tons and kilograms per capita

| Country or area        | Year        | Production     | Imports        | Exports        | Changes in stocks | Supply         |            |
|------------------------|-------------|----------------|----------------|----------------|-------------------|----------------|------------|
|                        |             |                |                |                |                   | Total          | Per capita |
| United Arab Emirates   | 2016        | ..             | 2,782          | 0              | ..                | 2,782          | 297        |
|                        | 2017        | ..             | 3,214          | 1              | ..                | 3,212          | 339        |
|                        | 2018        | ..             | 2,870          | 0              | ..                | 2,870          | 298        |
|                        | 2019        | ..             | 2,671          | 1              | ..                | 2,670          | 273        |
| Uzbekistan             | 2016        | 160            | 206            | 0              | -37               | 403            | 13         |
|                        | 2017        | 124            | 203            | 0              | -15               | 342            | 11         |
|                        | 2018        | 181            | 580            | ..             | -17               | 778            | 24         |
|                        | 2019        | 242            | 707            | ..             | -30               | 979            | 30         |
| Viet Nam               | 2016        | 38,735         | 13,199         | 1,243          | 667               | 50,024         | 534        |
|                        | 2017        | 38,409         | 14,677         | 2,229          | 411               | 50,446         | 533        |
|                        | 2018        | 42,047         | 22,856         | 2,388          | ..                | 62,515         | 654        |
|                        | 2019        | 47,158         | 43,770         | 1,143          | 705               | 89,080         | 923        |
| Yemen                  | 2016        | ..             | 122            | ..             | ..                | 122            | 4          |
|                        | 2017        | ..             | 116            | ..             | ..                | 116            | 4          |
|                        | 2018        | ..             | 117            | ..             | ..                | 117            | 4          |
|                        | 2019        | ..             | 134            | ..             | ..                | 134            | 5          |
| <b>Europe</b>          | <b>2016</b> | <b>420,736</b> | <b>209,754</b> | <b>181,172</b> | <b>-14,481</b>    | <b>463,798</b> | <b>621</b> |
|                        | <b>2017</b> | <b>416,826</b> | <b>222,126</b> | <b>192,462</b> | <b>4,967</b>      | <b>441,524</b> | <b>591</b> |
|                        | <b>2018</b> | <b>458,944</b> | <b>216,669</b> | <b>228,159</b> | <b>5,660</b>      | <b>441,795</b> | <b>590</b> |
|                        | <b>2019</b> | <b>450,673</b> | <b>182,022</b> | <b>217,447</b> | <b>17,821</b>     | <b>397,427</b> | <b>530</b> |
| Albania                | 2016        | 4              | 81             | ..             | ..                | 85             | 30         |
|                        | 2017        | 46             | 107            | 30             | ..                | 123            | 43         |
|                        | 2018        | 98             | 129            | 2              | ..                | 224            | 78         |
|                        | 2019        | 31             | 116            | ..             | ..                | 148            | 51         |
| Andorra                | 2016        | ..             | 0              | ..             | ..                | 0              | *2         |
|                        | 2017        | ..             | 0              | ..             | ..                | 0              | *2         |
|                        | 2018        | ..             | 0              | ..             | ..                | 0              | *1         |
|                        | 2019        | ..             | 0              | ..             | ..                | 0              | *2         |
| Austria                | 2016        | ..             | 3,282          | 0              | -249              | 3,531          | 404        |
|                        | 2017        | ..             | 3,387          | 1              | 5                 | 3,381          | 383        |
|                        | 2018        | ..             | 3,087          | 3              | -144              | 3,228          | 363        |
|                        | 2019        | ..             | 3,078          | 0              | -48               | 3,126          | 349        |
| Belarus                | 2016        | ..             | 724            | 36             | 70                | 618            | 65         |
|                        | 2017        | ..             | 762            | 167            | -49               | 644            | 68         |
|                        | 2018        | ..             | 1,652          | 854            | 153               | 645            | 68         |
|                        | 2019        | ..             | 4,015          | 3,243          | 23                | 749            | 79         |
| Belgium                | 2016        | 14             | 3,531          | 65             | -223              | 3,703          | 326        |
|                        | 2017        | 16             | 3,427          | 81             | -210              | 3,572          | 313        |
|                        | 2018        | 16             | 3,832          | 46             | 232               | 3,570          | 311        |
|                        | 2019        | 13             | 3,707          | 85             | 120               | 3,515          | 305        |
| Bosnia and Herzegovina | 2016        | ..             | 1,302          | 0              | 64                | 1,238          | 366        |
|                        | 2017        | ..             | 1,361          | 0              | 91                | 1,270          | 379        |
|                        | 2018        | ..             | 1,457          | ..             | 0                 | 1,457          | 438        |
|                        | 2019        | ..             | 1,531          | ..             | 180               | 1,351          | 409        |
| Bulgaria               | 2016        | 52             | 762            | 0              | -87               | 901            | 126        |
|                        | 2017        | 41             | 898            | 0              | 15                | 924            | 130        |
|                        | 2018        | 334            | 836            | ..             | 166               | 1,004          | 142        |
|                        | 2019        | 303            | 558            | ..             | -96               | 958            | 137        |
| Croatia                | 2016        | ..             | 1,045          | ..             | 25                | 1,020          | 242        |
|                        | 2017        | ..             | 590            | ..             | 5                 | 584            | 140        |
|                        | 2018        | ..             | 499            | ..             | -50               | 549            | 132        |
|                        | 2019        | ..             | 710            | ..             | 51                | 658            | 159        |

Table 5

## Production, trade and supply of hard coal

Thousand metric tons and kilograms per capita

| Country or area | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|-----------------|------|------------|---------|---------|-------------------|--------|------------|
|                 |      |            |         |         |                   | Total  | Per capita |
| Czechia         | 2016 | 7,015      | 3,565   | 3,516   | -824              | 7,888  | 743        |
|                 | 2017 | 5,601      | 3,844   | 2,414   | -108              | 7,138  | 671        |
|                 | 2018 | 4,562      | 3,809   | 1,954   | -140              | 6,557  | 615        |
|                 | 2019 | 3,540      | 3,780   | 1,435   | 357               | 5,529  | 517        |
| Denmark         | 2016 | ..         | 2,886   | 21      | -522              | 3,387  | 593        |
|                 | 2017 | ..         | 3,074   | ..      | 423               | 2,651  | 462        |
|                 | 2018 | ..         | 2,756   | 17      | 54                | 2,685  | 467        |
|                 | 2019 | ..         | 2,387   | 46      | 817               | 1,525  | 264        |
| Estonia         | 2016 | ..         | 23      | ..      | -4                | 27     | 21         |
|                 | 2017 | ..         | 45      | ..      | -3                | 48     | 36         |
|                 | 2018 | ..         | 44      | ..      | -6                | 50     | 38         |
|                 | 2019 | ..         | 49      | ..      | -2                | 50     | 38         |
| Finland         | 2016 | ..         | 4,012   | ..      | -522              | 4,534  | 825        |
|                 | 2017 | ..         | 3,970   | ..      | -445              | 4,415  | 801        |
|                 | 2018 | ..         | 4,109   | ..      | -32               | 4,141  | 750        |
|                 | 2019 | ..         | 3,152   | ..      | -146              | 3,298  | 596        |
| France          | 2016 | ..         | 12,566  | ..      | -1,036            | 13,602 | 203        |
|                 | 2017 | ..         | 14,956  | ..      | 96                | 14,859 | 222        |
|                 | 2018 | ..         | 13,364  | ..      | 181               | 13,183 | 196        |
|                 | 2019 | ..         | 10,225  | ..      | -116              | 10,340 | 153        |
| Germany         | 2016 | 4,078      | 57,757  | 278     | 1,067             | 60,490 | 736        |
|                 | 2017 | 3,836      | 50,486  | 222     | 552               | 53,548 | 648        |
|                 | 2018 | 2,761      | 44,816  | 202     | -3,322            | 50,697 | 610        |
|                 | 2019 | 0          | 40,993  | 462     | 1,979             | 38,552 | 462        |
| Greece          | 2016 | ..         | 312     | ..      | -21               | 333    | 31         |
|                 | 2017 | ..         | 411     | ..      | 35                | 376    | 36         |
|                 | 2018 | ..         | 379     | ..      | -55               | 434    | 41         |
|                 | 2019 | ..         | 327     | ..      | 15                | 311    | 30         |
| Hungary         | 2016 | ..         | 1,384   | ..      | -17               | 1,401  | 144        |
|                 | 2017 | ..         | 1,545   | ..      | 27                | 1,518  | 156        |
|                 | 2018 | ..         | 1,542   | ..      | 41                | 1,501  | 155        |
|                 | 2019 | ..         | 1,366   | ..      | -16               | 1,382  | 143        |
| Iceland         | 2016 | ..         | 125     | ..      | ..                | 125    | 376        |
|                 | 2017 | ..         | 127     | ..      | ..                | 127    | 380        |
|                 | 2018 | ..         | 149     | ..      | ..                | 149    | 441        |
|                 | 2019 | ..         | 150     | ..      | ..                | 150    | 441        |
| Ireland         | 2016 | ..         | 1,951   | 10      | -338              | 2,279  | 485        |
|                 | 2017 | ..         | 2,068   | 12      | 187               | 1,869  | 393        |
|                 | 2018 | ..         | 1,449   | ..      | 161               | 1,288  | 267        |
|                 | 2019 | ..         | 315     | ..      | -260              | 574    | 118        |
| Italy           | 2016 | 0          | 16,577  | 0       | -337              | 16,914 | 279        |
|                 | 2017 | ..         | 15,226  | 0       | 40                | 15,186 | 250        |
|                 | 2018 | ..         | 14,149  | 3       | 170               | 13,976 | 230        |
|                 | 2019 | ..         | 10,261  | ..      | -165              | 10,426 | 172        |
| Kosovo          | 2016 | ..         | 2       | 0       | ..                | 2      | 1          |
|                 | 2017 | ..         | 2       | ..      | ..                | 2      | 1          |
|                 | 2018 | ..         | 1       | ..      | ..                | 1      | 1          |
|                 | 2019 | ..         | 1       | ..      | ..                | 1      | 0          |
| Latvia          | 2016 | ..         | 67      | 6       | -10               | 71     | 36         |
|                 | 2017 | ..         | 68      | 6       | -8                | 70     | 36         |
|                 | 2018 | ..         | 82      | 10      | -7                | 78     | 41         |
|                 | 2019 | ..         | 79      | 5       | 7                 | 67     | 35         |

Table 5

## Production, trade and supply of hard coal

Thousand metric tons and kilograms per capita

| Country or area     | Year | Production | Imports | Exports  | Changes in stocks | Supply  |            |
|---------------------|------|------------|---------|----------|-------------------|---------|------------|
|                     |      |            |         |          |                   | Total   | Per capita |
| Lithuania           | 2016 | ..         | 225     | 0        | -21               | 246     | 85         |
|                     | 2017 | ..         | 272     | ..       | 22                | 250     | 88         |
|                     | 2018 | ..         | 262     | ..       | -3                | 265     | 95         |
|                     | 2019 | ..         | 285     | ..       | 24                | 261     | 95         |
| Luxembourg          | 2016 | ..         | 81      | ..       | ..                | 81      | 140        |
|                     | 2017 | ..         | 68      | ..       | ..                | 68      | 114        |
|                     | 2018 | ..         | 63      | ..       | ..                | 63      | 105        |
|                     | 2019 | ..         | 64      | ..       | ..                | 64      | 104        |
| Netherlands         | 2016 | ..         | 16,350  | ..       | -127              | 16,477  | 970        |
|                     | 2017 | ..         | 14,871  | ..       | 188               | 14,683  | 863        |
|                     | 2018 | ..         | 13,024  | ..       | -58               | 13,082  | 767        |
|                     | 2019 | ..         | 10,367  | ..       | 187               | 10,180  | 595        |
| North Macedonia     | 2016 | ..         | 27      | 0        | -3                | 29      | 14         |
|                     | 2017 | ..         | 33      | 0        | 0                 | 33      | 16         |
|                     | 2018 | ..         | 101     | 1        | 10                | 91      | 44         |
|                     | 2019 | ..         | 81      | 0        | -2                | 84      | 40         |
| Norway              | 2016 | 818        | 660     | 912      | -146              | 712     | 136        |
|                     | 2017 | 131        | 781     | 75       | 5                 | 832     | 157        |
|                     | 2018 | 150        | 746     | 113      | -10               | 793     | 149        |
|                     | 2019 | 121        | 794     | 79       | 7                 | 829     | 154        |
| Poland              | 2016 | 70,783     | 8,279   | 9,076    | -4,732            | 74,718  | 1,967      |
|                     | 2017 | 65,975     | 12,803  | 7,036    | -2,043            | 73,785  | 1,944      |
|                     | 2018 | 63,857     | 19,195  | 4,857    | 3,360             | 74,834  | 1,973      |
|                     | 2019 | 62,081     | 16,623  | 4,373    | 5,558             | 68,774  | 1,815      |
| Portugal            | 2016 | ..         | 4,911   | ..       | 110               | 4,801   | 465        |
|                     | 2017 | ..         | 5,712   | ..       | 304               | 5,408   | 526        |
|                     | 2018 | ..         | 4,497   | ..       | -50               | 4,546   | 443        |
|                     | 2019 | ..         | 2,575   | ..       | 469               | 2,106   | 206        |
| Republic of Moldova | 2016 | ..         | 99      | ..       | -26               | 125     | 31         |
|                     | 2017 | ..         | 200     | ..       | 24                | 176     | 43         |
|                     | 2018 | ..         | 144     | ..       | 7                 | 137     | 34         |
|                     | 2019 | ..         | 147     | ..       | -16               | 163     | 40         |
| Romania             | 2016 | ..         | 157     | 0        | 21                | 136     | 7          |
|                     | 2017 | ..         | 194     | 0        | 4                 | 190     | 10         |
|                     | 2018 | ..         | 186     | ..       | 6                 | 180     | 9          |
|                     | 2019 | ..         | 161     | ..       | -4                | 164     | 8          |
| Russian Federation  | 2016 | 292,862    | *21,723 | 165,835  | 698               | 148,052 | 1,019      |
|                     | 2017 | 312,811    | *26,722 | 181,022  | 9,643             | 148,868 | 1,023      |
|                     | 2018 | 358,614    | *26,065 | *219,125 | 7,430             | 158,124 | 1,085      |
|                     | 2019 | 357,564    | *21,923 | 205,394  | 6,905             | 167,189 | 1,146      |
| Serbia              | 2016 | ..         | 179     | 0        | -10               | 189     | 27         |
|                     | 2017 | ..         | 151     | ..       | 1                 | 150     | 21         |
|                     | 2018 | ..         | 260     | ..       | -2                | 262     | 37         |
|                     | 2019 | ..         | 253     | ..       | -4                | 257     | 37         |
| Slovakia            | 2016 | ..         | 3,557   | ..       | -109              | 3,666   | 674        |
|                     | 2017 | ..         | 3,808   | ..       | 4                 | 3,804   | 698        |
|                     | 2018 | ..         | 3,962   | ..       | 42                | 3,920   | 719        |
|                     | 2019 | ..         | 3,344   | ..       | 92                | 3,252   | 596        |
| Slovenia            | 2016 | ..         | 13      | 0        | 2                 | 11      | 5          |
|                     | 2017 | ..         | 11      | ..       | 0                 | 11      | 5          |
|                     | 2018 | ..         | 10      | ..       | -1                | 11      | 5          |
|                     | 2019 | ..         | 11      | ..       | 0                 | 11      | 5          |

Table 5

## Production, trade and supply of hard coal

Thousand metric tons and kilograms per capita

| Country or area | Year        | Production     | Imports      | Exports        | Changes in stocks | Supply        |            |
|-----------------|-------------|----------------|--------------|----------------|-------------------|---------------|------------|
|                 |             |                |              |                |                   | Total         | Per capita |
| Spain           | 2016        | 1,070          | 13,830       | 453            | -3,365            | 17,812        | 382        |
|                 | 2017        | 1,161          | 19,089       | 264            | -1,235            | 21,221        | 455        |
|                 | 2018        | 771            | 15,773       | 276            | -2,668            | 18,936        | 406        |
|                 | 2019        | ..             | 8,586        | 1,525          | -580              | 7,641         | 163        |
| Sweden          | 2016        | ..             | 3,100        | 0              | 427               | 2,673         | 272        |
|                 | 2017        | ..             | 2,731        | ..             | 130               | 2,601         | 263        |
|                 | 2018        | ..             | 2,718        | ..             | -78               | 2,796         | 280        |
|                 | 2019        | ..             | 2,368        | ..             | -51               | 2,419         | 241        |
| Switzerland     | 2016        | ..             | 47           | ..             | -4                | 51            | 6          |
|                 | 2017        | ..             | 52           | 0              | -2                | 53            | 6          |
|                 | 2018        | ..             | 15           | 0              | -38               | 53            | 6          |
|                 | 2019        | ..             | 29           | 0              | -19               | 48            | 6          |
| Ukraine         | 2016        | 39,862         | 15,648       | 520            | 1,142             | 53,848        | 1,204      |
|                 | 2017        | 24,167         | 19,778       | 636            | 645               | 42,664        | 959        |
|                 | 2018        | 25,202         | 21,387       | 63             | 140               | 46,386        | 1,048      |
|                 | 2019        | 24,854         | 21,082       | 61             | 2,571             | 43,304        | 984        |
| United Kingdom  | 2016        | 4,178          | 8,914        | 444            | -5,374            | 18,022        | 272        |
|                 | 2017        | 3,041          | 8,497        | 495            | -3,378            | 14,421        | 216        |
|                 | 2018        | 2,580          | 10,121       | 634            | 168               | 11,899        | 177        |
|                 | 2019        | 2,166          | 6,529        | 740            | -16               | 7,971         | 118        |
| <b>Oceania</b>  | <b>2016</b> | <b>413,961</b> | <b>1,186</b> | <b>390,488</b> | <b>-6,913</b>     | <b>31,572</b> | <b>781</b> |
|                 | <b>2017</b> | <b>415,891</b> | <b>1,222</b> | <b>380,080</b> | <b>4,859</b>      | <b>32,174</b> | <b>785</b> |
|                 | <b>2018</b> | <b>412,253</b> | <b>1,425</b> | <b>383,194</b> | <b>-2,722</b>     | <b>33,206</b> | <b>799</b> |
|                 | <b>2019</b> | <b>435,273</b> | <b>1,323</b> | <b>394,374</b> | <b>8,931</b>      | <b>33,291</b> | <b>790</b> |
| Australia       | 2016        | 412,756        | 30           | 389,301        | -6,884            | 30,369        | 1,252      |
|                 | 2017        | 414,679        | 103          | 378,938        | 5,003             | 30,841        | 1,254      |
|                 | 2018        | 410,934        | 228          | 381,944        | -2,807            | 32,025        | 1,286      |
|                 | 2019        | 433,982        | 182          | 392,934        | 9,126             | 32,104        | 1,274      |
| New Caledonia   | 2016        | ..             | 1,082        | ..             | 51                | 1,031         | 3,759      |
|                 | 2017        | ..             | 1,045        | ..             | -119              | 1,164         | 4,199      |
|                 | 2018        | ..             | 1,122        | ..             | 61                | 1,061         | 3,790      |
|                 | 2019        | ..             | 1,028        | ..             | -27               | 1,056         | 3,733      |
| New Zealand     | 2016        | 1,205          | 74           | 1,187          | -80               | 172           | 37         |
|                 | 2017        | 1,212          | 74           | 1,142          | -25               | 170           | 36         |
|                 | 2018        | 1,319          | 75           | 1,250          | 24                | 120           | 25         |
|                 | 2019        | 1,291          | 112          | 1,440          | -168              | 131           | 27         |

Table 6

**International trade of hard coal**  
**(Principal importers/exporters)**

Thousand metric tons

**2018**

| Importers            | Exporters |           |        |       |          |           |
|----------------------|-----------|-----------|--------|-------|----------|-----------|
|                      | World     | Australia | Canada | China | Colombia | Indonesia |
| Austria              | 3,087     | 190       | ..     | ..    | 22       | ..        |
| Belgium              | 3,832     | 1,189     | ..     | ..    | 17       | ..        |
| Brazil               | 20,986    | 5,805     | 855    | ..    | *2,578   | ..        |
| Canada               | 6,303     | ..        | ..     | ..    | 1,234    | ..        |
| Chile                | 11,463    | 1,027     | 194    | ..    | 8,202    | ..        |
| China                | 282,098   | 88,712    | 3,129  | ..    | 334      | 37,612    |
| China, Hong Kong SAR | 10,884    | 306       | 123    | ..    | ..       | 8,889     |
| Denmark              | 2,756     | ..        | ..     | ..    | 247      | ..        |
| Finland              | 4,109     | 130       | 600    | ..    | 5        | ..        |
| France               | 13,364    | 3,794     | 91     | 18    | 1,565    | ..        |
| Germany              | 44,816    | 5,162     | 1,552  | 10    | 3,786    | ..        |
| India                | 235,240   | 48,170    | 4,453  | 44    | 509      | 103,346   |
| Israel               | 7,721     | ..        | ..     | ..    | ..       | ..        |
| Italy                | 14,149    | 436       | 210    | ..    | 2,847    | 859       |
| Japan                | 188,548   | 118,027   | 3,207  | 1,549 | 822      | 30,987    |
| Korea, Republic of   | 125,750   | 47,555    | 9,108  | 2,357 | 2,431    | 30,168    |
| Malaysia             | 32,904    | 6,215     | 81     | 144   | 88       | *24,298   |
| Mexico               | 7,271     | ..        | ..     | 4     | 5,531    | ..        |
| Morocco              | 8,459     | ..        | ..     | ..    | 71       | ..        |
| Netherlands          | 13,024    | 2,160     | 129    | 9     | 1,097    | 72        |
| Pakistan             | 15,686    | ..        | 59     | 5     | 100      | 3,399     |
| Poland               | 19,195    | 1,478     | 214    | 3     | 1,460    | 18        |
| Portugal             | 4,497     | ..        | 45     | ..    | 3,684    | ..        |
| Russian Federation   | 26,065    | ..        | ..     | ..    | 45       | ..        |
| Slovakia             | 3,962     | ..        | 364    | ..    | 35       | ..        |
| Spain                | 15,773    | 1,334     | 73     | 11    | 3,421    | 4,494     |
| Thailand             | 25,739    | 3,805     | ..     | ..    | 5        | 19,994    |
| Turkey               | 38,329    | 2,048     | 445    | 32    | 18,946   | ..        |
| Ukraine              | 21,387    | 80        | 360    | ..    | ..       | ..        |
| United Kingdom       | 10,121    | 630       | ..     | 4     | 635      | ..        |
| United States        | 3,813     | ..        | 618    | 22    | 2,290    | 721       |



**International trade of hard coal  
(Principal importers/exporters)**

Thousand metric tons

**2018**

| Exporters  |          |            |                    |              |               |
|------------|----------|------------|--------------------|--------------|---------------|
| Kazakhstan | Mongolia | Mozambique | Russian Federation | South Africa | United States |
| ..         | ..       | 167        | 214                | ..           | 508           |
| ..         | ..       | ..         | 1,531              | 198          | 762           |
| ..         | ..       | 614        | 2,607              | 734          | 7,793         |
| ..         | ..       | ..         | 120                | ..           | 4,921         |
| ..         | ..       | ..         | ..                 | ..           | 2,037         |
| ..         | *31,472  | ..         | 26,220             | ..           | 2,036         |
| ..         | ..       | ..         | 1,362              | ..           | ..            |
| ..         | ..       | ..         | 1,878              | 526          | 45            |
| ..         | ..       | ..         | 2,713              | ..           | 634           |
| ..         | ..       | 405        | 4,209              | 830          | 1,915         |
| 87         | ..       | 789        | 19,037             | 1,044        | 9,747         |
| ..         | ..       | 6,852      | 4,321              | 33,986       | 15,509        |
| ..         | ..       | ..         | ..                 | ..           | ..            |
| 623        | ..       | ..         | 5,079              | 296          | 3,521         |
| ..         | ..       | ..         | 19,471             | 155          | 8,426         |
| ..         | ..       | 613        | 22,828             | 5,371        | 4,869         |
| ..         | ..       | ..         | 2,069              | 8            | 1             |
| ..         | ..       | ..         | 8                  | ..           | 1,706         |
| ..         | ..       | ..         | 3,911              | 484          | 3,888         |
| 187        | ..       | 236        | 5,032              | 107          | 3,863         |
| ..         | ..       | 776        | 494                | 9,565        | 174           |
| 504        | ..       | 552        | 13,006             | ..           | 1,535         |
| ..         | ..       | ..         | 71                 | ..           | 692           |
| 18,070     | ..       | ..         | ..                 | ..           | ..            |
| ..         | ..       | 393        | 1,532              | ..           | 213           |
| ..         | ..       | ..         | 3,645              | 890          | 1,457         |
| ..         | ..       | ..         | 549                | ..           | 456           |
| ..         | ..       | 132        | 12,339             | 1,596        | 2,694         |
| 421        | ..       | ..         | 15,009             | 245          | 4,370         |
| ..         | ..       | ..         | 4,694              | 118          | 3,573         |
| ..         | ..       | ..         | 72                 | 43           | ..            |

Table 6

**International trade of hard coal**  
**(Principal importers/exporters)**

Thousand metric tons

**2019**

| Importers            | Exporters |           |        |       |          |           |
|----------------------|-----------|-----------|--------|-------|----------|-----------|
|                      | World     | Australia | Canada | China | Colombia | Indonesia |
| Austria              | 3,078     | 191       | ..     | ..    | 1        | ..        |
| Belgium              | 3,707     | 1,188     | 29     | ..    | ..       | ..        |
| Brazil               | 18,859    | 4,310     | 756    | 1     | *3,274   | ..        |
| Canada               | 7,065     | ..        | ..     | ..    | 745      | ..        |
| Chile                | 13,107    | 1,036     | 215    | ..    | 8,747    | ..        |
| China                | 299,770   | 87,719    | 3,323  | ..    | 1,689    | 47,842    |
| China, Hong Kong SAR | 10,035    | 78        | ..     | ..    | ..       | 7,886     |
| Denmark              | 2,387     | ..        | ..     | ..    | 56       | ..        |
| Finland              | 3,152     | ..        | 463    | ..    | 15       | ..        |
| France               | 10,225    | 3,498     | 55     | 1     | 876      | ..        |
| Germany              | 40,993    | 4,771     | 1,263  | 9     | 1,870    | ..        |
| India                | 248,537   | 50,870    | 4,943  | 207   | 517      | 122,143   |
| Israel               | 8,417     | ..        | ..     | ..    | ..       | ..        |
| Italy                | 10,261    | 498       | 206    | ..    | 1,754    | 59        |
| Japan                | 186,892   | 115,561   | 4,910  | 1,808 | 612      | 32,643    |
| Korea, Republic of   | 127,380   | 45,798    | 11,338 | 1,722 | 4,435    | 24,660    |
| Malaysia             | 33,045    | 7,862     | ..     | 481   | 54       | ..        |
| Mexico               | 8,085     | 133       | ..     | 3     | 5,899    | ..        |
| Morocco              | 10,113    | ..        | ..     | ..    | 70       | ..        |
| Netherlands          | 10,367    | 2,101     | ..     | 5     | 575      | 266       |
| Pakistan             | 16,422    | ..        | ..     | 13    | ..       | 3,034     |
| Poland               | 16,623    | 2,117     | 66     | 3     | 1,192    | ..        |
| Portugal             | 2,575     | ..        | ..     | ..    | 1,790    | ..        |
| Russian Federation   | 21,923    | ..        | ..     | ..    | 42       | ..        |
| Slovakia             | 3,344     | ..        | 295    | ..    | 105      | ..        |
| Spain                | 8,586     | 827       | ..     | 10    | 1,150    | 2,270     |
| Thailand             | 22,463    | 3,823     | ..     | 1     | 164      | 10,366    |
| Turkey               | 38,141    | 2,905     | 754    | ..    | 18,295   | 80        |
| Ukraine              | 21,082    | 413       | ..     | ..    | 525      | 76        |
| United Kingdom       | 6,529     | 423       | ..     | 7     | 1,078    | ..        |
| United States        | 4,180     | ..        | 661    | 49    | 2,928    | 424       |

**International trade of hard coal  
(Principal importers/exporters)**

Thousand metric tons

**2019**

| Exporters  |          |            |                    |              |               |
|------------|----------|------------|--------------------|--------------|---------------|
| Kazakhstan | Mongolia | Mozambique | Russian Federation | South Africa | United States |
| ..         | ..       | 54         | 348                | ..           | 620           |
| ..         | ..       | ..         | 1,472              | 186          | 676           |
| ..         | ..       | 532        | 2,613              | 487          | 6,886         |
| ..         | ..       | ..         | 153                | ..           | 6,141         |
| ..         | ..       | ..         | 81                 | ..           | 989           |
| 150        | *32,192  | ..         | 29,176             | ..           | 1,181         |
| ..         | ..       | ..         | 1,131              | ..           | ..            |
| ..         | ..       | ..         | 2,099              | 80           | 60            |
| ..         | ..       | ..         | 2,008              | ..           | 653           |
| 66         | ..       | 282        | 2,745              | 1,177        | 1,390         |
| 1,169      | ..       | 571        | 19,140             | 803          | 8,584         |
| ..         | ..       | 5,741      | 7,461              | 39,496       | 12,044        |
| ..         | ..       | ..         | ..                 | ..           | ..            |
| 513        | ..       | ..         | 4,407              | 72           | 2,403         |
| 162        | ..       | ..         | 21,440             | 372          | 8,716         |
| ..         | ..       | 467        | 25,557             | 3,414        | 3,365         |
| ..         | ..       | ..         | 2,056              | 7            | 3             |
| ..         | ..       | ..         | 1,423              | ..           | 611           |
| ..         | ..       | ..         | 5,883              | 578          | 2,988         |
| ..         | ..       | 184        | 4,269              | 155          | 2,669         |
| ..         | ..       | 50         | 51                 | 12,154       | ..            |
| 867        | ..       | 393        | 10,734             | 222          | 821           |
| ..         | ..       | ..         | 166                | ..           | 615           |
| *18,737    | ..       | ..         | ..                 | ..           | ..            |
| ..         | ..       | 365        | 1,314              | ..           | 424           |
| ..         | ..       | ..         | 2,739              | 502          | 653           |
| ..         | ..       | ..         | 915                | ..           | 1             |
| 2          | ..       | 109        | 13,544             | 1,046        | 1,325         |
| 876        | ..       | ..         | 14,452             | ..           | 4,462         |
| 64         | ..       | ..         | 2,421              | 158          | 1,769         |
| ..         | ..       | ..         | 62                 | 22           | ..            |



### Production, trade and supply of brown coal and oil shale

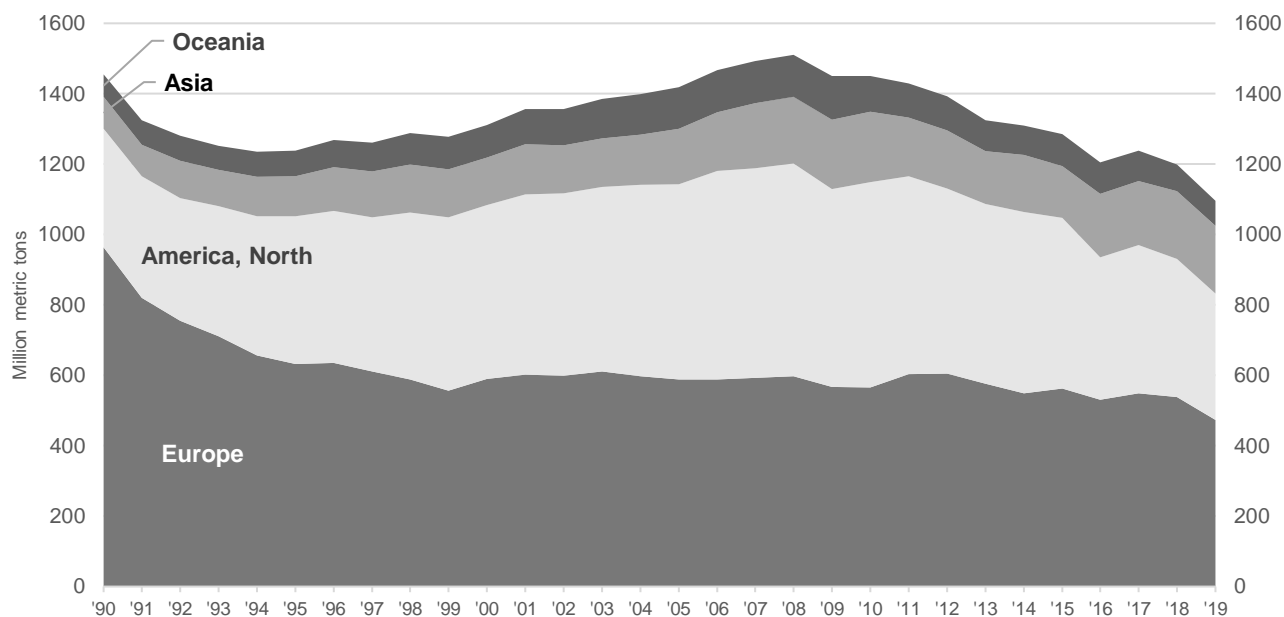
Thousand metric tons and kilograms per capita

#### Table Notes

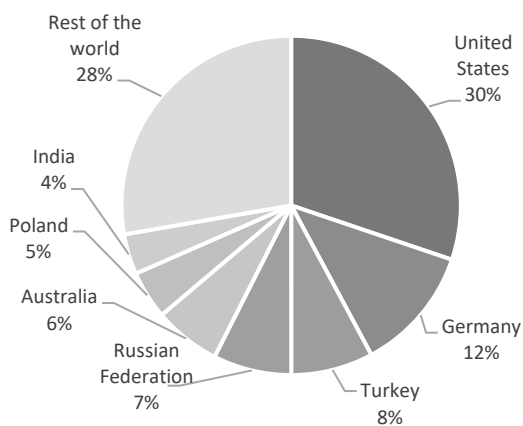
Data refer to brown coal and oil shale.

Please refer to the Definitions Section on pages ix to xv for the appropriate product description/ classification, and xvi to xvii for the descriptions of relevant flows.

**Figure 15: Production of brown coal and oil shale by region, 1990-2019**



**Figure 16: Major brown coal producing countries, 2019**



**Figure 17: Major brown coal consuming countries, 2019**

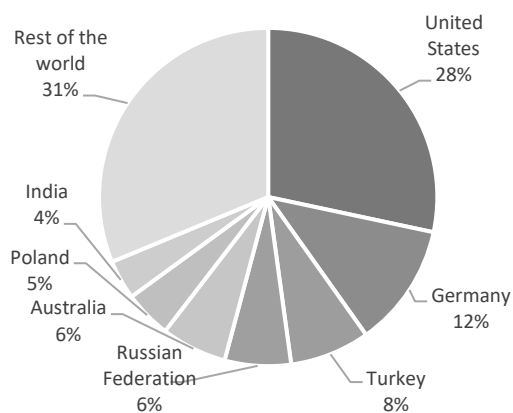


Table 7

## Production, trade and supply of brown coal and oil shale

Thousand metric tons and kilograms per capita

| Country or area       | Year        | Production       | Imports       | Exports       | Changes in stocks | Supply           |            |
|-----------------------|-------------|------------------|---------------|---------------|-------------------|------------------|------------|
|                       |             |                  |               |               |                   | Total            | Per capita |
| <b>World</b>          | <b>2016</b> | <b>1,204,600</b> | <b>52,664</b> | <b>19,158</b> | <b>-21,713</b>    | <b>1,259,820</b> | <b>169</b> |
|                       | <b>2017</b> | <b>1,238,076</b> | <b>58,395</b> | <b>27,646</b> | <b>-10,451</b>    | <b>1,279,276</b> | <b>169</b> |
|                       | <b>2018</b> | <b>1,198,598</b> | <b>61,518</b> | <b>28,765</b> | <b>-19,356</b>    | <b>1,250,708</b> | <b>164</b> |
|                       | <b>2019</b> | <b>1,096,294</b> | <b>63,719</b> | <b>33,341</b> | <b>15,036</b>     | <b>1,111,635</b> | <b>144</b> |
| <b>America, North</b> | <b>2016</b> | <b>405,533</b>   | <b>4,986</b>  | <b>2,994</b>  | <b>-18,794</b>    | <b>426,319</b>   | <b>744</b> |
|                       | <b>2017</b> | <b>420,591</b>   | <b>5,049</b>  | <b>7,968</b>  | <b>-6,865</b>     | <b>424,537</b>   | <b>735</b> |
|                       | <b>2018</b> | <b>392,265</b>   | <b>4,891</b>  | <b>7,265</b>  | <b>-20,004</b>    | <b>409,895</b>   | <b>704</b> |
|                       | <b>2019</b> | <b>358,555</b>   | <b>4,238</b>  | <b>6,024</b>  | <b>11,615</b>     | <b>345,154</b>   | <b>588</b> |
| Canada                | 2016        | 31,499           | 1,272         | 101           | -92               | 32,762           | 900        |
|                       | 2017        | 30,937           | 1,404         | 135           | -669              | 32,875           | 895        |
|                       | 2018        | 25,101           | 1,292         | 291           | 95                | 26,007           | 701        |
|                       | 2019        | 22,039           | 926           | 128           | 412               | 22,425           | 599        |
| Mexico                | 2016        | 8,130            | 1,624         | ..            | 450               | 9,304            | 75         |
|                       | 2017        | 7,171            | 2,178         | ..            | 2,874             | 6,475            | 52         |
|                       | 2018        | 6,971            | 2,010         | ..            | -321              | 9,302            | 74         |
|                       | 2019        | 5,626            | 1,417         | ..            | -622              | 7,665            | 60         |
| United States         | 2016        | 365,904          | 2,090         | 2,893         | -19,152           | 384,253          | 1,190      |
|                       | 2017        | 382,483          | 1,467         | 7,833         | -9,070            | 385,187          | 1,185      |
|                       | 2018        | 360,193          | 1,589         | 6,974         | -19,778           | 374,586          | 1,145      |
|                       | 2019        | 330,890          | 1,895         | 5,896         | 11,825            | 315,064          | 957        |
| <b>Asia</b>           | <b>2016</b> | <b>179,465</b>   | <b>41,503</b> | <b>9,207</b>  | <b>2,094</b>      | <b>209,667</b>   | <b>47</b>  |
|                       | <b>2017</b> | <b>181,901</b>   | <b>47,150</b> | <b>9,277</b>  | <b>-1,618</b>     | <b>221,393</b>   | <b>49</b>  |
|                       | <b>2018</b> | <b>191,514</b>   | <b>50,729</b> | <b>9,122</b>  | <b>1,548</b>      | <b>231,573</b>   | <b>51</b>  |
|                       | <b>2019</b> | <b>192,369</b>   | <b>52,934</b> | <b>13,908</b> | <b>-463</b>       | <b>231,858</b>   | <b>50</b>  |
| Brunei Darussalam     | 2016        | ..               | ..            | ..            | ..                | ..               | ..         |
|                       | 2017        | ..               | ..            | ..            | ..                | ..               | ..         |
|                       | 2018        | ..               | ..            | ..            | ..                | ..               | ..         |
|                       | 2019        | ..               | 341           | ..            | ..                | 341              | 787        |
| Cambodia              | 2016        | ..               | 1,629         | ..            | ..                | 1,629            | 103        |
|                       | 2017        | 42               | 1,884         | ..            | ..                | 1,926            | 120        |
|                       | 2018        | 25               | 2,021         | ..            | ..                | 2,046            | 126        |
|                       | 2019        | 27               | 2,524         | ..            | 196               | 2,355            | 143        |
| Georgia               | 2016        | 297              | ..            | 2             | 9                 | 286              | 71         |
|                       | 2017        | 268              | ..            | 2             | 2                 | 264              | 66         |
|                       | 2018        | 138              | ..            | 2             | -2                | 138              | 34         |
|                       | 2019        | 15               | ..            | 1             | 11                | 4                | 1          |
| India                 | 2016        | 45,230           | 19            | 5             | -2,074            | 47,318           | 36         |
|                       | 2017        | 46,255           | 10            | 4             | 327               | 45,934           | 34         |
|                       | 2018        | 44,283           | 19            | 40            | 1,538             | 42,724           | 32         |
|                       | 2019        | 42,103           | 54            | 93            | 177               | 41,887           | 31         |
| Israel                | 2016        | 423              | ..            | ..            | ..                | 423              | 52         |
|                       | 2017        | 449              | ..            | ..            | ..                | 449              | 54         |
|                       | 2018        | 415              | ..            | ..            | ..                | 415              | 49         |
|                       | 2019        | 403              | ..            | ..            | ..                | 403              | 47         |
| Kazakhstan            | 2016        | 5,750            | 1             | 2,204         | 177               | 3,370            | 189        |
|                       | 2017        | 6,095            | ..            | 2,231         | -554              | 4,418            | 244        |
|                       | 2018        | 6,561            | 0             | 2,757         | 5                 | 3,799            | 207        |
|                       | 2019        | 5,929            | 0             | 2,698         | 36                | 3,195            | 172        |
| Korea, Dem.Ppl's.Rep. | 2016        | 2,755            | ..            | ..            | ..                | 2,755            | 109        |
|                       | 2017        | 1,921            | ..            | ..            | ..                | 1,921            | 76         |
|                       | 2018        | 1,602            | ..            | ..            | ..                | 1,602            | 63         |
|                       | 2019        | 1,791            | ..            | ..            | ..                | 1,791            | 70         |

Table 7

## Production, trade and supply of brown coal and oil shale

Thousand metric tons and kilograms per capita

| Country or area        | Year        | Production     | Imports      | Exports       | Changes in stocks | Supply         |            |
|------------------------|-------------|----------------|--------------|---------------|-------------------|----------------|------------|
|                        |             |                |              |               |                   | Total          | Per capita |
| Korea, Republic of     | 2016        | ..             | 6,569        | ..            | ..                | 6,569          | 129        |
|                        | 2017        | ..             | 9,769        | ..            | ..                | 9,769          | 191        |
|                        | 2018        | ..             | 9,828        | ..            | ..                | 9,828          | 192        |
|                        | 2019        | ..             | 9,449        | ..            | ..                | 9,449          | 184        |
| Kyrgyzstan             | 2016        | 1,603          | 5            | 91            | 225               | 1,292          | 213        |
|                        | 2017        | 1,624          | 3            | 272           | 139               | 1,216          | 196        |
|                        | 2018        | 2,071          | 4            | 367           | -185              | 1,893          | 300        |
|                        | 2019        | 2,277          | 14           | 448           | -26               | 1,869          | 291        |
| Lao People's Dem. Rep. | 2016        | 13,097         | ..           | ..            | 1,771             | 11,326         | 1,654      |
|                        | 2017        | 13,440         | ..           | 209           | -1,116            | 14,347         | 2,063      |
|                        | 2018        | 15,903         | ..           | 413           | *-1,061           | 16,551         | 2,344      |
|                        | 2019        | 15,264         | ..           | *550          | *-454             | 15,168         | 2,116      |
| Mongolia               | 2016        | 6,672          | ..           | 97            | -160              | 6,735          | 2,203      |
|                        | 2017        | 6,783          | ..           | 408           | 58                | 6,317          | 2,029      |
|                        | 2018        | 7,015          | ..           | 507           | -20               | 6,529          | 2,060      |
|                        | 2019        | 6,977          | ..           | 137           | ..                | 6,840          | 2,121      |
| Other Asia             | 2016        | ..             | 12,565       | ..            | 494               | 12,071         | 511        |
|                        | 2017        | ..             | 12,362       | ..            | 511               | 11,851         | 501        |
|                        | 2018        | ..             | 11,606       | ..            | -340              | 11,946         | 504        |
|                        | 2019        | ..             | 11,751       | ..            | 265               | 11,485         | 483        |
| Philippines            | 2016        | 11,211         | 20,030       | 6,809         | -362              | 24,794         | 239        |
|                        | 2017        | 11,932         | 22,268       | 6,149         | -1,269            | 29,320         | 279        |
|                        | 2018        | 11,755         | 26,301       | 5,035         | 2,044             | 30,976         | 290        |
|                        | 2019        | 13,751         | 27,692       | 9,980         | -1,658            | 33,122         | 306        |
| Tajikistan             | 2016        | 50             | ..           | ..            | ..                | 50             | 6          |
|                        | 2017        | 53             | 1            | ..            | ..                | 54             | 6          |
|                        | 2018        | 65             | 1            | ..            | ..                | 66             | 7          |
|                        | 2019        | 65             | 9            | ..            | ..                | 74             | 8          |
| Thailand               | 2016        | 16,979         | 55           | ..            | 92                | 16,942         | 246        |
|                        | 2017        | 16,259         | 193          | ..            | 163               | 16,289         | 235        |
|                        | 2018        | 14,852         | 226          | ..            | 491               | 14,587         | 210        |
|                        | 2019        | 14,078         | 383          | ..            | 375               | 14,086         | 202        |
| Turkey                 | 2016        | 71,691         | ..           | ..            | 2,184             | 69,507         | 871        |
|                        | 2017        | 72,864         | ..           | 1             | -72               | 72,935         | 899        |
|                        | 2018        | 82,835         | ..           | 1             | 353               | 82,481         | 1,002      |
|                        | 2019        | 85,883         | ..           | 1             | 811               | 85,071         | 1,020      |
| Uzbekistan             | 2016        | 3,707          | 630          | 0             | -263              | 4,600          | 146        |
|                        | 2017        | 3,915          | 660          | 0             | 193               | 4,383          | 137        |
|                        | 2018        | 3,993          | 722          | 0             | -1,275            | 5,990          | 184        |
|                        | 2019        | 3,806          | 717          | 0             | -197              | 4,720          | 143        |
| <b>Europe</b>          | <b>2016</b> | <b>530,354</b> | <b>5,797</b> | <b>6,957</b>  | <b>-4,833</b>     | <b>534,027</b> | <b>715</b> |
|                        | <b>2017</b> | <b>549,089</b> | <b>5,804</b> | <b>10,358</b> | <b>-1,784</b>     | <b>546,319</b> | <b>731</b> |
|                        | <b>2018</b> | <b>538,751</b> | <b>5,373</b> | <b>12,351</b> | <b>-990</b>       | <b>532,763</b> | <b>712</b> |
|                        | <b>2019</b> | <b>473,840</b> | <b>5,585</b> | <b>13,400</b> | <b>3,806</b>      | <b>462,219</b> | <b>617</b> |
| Austria                | 2016        | ..             | 79           | 0             | 0                 | 79             | 9          |
|                        | 2017        | ..             | 76           | 0             | ..                | 76             | 9          |
|                        | 2018        | ..             | 80           | 0             | ..                | 79             | 9          |
|                        | 2019        | ..             | 68           | 0             | ..                | 68             | 8          |
| Belgium                | 2016        | 65             | 5            | 1             | 2                 | 67             | 6          |
|                        | 2017        | 53             | 14           | 7             | 8                 | 53             | 5          |
|                        | 2018        | 78             | 3            | 1             | -3                | 83             | 7          |
|                        | 2019        | 87             | 1            | 1             | -5                | 92             | 8          |

Table 7

## Production, trade and supply of brown coal and oil shale

Thousand metric tons and kilograms per capita

| Country or area        | Year | Production | Imports | Exports | Changes in stocks | Supply  |            |
|------------------------|------|------------|---------|---------|-------------------|---------|------------|
|                        |      |            |         |         |                   | Total   | Per capita |
| Bosnia and Herzegovina | 2016 | 13,644     | 87      | 258     | -326              | 13,799  | 4,075      |
|                        | 2017 | 14,084     | 98      | 239     | -186              | 14,129  | 4,216      |
|                        | 2018 | 14,505     | 106     | 195     | 262               | 14,154  | 4,258      |
|                        | 2019 | 13,377     | 117     | 163     | 489               | 12,842  | 3,890      |
| Bulgaria               | 2016 | 31,231     | 0       | 17      | 213               | 31,001  | 4,335      |
|                        | 2017 | 34,277     | 1       | 22      | 583               | 33,672  | 4,741      |
|                        | 2018 | 30,263     | ..      | 43      | 54                | 30,166  | 4,278      |
|                        | 2019 | 28,040     | ..      | 50      | 76                | 27,914  | 3,988      |
| Croatia                | 2016 | ..         | 44      | ..      | -6                | 50      | 12         |
|                        | 2017 | ..         | 49      | ..      | ..                | 49      | 12         |
|                        | 2018 | ..         | 36      | ..      | ..                | 36      | 9          |
|                        | 2019 | ..         | 31      | ..      | ..                | 31      | 7          |
| Czechia                | 2016 | 38,528     | 138     | 855     | -405              | 38,216  | 3,599      |
|                        | 2017 | 39,306     | 205     | 941     | -91               | 38,661  | 3,633      |
|                        | 2018 | 39,204     | 185     | 838     | -243              | 38,794  | 3,637      |
|                        | 2019 | 37,486     | 62      | 685     | 670               | 36,193  | 3,386      |
| Estonia                | 2016 | 17,057     | ..      | ..      | -2,837            | 19,894  | 15,111     |
|                        | 2017 | 21,625     | ..      | ..      | -272              | 21,897  | 16,596     |
|                        | 2018 | 21,883     | ..      | ..      | 985               | 20,898  | 15,797     |
|                        | 2019 | 15,877     | ..      | ..      | 233               | 15,644  | 11,801     |
| France                 | 2016 | ..         | 99      | ..      | -8                | 107     | 2          |
|                        | 2017 | ..         | 61      | ..      | 11                | 50      | 1          |
|                        | 2018 | ..         | 67      | ..      | -9                | 77      | 1          |
|                        | 2019 | ..         | 55      | ..      | -4                | 59      | 1          |
| Germany                | 2016 | 171,547    | 26      | 0       | 532               | 171,041 | 2,081      |
|                        | 2017 | 171,286    | 30      | ..      | 102               | 171,214 | 2,071      |
|                        | 2018 | 166,258    | 21      | ..      | -920              | 167,199 | 2,011      |
|                        | 2019 | 131,314    | 24      | ..      | -113              | 131,451 | 1,574      |
| Greece                 | 2016 | 32,638     | 0       | ..      | -1,592            | 34,230  | 3,225      |
|                        | 2017 | 37,731     | 0       | ..      | -330              | 38,061  | 3,601      |
|                        | 2018 | 36,489     | ..      | ..      | -180              | 36,669  | 3,485      |
|                        | 2019 | 27,375     | ..      | ..      | 754               | 26,621  | 2,542      |
| Hungary                | 2016 | 9,216      | 178     | 211     | 3                 | 9,180   | 941        |
|                        | 2017 | 7,972      | 207     | 2       | 34                | 8,143   | 837        |
|                        | 2018 | 7,898      | 189     | 3       | -91               | 8,175   | 842        |
|                        | 2019 | 6,847      | 144     | 4       | 74                | 6,913   | 714        |
| Italy                  | 2016 | ..         | 130     | ..      | ..                | 130     | 2          |
|                        | 2017 | ..         | 11      | ..      | ..                | 11      | 0          |
|                        | 2018 | ..         | 2       | ..      | ..                | 2       | 0          |
|                        | 2019 | ..         | 1       | ..      | ..                | 1       | 0          |
| Kosovo                 | 2016 | 8,801      | 2       | 18      | -267              | 9,052   | 5,092      |
|                        | 2017 | 7,575      | 9       | 14      | -33               | 7,603   | 4,245      |
|                        | 2018 | 7,661      | 9       | 9       | -32               | 7,693   | 4,281      |
|                        | 2019 | 8,063      | 11      | 27      | -26               | 8,073   | 4,499      |
| Lithuania              | 2016 | ..         | 0       | 0       | -1                | 1       | 0          |
|                        | 2017 | ..         | 3       | ..      | 0                 | 3       | 1          |
|                        | 2018 | ..         | 2       | ..      | 0                 | 1       | 0          |
|                        | 2019 | ..         | ..      | ..      | -1                | 1       | 0          |
| Montenegro             | 2016 | 1,398      | 5       | 42      | ..                | 1,361   | 2,170      |
|                        | 2017 | 1,475      | 5       | 97      | ..                | 1,383   | 2,204      |
|                        | 2018 | 1,596      | 5       | 94      | -65               | 1,573   | 2,505      |
|                        | 2019 | 1,605      | 5       | 111     | 6                 | 1,494   | 2,379      |



Table 7

## Production, trade and supply of brown coal and oil shale

Thousand metric tons and kilograms per capita

| Country or area    | Year        | Production    | Imports    | Exports   | Changes in stocks | Supply        |              |
|--------------------|-------------|---------------|------------|-----------|-------------------|---------------|--------------|
|                    |             |               |            |           |                   | Total         | Per capita   |
| Netherlands        | 2016        | ..            | 38         | ..        | 0                 | 38            | 2            |
|                    | 2017        | ..            | 51         | ..        | 0                 | 51            | 3            |
|                    | 2018        | ..            | 48         | ..        | 0                 | 48            | 3            |
|                    | 2019        | ..            | 10         | ..        | 0                 | 10            | 1            |
| North Macedonia    | 2016        | 5,152         | 192        | 2         | -72               | 5,414         | 2,602        |
|                    | 2017        | 5,094         | 127        | 2         | -153              | 5,372         | 2,580        |
|                    | 2018        | 4,995         | 112        | 0         | 287               | 4,820         | 2,314        |
|                    | 2019        | 5,477         | 146        | 1         | -277              | 5,900         | 2,832        |
| Poland             | 2016        | 60,246        | 289        | 212       | -67               | 60,390        | 1,590        |
|                    | 2017        | 61,161        | 328        | 256       | 49                | 61,184        | 1,612        |
|                    | 2018        | 58,571        | 276        | 287       | -24               | 58,583        | 1,545        |
|                    | 2019        | 50,329        | 290        | 148       | 10                | 50,461        | 1,332        |
| Romania            | 2016        | 22,980        | 854        | 3         | -46               | 23,877        | 1,206        |
|                    | 2017        | 25,752        | 669        | 2         | 201               | 26,219        | 1,334        |
|                    | 2018        | 23,647        | 588        | 6         | -724              | 24,953        | 1,279        |
|                    | 2019        | 21,652        | 882        | 0         | 315               | 22,218        | 1,147        |
| Russian Federation | 2016        | 73,485        | 2,296      | 5,272     | 1,079             | 69,430        | 478          |
|                    | 2017        | 74,886        | 2,321      | 8,701     | -1,662            | 70,168        | 482          |
|                    | 2018        | 80,478        | 2,160      | 10,796    | 25                | 71,817        | 493          |
|                    | 2019        | 81,886        | 2,338      | 12,116    | 1,674             | 70,434        | 483          |
| Serbia             | 2016        | 38,440        | 336        | 66        | -282              | 38,992        | 5,510        |
|                    | 2017        | 39,806        | 488        | 74        | 42                | 40,178        | 5,708        |
|                    | 2018        | 37,649        | 369        | 80        | -560              | 38,498        | 5,495        |
|                    | 2019        | 38,881        | 378        | 94        | 517               | 38,648        | 5,539        |
| Slovakia           | 2016        | 1,847         | 494        | ..        | -79               | 2,420         | 445          |
|                    | 2017        | 1,834         | 556        | ..        | 41                | 2,349         | 431          |
|                    | 2018        | 1,502         | 595        | ..        | 43                | 2,054         | 377          |
|                    | 2019        | 1,465         | 507        | ..        | 45                | 1,927         | 353          |
| Slovenia           | 2016        | 3,349         | 372        | ..        | -27               | 3,748         | 1,807        |
|                    | 2017        | 3,356         | 372        | ..        | -14               | 3,742         | 1,802        |
|                    | 2018        | 3,217         | 411        | ..        | -51               | 3,678         | 1,770        |
|                    | 2019        | 3,143         | 418        | ..        | 97                | 3,464         | 1,666        |
| Spain              | 2016        | 730           | ..         | ..        | -650              | 1,380         | 30           |
|                    | 2017        | 1,816         | ..         | ..        | -114              | 1,930         | 41           |
|                    | 2018        | 1,630         | ..         | ..        | 250               | 1,380         | 30           |
|                    | 2019        | ..            | ..         | ..        | -729              | 729           | 16           |
| Switzerland        | 2016        | ..            | 133        | ..        | 3                 | 130           | 16           |
|                    | 2017        | ..            | 123        | ..        | 1                 | 122           | 14           |
|                    | 2018        | ..            | 110        | ..        | 3                 | 107           | 13           |
|                    | 2019        | ..            | 97         | ..        | 1                 | 96            | 11           |
| Ukraine            | 2016        | ..            | ..         | ..        | ..                | ..            | ..           |
|                    | 2017        | ..            | ..         | ..        | ..                | ..            | ..           |
|                    | 2018        | 1,228         | ..         | ..        | 2                 | 1,226         | 28           |
|                    | 2019        | 935           | ..         | ..        | ..                | 935           | 21           |
| <b>Oceania</b>     | <b>2016</b> | <b>89,248</b> | <b>379</b> | <b>0</b>  | <b>-180</b>       | <b>89,807</b> | <b>2,221</b> |
|                    | <b>2017</b> | <b>86,494</b> | <b>392</b> | <b>44</b> | <b>-184</b>       | <b>87,027</b> | <b>2,122</b> |
|                    | <b>2018</b> | <b>76,068</b> | <b>526</b> | <b>28</b> | <b>90</b>         | <b>76,476</b> | <b>1,840</b> |
|                    | <b>2019</b> | <b>71,530</b> | <b>962</b> | <b>10</b> | <b>79</b>         | <b>72,404</b> | <b>1,719</b> |
| Australia          | 2016        | 87,587        | ..         | ..        | ..                | 87,587        | 3,610        |
|                    | 2017        | 84,788        | ..         | ..        | ..                | 84,788        | 3,449        |
|                    | 2018        | 74,156        | ..         | ..        | ..                | 74,156        | 2,978        |
|                    | 2019        | 69,787        | ..         | ..        | ..                | 69,787        | 2,769        |

**Table 7****Production, trade and supply of brown coal and oil shale**

Thousand metric tons and kilograms per capita

| Country or area | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|-----------------|------|------------|---------|---------|-------------------|--------|------------|
|                 |      |            |         |         |                   | Total  | Per capita |
| New Zealand     | 2016 | 1,661      | 379     | 0       | -180              | 2,220  | 476        |
|                 | 2017 | 1,706      | 392     | 44      | -184              | 2,239  | 476        |
|                 | 2018 | 1,912      | 526     | 28      | 90                | 2,320  | 489        |
|                 | 2019 | 1,743      | 962     | 10      | 79                | 2,617  | 547        |





### Production, trade and supply of coke

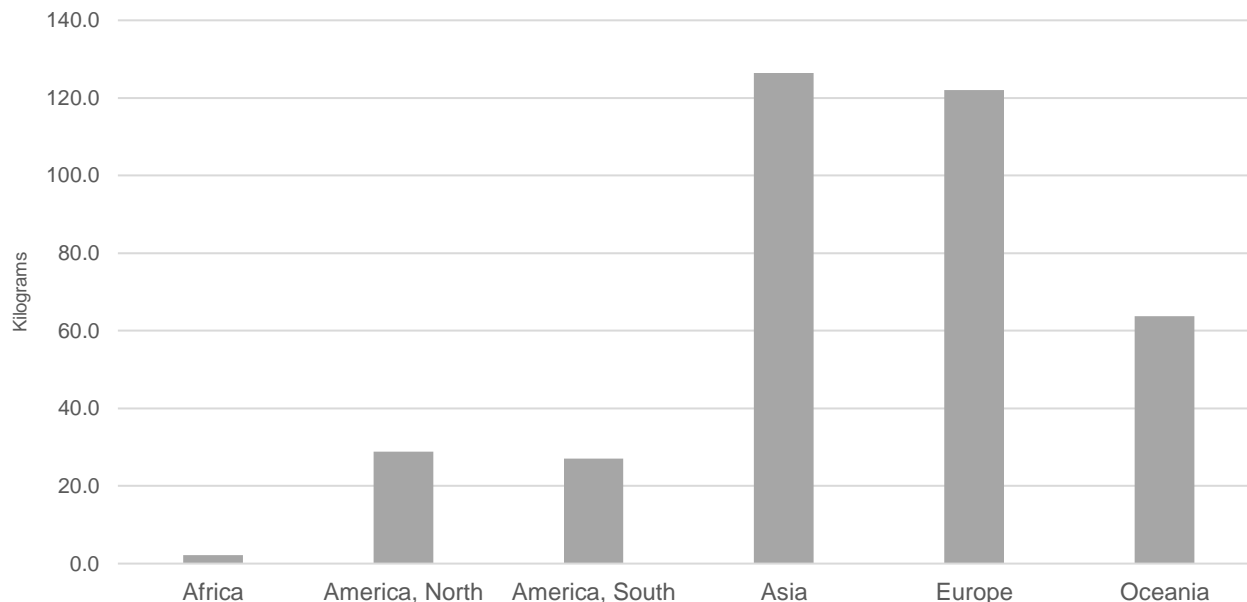
Thousand metric tons and kilograms per capita

#### Table Notes

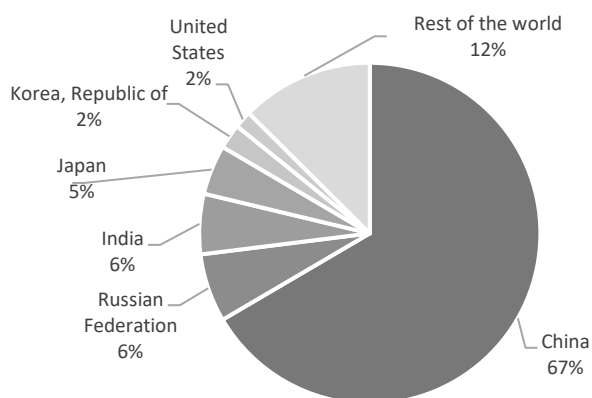
Data comprise coal tar, gas coke and coke oven coke.

Please refer to the Definitions Section on pages ix to xv for the appropriate product description/ classification, and xvi to xvii for the descriptions of relevant flows.

**Figure 18: Per capita supply of coke by region, 2019**



**Figure 19: Major coke producing countries, 2019**



**Figure 20: Major coke consuming countries, 2019**

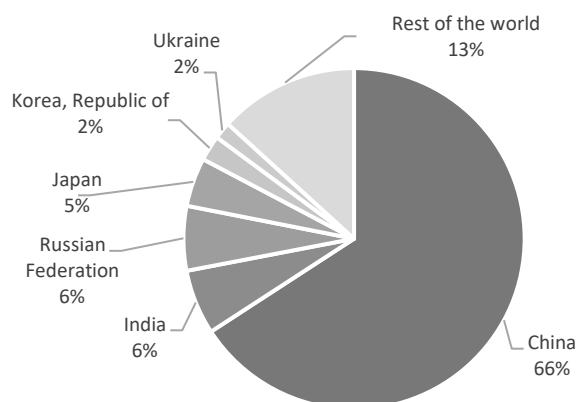


Table 8

## Production, trade and supply of coke

Thousand metric tons and kilograms per capita

| Country or area       | Year        | Production     | Imports       | Exports       | Changes in stocks | Supply         |            |
|-----------------------|-------------|----------------|---------------|---------------|-------------------|----------------|------------|
|                       |             |                |               |               |                   | Total          | Per capita |
| <b>World</b>          | <b>2016</b> | <b>655,674</b> | <b>26,868</b> | <b>28,400</b> | <b>-15,771</b>    | <b>669,913</b> | <b>90</b>  |
|                       | <b>2017</b> | <b>636,531</b> | <b>27,090</b> | <b>27,583</b> | <b>-13,750</b>    | <b>649,788</b> | <b>86</b>  |
|                       | <b>2018</b> | <b>672,247</b> | <b>28,240</b> | <b>29,619</b> | <b>6,319</b>      | <b>664,550</b> | <b>87</b>  |
|                       | <b>2019</b> | <b>710,628</b> | <b>25,151</b> | <b>26,338</b> | <b>2,577</b>      | <b>706,864</b> | <b>92</b>  |
| <b>Africa</b>         | <b>2016</b> | <b>2,695</b>   | <b>515</b>    | <b>281</b>    | <b>78</b>         | <b>2,851</b>   | <b>2</b>   |
|                       | <b>2017</b> | <b>2,089</b>   | <b>538</b>    | <b>236</b>    | <b>-26</b>        | <b>2,416</b>   | <b>2</b>   |
|                       | <b>2018</b> | <b>2,794</b>   | <b>716</b>    | <b>106</b>    | <b>-90</b>        | <b>3,495</b>   | <b>3</b>   |
|                       | <b>2019</b> | <b>2,618</b>   | <b>529</b>    | <b>288</b>    | <b>-3</b>         | <b>2,863</b>   | <b>2</b>   |
| Algeria               | 2016        | ..             | 78            | ..            | 78                | 0              | 0          |
|                       | 2017        | ..             | 301           | ..            | -26               | 327            | 8          |
|                       | 2018        | ..             | 500           | ..            | -48               | 548            | 13         |
|                       | 2019        | ..             | 437           | ..            | -3                | 440            | 10         |
| Egypt                 | 2016        | *222           | *353          | *66           | 0                 | *509           | *5         |
|                       | 2017        | *518           | *153          | *154          | ..                | *517           | *5         |
|                       | 2018        | 296            | *116          | ..            | -42               | 454            | 5          |
|                       | 2019        | 509            | ..            | 168           | ..                | 342            | 3          |
| Madagascar            | 2016        | ..             | ..            | ..            | ..                | ..             | ..         |
|                       | 2017        | ..             | ..            | ..            | ..                | ..             | ..         |
|                       | 2018        | ..             | *24           | ..            | ..                | *24            | *1         |
|                       | 2019        | ..             | *24           | ..            | ..                | *24            | *1         |
| South Africa          | 2016        | 2,166          | ..            | ..            | ..                | 2,166          | 39         |
|                       | 2017        | 1,390          | ..            | ..            | ..                | 1,390          | 24         |
|                       | 2018        | 2,281          | ..            | ..            | ..                | 2,281          | 39         |
|                       | 2019        | 1,880          | ..            | ..            | ..                | 1,880          | 32         |
| Zambia                | 2016        | ..             | *52           | *2            | ..                | *50            | *3         |
|                       | 2017        | ..             | *52           | *2            | ..                | *50            | *3         |
|                       | 2018        | ..             | *52           | *2            | ..                | *50            | *3         |
|                       | 2019        | ..             | *52           | *2            | ..                | *50            | *3         |
| Zimbabwe              | 2016        | 307            | 32            | 213           | ..                | 126            | 9          |
|                       | 2017        | 181            | 32            | 80            | ..                | 132            | 9          |
|                       | 2018        | 217            | 24            | 104           | ..                | 138            | 10         |
|                       | 2019        | 229            | 16            | 118           | ..                | 127            | 9          |
| <b>America, North</b> | <b>2016</b> | <b>14,411</b>  | <b>2,554</b>  | <b>951</b>    | <b>-583</b>       | <b>16,597</b>  | <b>29</b>  |
|                       | <b>2017</b> | <b>15,333</b>  | <b>2,453</b>  | <b>1,201</b>  | <b>-260</b>       | <b>16,845</b>  | <b>29</b>  |
|                       | <b>2018</b> | <b>16,299</b>  | <b>2,414</b>  | <b>1,127</b>  | <b>-290</b>       | <b>17,876</b>  | <b>31</b>  |
|                       | <b>2019</b> | <b>15,162</b>  | <b>2,624</b>  | <b>917</b>    | <b>-37</b>        | <b>16,906</b>  | <b>29</b>  |
| Bermuda               | 2016        | ..             | 0             | ..            | ..                | 0              | 1          |
|                       | 2017        | ..             | 0             | ..            | ..                | 0              | 1          |
|                       | 2018        | ..             | 0             | ..            | ..                | 0              | 1          |
|                       | 2019        | ..             | 0             | ..            | ..                | 0              | 0          |
| Canada                | 2016        | 2,194          | 1,236         | 44            | 172               | 3,214          | 88         |
|                       | 2017        | 2,203          | 1,211         | 5             | -241              | 3,650          | 99         |
|                       | 2018        | 2,520          | 1,101         | 39            | -105              | 3,687          | 99         |
|                       | 2019        | 2,428          | 1,298         | 39            | -115              | 3,802          | 102        |
| Cuba                  | 2016        | ..             | 1             | ..            | ..                | 1              | 0          |
|                       | 2017        | ..             | 1             | ..            | ..                | 1              | 0          |
|                       | 2018        | ..             | 1             | ..            | ..                | 1              | 0          |
|                       | 2019        | ..             | *1            | ..            | ..                | *1             | 0          |
| El Salvador           | 2016        | ..             | 1             | ..            | ..                | 1              | 0          |
|                       | 2017        | ..             | 1             | ..            | ..                | 1              | 0          |
|                       | 2018        | ..             | 1             | ..            | ..                | 1              | 0          |
|                       | 2019        | ..             | 1             | ..            | ..                | 1              | 0          |

Table 8

## Production, trade and supply of coke

Thousand metric tons and kilograms per capita

| Country or area       | Year        | Production     | Imports       | Exports       | Changes in stocks | Supply         |            |
|-----------------------|-------------|----------------|---------------|---------------|-------------------|----------------|------------|
|                       |             |                |               |               |                   | Total          | Per capita |
| Mexico                | 2016        | 1,462          | 1,109         | ..            | ..                | 2,571          | 21         |
|                       | 2017        | 1,384          | 1,187         | 99            | ..                | 2,472          | 20         |
|                       | 2018        | 1,254          | 1,205         | 44            | ..                | 2,415          | 19         |
|                       | 2019        | 1,059          | 1,219         | ..            | ..                | 2,278          | 18         |
| United States         | 2016        | 10,755         | 207           | 907           | -755              | 10,810         | 33         |
|                       | 2017        | 11,746         | 53            | 1,097         | -19               | 10,721         | 33         |
|                       | 2018        | 12,525         | 106           | 1,044         | -185              | 11,772         | 36         |
|                       | 2019        | 11,675         | 105           | 878           | 78                | 10,824         | 33         |
| <b>America, South</b> | <b>2016</b> | <b>12,085</b>  | <b>1,233</b>  | <b>1,919</b>  | <b>-16</b>        | <b>11,416</b>  | <b>27</b>  |
|                       | <b>2017</b> | <b>13,524</b>  | <b>1,603</b>  | <b>2,574</b>  | <b>96</b>         | <b>12,457</b>  | <b>30</b>  |
|                       | <b>2018</b> | <b>14,499</b>  | <b>1,918</b>  | <b>3,129</b>  | <b>582</b>        | <b>12,705</b>  | <b>30</b>  |
|                       | <b>2019</b> | <b>13,380</b>  | <b>1,433</b>  | <b>3,199</b>  | <b>63</b>         | <b>11,551</b>  | <b>27</b>  |
| Argentina             | 2016        | 617            | ..            | ..            | ..                | 617            | 14         |
|                       | 2017        | 716            | ..            | ..            | ..                | 716            | 16         |
|                       | 2018        | 792            | ..            | ..            | ..                | 792            | 18         |
|                       | 2019        | 541            | ..            | ..            | ..                | 541            | 12         |
| Brazil                | 2016        | 9,233          | 1,107         | ..            | 23                | 10,317         | 50         |
|                       | 2017        | 9,837          | 1,538         | ..            | 113               | 11,262         | 54         |
|                       | 2018        | 10,159         | 1,839         | ..            | 532               | 11,466         | 55         |
|                       | 2019        | 9,260          | 1,307         | ..            | 47                | 10,520         | 50         |
| Chile                 | 2016        | 418            | 0             | 146           | -72               | 344            | 19         |
|                       | 2017        | 386            | 0             | 52            | -3                | 337            | 18         |
|                       | 2018        | 410            | ..            | 31            | 49                | 329            | 18         |
|                       | 2019        | 391            | 1             | 52            | -31               | 371            | 20         |
| Colombia              | 2016        | 1,817          | ..            | 1,773         | ..                | 44             | 1          |
|                       | 2017        | 2,585          | ..            | 2,522         | ..                | 63             | 1          |
|                       | 2018        | 3,138          | ..            | 3,099         | ..                | 40             | 1          |
|                       | 2019        | 3,188          | ..            | 3,147         | ..                | 40             | 1          |
| Guyana                | 2016        | ..             | ..            | ..            | ..                | ..             | ..         |
|                       | 2017        | ..             | ..            | ..            | ..                | ..             | ..         |
|                       | 2018        | ..             | ..            | ..            | ..                | ..             | ..         |
|                       | 2019        | ..             | 19            | ..            | ..                | 19             | 25         |
| Peru                  | 2016        | ..             | 126           | 0             | 33                | 93             | 3          |
|                       | 2017        | ..             | 65            | 0             | -14               | 79             | 3          |
|                       | 2018        | ..             | 79            | 0             | 1                 | 78             | 2          |
|                       | 2019        | ..             | 105           | 0             | 47                | 58             | 2          |
| <b>Asia</b>           | <b>2016</b> | <b>529,925</b> | <b>10,281</b> | <b>11,575</b> | <b>-15,464</b>    | <b>544,096</b> | <b>122</b> |
|                       | <b>2017</b> | <b>510,811</b> | <b>10,530</b> | <b>9,941</b>  | <b>-13,820</b>    | <b>525,220</b> | <b>116</b> |
|                       | <b>2018</b> | <b>556,685</b> | <b>11,363</b> | <b>11,589</b> | <b>5,396</b>      | <b>551,063</b> | <b>121</b> |
|                       | <b>2019</b> | <b>583,096</b> | <b>8,767</b>  | <b>8,762</b>  | <b>1,650</b>      | <b>581,451</b> | <b>126</b> |
| Afghanistan           | 2016        | *66            | *200          | *66           | ..                | *200           | *6         |
|                       | 2017        | *67            | *203          | *67           | ..                | *203           | *6         |
|                       | 2018        | *67            | *203          | *67           | ..                | *203           | *5         |
|                       | 2019        | *67            | *203          | *67           | ..                | *203           | *5         |
| China                 | 2016        | 449,115        | 1             | 10,119        | -15,290           | 454,286        | 321        |
|                       | 2017        | 431,684        | 10            | 8,079         | -13,780           | 437,395        | 308        |
|                       | 2018        | 447,514        | 91            | 9,758         | 5,268             | 432,579        | 303        |
|                       | 2019        | 472,958        | 523           | 6,523         | 1,622             | 465,337        | 325        |
| Georgia               | 2016        | ..             | 147           | 0             | 21                | 126            | 31         |
|                       | 2017        | ..             | 135           | 13            | -18               | 140            | 35         |
|                       | 2018        | ..             | 162           | ..            | 3                 | 159            | 40         |
|                       | 2019        | ..             | 145           | ..            | 12                | 133            | 33         |

Table 8

## Production, trade and supply of coke

Thousand metric tons and kilograms per capita

| Country or area        | Year | Production | Imports | Exports | Changes in stocks | Supply  |            |
|------------------------|------|------------|---------|---------|-------------------|---------|------------|
|                        |      |            |         |         |                   | Total   | Per capita |
| India                  | 2016 | 12,503     | 4,346   | 89      | ..                | 16,760  | 13         |
|                        | 2017 | 11,330     | 4,585   | 108     | ..                | 15,807  | 12         |
|                        | 2018 | *37,665    | *4,931  | *25     | ..                | *42,571 | *31        |
|                        | 2019 | *40,623    | *2,875  | *22     | ..                | *43,476 | *32        |
| Indonesia              | 2016 | 2,931      | 548     | 0       | ..                | 3,479   | 13         |
|                        | 2017 | *2,795     | 523     | 0       | ..                | *3,318  | *13        |
|                        | 2018 | *3,214     | *170    | 0       | ..                | *3,384  | *13        |
|                        | 2019 | *433       | *160    | 0       | ..                | *593    | *2         |
| Iran (Islamic Rep. of) | 2016 | 1,199      | 26      | 1       | 1                 | 1,223   | 15         |
|                        | 2017 | 1,317      | 122     | 51      | 1                 | 1,387   | 17         |
|                        | 2018 | 1,400      | 354     | 91      | ..                | 1,663   | 20         |
|                        | 2019 | 1,192      | 354     | 361     | -2                | 1,187   | 14         |
| Japan                  | 2016 | 33,957     | 2,035   | 1,027   | 77                | 34,888  | 273        |
|                        | 2017 | 33,401     | 1,273   | 1,232   | -80               | 33,522  | 263        |
|                        | 2018 | 33,492     | 1,595   | 1,437   | 62                | 33,587  | 264        |
|                        | 2019 | 33,462     | 708     | 1,595   | -33               | 32,608  | 257        |
| Jordan                 | 2016 | ..         | 28      | ..      | ..                | 28      | 3          |
|                        | 2017 | ..         | 44      | ..      | ..                | 44      | 5          |
|                        | 2018 | ..         | 64      | ..      | ..                | 64      | 6          |
|                        | 2019 | ..         | 65      | ..      | ..                | 65      | 6          |
| Kazakhstan             | 2016 | 2,872      | 835     | 29      | 20                | 3,658   | 205        |
|                        | 2017 | 2,989      | 952     | 48      | ..                | 3,894   | 215        |
|                        | 2018 | 2,916      | 933     | 67      | 77                | 3,705   | 202        |
|                        | 2019 | 2,668      | 1,059   | 34      | -49               | 3,742   | 202        |
| Korea, Dem.Ppl's.Rep.  | 2016 | ..         | 200     | ..      | ..                | 200     | 8          |
|                        | 2017 | ..         | 179     | ..      | ..                | 179     | 7          |
|                        | 2018 | ..         | 133     | ..      | ..                | 133     | 5          |
|                        | 2019 | ..         | 112     | ..      | ..                | 112     | 4          |
| Korea, Republic of     | 2016 | 16,572     | 340     | ..      | ..                | 16,912  | 332        |
|                        | 2017 | 16,600     | 335     | ..      | ..                | 16,934  | 331        |
|                        | 2018 | 17,468     | 324     | ..      | ..                | 17,792  | 348        |
|                        | 2019 | 16,762     | 308     | ..      | ..                | 17,070  | 333        |
| Other Asia             | 2016 | 6,226      | 201     | 0       | -7                | 6,434   | 272        |
|                        | 2017 | 6,056      | 274     | 46      | -8                | 6,292   | 266        |
|                        | 2018 | 6,345      | 300     | 24      | 1                 | 6,620   | 279        |
|                        | 2019 | 6,175      | 260     | 19      | 39                | 6,376   | 268        |
| Philippines            | 2016 | ..         | 336     | ..      | ..                | 336     | 3          |
|                        | 2017 | ..         | 294     | ..      | ..                | 294     | 3          |
|                        | 2018 | ..         | 307     | ..      | ..                | 307     | 3          |
|                        | 2019 | ..         | 267     | ..      | ..                | 267     | 2          |
| Syrian Arab Republic   | 2016 | ..         | 1       | ..      | ..                | 1       | 0          |
|                        | 2017 | ..         | 1       | ..      | ..                | 1       | 0          |
|                        | 2018 | ..         | 1       | ..      | ..                | 1       | 0          |
|                        | 2019 | ..         | 1       | ..      | ..                | 1       | 0          |
| Thailand               | 2016 | ..         | 30      | ..      | -36               | 66      | 1          |
|                        | 2017 | ..         | 88      | ..      | 30                | 58      | 1          |
|                        | 2018 | ..         | 18      | ..      | -43               | 61      | 1          |
|                        | 2019 | ..         | 19      | ..      | -50               | 69      | 1          |
| Turkey                 | 2016 | 4,374      | 590     | 135     | -250              | 5,079   | 64         |
|                        | 2017 | 4,463      | 834     | 126     | 35                | 5,136   | 63         |
|                        | 2018 | 4,477      | 814     | 118     | 29                | 5,144   | 62         |
|                        | 2019 | 4,422      | 666     | 141     | 111               | 4,836   | 58         |



Table 8

## Production, trade and supply of coke

Thousand metric tons and kilograms per capita

| Country or area        | Year        | Production    | Imports       | Exports       | Changes in stocks | Supply        |            |
|------------------------|-------------|---------------|---------------|---------------|-------------------|---------------|------------|
|                        |             |               |               |               |                   | Total         | Per capita |
| United Arab Emirates   | 2016        | ..            | 1             | 0             | ..                | 1             | 0          |
|                        | 2017        | ..            | 2             | 0             | ..                | 2             | 0          |
|                        | 2018        | ..            | 25            | 0             | ..                | 25            | 3          |
|                        | 2019        | ..            | 5             | 0             | ..                | 5             | 0          |
| Uzbekistan             | 2016        | ..            | 23            | ..            | ..                | 23            | 1          |
|                        | 2017        | ..            | 23            | 0             | ..                | 23            | 1          |
|                        | 2018        | ..            | 29            | ..            | ..                | 29            | 1          |
|                        | 2019        | ..            | 46            | ..            | ..                | 46            | 1          |
| Viet Nam               | 2016        | 110           | 393           | 108           | ..                | 395           | 4          |
|                        | 2017        | 110           | 655           | 173           | ..                | 592           | 6          |
|                        | 2018        | 2,127         | 909           | 1             | ..                | 3,035         | 32         |
|                        | 2019        | 4,334         | 993           | 0             | ..                | 5,327         | 55         |
| <b>Europe</b>          | <b>2016</b> | <b>93,189</b> | <b>12,095</b> | <b>12,919</b> | <b>214</b>        | <b>92,151</b> | <b>123</b> |
|                        | <b>2017</b> | <b>91,476</b> | <b>11,781</b> | <b>13,157</b> | <b>260</b>        | <b>89,839</b> | <b>120</b> |
|                        | <b>2018</b> | <b>78,801</b> | <b>11,594</b> | <b>13,093</b> | <b>721</b>        | <b>76,581</b> | <b>102</b> |
|                        | <b>2019</b> | <b>93,479</b> | <b>11,349</b> | <b>12,516</b> | <b>903</b>        | <b>91,409</b> | <b>122</b> |
| Austria                | 2016        | 1,394         | 929           | 39            | 20                | 2,264         | 259        |
|                        | 2017        | 1,397         | 1,167         | 40            | -9                | 2,532         | 287        |
|                        | 2018        | 1,359         | 823           | 41            | 44                | 2,097         | 236        |
|                        | 2019        | 1,365         | 951           | 38            | -80               | 2,359         | 263        |
| Belarus                | 2016        | ..            | 54            | ..            | 4                 | 50            | 5          |
|                        | 2017        | ..            | 57            | ..            | -5                | 62            | 7          |
|                        | 2018        | ..            | 56            | ..            | 1                 | 55            | 6          |
|                        | 2019        | ..            | 47            | ..            | -4                | 51            | 5          |
| Belgium                | 2016        | 1,248         | 465           | 7             | -19               | 1,725         | 152        |
|                        | 2017        | 1,236         | 507           | 14            | -1                | 1,731         | 152        |
|                        | 2018        | 1,252         | 508           | 26            | 4                 | 1,729         | 151        |
|                        | 2019        | 1,253         | 585           | 38            | 26                | 1,774         | 154        |
| Bosnia and Herzegovina | 2016        | 880           | 17            | 377           | 92                | 428           | 126        |
|                        | 2017        | 855           | 58            | 306           | 216               | 391           | 117        |
|                        | 2018        | 945           | 38            | 566           | -12               | 429           | 129        |
|                        | 2019        | 907           | 46            | 455           | 26                | 472           | 143        |
| Bulgaria               | 2016        | ..            | 97            | ..            | -3                | 100           | 14         |
|                        | 2017        | ..            | 62            | ..            | 0                 | 62            | 9          |
|                        | 2018        | ..            | 61            | ..            | -1                | 62            | 9          |
|                        | 2019        | ..            | 62            | ..            | 0                 | 62            | 9          |
| Croatia                | 2016        | ..            | 30            | ..            | 1                 | 29            | 7          |
|                        | 2017        | ..            | 31            | ..            | 0                 | 32            | 8          |
|                        | 2018        | ..            | 30            | ..            | -1                | 31            | 7          |
|                        | 2019        | ..            | 28            | ..            | -3                | 31            | 8          |
| Czechia                | 2016        | 2,396         | 844           | 550           | 2                 | 2,688         | 253        |
|                        | 2017        | 2,676         | 522           | 646           | 23                | 2,529         | 238        |
|                        | 2018        | 2,738         | 529           | 636           | -25               | 2,656         | 249        |
|                        | 2019        | 2,536         | 465           | 593           | -7                | 2,415         | 226        |
| Denmark                | 2016        | ..            | 11            | ..            | -1                | 12            | 2          |
|                        | 2017        | ..            | 12            | ..            | 0                 | 12            | 2          |
|                        | 2018        | ..            | 14            | ..            | 2                 | 13            | 2          |
|                        | 2019        | ..            | 9             | ..            | -1                | 10            | 2          |
| Estonia                | 2016        | 13            | ..            | 13            | 0                 | 0             | 0          |
|                        | 2017        | 19            | ..            | 19            | ..                | 0             | 0          |
|                        | 2018        | 14            | ..            | 13            | 1                 | 0             | 0          |
|                        | 2019        | 23            | ..            | 20            | 3                 | 0             | 0          |

Table 8

## Production, trade and supply of coke

Thousand metric tons and kilograms per capita

| Country or area | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|-----------------|------|------------|---------|---------|-------------------|--------|------------|
|                 |      |            |         |         |                   | Total  | Per capita |
| Finland         | 2016 | 921        | 323     | 91      | 83                | 1,070  | 195        |
|                 | 2017 | 900        | 255     | 137     | 42                | 976    | 177        |
|                 | 2018 | 899        | 311     | 107     | 38                | 1,065  | 193        |
|                 | 2019 | 874        | 322     | 202     | 84                | 910    | 164        |
| France          | 2016 | 3,227      | 370     | 83      | 91                | 3,423  | 51         |
|                 | 2017 | 3,356      | 494     | 6       | 219               | 3,625  | 54         |
|                 | 2018 | 3,346      | 608     | 50      | -39               | 3,942  | 59         |
|                 | 2019 | 3,255      | 631     | 6       | 36                | 3,844  | 57         |
| Germany         | 2016 | 9,387      | 2,388   | 715     | 0                 | 11,060 | 135        |
|                 | 2017 | 9,392      | 2,297   | 842     | 30                | 10,817 | 131        |
|                 | 2018 | 9,361      | 2,301   | 838     | 9                 | 10,815 | 130        |
|                 | 2019 | 7,786      | 1,903   | 761     | ..                | 8,928  | 107        |
| Hungary         | 2016 | 929        | 39      | 459     | -9                | 518    | 53         |
|                 | 2017 | 999        | 110     | 374     | 9                 | 726    | 75         |
|                 | 2018 | 997        | 96      | 303     | 56                | 734    | 76         |
|                 | 2019 | 932        | 45      | 317     | -15               | 675    | 70         |
| Iceland         | 2016 | ..         | 25      | ..      | ..                | 25     | 75         |
|                 | 2017 | ..         | 22      | ..      | ..                | 22     | 65         |
|                 | 2018 | ..         | 21      | ..      | 0                 | 21     | 63         |
|                 | 2019 | ..         | 11      | ..      | ..                | 11     | 31         |
| Italy           | 2016 | 1,806      | 985     | 374     | -100              | 2,517  | 41         |
|                 | 2017 | 1,717      | 684     | 342     | 2                 | 2,056  | 34         |
|                 | 2018 | 1,860      | 654     | 361     | -14               | 2,167  | 36         |
|                 | 2019 | 1,759      | 582     | 292     | 12                | 2,037  | 34         |
| Lithuania       | 2016 | ..         | 16      | ..      | 0                 | 16     | 6          |
|                 | 2017 | ..         | 16      | ..      | -1                | 17     | 6          |
|                 | 2018 | ..         | 19      | ..      | 0                 | 19     | 7          |
|                 | 2019 | ..         | 17      | ..      | 0                 | 17     | 6          |
| Luxembourg      | 2016 | ..         | 1       | ..      | ..                | 1      | 2          |
|                 | 2017 | ..         | 1       | ..      | ..                | 1      | 1          |
|                 | 2018 | ..         | 0       | ..      | ..                | 0      | 1          |
|                 | 2019 | ..         | 1       | ..      | ..                | 1      | 1          |
| Netherlands     | 2016 | 2,108      | 71      | 101     | 50                | 2,028  | 119        |
|                 | 2017 | 2,036      | 110     | 197     | -81               | 2,030  | 119        |
|                 | 2018 | 2,060      | 107     | 106     | 39                | 2,022  | 119        |
|                 | 2019 | 2,054      | 104     | 140     | 33                | 1,985  | 116        |
| North Macedonia | 2016 | ..         | 1       | 0       | -1                | 2      | 1          |
|                 | 2017 | ..         | 5       | 0       | 4                 | 1      | 1          |
|                 | 2018 | ..         | 0       | 0       | 0                 | 0      | 0          |
|                 | 2019 | ..         | 1       | ..      | 0                 | 1      | 0          |
| Norway          | 2016 | ..         | 426     | ..      | 15                | 411    | 78         |
|                 | 2017 | ..         | 411     | ..      | -14               | 425    | 80         |
|                 | 2018 | ..         | 416     | 0       | -11               | 428    | 80         |
|                 | 2019 | ..         | 360     | 0       | 0                 | 359    | 67         |
| Poland          | 2016 | 10,101     | 125     | 7,355   | -45               | 2,916  | 77         |
|                 | 2017 | 9,790      | 211     | 6,855   | -93               | 3,240  | 85         |
|                 | 2018 | 9,849      | 214     | 6,948   | 140               | 2,974  | 78         |
|                 | 2019 | 9,277      | 189     | 6,526   | 217               | 2,724  | 72         |
| Portugal        | 2016 | ..         | 13      | ..      | 1                 | 12     | 1          |
|                 | 2017 | ..         | 12      | ..      | 0                 | 12     | 1          |
|                 | 2018 | ..         | 9       | ..      | 0                 | 9      | 1          |
|                 | 2019 | ..         | 9       | ..      | 0                 | 10     | 1          |

Table 8

## Production, trade and supply of coke

Thousand metric tons and kilograms per capita

| Country or area    | Year        | Production   | Imports    | Exports    | Changes in stocks | Supply       |            |
|--------------------|-------------|--------------|------------|------------|-------------------|--------------|------------|
|                    |             |              |            |            |                   | Total        | Per capita |
| Romania            | 2016        | ..           | 808        | ..         | -21               | 829          | 42         |
|                    | 2017        | ..           | 761        | 0          | 34                | 726          | 37         |
|                    | 2018        | ..           | 721        | 0          | -26               | 748          | 38         |
|                    | 2019        | ..           | 795        | 0          | 26                | 769          | 40         |
| Russian Federation | 2016        | 39,500       | 73         | 2,261      | 58                | 37,254       | 256        |
|                    | 2017        | 40,602       | 105        | 2,920      | -62               | 37,849       | 260        |
|                    | 2018        | 27,094       | 120        | 2,739      | -12               | 24,487       | 168        |
|                    | 2019        | 45,999       | 66         | 2,798      | 15                | 43,252       | 297        |
| Serbia             | 2016        | ..           | 664        | 0          | 2                 | 662          | 94         |
|                    | 2017        | ..           | 719        | 3          | -3                | 718          | 102        |
|                    | 2018        | ..           | 774        | ..         | -64               | 838          | 120        |
|                    | 2019        | ..           | 812        | ..         | 32                | 780          | 112        |
| Slovakia           | 2016        | 1,694        | 153        | 72         | 5                 | 1,770        | 325        |
|                    | 2017        | 1,637        | 258        | 70         | 31                | 1,794        | 329        |
|                    | 2018        | 1,645        | 305        | 59         | 88                | 1,803        | 331        |
|                    | 2019        | 1,454        | 235        | 124        | 108               | 1,457        | 267        |
| Slovenia           | 2016        | ..           | 28         | ..         | 1                 | 27           | 13         |
|                    | 2017        | ..           | 30         | ..         | 0                 | 30           | 15         |
|                    | 2018        | ..           | 30         | ..         | 0                 | 30           | 15         |
|                    | 2019        | ..           | 31         | ..         | 0                 | 30           | 15         |
| Spain              | 2016        | 1,572        | 186        | 137        | 45                | 1,576        | 34         |
|                    | 2017        | 1,580        | 261        | 132        | -50               | 1,759        | 38         |
|                    | 2018        | 1,484        | 770        | 265        | 320               | 1,669        | 36         |
|                    | 2019        | 878          | 841        | 143        | 370               | 1,206        | 26         |
| Sweden             | 2016        | 1,171        | 103        | 28         | -16               | 1,262        | 128        |
|                    | 2017        | 1,155        | 96         | 30         | -104              | 1,325        | 134        |
|                    | 2018        | 1,105        | 234        | 9          | 91                | 1,239        | 124        |
|                    | 2019        | 1,105        | 456        | 49         | 137               | 1,375        | 137        |
| Switzerland        | 2016        | ..           | 16         | ..         | ..                | 16           | 2          |
|                    | 2017        | ..           | 14         | ..         | ..                | 14           | 2          |
|                    | 2018        | ..           | 15         | ..         | ..                | 15           | 2          |
|                    | 2019        | ..           | 12         | 0          | ..                | 12           | 1          |
| Ukraine            | 2016        | 13,442       | 1,612      | 257        | -150              | 14,947       | 334        |
|                    | 2017        | 10,696       | 1,550      | 225        | 66                | 11,955       | 269        |
|                    | 2018        | 11,460       | 840        | 26         | 7                 | 12,267       | 277        |
|                    | 2019        | 10,651       | 877        | 14         | 37                | 11,476       | 261        |
| United Kingdom     | 2016        | 1,400        | 1,222      | 0          | 109               | 2,513        | 38         |
|                    | 2017        | 1,433        | 943        | 0          | 6                 | 2,370        | 36         |
|                    | 2018        | 1,334        | 970        | ..         | 87                | 2,217        | 33         |
|                    | 2019        | 1,370        | 857        | ..         | -148              | 2,375        | 35         |
| <b>Oceania</b>     | <b>2016</b> | <b>3,369</b> | <b>189</b> | <b>755</b> | <b>..</b>         | <b>2,803</b> | <b>69</b>  |
|                    | <b>2017</b> | <b>3,298</b> | <b>186</b> | <b>473</b> | <b>..</b>         | <b>3,011</b> | <b>73</b>  |
|                    | <b>2018</b> | <b>3,169</b> | <b>235</b> | <b>575</b> | <b>..</b>         | <b>2,829</b> | <b>68</b>  |
|                    | <b>2019</b> | <b>2,893</b> | <b>448</b> | <b>657</b> | <b>..</b>         | <b>2,684</b> | <b>64</b>  |
| Australia          | 2016        | 2,867        | 189        | 755        | ..                | 2,301        | 95         |
|                    | 2017        | 2,789        | 186        | 473        | ..                | 2,502        | 102        |
|                    | 2018        | 2,683        | 235        | 575        | ..                | 2,343        | 94         |
|                    | 2019        | 2,468        | 448        | 657        | ..                | 2,259        | 90         |
| New Zealand        | 2016        | 502          | ..         | ..         | ..                | 502          | 108        |
|                    | 2017        | 509          | ..         | ..         | ..                | 509          | 108        |
|                    | 2018        | 486          | ..         | ..         | ..                | 486          | 103        |
|                    | 2019        | 425          | ..         | ..         | ..                | 425          | 89         |



### Production, trade and supply of patent fuel

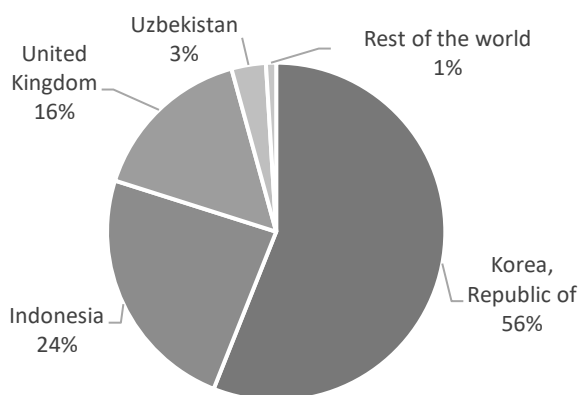
Thousand metric tons and kilograms per capita

#### Table Notes

Data refer to patent fuel.

Please refer to the Definitions Section on pages ix to xv for the appropriate product description/classification, and xvi to xvii for the descriptions of relevant flows.

**Figure 21: Major patent fuel producing countries, 2019**



**Figure 22: Major patent fuel consuming countries, 2019**

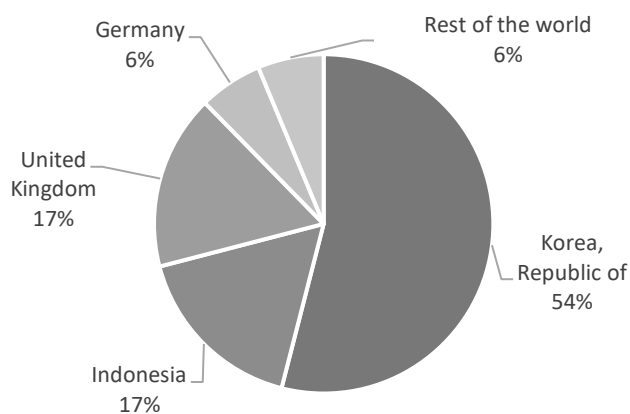


Table 9

## Production, trade and supply of patent fuel

Thousand metric tons and kilograms per capita

| Country or area       | Year        | Production   | Imports    | Exports   | Changes in stocks | Supply       |            |
|-----------------------|-------------|--------------|------------|-----------|-------------------|--------------|------------|
|                       |             |              |            |           |                   | Total        | Per capita |
| <b>World</b>          | <b>2016</b> | <b>2,508</b> | <b>237</b> | <b>32</b> | <b>69</b>         | <b>2,644</b> | <b>0</b>   |
|                       | <b>2017</b> | <b>1,900</b> | <b>240</b> | <b>29</b> | <b>44</b>         | <b>2,067</b> | <b>0</b>   |
|                       | <b>2018</b> | <b>1,735</b> | <b>219</b> | <b>25</b> | <b>36</b>         | <b>1,893</b> | <b>0</b>   |
|                       | <b>2019</b> | <b>1,149</b> | <b>142</b> | <b>39</b> | <b>60</b>         | <b>1,192</b> | <b>0</b>   |
| <b>Africa</b>         | <b>2016</b> | <b>4</b>     | <b>..</b>  | <b>..</b> | <b>..</b>         | <b>4</b>     | <b>0</b>   |
|                       | <b>2017</b> | <b>5</b>     | <b>..</b>  | <b>..</b> | <b>..</b>         | <b>5</b>     | <b>0</b>   |
|                       | <b>2018</b> | <b>5</b>     | <b>..</b>  | <b>..</b> | <b>..</b>         | <b>5</b>     | <b>0</b>   |
|                       | <b>2019</b> | <b>5</b>     | <b>..</b>  | <b>..</b> | <b>..</b>         | <b>5</b>     | <b>0</b>   |
| Niger                 | 2016        | *4           | ..         | ..        | ..                | *4           | 0          |
|                       | 2017        | *5           | ..         | ..        | ..                | *5           | 0          |
|                       | 2018        | *5           | ..         | ..        | ..                | *5           | 0          |
|                       | 2019        | *5           | ..         | ..        | ..                | *5           | 0          |
| <b>America, North</b> | <b>2016</b> | <b>..</b>    | <b>2</b>   | <b>..</b> | <b>..</b>         | <b>2</b>     | <b>0</b>   |
|                       | <b>2017</b> | <b>..</b>    | <b>2</b>   | <b>..</b> | <b>..</b>         | <b>2</b>     | <b>0</b>   |
|                       | <b>2018</b> | <b>..</b>    | <b>2</b>   | <b>..</b> | <b>..</b>         | <b>2</b>     | <b>0</b>   |
|                       | <b>2019</b> | <b>..</b>    | <b>2</b>   | <b>..</b> | <b>..</b>         | <b>2</b>     | <b>0</b>   |
| Bahamas               | 2016        | ..           | *2         | ..        | ..                | *2           | *5         |
|                       | 2017        | ..           | *2         | ..        | ..                | *2           | *5         |
|                       | 2018        | ..           | *2         | ..        | ..                | *2           | *5         |
|                       | 2019        | ..           | *2         | ..        | ..                | *2           | *5         |
| <b>Asia</b>           | <b>2016</b> | <b>2,257</b> | <b>5</b>   | <b>0</b>  | <b>54</b>         | <b>2,208</b> | <b>0</b>   |
|                       | <b>2017</b> | <b>1,692</b> | <b>6</b>   | <b>0</b>  | <b>46</b>         | <b>1,652</b> | <b>0</b>   |
|                       | <b>2018</b> | <b>1,519</b> | <b>8</b>   | <b>0</b>  | <b>52</b>         | <b>1,475</b> | <b>0</b>   |
|                       | <b>2019</b> | <b>956</b>   | <b>5</b>   | <b>0</b>  | <b>76</b>         | <b>884</b>   | <b>0</b>   |
| Armenia               | 2016        | ..           | 1          | ..        | ..                | 1            | 0          |
|                       | 2017        | ..           | 1          | ..        | ..                | 1            | 0          |
|                       | 2018        | ..           | 1          | ..        | ..                | 1            | 0          |
|                       | 2019        | ..           | 1          | ..        | ..                | 1            | 0          |
| Indonesia             | 2016        | *95          | *4         | 0         | *54               | *45          | 0          |
|                       | 2017        | *82          | *4         | 0         | *46               | *40          | 0          |
|                       | 2018        | *97          | *5         | 0         | *52               | *50          | 0          |
|                       | 2019        | *274         | *4         | ..        | *76               | *202         | *1         |
| Korea, Republic of    | 2016        | 1,255        | ..         | ..        | ..                | 1,255        | 25         |
|                       | 2017        | 1,078        | ..         | ..        | ..                | 1,078        | 21         |
|                       | 2018        | 910          | ..         | ..        | ..                | 910          | 18         |
|                       | 2019        | 644          | ..         | ..        | ..                | 644          | 13         |
| United Arab Emirates  | 2016        | ..           | 1          | ..        | ..                | 1            | 0          |
|                       | 2017        | ..           | 1          | ..        | ..                | 1            | 0          |
|                       | 2018        | ..           | 2          | ..        | ..                | 2            | 0          |
|                       | 2019        | ..           | 0          | 0         | ..                | 0            | 0          |
| Uzbekistan            | 2016        | 907          | ..         | ..        | ..                | 907          | 29         |
|                       | 2017        | 532          | ..         | ..        | ..                | 532          | 17         |
|                       | 2018        | 512          | ..         | ..        | ..                | 512          | 16         |
|                       | 2019        | 38           | ..         | ..        | ..                | 38           | 1          |
| <b>Europe</b>         | <b>2016</b> | <b>247</b>   | <b>230</b> | <b>32</b> | <b>15</b>         | <b>430</b>   | <b>1</b>   |
|                       | <b>2017</b> | <b>203</b>   | <b>233</b> | <b>29</b> | <b>-2</b>         | <b>408</b>   | <b>1</b>   |
|                       | <b>2018</b> | <b>211</b>   | <b>209</b> | <b>25</b> | <b>-16</b>        | <b>412</b>   | <b>1</b>   |
|                       | <b>2019</b> | <b>189</b>   | <b>135</b> | <b>38</b> | <b>-16</b>        | <b>301</b>   | <b>0</b>   |
| Austria               | 2016        | ..           | 4          | ..        | ..                | 4            | 0          |
|                       | 2017        | ..           | 4          | 0         | ..                | 4            | 0          |
|                       | 2018        | ..           | 28         | 0         | ..                | 28           | 3          |
|                       | 2019        | ..           | 2          | ..        | ..                | 2            | 0          |

## Production, trade and supply of patent fuel

Thousand metric tons and kilograms per capita

| Country or area | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|-----------------|------|------------|---------|---------|-------------------|--------|------------|
|                 |      |            |         |         |                   | Total  | Per capita |
| Belgium         | 2016 | ..         | 8       | 6       | -1                | 3      | 0          |
|                 | 2017 | ..         | 6       | 4       | 1                 | 1      | 0          |
|                 | 2018 | ..         | 5       | 3       | 0                 | 1      | 0          |
|                 | 2019 | ..         | 2       | 1       | 0                 | 1      | 0          |
| France          | 2016 | ..         | 29      | ..      | ..                | 29     | 0          |
|                 | 2017 | ..         | 26      | ..      | ..                | 26     | 0          |
|                 | 2018 | ..         | 12      | ..      | ..                | 12     | 0          |
|                 | 2019 | ..         | 9       | ..      | ..                | 9      | 0          |
| Germany         | 2016 | ..         | 137     | 1       | ..                | 136    | 2          |
|                 | 2017 | ..         | 114     | 1       | ..                | 113    | 1          |
|                 | 2018 | ..         | 108     | 1       | ..                | 107    | 1          |
|                 | 2019 | ..         | 73      | 0       | ..                | 72     | 1          |
| Poland          | 2016 | 2          | 14      | 3       | ..                | 13     | 0          |
|                 | 2017 | 2          | 14      | 4       | 0                 | 12     | 0          |
|                 | 2018 | 14         | 12      | 9       | 5                 | 13     | 0          |
|                 | 2019 | 7          | 22      | 26      | -6                | 9      | 0          |
| Slovakia        | 2016 | ..         | 9       | ..      | ..                | 9      | 2          |
|                 | 2017 | ..         | 11      | ..      | ..                | 11     | 2          |
|                 | 2018 | ..         | 11      | ..      | ..                | 11     | 2          |
|                 | 2019 | ..         | 9       | ..      | ..                | 9      | 2          |
| United Kingdom  | 2016 | 245        | 29      | 22      | 16                | 236    | 4          |
|                 | 2017 | 201        | 57      | 20      | -3                | 241    | 4          |
|                 | 2018 | 197        | 33      | 12      | -21               | 239    | 4          |
|                 | 2019 | 182        | 18      | 11      | -10               | 199    | 3          |





### Production, trade and supply of brown coal briquettes and peat products

Thousand metric tons and kilograms per capita

#### Table Notes

Data refer to brown coal briquettes (BKB) and peat products.

Please refer to the Definitions Section on pages ix to xv for the appropriate product description/classification, and xvi to xvii for the descriptions of relevant flows.

Figure 23: Production of BKB and peat products by region, 1990-2019

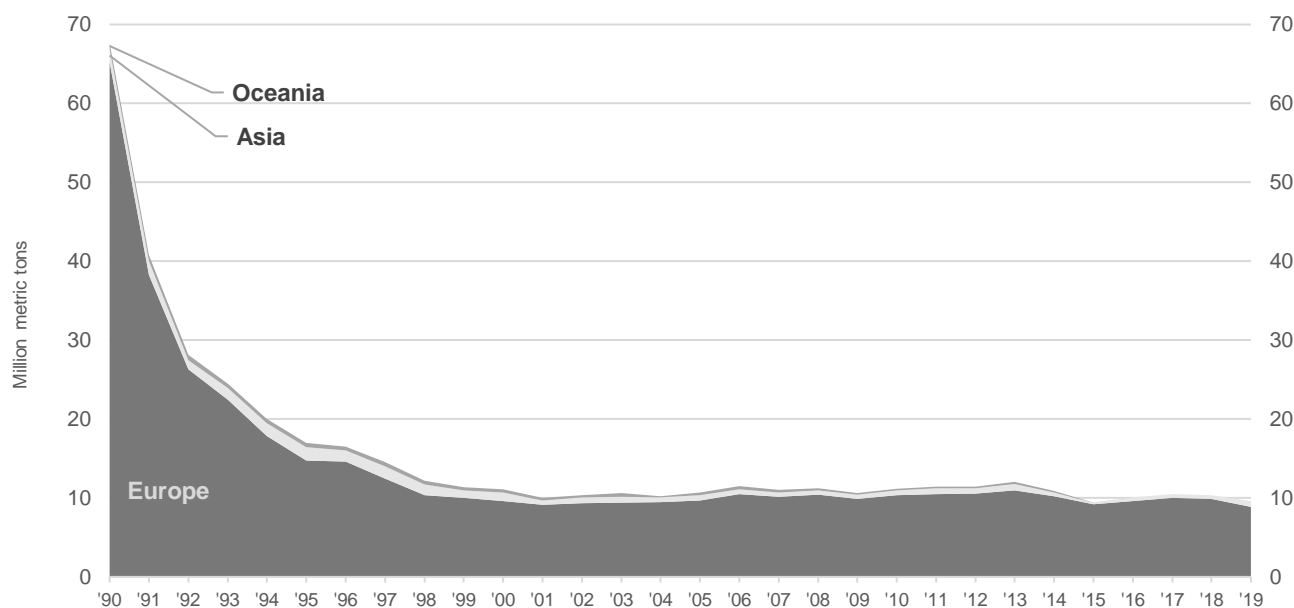


Figure 24: Major BKB and peat products producing countries, 2019

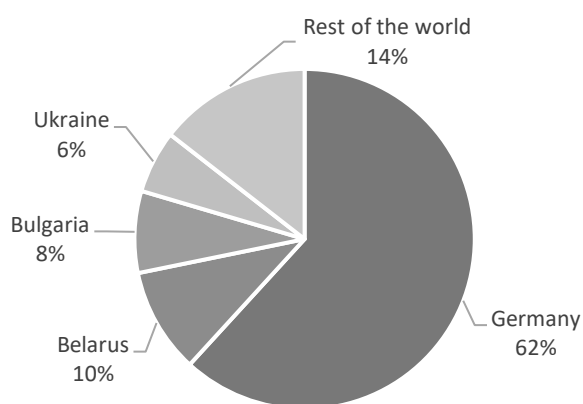


Figure 25: Major BKB and peat products consuming countries, 2019

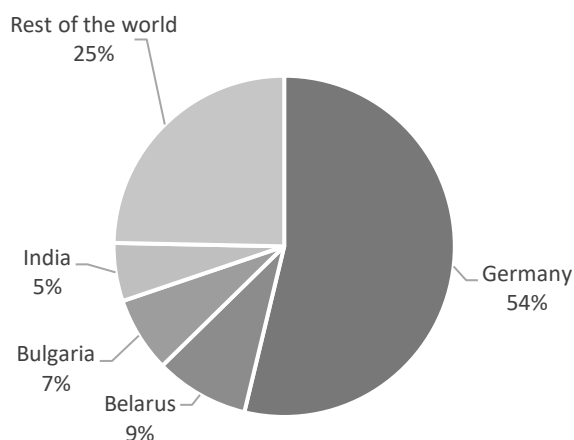


Table 10

## Production, trade and supply of brown coal briquettes and peat products

Thousand metric tons and kilograms per capita

| Country or area       | Year        | Production    | Imports    | Exports      | Changes in stocks | Supply       |            |
|-----------------------|-------------|---------------|------------|--------------|-------------------|--------------|------------|
|                       |             |               |            |              |                   | Total        | Per capita |
| <b>World</b>          | <b>2016</b> | <b>10,106</b> | <b>910</b> | <b>1,600</b> | <b>-12</b>        | <b>9,428</b> | <b>1</b>   |
|                       | <b>2017</b> | <b>10,469</b> | <b>876</b> | <b>1,722</b> | <b>131</b>        | <b>9,492</b> | <b>1</b>   |
|                       | <b>2018</b> | <b>10,351</b> | <b>905</b> | <b>1,791</b> | <b>326</b>        | <b>9,138</b> | <b>1</b>   |
|                       | <b>2019</b> | <b>9,626</b>  | <b>825</b> | <b>1,567</b> | <b>275</b>        | <b>8,610</b> | <b>1</b>   |
| <b>America, North</b> | <b>2016</b> | ..            | <b>4</b>   | ..           | ..                | <b>4</b>     | <b>0</b>   |
|                       | <b>2017</b> | ..            | <b>2</b>   | ..           | ..                | <b>2</b>     | <b>0</b>   |
|                       | <b>2018</b> | ..            | <b>1</b>   | ..           | ..                | <b>1</b>     | <b>0</b>   |
|                       | <b>2019</b> | ..            | <b>2</b>   | ..           | ..                | <b>2</b>     | <b>0</b>   |
| Mexico                | 2016        | ..            | 4          | ..           | ..                | 4            | 0          |
|                       | 2017        | ..            | 2          | ..           | ..                | 2            | 0          |
|                       | 2018        | ..            | 1          | ..           | ..                | 1            | 0          |
|                       | 2019        | ..            | 2          | ..           | ..                | 2            | 0          |
| <b>Asia</b>           | <b>2016</b> | <b>466</b>    | <b>1</b>   | ..           | ..                | <b>467</b>   | <b>0</b>   |
|                       | <b>2017</b> | <b>473</b>    | <b>2</b>   | <b>0</b>     | ..                | <b>475</b>   | <b>0</b>   |
|                       | <b>2018</b> | <b>467</b>    | <b>3</b>   | <b>3</b>     | ..                | <b>467</b>   | <b>0</b>   |
|                       | <b>2019</b> | <b>739</b>    | ..         | ..           | ..                | <b>739</b>   | <b>0</b>   |
| Georgia               | 2016        | ..            | 1          | ..           | ..                | 1            | 0          |
|                       | 2017        | ..            | 2          | 0            | ..                | 2            | 0          |
|                       | 2018        | ..            | 3          | 3            | ..                | 0            | 0          |
|                       | 2019        | ..            | ..         | ..           | ..                | ..           | ..         |
| India                 | 2016        | *436          | ..         | ..           | ..                | *436         | 0          |
|                       | 2017        | *464          | ..         | ..           | ..                | *464         | 0          |
|                       | 2018        | *461          | ..         | ..           | ..                | *461         | 0          |
|                       | 2019        | *475          | ..         | ..           | ..                | *475         | 0          |
| Uzbekistan            | 2016        | 30            | ..         | ..           | ..                | 30           | 1          |
|                       | 2017        | 9             | ..         | ..           | ..                | 9            | 0          |
|                       | 2018        | 6             | ..         | ..           | ..                | 6            | 0          |
|                       | 2019        | 264           | ..         | ..           | ..                | 264          | 8          |
| <b>Europe</b>         | <b>2016</b> | <b>9,640</b>  | <b>864</b> | <b>1,600</b> | <b>-30</b>        | <b>8,934</b> | <b>12</b>  |
|                       | <b>2017</b> | <b>9,996</b>  | <b>872</b> | <b>1,722</b> | <b>141</b>        | <b>9,005</b> | <b>12</b>  |
|                       | <b>2018</b> | <b>9,884</b>  | <b>900</b> | <b>1,788</b> | <b>326</b>        | <b>8,669</b> | <b>12</b>  |
|                       | <b>2019</b> | <b>8,888</b>  | <b>822</b> | <b>1,567</b> | <b>275</b>        | <b>7,868</b> | <b>10</b>  |
| Austria               | 2016        | ..            | 9          | 0            | ..                | 9            | 1          |
|                       | 2017        | ..            | 14         | 0            | ..                | 13           | 2          |
|                       | 2018        | ..            | 13         | 0            | ..                | 13           | 1          |
|                       | 2019        | ..            | 10         | 0            | ..                | 10           | 1          |
| Belarus               | 2016        | 873           | ..         | 94           | 9                 | 770          | 82         |
|                       | 2017        | 976           | ..         | 109          | 33                | 834          | 88         |
|                       | 2018        | 1,055         | ..         | 164          | 35                | 856          | 91         |
|                       | 2019        | 962           | ..         | 120          | 75                | 767          | 81         |
| Belgium               | 2016        | ..            | 417        | ..           | -1                | 418          | 37         |
|                       | 2017        | ..            | 366        | ..           | 0                 | 365          | 32         |
|                       | 2018        | ..            | 383        | ..           | 0                 | 383          | 33         |
|                       | 2019        | ..            | 324        | ..           | ..                | 324          | 28         |
| Bulgaria              | 2016        | 1,313         | ..         | ..           | 7                 | 1,306        | 183        |
|                       | 2017        | 1,192         | 0          | ..           | 99                | 1,093        | 154        |
|                       | 2018        | 980           | ..         | ..           | 210               | 770          | 109        |
|                       | 2019        | 749           | ..         | ..           | 134               | 615          | 88         |
| Czechia               | 2016        | 118           | 171        | 94           | -2                | 197          | 19         |
|                       | 2017        | 128           | 225        | 105          | 2                 | 246          | 23         |
|                       | 2018        | 145           | 236        | 126          | 2                 | 253          | 24         |
|                       | 2019        | 136           | 209        | 113          | 3                 | 229          | 21         |

Table 10

## Production, trade and supply of brown coal briquettes and peat products

Thousand metric tons and kilograms per capita

| Country or area    | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|--------------------|------|------------|---------|---------|-------------------|--------|------------|
|                    |      |            |         |         |                   | Total  | Per capita |
| Estonia            | 2016 | 8          | ..      | ..      | -1                | 9      | 7          |
|                    | 2017 | ..         | ..      | ..      | ..                | ..     | ..         |
|                    | 2018 | ..         | ..      | ..      | ..                | ..     | ..         |
|                    | 2019 | ..         | ..      | ..      | ..                | ..     | ..         |
| France             | 2016 | ..         | 44      | ..      | ..                | 44     | 1          |
|                    | 2017 | ..         | 57      | ..      | 0                 | 57     | 1          |
|                    | 2018 | ..         | 45      | ..      | 0                 | 45     | 1          |
|                    | 2019 | ..         | 51      | ..      | 0                 | 51     | 1          |
| Germany            | 2016 | 6,418      | 19      | 1,380   | -50               | 5,107  | 62         |
|                    | 2017 | 6,705      | 8       | 1,486   | ..                | 5,227  | 63         |
|                    | 2018 | 6,612      | 14      | 1,477   | 30                | 5,119  | 62         |
|                    | 2019 | 5,949      | 14      | 1,318   | 17                | 4,628  | 55         |
| Hungary            | 2016 | ..         | 7       | ..      | ..                | 7      | 1          |
|                    | 2017 | ..         | 12      | ..      | ..                | 12     | 1          |
|                    | 2018 | ..         | 11      | ..      | ..                | 11     | 1          |
|                    | 2019 | ..         | 9       | ..      | ..                | 9      | 1          |
| Ireland            | 2016 | 183        | 20      | 14      | 19                | 170    | 36         |
|                    | 2017 | 170        | 14      | 14      | 14                | 156    | 33         |
|                    | 2018 | 146        | 15      | 17      | -34               | 178    | 37         |
|                    | 2019 | 123        | 13      | 13      | -16               | 138    | 28         |
| Latvia             | 2016 | ..         | ..      | ..      | ..                | ..     | ..         |
|                    | 2017 | 1          | ..      | ..      | 0                 | 1      | 0          |
|                    | 2018 | 1          | ..      | 1       | -1                | 1      | 1          |
|                    | 2019 | 2          | ..      | 1       | 0                 | 1      | 1          |
| Lithuania          | 2016 | 6          | 60      | 5       | 2                 | 59     | 20         |
|                    | 2017 | 5          | 59      | 4       | -5                | 65     | 23         |
|                    | 2018 | 4          | 73      | 1       | 1                 | 75     | 27         |
|                    | 2019 | 3          | 58      | 1       | -1                | 61     | 22         |
| Luxembourg         | 2016 | ..         | 8       | ..      | ..                | 8      | 14         |
|                    | 2017 | ..         | 9       | ..      | ..                | 9      | 16         |
|                    | 2018 | ..         | 9       | ..      | ..                | 9      | 14         |
|                    | 2019 | ..         | 9       | ..      | ..                | 9      | 14         |
| Netherlands        | 2016 | ..         | 40      | ..      | ..                | 40     | 2          |
|                    | 2017 | ..         | 42      | ..      | ..                | 42     | 2          |
|                    | 2018 | ..         | 38      | ..      | ..                | 38     | 2          |
|                    | 2019 | ..         | 43      | ..      | ..                | 43     | 3          |
| Poland             | 2016 | ..         | 27      | 5       | ..                | 22     | 1          |
|                    | 2017 | ..         | 29      | 2       | 0                 | 27     | 1          |
|                    | 2018 | ..         | 44      | ..      | 0                 | 44     | 1          |
|                    | 2019 | ..         | 41      | 1       | 0                 | 40     | 1          |
| Russian Federation | 2016 | 41         | ..      | 4       | 1                 | 36     | 0          |
|                    | 2017 | 26         | 0       | 2       | 0                 | 24     | 0          |
|                    | 2018 | 29         | 0       | 0       | 0                 | 30     | 0          |
|                    | 2019 | 31         | ..      | ..      | 0                 | 31     | 0          |
| Serbia             | 2016 | 434        | 11      | 4       | -16               | 457    | 65         |
|                    | 2017 | 513        | 5       | 0       | 12                | 505    | 72         |
|                    | 2018 | 422        | 2       | 2       | -15               | 437    | 62         |
|                    | 2019 | 360        | 3       | ..      | -45               | 408    | 58         |
| Slovakia           | 2016 | ..         | 31      | ..      | 1                 | 30     | 6          |
|                    | 2017 | ..         | 32      | ..      | 1                 | 31     | 6          |
|                    | 2018 | ..         | 17      | ..      | -1                | 18     | 3          |
|                    | 2019 | ..         | 38      | ..      | -1                | 39     | 7          |

**Table 10****Production, trade and supply of brown coal briquettes and peat products**

Thousand metric tons and kilograms per capita

| Country or area | Year        | Production | Imports   | Exports   | Changes in stocks | Supply    |            |
|-----------------|-------------|------------|-----------|-----------|-------------------|-----------|------------|
|                 |             |            |           |           |                   | Total     | Per capita |
| Ukraine         | 2016        | 246        | 0         | 0         | 2                 | 244       | 5          |
|                 | 2017        | 281        | ..        | ..        | -15               | 296       | 7          |
|                 | 2018        | 490        | ..        | ..        | 99                | 391       | 9          |
|                 | 2019        | 574        | ..        | ..        | 110               | 464       | 11         |
| <b>Oceania</b>  | <b>2016</b> | <b>0</b>   | <b>41</b> | <b>0</b>  | <b>18</b>         | <b>23</b> | <b>1</b>   |
|                 | <b>2017</b> | <b>..</b>  | <b>..</b> | <b>..</b> | <b>-10</b>        | <b>10</b> | <b>0</b>   |
|                 | <b>2018</b> | <b>..</b>  | <b>1</b>  | <b>..</b> | <b>..</b>         | <b>1</b>  | <b>0</b>   |
|                 | <b>2019</b> | <b>..</b>  | <b>1</b>  | <b>..</b> | <b>..</b>         | <b>1</b>  | <b>0</b>   |
| Australia       | 2016        | 0          | 41        | 0         | 18                | 23        | 1          |
|                 | 2017        | ..         | ..        | ..        | -10               | 10        | 0          |
|                 | 2018        | ..         | 1         | ..        | ..                | 1         | 0          |
|                 | 2019        | ..         | 1         | ..        | ..                | 1         | 0          |





### Production, trade and supply of peat

Thousand metric tons and kilograms per capita

#### Table Notes

Data refer to peat.

Please refer to the Definitions Section on pages ix to xv for the appropriate product description/classification, and xvi to xvii for the descriptions of relevant flows.

Figure 26: World production of peat, 1990-2019

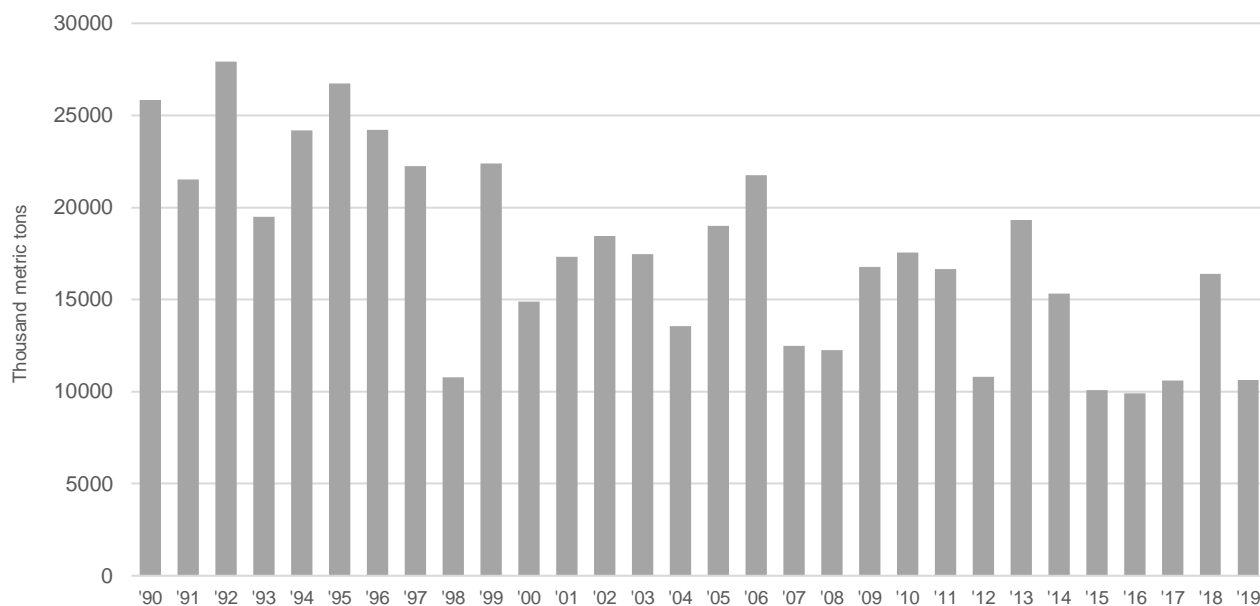


Figure 27: Major peat producing countries, 2019

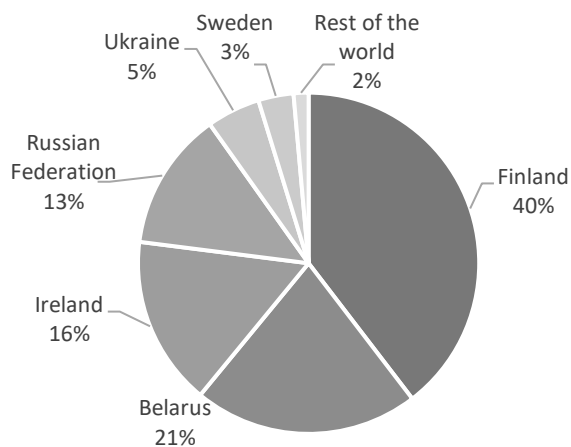


Figure 28: Major peat consuming countries, 2019

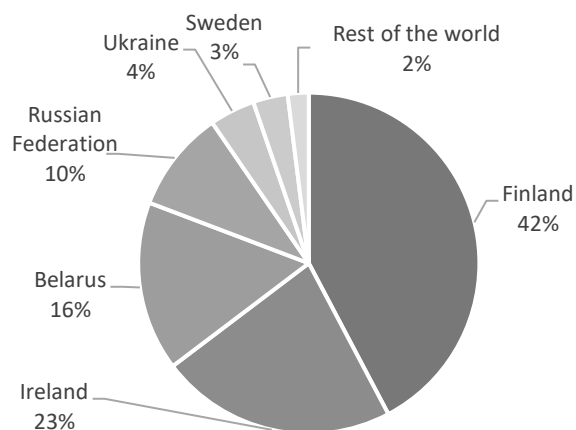


Table 11

## Production, trade and supply of peat

Thousand metric tons and kilograms per capita

| Country or area         | Year        | Production    | Imports    | Exports    | Changes in stocks | Supply        |            |
|-------------------------|-------------|---------------|------------|------------|-------------------|---------------|------------|
|                         |             |               |            |            |                   | Total         | Per capita |
| <b>World</b>            | <b>2016</b> | <b>9,894</b>  | <b>179</b> | <b>152</b> | <b>-3,517</b>     | <b>13,438</b> | <b>2</b>   |
|                         | <b>2017</b> | <b>10,613</b> | <b>216</b> | <b>165</b> | <b>-2,329</b>     | <b>12,993</b> | <b>2</b>   |
|                         | <b>2018</b> | <b>16,403</b> | <b>279</b> | <b>183</b> | <b>2,383</b>      | <b>14,115</b> | <b>2</b>   |
|                         | <b>2019</b> | <b>10,625</b> | <b>277</b> | <b>246</b> | <b>-2,177</b>     | <b>12,833</b> | <b>2</b>   |
| <b>Africa</b>           | <b>2016</b> | <b>17</b>     | <b>..</b>  | <b>..</b>  | <b>..</b>         | <b>17</b>     | <b>0</b>   |
|                         | <b>2017</b> | <b>22</b>     | <b>..</b>  | <b>..</b>  | <b>..</b>         | <b>22</b>     | <b>0</b>   |
|                         | <b>2018</b> | <b>27</b>     | <b>..</b>  | <b>..</b>  | <b>..</b>         | <b>27</b>     | <b>0</b>   |
|                         | <b>2019</b> | <b>37</b>     | <b>..</b>  | <b>..</b>  | <b>..</b>         | <b>37</b>     | <b>0</b>   |
| Burundi                 | 2016        | 10            | ..         | ..         | ..                | 10            | 1          |
|                         | 2017        | 14            | ..         | ..         | ..                | 14            | 1          |
|                         | 2018        | 12            | ..         | ..         | ..                | 12            | 1          |
|                         | 2019        | 15            | ..         | ..         | ..                | 15            | 1          |
| Rwanda                  | 2016        | *7            | ..         | ..         | ..                | *7            | *1         |
|                         | 2017        | *8            | ..         | ..         | ..                | *8            | *1         |
|                         | 2018        | *16           | ..         | ..         | ..                | *16           | *1         |
|                         | 2019        | *22           | ..         | ..         | ..                | *22           | *2         |
| <b>America, South</b>   | <b>2016</b> | <b>7</b>      | <b>5</b>   | <b>..</b>  | <b>..</b>         | <b>12</b>     | <b>0</b>   |
|                         | <b>2017</b> | <b>5</b>      | <b>4</b>   | <b>..</b>  | <b>..</b>         | <b>9</b>      | <b>0</b>   |
|                         | <b>2018</b> | <b>5</b>      | <b>4</b>   | <b>..</b>  | <b>..</b>         | <b>9</b>      | <b>0</b>   |
|                         | <b>2019</b> | <b>5</b>      | <b>4</b>   | <b>..</b>  | <b>..</b>         | <b>9</b>      | <b>0</b>   |
| Falkland Is. (Malvinas) | 2016        | *7            | ..         | ..         | ..                | *7            | *2,392     |
|                         | 2017        | 5             | ..         | ..         | ..                | 5             | 1,627      |
|                         | 2018        | 5             | ..         | ..         | ..                | 5             | 1,545      |
|                         | 2019        | 5             | ..         | ..         | ..                | 5             | 1,483      |
| Uruguay                 | 2016        | ..            | 5          | ..         | ..                | 5             | 1          |
|                         | 2017        | ..            | 4          | ..         | ..                | 4             | 1          |
|                         | 2018        | ..            | 4          | ..         | ..                | 4             | 1          |
|                         | 2019        | ..            | 4          | ..         | ..                | 4             | 1          |
| <b>Asia</b>             | <b>2016</b> | <b>0</b>      | <b>1</b>   | <b>..</b>  | <b>..</b>         | <b>1</b>      | <b>0</b>   |
|                         | <b>2017</b> | <b>0</b>      | <b>2</b>   | <b>0</b>   | <b>..</b>         | <b>2</b>      | <b>0</b>   |
|                         | <b>2018</b> | <b>3</b>      | <b>3</b>   | <b>3</b>   | <b>..</b>         | <b>3</b>      | <b>0</b>   |
|                         | <b>2019</b> | <b>4</b>      | <b>7</b>   | <b>4</b>   | <b>..</b>         | <b>7</b>      | <b>0</b>   |
| Georgia                 | 2016        | 0             | 1          | ..         | ..                | 1             | 0          |
|                         | 2017        | 0             | 2          | 0          | ..                | 2             | 1          |
|                         | 2018        | 3             | 3          | 3          | ..                | 3             | 1          |
|                         | 2019        | 4             | 7          | 4          | ..                | 7             | 2          |
| <b>Europe</b>           | <b>2016</b> | <b>9,870</b>  | <b>173</b> | <b>152</b> | <b>-3,517</b>     | <b>13,408</b> | <b>18</b>  |
|                         | <b>2017</b> | <b>10,586</b> | <b>209</b> | <b>165</b> | <b>-2,329</b>     | <b>12,960</b> | <b>17</b>  |
|                         | <b>2018</b> | <b>16,367</b> | <b>272</b> | <b>180</b> | <b>2,383</b>      | <b>14,076</b> | <b>19</b>  |
|                         | <b>2019</b> | <b>10,578</b> | <b>266</b> | <b>242</b> | <b>-2,177</b>     | <b>12,780</b> | <b>17</b>  |
| Belarus                 | 2016        | 1,362         | ..         | ..         | -494              | 1,856         | 196        |
|                         | 2017        | 2,045         | ..         | ..         | -28               | 2,073         | 219        |
|                         | 2018        | 2,354         | ..         | ..         | 141               | 2,213         | 234        |
|                         | 2019        | 2,269         | ..         | ..         | 205               | 2,064         | 218        |
| Estonia                 | 2016        | 102           | ..         | 18         | -54               | 138           | 105        |
|                         | 2017        | 32            | ..         | 31         | -162              | 163           | 123        |
|                         | 2018        | 92            | ..         | 0          | -49               | 141           | 107        |
|                         | 2019        | 65            | ..         | ..         | -31               | 96            | 72         |
| Finland                 | 2016        | 3,031         | 45         | ..         | -2,586            | 5,662         | 1,030      |
|                         | 2017        | 3,085         | 26         | ..         | -2,304            | 5,415         | 983        |
|                         | 2018        | 7,646         | 44         | ..         | 1,606             | 6,084         | 1,102      |
|                         | 2019        | 4,207         | 54         | ..         | -1,164            | 5,425         | 981        |



## Production, trade and supply of peat

Thousand metric tons and kilograms per capita

| Country or area    | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|--------------------|------|------------|---------|---------|-------------------|--------|------------|
|                    |      |            |         |         |                   | Total  | Per capita |
| Ireland            | 2016 | 3,187      | ..      | ..      | -340              | 3,527  | 751        |
|                    | 2017 | 3,593      | ..      | ..      | 181               | 3,412  | 718        |
|                    | 2018 | 3,871      | ..      | ..      | 687               | 3,184  | 661        |
|                    | 2019 | 1,706      | ..      | ..      | -1,171            | 2,877  | 589        |
| Latvia             | 2016 | 4          | 0       | 0       | 1                 | 3      | 2          |
|                    | 2017 | 2          | ..      | 1       | -2                | 3      | 2          |
|                    | 2018 | 7          | ..      | 1       | -6                | 12     | 6          |
|                    | 2019 | 8          | ..      | ..      | 2                 | 5      | 3          |
| Lithuania          | 2016 | 17         | ..      | 1       | -13               | 29     | 10         |
|                    | 2017 | 24         | ..      | 1       | -29               | 52     | 18         |
|                    | 2018 | 28         | ..      | 3       | -26               | 51     | 18         |
|                    | 2019 | 30         | ..      | 2       | -3                | 31     | 11         |
| Romania            | 2016 | 7          | 39      | 1       | 0                 | 45     | 2          |
|                    | 2017 | 7          | 50      | 0       | 0                 | 56     | 3          |
|                    | 2018 | 6          | 65      | 0       | 0                 | 71     | 4          |
|                    | 2019 | 1          | 70      | 1       | ..                | 70     | 4          |
| Russian Federation | 2016 | 1,197      | 15      | 106     | -38               | 1,144  | 8          |
|                    | 2017 | 903        | 41      | 102     | 0                 | 842    | 6          |
|                    | 2018 | 1,288      | 44      | 157     | 57                | 1,118  | 8          |
|                    | 2019 | 1,398      | 40      | 230     | -30               | 1,237  | 8          |
| Sweden             | 2016 | 424        | 57      | ..      | ..                | 481    | 49         |
|                    | 2017 | 377        | 74      | ..      | ..                | 451    | 46         |
|                    | 2018 | 535        | 97      | ..      | ..                | 632    | 63         |
|                    | 2019 | 355        | 67      | ..      | ..                | 422    | 42         |
| Ukraine            | 2016 | 539        | 17      | 26      | 7                 | 523    | 12         |
|                    | 2017 | 518        | 18      | 29      | 15                | 492    | 11         |
|                    | 2018 | 540        | 22      | 19      | -27               | 570    | 13         |
|                    | 2019 | 540        | 35      | 9       | 13                | 553    | 13         |



## Production of biofuels and wastes

Terajoules

### Table Notes

The conversion of fuelwood (solid volume, 9.135 TJ/m<sup>3</sup>) is based on an average 20-30% moisture content of wood from an unspecified species.

The methodology used for estimating fuel bagasse production for certain countries is derived from the work done by the Economic Commission for Latin America and the Caribbean (ECLAC). Although several different methodologies have been devised, the one selected assumes a yield of 3.26 tons of fuel bagasse at 50% humidity per ton of cane sugar produced. This methodology was used for instances where national data on bagasse production were not available. In these cases, data were derived from

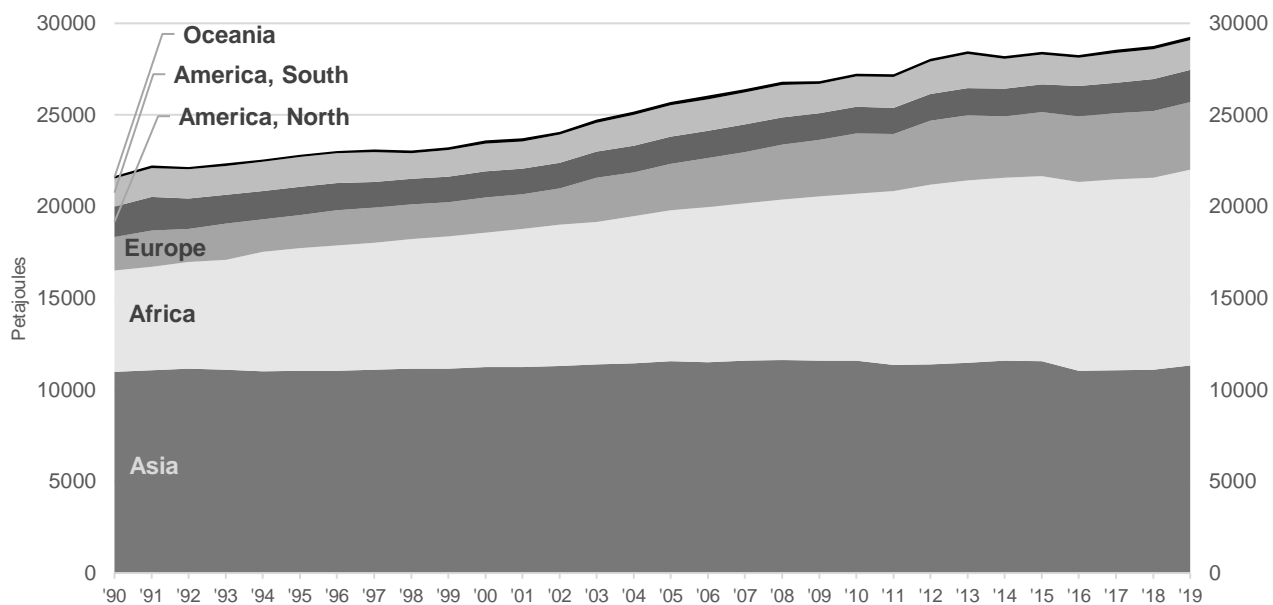
sugar production figures extracted from the Sugar Yearbook of the International Sugar Organization (London) or from the FAOSTAT database of the Food and Agriculture Organization of the United Nations.

Biogasoline includes Other liquid biofuels.

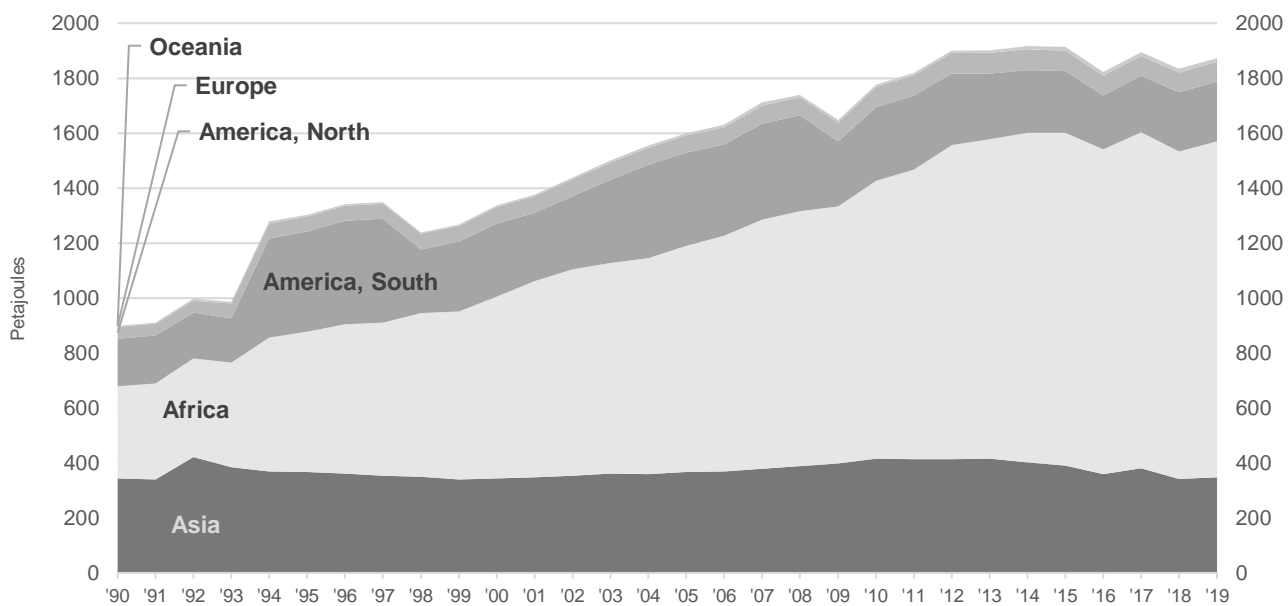
The total column excludes charcoal as it is the only secondary energy product in the table.

Please refer to the Definitions Section on pages ix to xv for the appropriate product description/classification, and xvi to xvii for the descriptions of relevant flows.

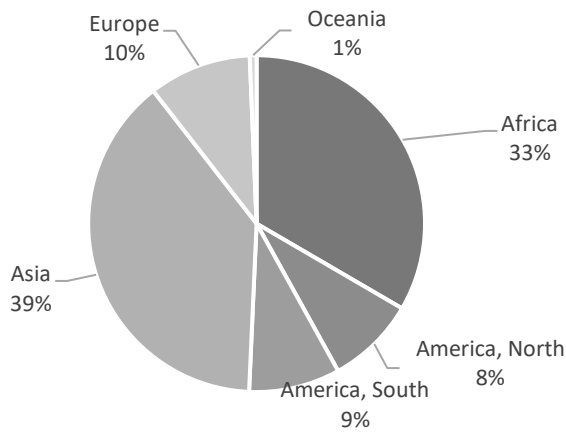
**Figure 29: Production of fuelwood by region, 1990-2019**



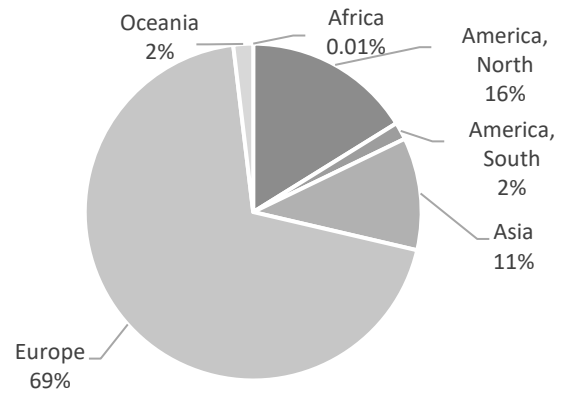
**Figure 30: Production of charcoal by region, 1990-2019**



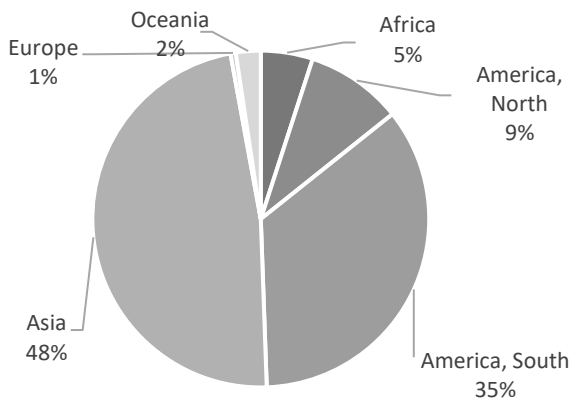
**Figure 31: Production of total solid biofuels by region, 2019**



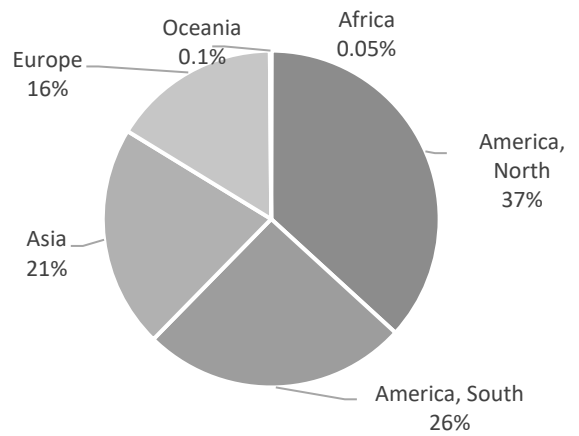
**Figure 32: Production of biogases by region, 2019**



**Figure 33: Production of bagasse by region, 2019**



**Figure 34: Production of liquids biofuels by region, 2019**



**Figure 35: Production of energy from waste by region, 2019**

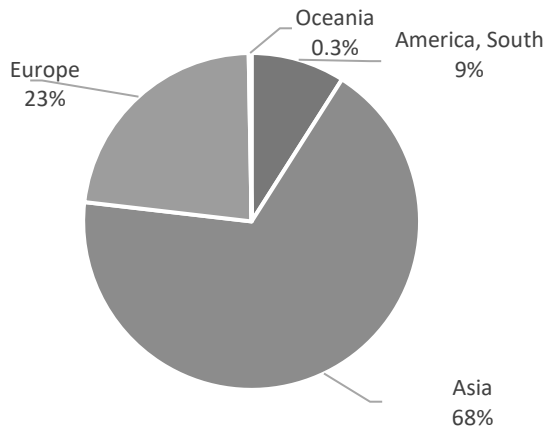


Table 12

## Production of biofuels and wastes

Terajoules

| Country or area      | Year | Solid biofuels |              |               |           |              |           |
|----------------------|------|----------------|--------------|---------------|-----------|--------------|-----------|
|                      |      | Fuelwood       | Animal waste | Vegetal waste | Bagasse   | Black liquor | Charcoal  |
| World                | 2016 | 28,256,207     | 648,832      | 9,283,423     | 3,754,295 | 1,678,537    | 1,822,776 |
|                      | 2017 | 28,551,599     | 641,988      | 9,481,401     | 3,926,916 | 1,692,458    | 1,894,569 |
|                      | 2018 | 28,770,564     | 691,336      | 9,697,873     | 4,115,810 | 1,807,012    | 1,834,089 |
|                      | 2019 | 29,264,992     | 698,383      | 9,581,952     | 4,051,304 | 1,809,657    | 1,873,342 |
| Africa               | 2016 | 10,305,021     | 162,097      | 3,284,307     | 190,366   | ..           | 1,181,745 |
|                      | 2017 | 10,408,269     | 164,765      | 3,357,216     | 178,689   | ..           | 1,221,898 |
|                      | 2018 | 10,475,535     | 168,498      | 3,434,767     | 184,689   | ..           | 1,192,683 |
|                      | 2019 | 10,684,724     | 172,225      | 3,508,753     | 202,292   | ..           | 1,222,147 |
| Algeria              | 2016 | 283            | ..           | ..            | ..        | ..           | ..        |
|                      | 2017 | 484            | ..           | ..            | ..        | ..           | ..        |
|                      | 2018 | 1,032          | ..           | ..            | ..        | ..           | ..        |
|                      | 2019 | 484            | ..           | ..            | ..        | ..           | ..        |
| Angola               | 2016 | 157,116        | ..           | 102,127       | *1,113    | ..           | 32,834    |
|                      | 2017 | 159,460        | ..           | 103,650       | *1,248    | ..           | 33,276    |
|                      | 2018 | 161,604        | ..           | 105,044       | *1,382    | ..           | 33,778    |
|                      | 2019 | 163,722        | ..           | 106,421       | *1,422    | ..           | 34,214    |
| Benin                | 2016 | 102,816        | ..           | 4,084         | ..        | ..           | 14,426    |
|                      | 2017 | 105,436        | ..           | 4,169         | ..        | ..           | 14,937    |
|                      | 2018 | 108,829        | ..           | 4,411         | ..        | ..           | 15,258    |
|                      | 2019 | 117,219        | ..           | 3,386         | ..        | ..           | 16,409    |
| Botswana             | 2016 | 6,387          | ..           | ..            | ..        | ..           | 2,216     |
|                      | 2017 | 6,388          | ..           | ..            | ..        | ..           | 2,216     |
|                      | 2018 | 6,389          | ..           | ..            | ..        | ..           | 2,216     |
|                      | 2019 | 6,390          | ..           | ..            | ..        | ..           | 2,216     |
| Burkina Faso         | 2016 | 126,702        | ..           | ..            | 633       | ..           | 20,345    |
|                      | 2017 | 128,164        | ..           | ..            | *633      | ..           | 20,852    |
|                      | 2018 | 129,651        | ..           | ..            | *633      | ..           | 21,372    |
|                      | 2019 | 131,168        | ..           | ..            | *633      | ..           | 21,905    |
| Burundi              | 2016 | 54,801         | ..           | ..            | 596       | ..           | 7,788     |
|                      | 2017 | 54,801         | ..           | ..            | 552       | ..           | 7,788     |
|                      | 2018 | 54,801         | ..           | ..            | 492       | ..           | 7,788     |
|                      | 2019 | 54,801         | ..           | ..            | 468       | ..           | 7,788     |
| Cabo Verde           | 2016 | *1,448         | ..           | ..            | ..        | ..           | *19       |
|                      | 2017 | *1,413         | ..           | ..            | ..        | ..           | *19       |
|                      | 2018 | *1,399         | ..           | ..            | ..        | ..           | *19       |
|                      | 2019 | *1,385         | ..           | ..            | ..        | ..           | *20       |
| Cameroon             | 2016 | 261,985        | ..           | 5,131         | 1,594     | ..           | 6,962     |
|                      | 2017 | *268,862       | ..           | 5,266         | 1,592     | ..           | 7,148     |
|                      | 2018 | 275,912        | ..           | 5,410         | 1,590     | ..           | 7,337     |
|                      | 2019 | 283,134        | ..           | 5,552         | 1,654     | ..           | 7,529     |
| Central African Rep. | 2016 | 33,201         | ..           | ..            | ..        | ..           | 413       |
|                      | 2017 | *33,327        | ..           | ..            | ..        | ..           | *422      |
|                      | 2018 | *33,579        | ..           | ..            | ..        | ..           | *434      |
|                      | 2019 | *33,831        | ..           | ..            | ..        | ..           | *445      |
| Chad                 | 2016 | 70,942         | ..           | ..            | 881       | ..           | 13,806    |
|                      | 2017 | 71,920         | ..           | ..            | *914      | ..           | 14,131    |
|                      | 2018 | 72,916         | ..           | ..            | *949      | ..           | 14,485    |
|                      | 2019 | 73,920         | ..           | ..            | *985      | ..           | 14,839    |
| Comoros              | 2016 | *3,637         | ..           | *17           | ..        | ..           | *4        |
|                      | 2017 | 3,715          | ..           | 17            | ..        | ..           | 5         |
|                      | 2018 | 3,799          | ..           | 18            | ..        | ..           | *5        |
|                      | 2019 | *3,818         | ..           | *18           | ..        | ..           | *5        |
| Congo                | 2016 | 49,105         | ..           | 15,641        | ..        | ..           | 6,638     |
|                      | 2017 | 51,186         | ..           | 15,641        | ..        | ..           | 6,805     |
|                      | 2018 | 51,911         | ..           | 15,862        | ..        | ..           | 6,902     |
|                      | 2019 | 51,911         | ..           | 15,862        | ..        | ..           | 6,902     |

Table 12

## Production of biofuels and wastes

Terajoules

| Non-biomass wastes |                 | Liquid biofuels |           | Biogases  | Total      |
|--------------------|-----------------|-----------------|-----------|-----------|------------|
| Industrial waste   | Municipal waste | Biogasoline     | Biodiesel |           |            |
| 1,032,033          | 1,351,277       | 2,158,567       | 1,355,579 | 970,535   | 50,489,285 |
| 1,066,990          | 1,363,863       | 2,205,009       | 1,482,907 | 993,066   | 51,406,195 |
| 1,122,273          | 1,377,319       | 2,355,274       | 1,670,818 | 1,013,671 | 52,621,950 |
| 1,171,511          | 1,384,747       | 2,367,432       | 1,798,898 | 1,032,473 | 53,161,350 |
| 3,108              | ..              | 1,528           | ..        | 110       | 13,946,537 |
| 3,106              | ..              | 1,179           | ..        | 104       | 14,113,329 |
| 3,106              | ..              | 1,825           | ..        | 130       | 14,268,549 |
| 3,106              | ..              | 1,887           | ..        | 114       | 14,573,102 |
| ..                 | ..              | ..              | ..        | ..        | 283        |
| ..                 | ..              | ..              | ..        | ..        | 484        |
| ..                 | ..              | ..              | ..        | ..        | 1,032      |
| ..                 | ..              | ..              | ..        | ..        | 484        |
| ..                 | ..              | ..              | ..        | ..        | 260,356    |
| ..                 | ..              | ..              | ..        | ..        | 264,358    |
| ..                 | ..              | ..              | ..        | ..        | 268,031    |
| ..                 | ..              | ..              | ..        | ..        | 271,566    |
| ..                 | ..              | ..              | ..        | ..        | 106,900    |
| ..                 | ..              | ..              | ..        | ..        | 109,605    |
| ..                 | ..              | ..              | ..        | ..        | 113,240    |
| ..                 | ..              | ..              | ..        | ..        | 120,604    |
| ..                 | ..              | ..              | ..        | ..        | 6,387      |
| ..                 | ..              | ..              | ..        | ..        | 6,388      |
| ..                 | ..              | ..              | ..        | ..        | 6,389      |
| ..                 | ..              | ..              | ..        | ..        | 6,390      |
| ..                 | ..              | ..              | ..        | *36       | 127,372    |
| ..                 | ..              | ..              | ..        | *36       | 128,833    |
| ..                 | ..              | ..              | ..        | *36       | 130,320    |
| ..                 | ..              | ..              | ..        | *36       | 131,837    |
| ..                 | ..              | ..              | ..        | ..        | 55,396     |
| ..                 | ..              | ..              | ..        | ..        | 55,353     |
| ..                 | ..              | ..              | ..        | ..        | 55,293     |
| ..                 | ..              | ..              | ..        | ..        | 55,268     |
| ..                 | ..              | ..              | ..        | ..        | *1,448     |
| ..                 | ..              | ..              | ..        | ..        | *1,413     |
| ..                 | ..              | ..              | ..        | ..        | *1,399     |
| ..                 | ..              | ..              | ..        | ..        | *1,385     |
| ..                 | ..              | ..              | ..        | 7         | 268,717    |
| ..                 | ..              | ..              | ..        | *7        | *275,727   |
| ..                 | ..              | ..              | ..        | 7         | 282,919    |
| ..                 | ..              | ..              | ..        | 7         | 290,347    |
| ..                 | ..              | ..              | ..        | ..        | 33,201     |
| ..                 | ..              | ..              | ..        | ..        | *33,327    |
| ..                 | ..              | ..              | ..        | ..        | *33,579    |
| ..                 | ..              | ..              | ..        | ..        | *33,831    |
| ..                 | ..              | ..              | ..        | ..        | 71,824     |
| ..                 | ..              | ..              | ..        | ..        | 72,834     |
| ..                 | ..              | ..              | ..        | ..        | 73,865     |
| ..                 | ..              | ..              | ..        | ..        | 74,906     |
| ..                 | ..              | ..              | ..        | ..        | *3,654     |
| ..                 | ..              | ..              | ..        | ..        | 3,732      |
| ..                 | ..              | ..              | ..        | ..        | 3,816      |
| ..                 | ..              | ..              | ..        | ..        | *3,835     |
| ..                 | ..              | ..              | ..        | ..        | 64,746     |
| ..                 | ..              | ..              | ..        | ..        | 66,827     |
| ..                 | ..              | ..              | ..        | ..        | 67,773     |
| ..                 | ..              | ..              | ..        | ..        | 67,773     |

Table 12

## Production of biofuels and wastes

Terajoules

| Country or area        | Year | Solid biofuels |              |               |         |              | Charcoal |
|------------------------|------|----------------|--------------|---------------|---------|--------------|----------|
|                        |      | Fuelwood       | Animal waste | Vegetal waste | Bagasse | Black liquor |          |
| Côte d'Ivoire          | 2016 | 266,155        | ..           | 1,968         | ..      | ..           | 44,180   |
|                        | 2017 | 262,429        | ..           | 1,986         | ..      | ..           | 44,180   |
|                        | 2018 | 259,853        | ..           | 2,131         | ..      | ..           | 43,735   |
|                        | 2019 | 265,966        | ..           | 2,275         | ..      | ..           | 44,901   |
| Dem. Rep. of the Congo | 2016 | 1,174,908      | ..           | 6,229         | ..      | ..           | 120,183  |
|                        | 2017 | 1,176,516      | ..           | 3,014         | ..      | ..           | 120,354  |
|                        | 2018 | 1,072,193      | ..           | 4,658         | ..      | ..           | 121,858  |
|                        | 2019 | 1,191,222      | ..           | 4,131         | ..      | ..           | 121,858  |
| Djibouti               | 2016 | 3,560          | ..           | ..            | ..      | ..           | 1,554    |
|                        | 2017 | 3,605          | ..           | ..            | ..      | ..           | 1,574    |
|                        | 2018 | 3,650          | ..           | ..            | ..      | ..           | 1,595    |
|                        | 2019 | 3,696          | ..           | ..            | ..      | ..           | 1,615    |
| Egypt                  | 2016 | 162,325        | ..           | 39,098        | 23,412  | ..           | 42,303   |
|                        | 2017 | 162,599        | ..           | *39,098       | *23,412 | ..           | 42,625   |
|                        | 2018 | 162,877        | ..           | *41,088       | *23,915 | ..           | 42,949   |
|                        | 2019 | 141,672        | ..           | *41,100       | *23,939 | ..           | 42,950   |
| Equatorial Guinea      | 2016 | 4,083          | ..           | ..            | ..      | ..           | 310      |
|                        | 2017 | 4,083          | ..           | ..            | ..      | ..           | 310      |
|                        | 2018 | 4,083          | ..           | ..            | ..      | ..           | 324      |
|                        | 2019 | 4,083          | ..           | ..            | ..      | ..           | 324      |
| Eritrea                | 2016 | 21,913         | 2,577        | 1,459         | ..      | ..           | 5,133    |
|                        | 2017 | 22,151         | 2,606        | 1,475         | ..      | ..           | 4,775    |
|                        | 2018 | 22,407         | 2,636        | 1,492         | ..      | ..           | 4,833    |
|                        | 2019 | 22,696         | 2,671        | 1,511         | ..      | ..           | 4,898    |
| Eswatini               | 2016 | 16,114         | ..           | ..            | 14,757  | ..           | 1,464    |
|                        | 2017 | 12,062         | ..           | ..            | 12,365  | ..           | 266      |
|                        | 2018 | 12,174         | ..           | ..            | 12,974  | ..           | *295     |
|                        | 2019 | 12,094         | ..           | ..            | 14,729  | ..           | *295     |
| Ethiopia               | 2016 | 999,269        | 152,834      | 149,807       | 8,934   | ..           | 127,340  |
|                        | 2017 | 1,010,532      | 156,058      | 156,058       | 9,158   | ..           | 130,275  |
|                        | 2018 | 1,021,978      | 160,026      | 156,857       | *8,494  | ..           | 133,272  |
|                        | 2019 | 1,033,598      | 163,669      | 160,428       | *7,722  | ..           | 136,340  |
| Gabon                  | 2016 | *50,000        | ..           | 2,132         | 705     | ..           | 667      |
|                        | 2017 | *50,778        | ..           | 2,180         | 628     | ..           | 676      |
|                        | 2018 | *51,975        | ..           | 2,138         | 641     | ..           | 687      |
|                        | 2019 | *52,070        | ..           | 2,101         | 649     | ..           | 698      |
| Gambia                 | 2016 | 6,846          | ..           | ..            | ..      | ..           | 1,972    |
|                        | 2017 | 6,921          | ..           | ..            | ..      | ..           | 2,008    |
|                        | 2018 | 6,997          | ..           | ..            | ..      | ..           | 2,045    |
|                        | 2019 | 7,074          | ..           | ..            | ..      | ..           | 2,083    |
| Ghana                  | 2016 | 150,872        | ..           | ..            | ..      | ..           | 43,785   |
|                        | 2017 | 161,583        | ..           | ..            | ..      | ..           | 50,153   |
|                        | 2018 | 176,833        | ..           | ..            | ..      | ..           | 52,963   |
|                        | 2019 | 173,064        | ..           | ..            | ..      | ..           | 52,066   |
| Guinea                 | 2016 | 112,050        | ..           | ..            | 629     | ..           | 11,679   |
|                        | 2017 | 112,388        | ..           | ..            | 629     | ..           | 11,907   |
|                        | 2018 | 112,730        | ..           | ..            | *638    | ..           | 12,140   |
|                        | 2019 | 113,089        | ..           | ..            | *647    | ..           | 12,377   |
| Guinea-Bissau          | 2016 | 25,808         | ..           | ..            | ..      | ..           | 2,172    |
|                        | 2017 | 26,119         | ..           | ..            | ..      | ..           | 2,221    |
|                        | 2018 | 26,434         | ..           | ..            | ..      | ..           | 2,271    |
|                        | 2019 | 26,434         | ..           | ..            | ..      | ..           | 2,271    |
| Kenya                  | 2016 | 520,065        | ..           | 25,223        | 14,616  | ..           | 135,818  |
|                        | 2017 | 515,908        | ..           | 26,055        | 14,367  | ..           | 151,040  |
|                        | 2018 | *515,908       | ..           | 25,879        | 11,676  | ..           | 115,758  |
|                        | 2019 | *527,802       | ..           | *26,474       | *11,946 | ..           | 118,413  |



Table 12

## Production of biofuels and wastes

Terajoules

| Non-biomass wastes |                 | Liquid biofuels |           | Biogases | Total     |
|--------------------|-----------------|-----------------|-----------|----------|-----------|
| Industrial waste   | Municipal waste | Biogasoline     | Biodiesel |          |           |
| ..                 | ..              | ..              | ..        | ..       | 268,123   |
| ..                 | ..              | ..              | ..        | ..       | 264,415   |
| ..                 | ..              | ..              | ..        | ..       | 261,984   |
| ..                 | ..              | ..              | ..        | ..       | 268,242   |
| ..                 | ..              | ..              | ..        | ..       | 1,181,137 |
| ..                 | ..              | ..              | ..        | ..       | 1,179,530 |
| ..                 | ..              | ..              | ..        | ..       | 1,076,851 |
| ..                 | ..              | ..              | ..        | ..       | 1,195,353 |
| ..                 | ..              | ..              | ..        | ..       | 3,560     |
| ..                 | ..              | ..              | ..        | ..       | 3,605     |
| ..                 | ..              | ..              | ..        | ..       | 3,650     |
| ..                 | ..              | ..              | ..        | ..       | 3,696     |
| ..                 | ..              | ..              | ..        | ..       | 224,835   |
| ..                 | ..              | ..              | ..        | ..       | 225,109   |
| ..                 | ..              | ..              | ..        | ..       | 227,880   |
| ..                 | ..              | ..              | ..        | ..       | 206,710   |
| ..                 | ..              | ..              | ..        | ..       | 4,083     |
| ..                 | ..              | ..              | ..        | ..       | 4,083     |
| ..                 | ..              | ..              | ..        | ..       | 4,083     |
| ..                 | ..              | ..              | ..        | ..       | 4,083     |
| ..                 | ..              | ..              | ..        | ..       | 25,949    |
| ..                 | ..              | ..              | ..        | ..       | 26,231    |
| ..                 | ..              | ..              | ..        | ..       | 26,535    |
| ..                 | ..              | ..              | ..        | ..       | 26,878    |
| ..                 | ..              | ..              | ..        | ..       | 30,871    |
| ..                 | ..              | ..              | ..        | ..       | 24,427    |
| ..                 | ..              | ..              | ..        | ..       | 25,148    |
| ..                 | ..              | ..              | ..        | ..       | 26,823    |
| ..                 | ..              | 134             | ..        | ..       | 1,310,978 |
| ..                 | ..              | 134             | ..        | ..       | 1,331,939 |
| ..                 | ..              | 161             | ..        | ..       | 1,347,516 |
| ..                 | ..              | 170             | ..        | ..       | 1,365,587 |
| ..                 | ..              | ..              | ..        | ..       | *52,837   |
| ..                 | ..              | ..              | ..        | ..       | *53,586   |
| ..                 | ..              | ..              | ..        | ..       | *54,754   |
| ..                 | ..              | ..              | ..        | ..       | *54,819   |
| ..                 | ..              | ..              | ..        | ..       | 6,846     |
| ..                 | ..              | ..              | ..        | ..       | 6,921     |
| ..                 | ..              | ..              | ..        | ..       | 6,997     |
| ..                 | ..              | ..              | ..        | ..       | 7,074     |
| ..                 | ..              | ..              | ..        | ..       | 150,872   |
| ..                 | ..              | ..              | ..        | ..       | 161,583   |
| ..                 | ..              | ..              | ..        | ..       | 176,833   |
| ..                 | ..              | ..              | ..        | ..       | 173,064   |
| ..                 | ..              | ..              | ..        | ..       | 112,679   |
| ..                 | ..              | ..              | ..        | ..       | 113,017   |
| ..                 | ..              | ..              | ..        | ..       | 113,367   |
| ..                 | ..              | ..              | ..        | ..       | 113,736   |
| ..                 | ..              | ..              | ..        | ..       | 25,808    |
| ..                 | ..              | ..              | ..        | ..       | 26,119    |
| ..                 | ..              | ..              | ..        | ..       | 26,434    |
| ..                 | ..              | ..              | ..        | ..       | 26,434    |
| ..                 | ..              | ..              | ..        | ..       | 559,903   |
| ..                 | ..              | ..              | ..        | ..       | 556,330   |
| ..                 | ..              | ..              | ..        | 6        | *553,469  |
| ..                 | ..              | ..              | ..        | ..       | *566,222  |

Table 12

## Production of biofuels and wastes

Terajoules

| Country or area | Year | Solid biofuels |              |               |         |              |          |
|-----------------|------|----------------|--------------|---------------|---------|--------------|----------|
|                 |      | Fuelwood       | Animal waste | Vegetal waste | Bagasse | Black liquor | Charcoal |
| Lesotho         | 2016 | *11,370        | *4,508       | *1,375        | ..      | ..           | 1,145    |
|                 | 2017 | 10,576         | 3,995        | 1,441         | ..      | ..           | 510      |
|                 | 2018 | *9,994         | *3,481       | *1,459        | ..      | ..           | 153      |
|                 | 2019 | *9,793         | *3,412       | *1,473        | ..      | ..           | *153     |
| Liberia         | 2016 | 78,534         | ..           | ..            | ..      | ..           | 8,595    |
|                 | 2017 | 81,091         | ..           | ..            | ..      | ..           | 8,891    |
|                 | 2018 | 83,734         | ..           | ..            | ..      | ..           | 9,197    |
|                 | 2019 | 86,462         | ..           | ..            | ..      | ..           | 9,513    |
| Libya           | 2016 | 24,330         | ..           | ..            | ..      | ..           | 3,304    |
|                 | 2017 | 24,602         | ..           | ..            | ..      | ..           | 3,338    |
|                 | 2018 | 24,884         | ..           | ..            | ..      | ..           | 3,371    |
|                 | 2019 | 25,169         | ..           | ..            | ..      | ..           | 3,405    |
| Madagascar      | 2016 | 256,698        | ..           | ..            | 2,726   | ..           | 22,677   |
|                 | 2017 | 266,494        | ..           | ..            | 2,851   | ..           | 23,680   |
|                 | 2018 | 299,749        | ..           | ..            | 2,497   | ..           | 27,199   |
|                 | 2019 | 312,613        | ..           | ..            | 2,487   | ..           | 28,497   |
| Malawi          | 2016 | 52,882         | ..           | ..            | 6,772   | ..           | 16,674   |
|                 | 2017 | 53,435         | ..           | ..            | 6,772   | ..           | 17,047   |
|                 | 2018 | 53,973         | ..           | ..            | *6,772  | ..           | 17,429   |
|                 | 2019 | 54,605         | ..           | ..            | *6,772  | ..           | 17,819   |
| Mali            | 2016 | *150,965       | ..           | ..            | 1,457   | ..           | 15,045   |
|                 | 2017 | *153,587       | ..           | ..            | *1,457  | ..           | 15,340   |
|                 | 2018 | *155,249       | ..           | ..            | *1,457  | ..           | 15,488   |
|                 | 2019 | *156,665       | ..           | ..            | *1,457  | ..           | *15,635  |
| Mauritania      | 2016 | 19,092         | ..           | ..            | ..      | ..           | 6,390    |
|                 | 2017 | 19,448         | ..           | ..            | ..      | ..           | 6,534    |
|                 | 2018 | 19,805         | ..           | ..            | ..      | ..           | 6,667    |
|                 | 2019 | 19,805         | ..           | ..            | ..      | ..           | 6,667    |
| Mauritius       | 2016 | 213            | ..           | ..            | 9,946   | ..           | 15       |
|                 | 2017 | 266            | ..           | ..            | 9,382   | ..           | 15       |
|                 | 2018 | 204            | ..           | ..            | 8,690   | ..           | 15       |
|                 | 2019 | 162            | ..           | ..            | 8,541   | ..           | 12       |
| Morocco         | 2016 | 63,752         | ..           | ..            | 922     | ..           | 561      |
|                 | 2017 | 63,022         | ..           | ..            | 1,196   | ..           | 585      |
|                 | 2018 | 61,744         | ..           | ..            | 1,332   | ..           | 596      |
|                 | 2019 | 61,863         | ..           | ..            | 1,122   | ..           | 608      |
| Mozambique      | 2016 | 281,294        | ..           | 13,774        | 9,689   | ..           | 41,979   |
|                 | 2017 | 285,973        | ..           | 13,552        | 9,777   | ..           | 47,742   |
|                 | 2018 | 290,683        | ..           | 13,343        | 9,706   | ..           | 48,182   |
|                 | 2019 | 295,388        | ..           | 13,145        | 9,520   | ..           | 48,647   |
| Namibia         | 2016 | 13,419         | ..           | 1,584         | ..      | ..           | 4,750    |
|                 | 2017 | 13,711         | ..           | 1,586         | ..      | ..           | 4,868    |
|                 | 2018 | 15,718         | ..           | 1,601         | ..      | ..           | 5,399    |
|                 | 2019 | 18,426         | ..           | 1,592         | ..      | ..           | 5,508    |
| Niger           | 2016 | 65,581         | *562         | *452          | ..      | ..           | 1,535    |
|                 | 2017 | *54,496        | *584         | *470          | ..      | ..           | 1,593    |
|                 | 2018 | *65,932        | *803         | *647          | ..      | ..           | 1,652    |
|                 | 2019 | *68,537        | *876         | *705          | ..      | ..           | 1,711    |
| Nigeria         | 2016 | 2,313,610      | ..           | 2,388,515     | 503     | ..           | 116,997  |
|                 | 2017 | 2,330,370      | ..           | 2,451,619     | 633     | ..           | 118,962  |
|                 | 2018 | 2,347,592      | ..           | 2,515,866     | 757     | ..           | 120,959  |
|                 | 2019 | 2,347,592      | ..           | 2,581,230     | *541    | ..           | 120,959  |
| Rwanda          | 2016 | *83,476        | ..           | ..            | 203     | ..           | *18,113  |
|                 | 2017 | *84,179        | ..           | ..            | 232     | ..           | *18,349  |
|                 | 2018 | *84,526        | ..           | ..            | 253     | ..           | *18,467  |
|                 | 2019 | *84,526        | ..           | ..            | 248     | ..           | *18,467  |

Table 12

## Production of biofuels and wastes

Terajoules

| Non-biomass wastes |                 | Liquid biofuels |           | Biogases | Total     |
|--------------------|-----------------|-----------------|-----------|----------|-----------|
| Industrial waste   | Municipal waste | Biogasoline     | Biodiesel |          |           |
| ..                 | ..              | ..              | ..        | ..       | *17,254   |
| ..                 | ..              | ..              | ..        | ..       | 16,012    |
| ..                 | ..              | ..              | ..        | ..       | *14,934   |
| ..                 | ..              | ..              | ..        | ..       | *14,677   |
| ..                 | ..              | ..              | ..        | ..       | 78,534    |
| ..                 | ..              | ..              | ..        | ..       | 81,091    |
| ..                 | ..              | ..              | ..        | ..       | 83,734    |
| ..                 | ..              | ..              | ..        | ..       | 86,462    |
| ..                 | ..              | ..              | ..        | ..       | 24,330    |
| ..                 | ..              | ..              | ..        | ..       | 24,602    |
| ..                 | ..              | ..              | ..        | ..       | 24,884    |
| ..                 | ..              | ..              | ..        | ..       | 25,169    |
| ..                 | ..              | ..              | ..        | ..       | 259,423   |
| ..                 | ..              | ..              | ..        | ..       | 269,345   |
| ..                 | ..              | ..              | ..        | ..       | 302,246   |
| ..                 | ..              | ..              | ..        | ..       | 315,100   |
| *99                | ..              | ..              | ..        | ..       | 59,753    |
| *98                | ..              | ..              | ..        | ..       | 60,305    |
| *98                | ..              | ..              | ..        | ..       | 60,843    |
| *98                | ..              | ..              | ..        | ..       | 61,475    |
| ..                 | ..              | ..              | ..        | ..       | *152,422  |
| ..                 | ..              | ..              | ..        | ..       | *155,044  |
| ..                 | ..              | ..              | ..        | ..       | *156,706  |
| ..                 | ..              | ..              | ..        | ..       | *158,122  |
| ..                 | ..              | ..              | ..        | ..       | 19,092    |
| ..                 | ..              | ..              | ..        | ..       | 19,448    |
| ..                 | ..              | ..              | ..        | ..       | 19,805    |
| ..                 | ..              | ..              | ..        | ..       | 19,805    |
| ..                 | ..              | ..              | ..        | 67       | 10,226    |
| ..                 | ..              | ..              | ..        | 61       | 9,709     |
| ..                 | ..              | ..              | ..        | 81       | 8,975     |
| ..                 | ..              | ..              | ..        | 71       | 8,775     |
| 3,009              | ..              | ..              | ..        | ..       | 67,683    |
| 3,008              | ..              | ..              | ..        | ..       | 67,227    |
| 3,008              | ..              | ..              | ..        | ..       | 66,085    |
| 3,008              | ..              | ..              | ..        | ..       | 65,993    |
| ..                 | ..              | ..              | ..        | ..       | 304,757   |
| ..                 | ..              | ..              | ..        | ..       | 309,302   |
| ..                 | ..              | ..              | ..        | ..       | 313,732   |
| ..                 | ..              | ..              | ..        | ..       | 318,053   |
| ..                 | ..              | ..              | ..        | ..       | 15,003    |
| ..                 | ..              | ..              | ..        | ..       | 15,297    |
| ..                 | ..              | ..              | ..        | ..       | 17,319    |
| ..                 | ..              | ..              | ..        | ..       | 20,018    |
| ..                 | ..              | ..              | ..        | ..       | 66,595    |
| ..                 | ..              | ..              | ..        | ..       | *55,550   |
| ..                 | ..              | ..              | ..        | ..       | *67,382   |
| ..                 | ..              | ..              | ..        | ..       | *70,118   |
| ..                 | ..              | ..              | ..        | ..       | 4,702,628 |
| ..                 | ..              | ..              | ..        | ..       | 4,782,622 |
| ..                 | ..              | ..              | ..        | ..       | 4,864,215 |
| ..                 | ..              | ..              | ..        | ..       | 4,929,363 |
| ..                 | ..              | ..              | ..        | ..       | *83,679   |
| ..                 | ..              | ..              | ..        | ..       | *84,411   |
| ..                 | ..              | ..              | ..        | ..       | *84,779   |
| ..                 | ..              | ..              | ..        | ..       | *84,774   |

Table 12

## Production of biofuels and wastes

Terajoules

| Country or area         | Year | Solid biofuels |              |               |         |              |          |
|-------------------------|------|----------------|--------------|---------------|---------|--------------|----------|
|                         |      | Fuelwood       | Animal waste | Vegetal waste | Bagasse | Black liquor | Charcoal |
| Sao Tome and Principe   | 2016 | 1,029          | ..           | ..            | ..      | ..           | 283      |
|                         | 2017 | 1,033          | ..           | ..            | ..      | ..           | 286      |
|                         | 2018 | 1,039          | ..           | ..            | ..      | ..           | 289      |
|                         | 2019 | 1,039          | ..           | ..            | ..      | ..           | 289      |
| Senegal                 | 2016 | 60,730         | ..           | 1,136         | 2,768   | ..           | 8,526    |
|                         | 2017 | 64,534         | ..           | 252           | 2,706   | ..           | 5,575    |
|                         | 2018 | 63,838         | ..           | 252           | 3,536   | ..           | 5,387    |
|                         | 2019 | 65,601         | ..           | 1,513         | 5,880   | ..           | 5,476    |
| Seychelles              | 2016 | 29             | ..           | ..            | ..      | ..           | ..       |
|                         | 2017 | 29             | ..           | ..            | ..      | ..           | ..       |
|                         | 2018 | 29             | ..           | ..            | ..      | ..           | ..       |
|                         | 2019 | 29             | ..           | ..            | ..      | ..           | ..       |
| Sierra Leone            | 2016 | 53,330         | ..           | *72           | 201     | ..           | 13,039   |
|                         | 2017 | 53,723         | ..           | *72           | 201     | ..           | 13,334   |
|                         | 2018 | 54,143         | ..           | *72           | *201    | ..           | 13,629   |
|                         | 2019 | 54,572         | ..           | *70           | *201    | ..           | 13,924   |
| Somalia                 | 2016 | 135,387        | ..           | ..            | 579     | ..           | 36,127   |
|                         | 2017 | 138,909        | ..           | ..            | *527    | ..           | 37,447   |
|                         | 2018 | 142,539        | ..           | ..            | *530    | ..           | 38,816   |
|                         | 2019 | 146,278        | ..           | ..            | *550    | ..           | 40,235   |
| South Africa            | 2016 | 221,774        | ..           | 113,240       | 39,817  | ..           | 41,831   |
|                         | 2017 | 221,746        | ..           | 114,735       | 25,678  | ..           | 41,300   |
|                         | 2018 | 218,093        | ..           | 115,570       | 28,114  | ..           | 24,485   |
|                         | 2019 | 213,420        | ..           | 115,726       | 28,157  | ..           | 23,569   |
| South Sudan             | 2016 | 8,110          | ..           | ..            | ..      | ..           | 325      |
|                         | 2017 | 6,896          | ..           | ..            | ..      | ..           | 254      |
|                         | 2018 | 6,937          | ..           | ..            | ..      | ..           | 255      |
|                         | 2019 | 6,992          | ..           | ..            | ..      | ..           | 257      |
| St. Helena and Depend.  | 2016 | 6              | ..           | ..            | ..      | ..           | ..       |
|                         | 2017 | 6              | ..           | ..            | ..      | ..           | ..       |
|                         | 2018 | 5              | ..           | ..            | ..      | ..           | ..       |
|                         | 2019 | 5              | ..           | ..            | ..      | ..           | ..       |
| Sudan                   | 2016 | 139,884        | ..           | 47,215        | *16,711 | ..           | 17,346   |
|                         | 2017 | 140,834        | ..           | 47,319        | *16,711 | ..           | 17,346   |
|                         | 2018 | 141,830        | ..           | 47,868        | *16,989 | ..           | 17,346   |
|                         | 2019 | 142,351        | ..           | 48,413        | *17,004 | ..           | 17,346   |
| Togo                    | 2016 | 113,533        | ..           | 1,358         | ..      | ..           | 20,591   |
|                         | 2017 | 105,704        | ..           | 1,245         | ..      | ..           | 21,093   |
|                         | 2018 | 111,890        | ..           | 1,641         | ..      | ..           | 22,332   |
|                         | 2019 | 111,890        | ..           | 1,641         | ..      | ..           | 22,332   |
| Tunisia                 | 2016 | 39,262         | 1,616        | 4,370         | ..      | ..           | 6,431    |
|                         | 2017 | 39,427         | 1,523        | 4,370         | ..      | ..           | 6,579    |
|                         | 2018 | 39,708         | 1,551        | 4,377         | ..      | ..           | 6,726    |
|                         | 2019 | 39,946         | 1,598        | 4,321         | ..      | ..           | 6,873    |
| Uganda                  | 2016 | 742,912        | ..           | ..            | *18,170 | ..           | *56,164  |
|                         | 2017 | 773,962        | ..           | ..            | *22,796 | ..           | *60,008  |
|                         | 2018 | 806,413        | ..           | ..            | *27,568 | ..           | 60,960   |
|                         | 2019 | 833,335        | ..           | ..            | *41,058 | ..           | 76,954   |
| United Rep. of Tanzania | 2016 | 545,532        | ..           | 199,763       | 6,517   | ..           | 46,345   |
|                         | 2017 | 553,309        | ..           | 200,729       | 6,618   | ..           | 47,643   |
|                         | 2018 | 561,390        | ..           | 203,328       | 6,741   | ..           | 49,088   |
|                         | 2019 | 561,390        | ..           | 203,342       | 7,761   | ..           | 48,989   |
| Zambia                  | 2016 | 259,105        | ..           | 44,236        | *3,398  | ..           | 32,686   |
|                         | 2017 | 264,372        | ..           | 45,135        | *3,475  | ..           | 33,350   |
|                         | 2018 | 269,585        | ..           | 46,025        | *3,475  | ..           | 34,008   |
|                         | 2019 | 274,789        | ..           | 46,914        | *3,475  | ..           | 34,665   |

Table 12

## Production of biofuels and wastes

Terajoules

| Non-biomass wastes |                 | Liquid biofuels |           | Biogases | Total   |
|--------------------|-----------------|-----------------|-----------|----------|---------|
| Industrial waste   | Municipal waste | Biogasoline     | Biodiesel |          |         |
| ..                 | ..              | ..              | ..        | ..       | 1,029   |
| ..                 | ..              | ..              | ..        | ..       | 1,033   |
| ..                 | ..              | ..              | ..        | ..       | 1,039   |
| ..                 | ..              | ..              | ..        | ..       | 1,039   |
| ..                 | ..              | ..              | ..        | ..       | 64,634  |
| ..                 | ..              | ..              | ..        | ..       | 67,492  |
| ..                 | ..              | ..              | ..        | ..       | 67,626  |
| ..                 | ..              | ..              | ..        | ..       | 72,994  |
| ..                 | ..              | ..              | ..        | ..       | 29      |
| ..                 | ..              | ..              | ..        | ..       | 29      |
| ..                 | ..              | ..              | ..        | ..       | 29      |
| ..                 | ..              | ..              | ..        | ..       | 29      |
| ..                 | ..              | ..              | ..        | ..       | 53,603  |
| ..                 | ..              | ..              | ..        | ..       | 53,996  |
| ..                 | ..              | ..              | ..        | ..       | 54,416  |
| ..                 | ..              | ..              | ..        | ..       | 54,843  |
| ..                 | ..              | ..              | ..        | ..       | 135,966 |
| ..                 | ..              | ..              | ..        | ..       | 139,436 |
| ..                 | ..              | ..              | ..        | ..       | 143,069 |
| ..                 | ..              | ..              | ..        | ..       | 146,828 |
| ..                 | ..              | ..              | ..        | ..       | 374,831 |
| ..                 | ..              | ..              | ..        | ..       | 362,158 |
| ..                 | ..              | ..              | ..        | ..       | 361,777 |
| ..                 | ..              | ..              | ..        | ..       | 357,302 |
| ..                 | ..              | ..              | ..        | ..       | 8,110   |
| ..                 | ..              | ..              | ..        | ..       | 6,896   |
| ..                 | ..              | ..              | ..        | ..       | 6,937   |
| ..                 | ..              | ..              | ..        | ..       | 6,992   |
| ..                 | ..              | ..              | ..        | ..       | 6       |
| ..                 | ..              | ..              | ..        | ..       | 6       |
| ..                 | ..              | ..              | ..        | ..       | 5       |
| ..                 | ..              | ..              | ..        | ..       | 5       |
| ..                 | ..              | ..              | ..        | ..       | 203,810 |
| ..                 | ..              | ..              | ..        | ..       | 204,864 |
| ..                 | ..              | ..              | ..        | ..       | 206,686 |
| ..                 | ..              | ..              | ..        | ..       | 207,768 |
| ..                 | ..              | ..              | ..        | ..       | 114,891 |
| ..                 | ..              | ..              | ..        | ..       | 106,949 |
| ..                 | ..              | ..              | ..        | ..       | 113,531 |
| ..                 | ..              | ..              | ..        | ..       | 113,531 |
| ..                 | ..              | ..              | ..        | ..       | 45,248  |
| ..                 | ..              | ..              | ..        | ..       | 45,320  |
| ..                 | ..              | ..              | ..        | ..       | 45,636  |
| ..                 | ..              | ..              | ..        | ..       | 45,864  |
| ..                 | ..              | ..              | ..        | ..       | 761,082 |
| ..                 | ..              | ..              | ..        | ..       | 796,757 |
| ..                 | ..              | ..              | ..        | ..       | 833,981 |
| ..                 | ..              | ..              | ..        | ..       | 874,394 |
| ..                 | ..              | ..              | ..        | ..       | 751,812 |
| ..                 | ..              | ..              | ..        | ..       | 760,655 |
| ..                 | ..              | ..              | ..        | ..       | 771,460 |
| ..                 | ..              | ..              | ..        | ..       | 772,493 |
| ..                 | ..              | ..              | ..        | ..       | 306,739 |
| ..                 | ..              | ..              | ..        | ..       | 312,983 |
| ..                 | ..              | ..              | ..        | ..       | 319,085 |
| ..                 | ..              | ..              | ..        | ..       | 325,178 |

Table 12

## Production of biofuels and wastes

Terajoules

| Country or area        | Year        | Solid biofuels   |                |                |                |                |               |
|------------------------|-------------|------------------|----------------|----------------|----------------|----------------|---------------|
|                        |             | Fuelwood         | Animal waste   | Vegetal waste  | Bagasse        | Black liquor   | Charcoal      |
| Zimbabwe               | 2016        | 186,790          | ..             | 114,301        | 2,117          | ..             | 266           |
|                        | 2017        | 189,702          | ..             | 116,083        | 2,180          | ..             | 269           |
|                        | 2018        | 192,394          | ..             | 117,730        | 2,687          | ..             | 273           |
|                        | 2019        | 195,139          | ..             | 119,410        | 2,725          | ..             | 277           |
| <b>America, North</b>  | <b>2016</b> | <b>1,648,130</b> | <b>317,313</b> | <b>589,247</b> | <b>346,361</b> | <b>827,488</b> | <b>71,492</b> |
|                        | <b>2017</b> | <b>1,671,335</b> | <b>308,947</b> | <b>536,792</b> | <b>348,820</b> | <b>808,160</b> | <b>71,678</b> |
|                        | <b>2018</b> | <b>1,746,892</b> | <b>354,331</b> | <b>614,216</b> | <b>382,186</b> | <b>906,606</b> | <b>71,929</b> |
|                        | <b>2019</b> | <b>1,744,512</b> | <b>348,416</b> | <b>604,263</b> | <b>376,703</b> | <b>898,323</b> | <b>72,537</b> |
| Anguilla               | 2016        | *2               | ..             | ..             | ..             | ..             | ..            |
|                        | 2017        | *2               | ..             | ..             | ..             | ..             | ..            |
|                        | 2018        | *2               | ..             | ..             | ..             | ..             | ..            |
|                        | 2019        | *2               | ..             | ..             | ..             | ..             | ..            |
| Aruba                  | 2016        | 20               | ..             | ..             | ..             | ..             | 6             |
|                        | 2017        | 20               | ..             | ..             | ..             | ..             | 7             |
|                        | 2018        | 21               | ..             | ..             | ..             | ..             | 7             |
|                        | 2019        | 22               | ..             | ..             | ..             | ..             | 8             |
| Bahamas                | 2016        | 308              | ..             | ..             | ..             | ..             | 33            |
|                        | 2017        | 309              | ..             | ..             | ..             | ..             | 34            |
|                        | 2018        | 309              | ..             | ..             | ..             | ..             | 34            |
|                        | 2019        | 309              | ..             | ..             | ..             | ..             | 34            |
| Barbados               | 2016        | 44               | ..             | ..             | 462            | ..             | 9             |
|                        | 2017        | 44               | ..             | ..             | 478            | ..             | 9             |
|                        | 2018        | 43               | ..             | ..             | 539            | ..             | 9             |
|                        | 2019        | 43               | ..             | ..             | 430            | ..             | 9             |
| Belize                 | 2016        | 969              | ..             | ..             | 3,429          | ..             | 92            |
|                        | 2017        | 995              | ..             | ..             | 4,270          | ..             | 91            |
|                        | 2018        | 1,021            | ..             | ..             | 4,295          | ..             | 91            |
|                        | 2019        | 1,048            | ..             | ..             | 4,416          | ..             | 91            |
| Bermuda                | 2016        | ..               | ..             | ..             | ..             | ..             | ..            |
|                        | 2017        | ..               | ..             | ..             | ..             | ..             | ..            |
|                        | 2018        | ..               | ..             | ..             | ..             | ..             | ..            |
|                        | 2019        | ..               | ..             | ..             | ..             | ..             | ..            |
| British Virgin Islands | 2016        | 14               | ..             | ..             | ..             | ..             | 2             |
|                        | 2017        | 15               | ..             | ..             | ..             | ..             | 2             |
|                        | 2018        | 15               | ..             | ..             | ..             | ..             | 2             |
|                        | 2019        | 15               | ..             | ..             | ..             | ..             | 2             |
| Canada                 | 2016        | 299,283          | ..             | ..             | ..             | 177,749        | ..            |
|                        | 2017        | 312,305          | ..             | ..             | ..             | 175,549        | ..            |
|                        | 2018        | 311,890          | ..             | ..             | ..             | 181,071        | ..            |
|                        | 2019        | 308,641          | ..             | ..             | ..             | 184,900        | ..            |
| Costa Rica             | 2016        | 4,969            | ..             | 3,105          | 10,988         | ..             | 26            |
|                        | 2017        | 3,402            | ..             | 3,037          | 11,189         | ..             | 27            |
|                        | 2018        | 3,010            | ..             | 2,979          | 10,442         | ..             | 28            |
|                        | 2019        | 2,580            | ..             | 3,017          | 10,368         | ..             | 28            |
| Cuba                   | 2016        | 10,111           | ..             | *88            | 29,295         | ..             | 2,726         |
|                        | 2017        | 9,638            | ..             | *88            | 40,413         | ..             | 2,272         |
|                        | 2018        | 8,805            | ..             | *88            | 48,463         | ..             | 1,894         |
|                        | 2019        | 8,440            | ..             | *88            | 40,119         | ..             | 2,245         |
| Dominica               | 2016        | 68               | ..             | ..             | ..             | ..             | 7             |
|                        | 2017        | 68               | ..             | ..             | ..             | ..             | 7             |
|                        | 2018        | 68               | ..             | ..             | ..             | ..             | 7             |
|                        | 2019        | 67               | ..             | ..             | ..             | ..             | 7             |
| Dominican Republic     | 2016        | 10,313           | ..             | 468            | 9,229          | ..             | 1,658         |
|                        | 2017        | 10,446           | ..             | 490            | 11,410         | ..             | 1,720         |
|                        | 2018        | 10,667           | ..             | 516            | 11,514         | ..             | 1,796         |
|                        | 2019        | *10,892          | ..             | *525           | *10,800        | ..             | *1,888        |

Table 12

## Production of biofuels and wastes

Terajoules

| Non-biomass wastes |                 | Liquid biofuels  |                | Biogases       | Total            |
|--------------------|-----------------|------------------|----------------|----------------|------------------|
| Industrial waste   | Municipal waste | Biogasoline      | Biodiesel      |                |                  |
| ..                 | ..              | 1,394            | ..             | ..             | 304,602          |
| ..                 | ..              | 1,045            | ..             | ..             | 309,010          |
| ..                 | ..              | 1,664            | ..             | ..             | 314,476          |
| ..                 | ..              | 1,718            | ..             | ..             | 318,992          |
| <b>51,550</b>      | <b>311,437</b>  | <b>1,265,992</b> | <b>207,221</b> | <b>174,636</b> | <b>5,739,375</b> |
| <b>48,394</b>      | <b>300,506</b>  | <b>1,307,951</b> | <b>208,462</b> | <b>175,879</b> | <b>5,715,245</b> |
| <b>48,107</b>      | <b>307,781</b>  | <b>1,328,262</b> | <b>237,710</b> | <b>173,933</b> | <b>6,100,024</b> |
| <b>47,341</b>      | <b>294,451</b>  | <b>1,307,965</b> | <b>222,994</b> | <b>166,786</b> | <b>6,011,754</b> |
| ..                 | ..              | ..               | ..             | ..             | *2               |
| ..                 | ..              | ..               | ..             | ..             | *2               |
| ..                 | ..              | ..               | ..             | ..             | *2               |
| ..                 | ..              | ..               | ..             | ..             | *2               |
| ..                 | ..              | ..               | ..             | ..             | 20               |
| ..                 | ..              | ..               | ..             | ..             | 20               |
| ..                 | ..              | ..               | ..             | ..             | 21               |
| ..                 | ..              | ..               | ..             | ..             | 22               |
| ..                 | ..              | ..               | ..             | ..             | 308              |
| ..                 | ..              | ..               | ..             | ..             | 309              |
| ..                 | ..              | ..               | ..             | ..             | 309              |
| ..                 | ..              | ..               | ..             | ..             | 309              |
| ..                 | ..              | ..               | ..             | ..             | 506              |
| ..                 | ..              | ..               | ..             | ..             | 522              |
| ..                 | ..              | ..               | ..             | ..             | 582              |
| ..                 | ..              | ..               | ..             | ..             | 473              |
| ..                 | ..              | ..               | ..             | ..             | 4,398            |
| ..                 | ..              | ..               | ..             | ..             | 5,265            |
| ..                 | ..              | ..               | ..             | ..             | 5,316            |
| ..                 | ..              | ..               | ..             | ..             | 5,464            |
| ..                 | *605            | ..               | ..             | ..             | *605             |
| ..                 | *590            | ..               | ..             | ..             | *590             |
| ..                 | *600            | ..               | ..             | ..             | *600             |
| ..                 | *600            | ..               | ..             | ..             | *600             |
| ..                 | ..              | ..               | ..             | ..             | 14               |
| ..                 | ..              | ..               | ..             | ..             | 15               |
| ..                 | ..              | ..               | ..             | ..             | 15               |
| ..                 | ..              | ..               | ..             | ..             | 15               |
| 5,960              | 7,658           | 35,939           | 15,088         | 16,977         | 558,654          |
| 6,137              | 7,658           | 36,582           | 12,917         | 16,977         | 568,125          |
| 6,314              | 9,958           | 37,011           | 10,010         | 16,977         | 573,230          |
| 6,491              | 9,944           | 41,084           | 11,666         | 16,977         | 579,703          |
| ..                 | ..              | 677              | ..             | 9              | 19,748           |
| ..                 | ..              | 586              | ..             | 13             | 18,226           |
| ..                 | ..              | 608              | ..             | 16             | 17,055           |
| ..                 | ..              | 746              | ..             | 11             | 16,723           |
| ..                 | ..              | *348             | ..             | ..             | 39,841           |
| ..                 | ..              | *348             | ..             | ..             | 50,487           |
| ..                 | ..              | *348             | ..             | ..             | 57,704           |
| ..                 | ..              | *348             | ..             | ..             | 48,994           |
| ..                 | ..              | ..               | ..             | ..             | 68               |
| ..                 | ..              | ..               | ..             | ..             | 68               |
| ..                 | ..              | ..               | ..             | ..             | 68               |
| ..                 | ..              | ..               | ..             | ..             | 67               |
| ..                 | ..              | ..               | ..             | *157           | 20,167           |
| ..                 | ..              | ..               | ..             | *157           | 22,503           |
| ..                 | ..              | ..               | ..             | *157           | 22,853           |
| ..                 | ..              | ..               | ..             | *157           | *22,374          |

Table 12

## Production of biofuels and wastes

Terajoules

| Country or area        | Year | Solid biofuels |              |               |         |              |          |
|------------------------|------|----------------|--------------|---------------|---------|--------------|----------|
|                        |      | Fuelwood       | Animal waste | Vegetal waste | Bagasse | Black liquor | Charcoal |
| El Salvador            | 2016 | 8,030          | ..           | ..            | 11,424  | ..           | 775      |
|                        | 2017 | 8,666          | ..           | ..            | 14,073  | ..           | 837      |
|                        | 2018 | 7,651          | ..           | ..            | 14,053  | ..           | 739      |
|                        | 2019 | 6,661          | ..           | ..            | 14,927  | ..           | 643      |
| Greenland              | 2016 | ..             | ..           | ..            | ..      | ..           | ..       |
|                        | 2017 | ..             | ..           | ..            | ..      | ..           | ..       |
|                        | 2018 | ..             | ..           | ..            | ..      | ..           | ..       |
|                        | 2019 | ..             | ..           | ..            | ..      | ..           | ..       |
| Grenada                | 2016 | 304            | ..           | ..            | 20      | ..           | 64       |
|                        | 2017 | 315            | ..           | ..            | 21      | ..           | 67       |
|                        | 2018 | 327            | ..           | ..            | 22      | ..           | 69       |
|                        | 2019 | 339            | ..           | ..            | 22      | ..           | 72       |
| Guatemala              | 2016 | 223,935        | ..           | ..            | 85,152  | ..           | 1,711    |
|                        | 2017 | 237,545        | ..           | ..            | 53,779  | ..           | 1,800    |
|                        | 2018 | 242,245        | ..           | ..            | 51,340  | ..           | 1,896    |
|                        | 2019 | 246,902        | ..           | ..            | 53,779  | ..           | 1,994    |
| Haiti                  | 2016 | 139,415        | ..           | ..            | 972     | ..           | 37,583   |
|                        | 2017 | 141,050        | ..           | ..            | 983     | ..           | 38,015   |
|                        | 2018 | 143,143        | ..           | ..            | 998     | ..           | 38,580   |
|                        | 2019 | 145,267        | ..           | ..            | 1,013   | ..           | 39,152   |
| Honduras               | 2016 | 72,222         | ..           | 1,901         | 13,291  | ..           | 4        |
|                        | 2017 | 49,389         | ..           | 1,922         | 23,000  | ..           | 1        |
|                        | 2018 | 55,298         | ..           | 1,498         | 21,848  | ..           | 6        |
|                        | 2019 | 53,793         | ..           | 1,708         | 15,940  | ..           | 5        |
| Jamaica                | 2016 | 5,006          | ..           | ..            | 2,868   | ..           | 1,133    |
|                        | 2017 | 5,006          | ..           | ..            | 1,965   | ..           | 1,133    |
|                        | 2018 | *5,006         | ..           | ..            | 1,544   | ..           | 1,121    |
|                        | 2019 | 4,788          | ..           | ..            | 1,888   | ..           | 738      |
| Mexico                 | 2016 | 251,887        | ..           | 38,276        | 70,264  | 3            | ..       |
|                        | 2017 | 250,601        | ..           | 0             | 76,659  | 6            | ..       |
|                        | 2018 | 249,084        | ..           | 0             | 107,146 | ..           | ..       |
|                        | 2019 | 247,919        | ..           | 0             | 113,249 | ..           | ..       |
| Nicaragua              | 2016 | 45,297         | ..           | 1,444         | 14,231  | ..           | 295      |
|                        | 2017 | 45,435         | ..           | 1,633         | 16,165  | ..           | 305      |
|                        | 2018 | 46,147         | ..           | 1,712         | 15,717  | ..           | 309      |
|                        | 2019 | 46,373         | ..           | 1,641         | 16,287  | ..           | 297      |
| Panama                 | 2016 | 7,102          | ..           | ..            | 6,319   | ..           | 35       |
|                        | 2017 | 7,059          | ..           | ..            | 5,997   | ..           | 34       |
|                        | 2018 | 7,015          | ..           | ..            | 5,846   | ..           | 33       |
|                        | 2019 | 6,973          | ..           | ..            | 4,660   | ..           | 32       |
| St. Kitts-Nevis        | 2016 | 0              | ..           | ..            | ..      | ..           | 0        |
|                        | 2017 | 0              | ..           | ..            | ..      | ..           | 0        |
|                        | 2018 | 0              | ..           | ..            | ..      | ..           | 0        |
|                        | 2019 | *1             | ..           | ..            | ..      | ..           | 0        |
| St. Lucia              | 2016 | *670           | ..           | ..            | ..      | ..           | 125      |
|                        | 2017 | *643           | ..           | ..            | ..      | ..           | 115      |
|                        | 2018 | *617           | ..           | ..            | ..      | ..           | 106      |
|                        | 2019 | *595           | ..           | ..            | ..      | ..           | *91      |
| St. Pierre-Miquelon    | 2016 | 5              | ..           | ..            | ..      | ..           | ..       |
|                        | 2017 | 5              | ..           | ..            | ..      | ..           | ..       |
|                        | 2018 | 5              | ..           | ..            | ..      | ..           | ..       |
|                        | 2019 | 5              | ..           | ..            | ..      | ..           | ..       |
| St. Vincent-Grenadines | 2016 | 66             | ..           | ..            | ..      | ..           | 11       |
|                        | 2017 | 65             | ..           | ..            | ..      | ..           | 11       |
|                        | 2018 | 65             | ..           | ..            | ..      | ..           | 11       |
|                        | 2019 | 65             | ..           | ..            | ..      | ..           | 11       |



Table 12

## Production of biofuels and wastes

Terajoules

| Non-biomass wastes |                 | Liquid biofuels |           | Biogases | Total   |
|--------------------|-----------------|-----------------|-----------|----------|---------|
| Industrial waste   | Municipal waste | Biogasoline     | Biodiesel |          |         |
| ..                 | ..              | ..              | ..        | 531      | 19,985  |
| ..                 | ..              | ..              | ..        | 510      | 23,249  |
| ..                 | ..              | ..              | ..        | 495      | 22,199  |
| ..                 | ..              | ..              | ..        | 570      | 22,158  |
| ..                 | 94              | ..              | ..        | ..       | 94      |
| ..                 | 94              | ..              | ..        | ..       | 94      |
| ..                 | *94             | ..              | ..        | ..       | *94     |
| ..                 | *94             | ..              | ..        | ..       | *94     |
| ..                 | ..              | ..              | ..        | ..       | 324     |
| ..                 | ..              | ..              | ..        | ..       | 336     |
| ..                 | ..              | ..              | ..        | ..       | 348     |
| ..                 | ..              | ..              | ..        | ..       | 361     |
| ..                 | ..              | ..              | ..        | 186      | 309,273 |
| ..                 | ..              | ..              | ..        | 308      | 291,632 |
| ..                 | ..              | ..              | ..        | 430      | 294,015 |
| ..                 | ..              | ..              | ..        | 308      | 300,989 |
| ..                 | ..              | 241             | ..        | ..       | 140,628 |
| ..                 | ..              | 234             | ..        | ..       | 142,267 |
| ..                 | ..              | 238             | ..        | ..       | 144,379 |
| ..                 | ..              | 241             | ..        | ..       | 146,521 |
| ..                 | ..              | ..              | ..        | ..       | 87,414  |
| ..                 | ..              | ..              | ..        | ..       | 74,311  |
| ..                 | ..              | ..              | ..        | ..       | 78,644  |
| ..                 | ..              | ..              | ..        | ..       | 71,442  |
| ..                 | ..              | ..              | ..        | ..       | 7,874   |
| ..                 | ..              | ..              | ..        | ..       | 6,971   |
| ..                 | ..              | ..              | ..        | ..       | *6,550  |
| ..                 | ..              | ..              | ..        | ..       | 6,676   |
| 552                | ..              | ..              | ..        | 1,912    | 362,894 |
| 897                | ..              | ..              | ..        | 2,008    | 330,171 |
| 1,010              | ..              | ..              | ..        | 2,844    | 360,084 |
| 1,067              | ..              | ..              | ..        | 2,799    | 365,034 |
| ..                 | ..              | ..              | ..        | ..       | 60,972  |
| ..                 | ..              | ..              | ..        | ..       | 63,233  |
| ..                 | ..              | ..              | ..        | ..       | 63,577  |
| ..                 | ..              | ..              | ..        | 75       | 64,376  |
| ..                 | ..              | ..              | ..        | ..       | 13,421  |
| ..                 | ..              | ..              | ..        | ..       | 13,056  |
| ..                 | ..              | ..              | ..        | ..       | 12,861  |
| ..                 | ..              | ..              | ..        | ..       | 11,633  |
| ..                 | ..              | ..              | ..        | ..       | 0       |
| ..                 | ..              | ..              | ..        | ..       | 0       |
| ..                 | ..              | ..              | ..        | ..       | 0       |
| ..                 | ..              | ..              | ..        | ..       | *1      |
| ..                 | ..              | ..              | ..        | ..       | *670    |
| ..                 | ..              | ..              | ..        | ..       | *643    |
| ..                 | ..              | ..              | ..        | ..       | *617    |
| ..                 | ..              | ..              | ..        | ..       | *595    |
| ..                 | ..              | ..              | ..        | ..       | 5       |
| ..                 | ..              | ..              | ..        | ..       | 5       |
| ..                 | ..              | ..              | ..        | ..       | 5       |
| ..                 | ..              | ..              | ..        | ..       | 5       |
| ..                 | ..              | ..              | ..        | ..       | 66      |
| ..                 | ..              | ..              | ..        | ..       | 65      |
| ..                 | ..              | ..              | ..        | ..       | 65      |
| ..                 | ..              | ..              | ..        | ..       | 65      |

Table 12

## Production of biofuels and wastes

Terajoules

| Country or area          | Year        | Solid biofuels   |              |                |                  |                |                |
|--------------------------|-------------|------------------|--------------|----------------|------------------|----------------|----------------|
|                          |             | Fuelwood         | Animal waste | Vegetal waste  | Bagasse          | Black liquor   | Charcoal       |
| Trinidad and Tobago      | 2016        | 284              | ..           | ..             | ..               | ..             | 59             |
|                          | 2017        | 281              | ..           | ..             | ..               | ..             | 54             |
|                          | 2018        | 279              | ..           | ..             | ..               | ..             | 54             |
|                          | 2019        | *276             | ..           | ..             | ..               | ..             | 54             |
| Turks and Caicos Islands | 2016        | 11               | ..           | ..             | ..               | ..             | 4              |
|                          | 2017        | 11               | ..           | ..             | ..               | ..             | 4              |
|                          | 2018        | 11               | ..           | ..             | ..               | ..             | 4              |
|                          | 2019        | 11               | ..           | ..             | ..               | ..             | 4              |
| United States            | 2016        | 567,795          | *317,313     | *543,965       | 88,418           | *649,736       | 25,134         |
|                          | 2017        | 588,020          | *308,947     | *529,623       | *88,418          | *632,605       | 25,134         |
|                          | 2018        | 654,148          | *354,331     | *607,424       | *88,418          | *725,535       | 25,134         |
|                          | 2019        | 652,486          | *348,416     | *597,284       | *88,804          | *713,423       | 25,134         |
| <b>America, South</b>    | <b>2016</b> | <b>1,542,289</b> | <b>..</b>    | <b>764,056</b> | <b>1,458,379</b> | <b>158,880</b> | <b>196,373</b> |
|                          | <b>2017</b> | <b>1,601,682</b> | <b>..</b>    | <b>829,851</b> | <b>1,448,608</b> | <b>160,297</b> | <b>204,965</b> |
|                          | <b>2018</b> | <b>1,631,039</b> | <b>..</b>    | <b>922,204</b> | <b>1,392,711</b> | <b>164,822</b> | <b>213,927</b> |
|                          | <b>2019</b> | <b>1,628,002</b> | <b>..</b>    | <b>708,486</b> | <b>1,423,764</b> | <b>163,425</b> | <b>218,044</b> |
| Argentina                | 2016        | 34,652           | ..           | ..             | 42,711           | ..             | 11,771         |
|                          | 2017        | 34,873           | ..           | ..             | 49,522           | ..             | 11,977         |
|                          | 2018        | 39,250           | ..           | ..             | 54,974           | ..             | 11,918         |
|                          | 2019        | 50,800           | ..           | ..             | 53,476           | ..             | 12,125         |
| Bolivia (Plur. State of) | 2016        | 7,452            | ..           | 38             | 19,794           | ..             | 1,416          |
|                          | 2017        | 6,006            | ..           | 0              | 19,821           | ..             | 1,419          |
|                          | 2018        | 5,756            | ..           | 0              | *20,489          | ..             | 1,452          |
|                          | 2019        | 5,934            | ..           | 0              | 19,166           | ..             | 1,472          |
| Brazil                   | 2016        | 935,588          | ..           | 704,438        | 1,301,691        | ..             | 163,578        |
|                          | 2017        | 990,234          | ..           | 774,475        | 1,278,872        | ..             | 169,271        |
|                          | 2018        | 1,039,645        | ..           | 867,675        | 1,218,269        | ..             | 177,295        |
|                          | 2019        | 1,045,802        | ..           | 658,218        | 1,252,702        | ..             | 182,812        |
| Chile                    | 2016        | 227,188          | ..           | ..             | ..               | 94,908         | 1,918          |
|                          | 2017        | 241,105          | ..           | ..             | ..               | 93,577         | 3,621          |
|                          | 2018        | 240,328          | ..           | ..             | ..               | 100,675        | 4,165          |
|                          | 2019        | 237,692          | ..           | ..             | ..               | 98,853         | 3,704          |
| Colombia                 | 2016        | 95,706           | ..           | 427            | 47,021           | 12,681         | 286            |
|                          | 2017        | 88,193           | ..           | 467            | 50,323           | 12,900         | 601            |
|                          | 2018        | 87,884           | ..           | 478            | 51,676           | 12,345         | 383            |
|                          | 2019        | 81,512           | ..           | 489            | 48,159           | 11,851         | 350            |
| Ecuador                  | 2016        | 10,596           | ..           | ..             | 12,524           | ..             | ..             |
|                          | 2017        | 10,378           | ..           | ..             | 14,103           | ..             | ..             |
|                          | 2018        | 10,127           | ..           | ..             | 12,170           | ..             | ..             |
|                          | 2019        | 9,815            | ..           | ..             | 12,076           | ..             | ..             |
| Falkland Is. (Malvinas)  | 2016        | 8                | ..           | ..             | ..               | ..             | 3              |
|                          | 2017        | 8                | ..           | ..             | ..               | ..             | 3              |
|                          | 2018        | 8                | ..           | ..             | ..               | ..             | 4              |
|                          | 2019        | 9                | ..           | ..             | ..               | ..             | 4              |
| Guyana                   | 2016        | 1,073            | ..           | ..             | 5,587            | ..             | 42             |
|                          | 2017        | 1,057            | ..           | ..             | 5,552            | ..             | 43             |
|                          | 2018        | 1,073            | ..           | ..             | 3,913            | ..             | 40             |
|                          | 2019        | 1,153            | ..           | ..             | 2,408            | ..             | 41             |
| Paraguay                 | 2016        | 113,888          | ..           | 24,563         | ..               | ..             | 12,139         |
|                          | 2017        | 117,769          | ..           | 23,335         | ..               | ..             | 13,103         |
|                          | 2018        | 101,576          | ..           | 23,931         | ..               | ..             | 12,801         |
|                          | 2019        | 98,604           | ..           | 23,692         | ..               | ..             | 11,871         |
| Peru                     | 2016        | 79,021           | ..           | 5,967          | 19,880           | ..             | 5,015          |
|                          | 2017        | 74,725           | ..           | 5,269          | 20,938           | ..             | 4,750          |
|                          | 2018        | 68,497           | ..           | 5,449          | 20,986           | ..             | 5,694          |
|                          | 2019        | 64,615           | ..           | 5,908          | 25,480           | ..             | 5,564          |

Table 12

## Production of biofuels and wastes

Terajoules

| Non-biomass wastes |                 | Liquid biofuels |                | Biogases      | Total            |
|--------------------|-----------------|-----------------|----------------|---------------|------------------|
| Industrial waste   | Municipal waste | Biogasoline     | Biodiesel      |               |                  |
| ..                 | ..              | ..              | ..             | ..            | 284              |
| ..                 | ..              | ..              | ..             | ..            | 281              |
| ..                 | ..              | ..              | ..             | ..            | 279              |
| ..                 | ..              | ..              | ..             | ..            | *276             |
| ..                 | ..              | ..              | ..             | ..            | 11               |
| ..                 | ..              | ..              | ..             | ..            | 11               |
| ..                 | ..              | ..              | ..             | ..            | 11               |
| ..                 | ..              | ..              | ..             | ..            | 11               |
| 45,038             | 303,080         | 1,228,787       | 192,133        | 154,864       | 4,091,129        |
| 41,360             | 292,165         | 1,270,200       | 195,545        | 155,906       | 4,102,788        |
| 40,783             | 297,129         | 1,290,057       | 227,701        | 153,014       | 4,438,540        |
| 39,783             | 283,813         | 1,265,545       | 211,328        | 145,888       | 4,346,770        |
| <b>294</b>         | ..              | <b>621,712</b>  | <b>228,558</b> | <b>11,092</b> | <b>4,785,260</b> |
| <b>268</b>         | ..              | <b>611,497</b>  | <b>260,268</b> | <b>12,968</b> | <b>4,925,438</b> |
| <b>366</b>         | ..              | <b>731,371</b>  | <b>283,484</b> | <b>14,632</b> | <b>5,140,630</b> |
| <b>360</b>         | ..              | <b>773,641</b>  | <b>290,712</b> | <b>17,228</b> | <b>5,005,618</b> |
| ..                 | ..              | 18,867          | 97,851         | ..            | 194,082          |
| ..                 | ..              | 23,450          | 105,653        | ..            | 213,498          |
| ..                 | ..              | 23,638          | 89,350         | ..            | 207,212          |
| ..                 | ..              | 22,780          | 79,010         | ..            | 206,065          |
| ..                 | ..              | ..              | ..             | ..            | 27,284           |
| ..                 | ..              | ..              | ..             | ..            | 25,827           |
| ..                 | ..              | 25              | ..             | ..            | *26,271          |
| ..                 | ..              | 942             | ..             | ..            | 26,042           |
| ..                 | ..              | 588,850         | 121,738        | 5,728         | 3,658,033        |
| ..                 | ..              | 574,136         | 137,433        | 7,993         | 3,763,144        |
| ..                 | ..              | 691,896         | 171,348        | 8,532         | 3,997,365        |
| ..                 | ..              | 733,409         | 189,733        | 11,245        | 3,891,110        |
| ..                 | ..              | ..              | ..             | 3,747         | 325,843          |
| ..                 | ..              | ..              | ..             | 3,849         | 338,531          |
| ..                 | ..              | ..              | ..             | 4,484         | 345,487          |
| ..                 | ..              | ..              | ..             | 4,235         | 340,780          |
| ..                 | ..              | 5,275           | 7,243          | ..            | 168,353          |
| ..                 | ..              | 4,634           | 15,415         | ..            | 171,933          |
| ..                 | ..              | 6,337           | 18,384         | ..            | 177,104          |
| ..                 | ..              | 5,199           | 17,137         | ..            | 164,349          |
| ..                 | ..              | 452             | ..             | 282           | 23,853           |
| ..                 | ..              | 817             | ..             | 567           | 25,866           |
| ..                 | ..              | 717             | ..             | 925           | 23,939           |
| ..                 | ..              | 945             | ..             | 925           | 23,762           |
| ..                 | ..              | ..              | ..             | ..            | 8                |
| ..                 | ..              | ..              | ..             | ..            | 8                |
| ..                 | ..              | ..              | ..             | ..            | 8                |
| ..                 | ..              | ..              | ..             | ..            | 9                |
| ..                 | ..              | ..              | ..             | ..            | 6,661            |
| ..                 | ..              | ..              | ..             | ..            | 6,609            |
| ..                 | ..              | ..              | ..             | ..            | 4,987            |
| ..                 | ..              | ..              | ..             | ..            | 3,561            |
| ..                 | ..              | 6,259           | ..             | ..            | 144,710          |
| ..                 | ..              | 6,479           | ..             | ..            | 147,583          |
| ..                 | ..              | 7,071           | ..             | ..            | 132,578          |
| ..                 | ..              | 8,366           | ..             | ..            | 130,662          |
| ..                 | ..              | 364             | 4              | 1,335         | 106,571          |
| ..                 | ..              | 515             | 66             | 558           | 102,071          |
| ..                 | ..              | 0               | 2,867          | 691           | 98,491           |
| ..                 | ..              | 271             | 3,231          | 823           | 100,328          |

Table 12

## Production of biofuels and wastes

Terajoules

| Country or area           | Year        | Solid biofuels    |                |                  |                  |                |                |
|---------------------------|-------------|-------------------|----------------|------------------|------------------|----------------|----------------|
|                           |             | Fuelwood          | Animal waste   | Vegetal waste    | Bagasse          | Black liquor   | Charcoal       |
| Suriname                  | 2016        | 914               | ..             | 735              | ..               | ..             | ..             |
|                           | 2017        | 915               | ..             | 736              | ..               | ..             | ..             |
|                           | 2018        | 916               | ..             | 737              | ..               | ..             | ..             |
|                           | 2019        | 916               | ..             | 751              | ..               | ..             | ..             |
| Uruguay                   | 2016        | 25,176            | ..             | 11,570           | 863              | 51,291         | ..             |
|                           | 2017        | 25,060            | ..             | 11,807           | 882              | 53,820         | ..             |
|                           | 2018        | 25,794            | ..             | 12,873           | 858              | 51,802         | ..             |
|                           | 2019        | 24,286            | ..             | 12,238           | 829              | 52,720         | ..             |
| Venezuela (Bolivar. Rep.) | 2016        | 11,027            | ..             | 16,319           | 8,307            | ..             | 207            |
|                           | 2017        | 11,358            | ..             | 13,762           | 8,595            | ..             | 177            |
|                           | 2018        | 10,184            | ..             | 11,061           | 9,375            | ..             | 177            |
|                           | 2019        | 6,862             | ..             | 7,190            | 9,467            | ..             | 102            |
| <b>Asia</b>               | <b>2016</b> | <b>11,027,950</b> | <b>149,986</b> | <b>4,349,298</b> | <b>1,603,291</b> | <b>147,329</b> | <b>359,457</b> |
|                           | <b>2017</b> | <b>11,079,084</b> | <b>151,267</b> | <b>4,430,679</b> | <b>1,814,508</b> | <b>164,990</b> | <b>381,631</b> |
|                           | <b>2018</b> | <b>11,094,322</b> | <b>151,328</b> | <b>4,369,551</b> | <b>2,030,507</b> | <b>176,397</b> | <b>341,535</b> |
|                           | <b>2019</b> | <b>11,318,071</b> | <b>160,006</b> | <b>4,401,349</b> | <b>1,931,384</b> | <b>169,246</b> | <b>347,468</b> |
| Afghanistan               | 2016        | 16,660            | ..             | ..               | ..               | ..             | 3,927          |
|                           | 2017        | 16,960            | ..             | ..               | ..               | ..             | 4,037          |
|                           | 2018        | 17,266            | ..             | ..               | ..               | ..             | 4,149          |
|                           | 2019        | 17,578            | ..             | ..               | ..               | ..             | 4,265          |
| Armenia                   | 2016        | 6,194             | 2,195          | ..               | ..               | ..             | ..             |
|                           | 2017        | 6,082             | 2,428          | ..               | ..               | ..             | ..             |
|                           | 2018        | 4,348             | 1,289          | ..               | ..               | ..             | ..             |
|                           | 2019        | 4,019             | 871            | ..               | ..               | ..             | ..             |
| Azerbaijan                | 2016        | 1,268             | ..             | ..               | ..               | ..             | 6              |
|                           | 2017        | 1,379             | ..             | ..               | ..               | ..             | 6              |
|                           | 2018        | 1,347             | ..             | 187              | ..               | ..             | 3              |
|                           | 2019        | 1,279             | ..             | 408              | ..               | ..             | 3              |
| Bahrain                   | 2016        | 65                | ..             | ..               | ..               | ..             | 34             |
|                           | 2017        | 66                | ..             | ..               | ..               | ..             | 34             |
|                           | 2018        | 66                | ..             | ..               | ..               | ..             | 34             |
|                           | 2019        | 66                | ..             | ..               | ..               | ..             | 35             |
| Bangladesh                | 2016        | 239,844           | 121,178        | 230,649          | 1,888            | ..             | 9,947          |
|                           | 2017        | 237,541           | 122,456        | 232,777          | 1,753            | ..             | 9,972          |
|                           | 2018        | 235,268           | 123,673        | 235,395          | 1,771            | ..             | 9,998          |
|                           | 2019        | 233,025           | 132,688        | 199,031          | *1,949           | ..             | 10,023         |
| Bhutan                    | 2016        | 47,088            | ..             | ..               | ..               | ..             | 207            |
|                           | 2017        | 47,457            | ..             | ..               | ..               | ..             | 207            |
|                           | 2018        | 47,831            | ..             | ..               | ..               | ..             | 252            |
|                           | 2019        | 48,209            | ..             | ..               | ..               | ..             | 257            |
| Brunei Darussalam         | 2016        | 106               | ..             | ..               | ..               | ..             | 9              |
|                           | 2017        | 106               | ..             | ..               | ..               | ..             | 10             |
|                           | 2018        | 106               | ..             | ..               | ..               | ..             | 10             |
|                           | 2019        | 106               | ..             | ..               | ..               | ..             | 10             |
| Cambodia                  | 2016        | 137,593           | ..             | 1,118            | ..               | ..             | 12,626         |
|                           | 2017        | 139,949           | ..             | 1,132            | ..               | ..             | 12,580         |
|                           | 2018        | 142,416           | ..             | 1,385            | ..               | ..             | 12,490         |
|                           | 2019        | 145,073           | ..             | 1,974            | ..               | ..             | 12,418         |
| China                     | 2016        | 1,545,363         | ..             | 1,613,903        | 251,547          | ..             | 49,090         |
|                           | 2017        | 1,517,369         | ..             | 1,753,712        | 259,293          | ..             | 48,689         |
|                           | 2018        | 1,489,067         | ..             | 1,788,786        | 294,675          | ..             | 48,289         |
|                           | 2019        | 1,461,314         | ..             | 1,788,786        | 261,810          | ..             | 47,892         |
| China, Macao SAR          | 2016        | ..                | ..             | ..               | ..               | ..             | ..             |
|                           | 2017        | ..                | ..             | ..               | ..               | ..             | ..             |
|                           | 2018        | ..                | ..             | ..               | ..               | ..             | ..             |
|                           | 2019        | ..                | ..             | ..               | ..               | ..             | ..             |

Table 12

## Production of biofuels and wastes

Terajoules

| Non-biomass wastes |                 | Liquid biofuels |                | Biogases       | Total             |
|--------------------|-----------------|-----------------|----------------|----------------|-------------------|
| Industrial waste   | Municipal waste | Biogasoline     | Biodiesel      |                |                   |
| ..                 | ..              | ..              | ..             | ..             | 1,649             |
| ..                 | ..              | ..              | ..             | ..             | 1,650             |
| ..                 | ..              | ..              | ..             | ..             | 1,652             |
| ..                 | ..              | ..              | ..             | ..             | 1,667             |
| 294                | ..              | 1,646           | 1,722          | ..             | 92,562            |
| 268                | ..              | 1,466           | 1,700          | ..             | 95,003            |
| 366                | ..              | 1,688           | 1,535          | ..             | 94,917            |
| 360                | ..              | 1,729           | 1,601          | ..             | 93,764            |
| ..                 | ..              | ..              | ..             | ..             | 35,653            |
| ..                 | ..              | ..              | ..             | ..             | 33,714            |
| ..                 | ..              | ..              | ..             | ..             | 30,620            |
| ..                 | ..              | ..              | ..             | ..             | 23,519            |
| <b>542,152</b>     | <b>165,091</b>  | <b>147,754</b>  | <b>479,120</b> | <b>75,225</b>  | <b>18,687,196</b> |
| <b>599,306</b>     | <b>160,706</b>  | <b>158,091</b>  | <b>523,364</b> | <b>81,769</b>  | <b>19,163,763</b> |
| <b>616,886</b>     | <b>167,692</b>  | <b>163,470</b>  | <b>633,498</b> | <b>103,405</b> | <b>19,507,057</b> |
| <b>598,753</b>     | <b>168,693</b>  | <b>156,929</b>  | <b>734,659</b> | <b>111,631</b> | <b>19,750,722</b> |
| ..                 | ..              | ..              | ..             | ..             | 16,660            |
| ..                 | ..              | ..              | ..             | ..             | 16,960            |
| ..                 | ..              | ..              | ..             | ..             | 17,266            |
| ..                 | ..              | ..              | ..             | ..             | 17,578            |
| ..                 | ..              | ..              | ..             | ..             | 8,390             |
| ..                 | ..              | ..              | ..             | ..             | 8,510             |
| ..                 | ..              | ..              | ..             | ..             | 5,637             |
| ..                 | ..              | ..              | ..             | ..             | 4,890             |
| ..                 | 2,773           | ..              | ..             | ..             | 4,041             |
| ..                 | 2,782           | ..              | ..             | ..             | 4,162             |
| ..                 | 2,966           | ..              | ..             | ..             | 4,500             |
| ..                 | 3,075           | ..              | ..             | ..             | 4,762             |
| ..                 | ..              | ..              | ..             | ..             | 65                |
| ..                 | ..              | ..              | ..             | ..             | 66                |
| ..                 | ..              | ..              | ..             | ..             | 66                |
| ..                 | ..              | ..              | ..             | ..             | 66                |
| ..                 | ..              | ..              | ..             | ..             | 593,559           |
| ..                 | ..              | ..              | ..             | ..             | 594,527           |
| ..                 | ..              | ..              | ..             | ..             | 596,107           |
| ..                 | ..              | ..              | ..             | ..             | 566,693           |
| ..                 | ..              | ..              | ..             | ..             | 47,088            |
| ..                 | ..              | ..              | ..             | ..             | 47,457            |
| ..                 | ..              | ..              | ..             | ..             | 47,831            |
| ..                 | ..              | ..              | ..             | ..             | 48,209            |
| ..                 | ..              | ..              | ..             | ..             | 106               |
| ..                 | ..              | ..              | ..             | ..             | 106               |
| ..                 | ..              | ..              | ..             | ..             | 106               |
| ..                 | ..              | ..              | ..             | ..             | 106               |
| ..                 | ..              | ..              | ..             | ..             | 138,711           |
| ..                 | ..              | ..              | ..             | ..             | 141,081           |
| ..                 | ..              | ..              | ..             | ..             | 143,801           |
| ..                 | ..              | ..              | ..             | ..             | 147,047           |
| 213,315            | ..              | 100,307         | 275,474        | ..             | 3,999,909         |
| 229,441            | ..              | *106,664        | 321,757        | ..             | 4,188,235         |
| 221,906            | ..              | *106,664        | *323,840       | ..             | 4,224,938         |
| 230,386            | ..              | *85,760         | *323,840       | ..             | 4,151,896         |
| ..                 | 3,384           | ..              | ..             | ..             | 3,384             |
| ..                 | 3,339           | ..              | ..             | ..             | 3,339             |
| ..                 | 3,386           | ..              | ..             | ..             | 3,386             |
| ..                 | 3,878           | ..              | ..             | ..             | 3,878             |

Table 12

## Production of biofuels and wastes

Terajoules

| Country or area        | Year | Solid biofuels |              |               |           |              |          |
|------------------------|------|----------------|--------------|---------------|-----------|--------------|----------|
|                        |      | Fuelwood       | Animal waste | Vegetal waste | Bagasse   | Black liquor | Charcoal |
| Cyprus                 | 2016 | 642            | ..           | 146           | ..        | ..           | 59       |
|                        | 2017 | 781            | ..           | 175           | ..        | ..           | 73       |
|                        | 2018 | 786            | ..           | 163           | ..        | ..           | 48       |
|                        | 2019 | 798            | ..           | 246           | ..        | ..           | 40       |
| Georgia                | 2016 | 16,007         | 102          | 123           | ..        | ..           | ..       |
|                        | 2017 | 15,115         | 103          | 59            | ..        | ..           | ..       |
|                        | 2018 | 11,233         | 125          | 42            | ..        | ..           | ..       |
|                        | 2019 | 10,101         | 137          | 32            | ..        | ..           | ..       |
| India                  | 2016 | 5,405,992      | ..           | 1,060,823     | 789,278   | ..           | 85,668   |
|                        | 2017 | 5,549,926      | ..           | 1,056,729     | 998,812   | ..           | 113,664  |
|                        | 2018 | 5,698,172      | ..           | 1,037,543     | 1,056,815 | ..           | *82,187  |
|                        | 2019 | 5,851,142      | ..           | 1,047,001     | 957,070   | ..           | *80,535  |
| Indonesia              | 2016 | 1,076,605      | ..           | 389,530       | 56,012    | ..           | 22,096   |
|                        | 2017 | 1,032,622      | ..           | 388,084       | *49,751   | ..           | 26,609   |
|                        | 2018 | 901,816        | ..           | 409,291       | 52,464    | ..           | 47,053   |
|                        | 2019 | 947,857        | ..           | 419,574       | 53,782    | ..           | 52,923   |
| Iran (Islamic Rep. of) | 2016 | *73,994        | *1,175       | 8,400         | ..        | ..           | 30       |
|                        | 2017 | *73,994        | *1,175       | 8,715         | ..        | ..           | 9        |
|                        | 2018 | *73,994        | *1,175       | 8,373         | ..        | ..           | 9        |
|                        | 2019 | *73,994        | *1,175       | 8,205         | ..        | ..           | 9        |
| Iraq                   | 2016 | 2,148          | ..           | ..            | ..        | ..           | 856      |
|                        | 2017 | 1,982          | ..           | ..            | ..        | ..           | 797      |
|                        | 2018 | 1,977          | ..           | ..            | ..        | ..           | 561      |
|                        | 2019 | 2,008          | ..           | ..            | ..        | ..           | 574      |
| Israel                 | 2016 | 183            | ..           | ..            | ..        | ..           | ..       |
|                        | 2017 | 183            | ..           | ..            | ..        | ..           | ..       |
|                        | 2018 | 183            | ..           | ..            | ..        | ..           | ..       |
|                        | 2019 | 183            | ..           | ..            | ..        | ..           | ..       |
| Japan                  | 2016 | 64,882         | ..           | 69,938        | ..        | 128,457      | 354      |
|                        | 2017 | 73,880         | ..           | 75,019        | ..        | 145,237      | 343      |
|                        | 2018 | 77,642         | ..           | 75,019        | ..        | 146,898      | 343      |
|                        | 2019 | 79,212         | ..           | 97,735        | ..        | 141,546      | 343      |
| Jordan                 | 2016 | 3,197          | ..           | ..            | ..        | ..           | 1,380    |
|                        | 2017 | 3,261          | ..           | ..            | ..        | ..           | 1,410    |
|                        | 2018 | 3,325          | ..           | ..            | ..        | ..           | 1,441    |
|                        | 2019 | 3,397          | ..           | ..            | ..        | ..           | 1,473    |
| Kazakhstan             | 2016 | 2,202          | ..           | ..            | ..        | ..           | 14       |
|                        | 2017 | 2,202          | ..           | ..            | ..        | ..           | 14       |
|                        | 2018 | 2,171          | ..           | ..            | ..        | ..           | 47       |
|                        | 2019 | 2,436          | ..           | ..            | ..        | ..           | 41       |
| Korea, Dem.Ppl's.Rep.  | 2016 | 46,297         | ..           | ..            | ..        | ..           | 4,838    |
|                        | 2017 | 46,520         | ..           | ..            | ..        | ..           | 4,891    |
|                        | 2018 | 46,740         | ..           | ..            | ..        | ..           | 4,930    |
|                        | 2019 | 46,952         | ..           | ..            | ..        | ..           | 4,970    |
| Korea, Republic of     | 2016 | 67,887         | ..           | 0             | ..        | 9,581        | ..       |
|                        | 2017 | 77,939         | ..           | 0             | ..        | 7,172        | ..       |
|                        | 2018 | 88,260         | ..           | ..            | ..        | 8,378        | ..       |
|                        | 2019 | 76,104         | ..           | ..            | ..        | 7,857        | ..       |
| Kuwait                 | 2016 | 183            | ..           | ..            | ..        | ..           | 90       |
|                        | 2017 | 185            | ..           | ..            | ..        | ..           | 91       |
|                        | 2018 | 187            | ..           | ..            | ..        | ..           | 92       |
|                        | 2019 | 189            | ..           | ..            | ..        | ..           | 93       |
| Kyrgyzstan             | 2016 | 43             | ..           | ..            | ..        | ..           | ..       |
|                        | 2017 | 60             | ..           | ..            | ..        | ..           | ..       |
|                        | 2018 | 96             | ..           | ..            | ..        | ..           | ..       |
|                        | 2019 | 85             | ..           | ..            | ..        | ..           | ..       |

Table 12

## Production of biofuels and wastes

Terajoules

| Non-biomass wastes |                 | Liquid biofuels |           | Biogases | Total     |
|--------------------|-----------------|-----------------|-----------|----------|-----------|
| Industrial waste   | Municipal waste | Biogasoline     | Biodiesel |          |           |
| 197                | 9               | ..              | 0         | 492      | 1,486     |
| 122                | 37              | ..              | 54        | 504      | 1,673     |
| 158                | 52              | ..              | ..        | 554      | 1,712     |
| 164                | 101             | ..              | ..        | 579      | 1,889     |
| ..                 | ..              | ..              | ..        | 0        | 16,232    |
| ..                 | ..              | ..              | ..        | ..       | 15,277    |
| ..                 | ..              | ..              | ..        | ..       | 11,399    |
| ..                 | ..              | ..              | 10        | ..       | 10,279    |
| ..                 | ..              | ..              | ..        | ..       | 7,256,093 |
| ..                 | ..              | ..              | ..        | ..       | 7,605,467 |
| ..                 | ..              | ..              | ..        | ..       | 7,792,529 |
| ..                 | ..              | ..              | ..        | ..       | 7,855,214 |
| ..                 | ..              | ..              | 118,396   | 456      | 1,640,999 |
| ..                 | ..              | ..              | 110,624   | 496      | 1,581,577 |
| ..                 | ..              | ..              | 199,745   | 513      | 1,563,829 |
| ..                 | ..              | ..              | 271,993   | 526      | 1,693,731 |
| ..                 | ..              | ..              | ..        | 282      | *83,851   |
| ..                 | ..              | ..              | ..        | 288      | *84,172   |
| ..                 | ..              | ..              | ..        | 288      | *83,830   |
| ..                 | ..              | ..              | ..        | 254      | *83,628   |
| ..                 | ..              | ..              | ..        | ..       | 2,148     |
| ..                 | ..              | ..              | ..        | ..       | 1,982     |
| ..                 | ..              | ..              | ..        | ..       | 1,977     |
| ..                 | ..              | ..              | ..        | ..       | 2,008     |
| ..                 | ..              | ..              | ..        | 795      | 978       |
| ..                 | ..              | ..              | ..        | 960      | 1,143     |
| ..                 | ..              | ..              | ..        | 878      | 1,061     |
| ..                 | ..              | ..              | ..        | 806      | 989       |
| 217,268            | 31,224          | 54              | 442       | 6,000    | 518,264   |
| 233,211            | 28,918          | 4               | 442       | 4,616    | 561,327   |
| 249,544            | 30,849          | 4               | 442       | 9,058    | 589,456   |
| 229,430            | 32,023          | 4               | 442       | 9,253    | 589,644   |
| ..                 | ..              | ..              | ..        | 100      | 3,297     |
| ..                 | ..              | ..              | ..        | 100      | 3,361     |
| ..                 | ..              | ..              | ..        | *100     | 3,425     |
| ..                 | ..              | ..              | ..        | 85       | 3,482     |
| ..                 | ..              | ..              | ..        | 58       | 2,260     |
| ..                 | ..              | ..              | ..        | 32       | 2,234     |
| ..                 | ..              | ..              | ..        | 19       | 2,189     |
| ..                 | ..              | ..              | ..        | 43       | 2,479     |
| ..                 | ..              | ..              | ..        | ..       | 46,297    |
| ..                 | ..              | ..              | ..        | ..       | 46,520    |
| ..                 | ..              | ..              | ..        | ..       | 46,740    |
| ..                 | ..              | ..              | ..        | ..       | 46,952    |
| 109,305            | 39,467          | 10,823          | 17,995    | 6,955    | 262,013   |
| 134,086            | 39,798          | 9,413           | 19,320    | 7,333    | 295,061   |
| 108,143            | 40,155          | 12,045          | 23,515    | 7,406    | 287,901   |
| 102,191            | 37,090          | 15,573          | 24,082    | 8,108    | 271,006   |
| ..                 | ..              | ..              | ..        | ..       | 183       |
| ..                 | ..              | ..              | ..        | ..       | 185       |
| ..                 | ..              | ..              | ..        | ..       | 187       |
| ..                 | ..              | ..              | ..        | ..       | 189       |
| ..                 | ..              | ..              | ..        | ..       | 43        |
| ..                 | ..              | ..              | ..        | ..       | 60        |
| ..                 | ..              | ..              | ..        | ..       | 96        |
| ..                 | ..              | ..              | ..        | ..       | 85        |

Table 12

## Production of biofuels and wastes

Terajoules

| Country or area        | Year | Solid biofuels |              |               |          |              |          |
|------------------------|------|----------------|--------------|---------------|----------|--------------|----------|
|                        |      | Fuelwood       | Animal waste | Vegetal waste | Bagasse  | Black liquor | Charcoal |
| Lao People's Dem. Rep. | 2016 | *52,920        | ..           | ..            | 3,147    | ..           | *6,048   |
|                        | 2017 | 53,063         | ..           | ..            | *3,286   | ..           | *6,048   |
|                        | 2018 | 52,710         | ..           | ..            | *3,220   | ..           | *6,136   |
|                        | 2019 | 52,363         | ..           | ..            | 4,031    | ..           | *6,195   |
| Lebanon                | 2016 | 4,971          | ..           | ..            | ..       | ..           | 89       |
|                        | 2017 | *4,971         | ..           | ..            | ..       | ..           | 89       |
|                        | 2018 | *4,971         | ..           | ..            | ..       | ..           | 89       |
|                        | 2019 | 4,971          | ..           | ..            | ..       | ..           | 89       |
| Malaysia               | 2016 | 23,146         | ..           | 9,878         | 2,394    | ..           | 864      |
|                        | 2017 | 22,780         | ..           | *8,196        | *755     | ..           | 864      |
|                        | 2018 | 22,425         | ..           | *12,581       | *591     | ..           | 867      |
|                        | 2019 | 22,083         | ..           | 12,624        | *518     | ..           | 458      |
| Maldives               | 2016 | 149            | ..           | ..            | ..       | ..           | 25       |
|                        | 2017 | 149            | ..           | ..            | ..       | ..           | 26       |
|                        | 2018 | 150            | ..           | ..            | ..       | ..           | 26       |
|                        | 2019 | 151            | ..           | ..            | ..       | ..           | 26       |
| Mongolia               | 2016 | 5,481          | ..           | ..            | ..       | ..           | 466      |
|                        | 2017 | 5,481          | ..           | ..            | ..       | ..           | 506      |
|                        | 2018 | 5,481          | ..           | ..            | ..       | ..           | 510      |
|                        | 2019 | 5,481          | ..           | ..            | ..       | ..           | 515      |
| Myanmar                | 2016 | 429,209        | ..           | 25,790        | ..       | ..           | 856      |
|                        | 2017 | 431,655        | ..           | 25,943        | ..       | ..           | 856      |
|                        | 2018 | 432,788        | ..           | 26,005        | ..       | ..           | 856      |
|                        | 2019 | 426,076        | ..           | 25,811        | ..       | ..           | 856      |
| Nepal                  | 2016 | 355,065        | 18,504       | 17,505        | 11,729   | ..           | 295      |
|                        | 2017 | 361,118        | 18,579       | 17,804        | 11,821   | ..           | 325      |
|                        | 2018 | 365,996        | 18,829       | 18,045        | *11,833  | ..           | 325      |
|                        | 2019 | 372,785        | 19,179       | 18,379        | *11,832  | ..           | 328      |
| Oman                   | 2016 | 425            | ..           | ..            | ..       | ..           | 205      |
|                        | 2017 | 436            | ..           | ..            | ..       | ..           | 210      |
|                        | 2018 | 447            | ..           | ..            | ..       | ..           | 216      |
|                        | 2019 | 458            | ..           | ..            | ..       | ..           | 221      |
| Other Asia             | 2016 | 6,888          | ..           | ..            | ..       | ..           | ..       |
|                        | 2017 | 6,281          | ..           | ..            | ..       | ..           | ..       |
|                        | 2018 | 6,324          | ..           | ..            | ..       | ..           | ..       |
|                        | 2019 | 6,102          | ..           | ..            | ..       | ..           | ..       |
| Pakistan               | 2016 | *316,531       | *6,284       | *260,975      | 141,268  | ..           | 2,466    |
|                        | 2017 | *311,634       | *5,969       | *256,937      | *141,268 | ..           | 2,516    |
|                        | 2018 | *306,330       | *5,671       | *252,564      | *149,508 | ..           | 2,567    |
|                        | 2019 | *306,579       | *5,387       | *252,769      | *149,508 | ..           | 2,617    |
| Philippines            | 2016 | *269,053       | 549          | 38,750        | 27,819   | ..           | 58,690   |
|                        | 2017 | *272,290       | 557          | 38,808        | 32,046   | ..           | 60,800   |
|                        | 2018 | *275,761       | 565          | 38,473        | 33,588   | ..           | 63,042   |
|                        | 2019 | *279,500       | 569          | 38,065        | 32,768   | ..           | 65,372   |
| Qatar                  | 2016 | 47             | ..           | ..            | ..       | ..           | 23       |
|                        | 2017 | 47             | ..           | ..            | ..       | ..           | 23       |
|                        | 2018 | 47             | ..           | ..            | ..       | ..           | 23       |
|                        | 2019 | 47             | ..           | ..            | ..       | ..           | 23       |
| Singapore              | 2016 | 271            | ..           | ..            | ..       | ..           | 143      |
|                        | 2017 | 267            | ..           | ..            | ..       | ..           | 141      |
|                        | 2018 | 262            | ..           | ..            | ..       | ..           | 139      |
|                        | 2019 | 258            | ..           | ..            | ..       | ..           | 137      |
| Sri Lanka              | 2016 | 150,651        | ..           | ..            | 1,862    | ..           | ..       |
|                        | 2017 | 148,807        | ..           | ..            | 1,470    | ..           | ..       |
|                        | 2018 | 148,878        | ..           | ..            | 1,572    | ..           | ..       |
|                        | 2019 | *156,358       | ..           | ..            | 1,651    | ..           | ..       |



Table 12

## Production of biofuels and wastes

Terajoules

| Non-biomass wastes |                 | Liquid biofuels |           | Biogases | Total    |
|--------------------|-----------------|-----------------|-----------|----------|----------|
| Industrial waste   | Municipal waste | Biogasoline     | Biodiesel |          |          |
| ..                 | ..              | ..              | ..        | ..       | *56,067  |
| ..                 | ..              | ..              | ..        | ..       | 56,349   |
| ..                 | ..              | ..              | ..        | ..       | 55,930   |
| ..                 | ..              | ..              | ..        | ..       | 56,394   |
| ..                 | ..              | ..              | ..        | ..       | 4,971    |
| ..                 | ..              | ..              | ..        | ..       | *4,971   |
| ..                 | ..              | ..              | ..        | *83      | *5,054   |
| ..                 | ..              | ..              | ..        | *415     | 5,386    |
| ..                 | ..              | ..              | 18,437    | ..       | 53,855   |
| ..                 | ..              | ..              | 16,928    | ..       | 48,659   |
| ..                 | ..              | ..              | 25,502    | ..       | 61,100   |
| ..                 | ..              | ..              | 44,374    | ..       | 79,598   |
| ..                 | ..              | ..              | ..        | ..       | 149      |
| ..                 | ..              | ..              | ..        | ..       | 149      |
| ..                 | ..              | ..              | ..        | ..       | 150      |
| ..                 | ..              | ..              | ..        | ..       | 151      |
| ..                 | ..              | ..              | ..        | ..       | 5,481    |
| ..                 | ..              | ..              | ..        | ..       | 5,481    |
| ..                 | ..              | ..              | ..        | ..       | 5,481    |
| ..                 | ..              | ..              | ..        | ..       | 5,481    |
| ..                 | ..              | ..              | ..        | 1        | 455,000  |
| ..                 | ..              | ..              | ..        | 1        | 457,599  |
| ..                 | ..              | ..              | ..        | 1        | 458,794  |
| ..                 | ..              | ..              | ..        | 1        | 451,888  |
| ..                 | ..              | ..              | ..        | 11,729   | 414,532  |
| ..                 | ..              | ..              | ..        | 11,821   | 421,143  |
| ..                 | ..              | ..              | ..        | 12,019   | 426,722  |
| ..                 | ..              | ..              | ..        | 12,133   | 434,307  |
| ..                 | ..              | ..              | ..        | ..       | 425      |
| ..                 | ..              | ..              | ..        | ..       | 436      |
| ..                 | ..              | ..              | ..        | ..       | 447      |
| ..                 | ..              | ..              | ..        | ..       | 458      |
| ..                 | 55,956          | 438             | ..        | 295      | 63,577   |
| ..                 | 54,380          | 187             | ..        | 272      | 61,120   |
| ..                 | 56,731          | 7               | ..        | 268      | 63,330   |
| ..                 | 57,322          | 3               | ..        | 219      | 63,645   |
| ..                 | ..              | ..              | ..        | ..       | *725,057 |
| ..                 | ..              | ..              | ..        | ..       | *715,808 |
| ..                 | ..              | ..              | ..        | ..       | *714,073 |
| ..                 | ..              | ..              | ..        | ..       | *714,243 |
| ..                 | 447             | 8,314           | 7,050     | ..       | *351,982 |
| ..                 | 527             | 8,608           | 6,591     | ..       | *359,427 |
| ..                 | 543             | 11,130          | 6,645     | ..       | *366,705 |
| ..                 | 634             | 13,030          | 7,044     | ..       | *371,611 |
| ..                 | ..              | ..              | ..        | ..       | 47       |
| ..                 | ..              | ..              | ..        | ..       | 47       |
| ..                 | ..              | ..              | ..        | ..       | 47       |
| ..                 | ..              | ..              | ..        | ..       | 47       |
| ..                 | 27,436          | ..              | ..        | ..       | 27,707   |
| ..                 | 26,741          | ..              | ..        | ..       | 27,008   |
| ..                 | 24,811          | ..              | ..        | ..       | 25,073   |
| ..                 | 25,133          | ..              | ..        | ..       | 25,392   |
| ..                 | ..              | ..              | ..        | ..       | 152,512  |
| ..                 | ..              | ..              | ..        | ..       | 150,277  |
| ..                 | ..              | ..              | ..        | ..       | 150,450  |
| ..                 | ..              | ..              | ..        | ..       | *158,009 |

Table 12

## Production of biofuels and wastes

Terajoules

| Country or area      | Year        | Solid biofuels   |               |                |               |                |               |
|----------------------|-------------|------------------|---------------|----------------|---------------|----------------|---------------|
|                      |             | Fuelwood         | Animal waste  | Vegetal waste  | Bagasse       | Black liquor   | Charcoal      |
| State of Palestine   | 2016        | 3,460            | ..            | 564            | ..            | ..             | ..            |
|                      | 2017        | 1,964            | ..            | 588            | ..            | ..             | ..            |
|                      | 2018        | 2,022            | ..            | 398            | ..            | ..             | ..            |
|                      | 2019        | 2,074            | ..            | 1,190          | ..            | ..             | ..            |
| Syrian Arab Republic | 2016        | 333              | ..            | ..             | ..            | ..             | 30            |
|                      | 2017        | 305              | ..            | ..             | ..            | ..             | 30            |
|                      | 2018        | 304              | ..            | ..             | ..            | ..             | 30            |
|                      | 2019        | 305              | ..            | ..             | ..            | ..             | 80            |
| Tajikistan           | 2016        | 50,225           | ..            | ..             | ..            | ..             | ..            |
|                      | 2017        | *50,225          | ..            | ..             | ..            | ..             | ..            |
|                      | 2018        | *50,225          | ..            | ..             | ..            | ..             | ..            |
|                      | 2019        | 50,142           | ..            | ..             | ..            | ..             | ..            |
| Thailand             | 2016        | 345,454          | ..            | 448,520        | 271,799       | 9,291          | 91,539        |
|                      | 2017        | 315,620          | ..            | 391,430        | 262,756       | 12,581         | 78,057        |
|                      | 2018        | 233,303          | ..            | 312,620        | 364,892       | 21,121         | 43,159        |
|                      | 2019        | 229,289          | ..            | 340,594        | 389,444       | 19,843         | 42,510        |
| Timor-Leste          | 2016        | 850              | ..            | ..             | ..            | ..             | ..            |
|                      | 2017        | 813              | ..            | ..             | ..            | ..             | ..            |
|                      | 2018        | 776              | ..            | ..             | ..            | ..             | ..            |
|                      | 2019        | 742              | ..            | ..             | ..            | ..             | ..            |
| Turkey               | 2016        | 68,831           | ..            | 40,551         | ..            | ..             | ..            |
|                      | 2017        | 56,773           | ..            | 45,407         | ..            | ..             | ..            |
|                      | 2018        | 40,654           | ..            | 30,720         | ..            | ..             | ..            |
|                      | 2019        | 43,794           | ..            | 30,898         | ..            | ..             | ..            |
| Turkmenistan         | 2016        | 86               | ..            | ..             | ..            | ..             | ..            |
|                      | 2017        | 104              | ..            | ..             | ..            | ..             | ..            |
|                      | 2018        | 104              | ..            | ..             | ..            | ..             | ..            |
|                      | 2019        | 104              | ..            | ..             | ..            | ..             | ..            |
| Uzbekistan           | 2016        | *1,763           | ..            | ..             | ..            | ..             | ..            |
|                      | 2017        | *924             | ..            | ..             | ..            | ..             | ..            |
|                      | 2018        | *926             | ..            | ..             | ..            | ..             | ..            |
|                      | 2019        | *929             | ..            | ..             | ..            | ..             | ..            |
| Viet Nam             | 2016        | 182,700          | ..            | 132,135        | 44,548        | ..             | 4,543         |
|                      | 2017        | 182,700          | ..            | 129,162        | 51,497        | ..             | 5,723         |
|                      | 2018        | *293,836         | ..            | 121,961        | 59,578        | ..             | 9,588         |
|                      | 2019        | *346,927         | ..            | 118,026        | 67,021        | ..             | 10,060        |
| Yemen                | 2016        | 4,999            | ..            | ..             | ..            | ..             | 1,947         |
|                      | 2017        | 5,120            | ..            | ..             | ..            | ..             | 1,985         |
|                      | 2018        | 5,306            | ..            | ..             | ..            | ..             | 2,033         |
|                      | 2019        | 5,429            | ..            | ..             | ..            | ..             | 2,080         |
| <b>Europe</b>        | <b>2016</b> | <b>3,593,320</b> | <b>19,435</b> | <b>280,753</b> | <b>19,820</b> | <b>524,767</b> | <b>13,248</b> |
|                      | <b>2017</b> | <b>3,609,912</b> | <b>17,009</b> | <b>308,914</b> | <b>20,547</b> | <b>543,284</b> | <b>13,890</b> |
|                      | <b>2018</b> | <b>3,645,688</b> | <b>17,180</b> | <b>336,888</b> | <b>20,528</b> | <b>543,966</b> | <b>13,503</b> |
|                      | <b>2019</b> | <b>3,711,663</b> | <b>17,735</b> | <b>340,850</b> | <b>20,608</b> | <b>563,226</b> | <b>12,618</b> |
| Albania              | 2016        | 7,787            | ..            | ..             | ..            | ..             | ..            |
|                      | 2017        | 6,959            | ..            | ..             | ..            | ..             | ..            |
|                      | 2018        | 6,710            | ..            | ..             | ..            | ..             | ..            |
|                      | 2019        | 6,627            | ..            | ..             | ..            | ..             | ..            |
| Andorra              | 2016        | ..               | ..            | ..             | ..            | ..             | ..            |
|                      | 2017        | ..               | ..            | ..             | ..            | ..             | ..            |
|                      | 2018        | ..               | ..            | ..             | ..            | ..             | ..            |
|                      | 2019        | ..               | ..            | ..             | ..            | ..             | ..            |
| Austria              | 2016        | 154,659          | ..            | 5,932          | ..            | 32,785         | 30            |
|                      | 2017        | 161,236          | ..            | 5,904          | ..            | 32,663         | 36            |
|                      | 2018        | 151,477          | ..            | 4,941          | ..            | 33,651         | 41            |
|                      | 2019        | 153,709          | ..            | 2,601          | ..            | 33,643         | 42            |

Table 12

## Production of biofuels and wastes

Terajoules

| Non-biomass wastes |                 | Liquid biofuels |                | Biogases       | Total            |
|--------------------|-----------------|-----------------|----------------|----------------|------------------|
| Industrial waste   | Municipal waste | Biogasoline     | Biodiesel      |                |                  |
| ..                 | ..              | ..              | ..             | ..             | 4,024            |
| ..                 | ..              | ..              | ..             | ..             | 2,552            |
| ..                 | ..              | ..              | ..             | ..             | 2,420            |
| ..                 | ..              | ..              | ..             | ..             | 3,264            |
| ..                 | ..              | ..              | ..             | ..             | 333              |
| ..                 | ..              | ..              | ..             | ..             | 305              |
| ..                 | ..              | ..              | ..             | ..             | 304              |
| ..                 | ..              | ..              | ..             | ..             | 305              |
| ..                 | ..              | ..              | ..             | ..             | 50,225           |
| ..                 | ..              | ..              | ..             | ..             | *50,225          |
| ..                 | ..              | ..              | ..             | ..             | *50,225          |
| ..                 | ..              | ..              | ..             | ..             | 50,142           |
| ..                 | 4,395           | 25,889          | 39,008         | 33,341         | 1,177,697        |
| ..                 | 4,183           | 31,089          | 45,193         | 37,778         | 1,100,632        |
| ..                 | 8,029           | 31,578          | 49,782         | 51,723         | 1,073,049        |
| ..                 | 9,001           | 40,342          | 58,422         | 54,385         | 1,141,320        |
| ..                 | ..              | ..              | ..             | ..             | 850              |
| ..                 | ..              | ..              | ..             | ..             | 813              |
| ..                 | ..              | ..              | ..             | ..             | 776              |
| ..                 | ..              | ..              | ..             | ..             | 742              |
| 2,067              | ..              | 1,930           | 2,318          | 14,721         | 130,418          |
| 2,446              | ..              | 2,126           | 2,455          | 17,569         | 126,775          |
| 37,135             | 171             | 2,042           | 4,027          | 20,496         | 135,245          |
| 36,581             | 436             | 2,217           | 4,453          | 24,824         | 143,202          |
| ..                 | ..              | ..              | ..             | ..             | 86               |
| ..                 | ..              | ..              | ..             | ..             | 104              |
| ..                 | ..              | ..              | ..             | ..             | 104              |
| ..                 | ..              | ..              | ..             | ..             | 104              |
| ..                 | ..              | ..              | ..             | ..             | *1,763           |
| ..                 | ..              | ..              | ..             | ..             | *924             |
| ..                 | ..              | ..              | ..             | ..             | *926             |
| ..                 | ..              | ..              | ..             | ..             | *929             |
| ..                 | ..              | ..              | ..             | ..             | 359,383          |
| ..                 | ..              | ..              | ..             | ..             | 363,359          |
| ..                 | ..              | ..              | ..             | ..             | *475,375         |
| ..                 | ..              | ..              | ..             | ..             | *531,974         |
| ..                 | ..              | ..              | ..             | ..             | 4,999            |
| ..                 | ..              | ..              | ..             | ..             | 5,120            |
| ..                 | ..              | ..              | ..             | ..             | 5,306            |
| ..                 | ..              | ..              | ..             | ..             | 5,429            |
| <b>431,014</b>     | <b>874,749</b>  | <b>116,677</b>  | <b>438,693</b> | <b>688,699</b> | <b>6,987,927</b> |
| <b>412,146</b>     | <b>902,650</b>  | <b>122,192</b>  | <b>490,653</b> | <b>704,056</b> | <b>7,131,363</b> |
| <b>450,023</b>     | <b>901,846</b>  | <b>125,246</b>  | <b>516,077</b> | <b>702,187</b> | <b>7,259,628</b> |
| <b>518,341</b>     | <b>921,604</b>  | <b>121,662</b>  | <b>550,496</b> | <b>717,109</b> | <b>7,483,293</b> |
| ..                 | ..              | ..              | ..             | ..             | 7,787            |
| ..                 | ..              | ..              | ..             | ..             | 6,959            |
| ..                 | ..              | ..              | ..             | ..             | 6,710            |
| ..                 | ..              | ..              | ..             | ..             | 6,627            |
| ..                 | *255            | ..              | ..             | ..             | *255             |
| ..                 | *306            | ..              | ..             | ..             | *306             |
| ..                 | *366            | ..              | ..             | ..             | *366             |
| ..                 | *377            | ..              | ..             | ..             | *377             |
| 16,943             | 21,169          | 5,709           | 11,040         | 12,515         | 260,752          |
| 16,538             | 18,622          | 5,681           | 9,097          | 13,021         | 262,762          |
| 15,332             | 19,441          | 5,236           | 9,377          | 9,505          | 248,959          |
| 16,468             | 19,796          | 5,042           | 10,595         | 8,975          | 250,830          |

Table 12

## Production of biofuels and wastes

Terajoules

| Country or area        | Year | Solid biofuels |              |               |         |              |          |
|------------------------|------|----------------|--------------|---------------|---------|--------------|----------|
|                        |      | Fuelwood       | Animal waste | Vegetal waste | Bagasse | Black liquor | Charcoal |
| Belarus                | 2016 | 68,613         | ..           | 2,403         | ..      | ..           | 118      |
|                        | 2017 | 75,446         | ..           | 2,345         | ..      | ..           | 89       |
|                        | 2018 | 60,492         | ..           | 2,084         | ..      | ..           | 103      |
|                        | 2019 | 66,963         | ..           | 2,184         | ..      | ..           | 189      |
| Belgium                | 2016 | 45,175         | 783          | 6,204         | ..      | 1,762        | ..       |
|                        | 2017 | 41,907         | 841          | 6,406         | ..      | 1,732        | ..       |
|                        | 2018 | 42,353         | 741          | 6,630         | ..      | 1,817        | ..       |
|                        | 2019 | 41,185         | 818          | 6,611         | ..      | 1,548        | ..       |
| Bosnia and Herzegovina | 2016 | 30,729         | ..           | ..            | ..      | ..           | 1,328    |
|                        | 2017 | 28,596         | ..           | ..            | ..      | ..           | 1,180    |
|                        | 2018 | 60,650         | ..           | ..            | ..      | ..           | 885      |
|                        | 2019 | 60,775         | ..           | ..            | ..      | ..           | 944      |
| Bulgaria               | 2016 | 42,194         | ..           | 1,261         | ..      | 4,733        | 118      |
|                        | 2017 | 41,930         | ..           | 1,103         | ..      | 5,104        | 72       |
|                        | 2018 | 51,470         | ..           | 8,079         | ..      | 4,273        | 60       |
|                        | 2019 | 52,470         | ..           | 11,043        | ..      | 4,331        | 62       |
| Croatia                | 2016 | 64,080         | ..           | 32            | ..      | ..           | 266      |
|                        | 2017 | 64,565         | ..           | 19            | ..      | ..           | 280      |
|                        | 2018 | 62,621         | ..           | 32            | ..      | ..           | 290      |
|                        | 2019 | 62,228         | ..           | 30            | ..      | ..           | 416      |
| Czechia                | 2016 | 103,427        | ..           | 5,789         | ..      | 15,114       | ..       |
|                        | 2017 | 103,824        | ..           | 6,379         | ..      | 15,281       | ..       |
|                        | 2018 | 108,298        | ..           | 5,576         | ..      | 14,675       | ..       |
|                        | 2019 | 116,958        | ..           | 5,331         | ..      | 18,803       | ..       |
| Denmark                | 2016 | 51,000         | ..           | 19,698        | ..      | ..           | ..       |
|                        | 2017 | 49,255         | ..           | 20,219        | ..      | ..           | ..       |
|                        | 2018 | 50,688         | ..           | 17,606        | ..      | ..           | ..       |
|                        | 2019 | 47,114         | ..           | 17,963        | ..      | ..           | ..       |
| Estonia                | 2016 | 50,850         | ..           | 6,206         | ..      | 1,385        | ..       |
|                        | 2017 | 51,714         | ..           | 9,175         | ..      | 1,382        | ..       |
|                        | 2018 | 55,681         | ..           | 11,914        | ..      | 1,404        | ..       |
|                        | 2019 | 58,683         | ..           | 13,906        | ..      | 1,229        | ..       |
| Finland                | 2016 | 200,688        | 239          | 1,684         | ..      | 146,307      | ..       |
|                        | 2017 | 202,437        | 212          | 1,698         | ..      | 154,761      | ..       |
|                        | 2018 | 201,498        | 308          | 1,773         | ..      | 167,032      | ..       |
|                        | 2019 | 202,704        | 249          | 1,986         | ..      | 169,744      | ..       |
| France                 | 2016 | 396,199        | 2,164        | 5,818         | 6,374   | 35,462       | ..       |
|                        | 2017 | 383,265        | 2,193        | 5,887         | 6,156   | 35,747       | ..       |
|                        | 2018 | 382,031        | 2,340        | 6,816         | 5,835   | 31,967       | ..       |
|                        | 2019 | 378,520        | 2,806        | 6,781         | 6,262   | 32,447       | ..       |
| Germany                | 2016 | 454,508        | 6,068        | 7,587         | ..      | 25,910       | 974      |
|                        | 2017 | 454,708        | 3,660        | 9,098         | ..      | 31,453       | 974      |
|                        | 2018 | 476,488        | 3,653        | 13,404        | ..      | 26,710       | 974      |
|                        | 2019 | 491,439        | 3,277        | 13,321        | ..      | 27,299       | 974      |
| Greece                 | 2016 | 26,947         | ..           | 6,440         | ..      | ..           | 30       |
|                        | 2017 | 27,655         | ..           | 6,199         | ..      | ..           | 30       |
|                        | 2018 | 25,977         | ..           | 6,769         | ..      | ..           | 59       |
|                        | 2019 | 25,746         | ..           | 6,532         | ..      | ..           | 30       |
| Hungary                | 2016 | 87,340         | 323          | 12,624        | ..      | 283          | ..       |
|                        | 2017 | 86,860         | 256          | 11,526        | ..      | 310          | ..       |
|                        | 2018 | 76,281         | 241          | 12,495        | ..      | 303          | ..       |
|                        | 2019 | 73,900         | 379          | 11,258        | ..      | 377          | ..       |
| Iceland                | 2016 | 465            | ..           | ..            | ..      | ..           | ..       |
|                        | 2017 | 680            | ..           | ..            | ..      | ..           | ..       |
|                        | 2018 | 902            | ..           | ..            | ..      | ..           | ..       |
|                        | 2019 | ..             | ..           | ..            | ..      | ..           | ..       |

Table 12

## Production of biofuels and wastes

Terajoules

| Non-biomass wastes |                 | Liquid biofuels |           | Biogases | Total     |
|--------------------|-----------------|-----------------|-----------|----------|-----------|
| Industrial waste   | Municipal waste | Biogasoline     | Biodiesel |          |           |
| 1,286              | ..              | ..              | 736       | 390      | 73,428    |
| 1,187              | ..              | ..              | 736       | 468      | 80,182    |
| 970                | ..              | ..              | 515       | 507      | 64,568    |
| 792                | ..              | ..              | 589       | 465      | 70,993    |
| 13,290             | 30,460          | 6,354           | 8,648     | 9,819    | 122,495   |
| 12,118             | 30,895          | 7,293           | 10,654    | 9,432    | 121,276   |
| 13,038             | 30,512          | 7,598           | 9,281     | 9,555    | 121,525   |
| 13,154             | 30,481          | 8,513           | 9,358     | 9,708    | 121,378   |
| ..                 | ..              | ..              | ..        | ..       | 30,729    |
| ..                 | ..              | ..              | ..        | 63       | 28,659    |
| ..                 | ..              | ..              | ..        | 97       | 60,747    |
| ..                 | ..              | ..              | ..        | 67       | 60,842    |
| 1,319              | 1,061           | 724             | 2,282     | 2,511    | 56,084    |
| 1,621              | 1,240           | 577             | 3,384     | 1,958    | 56,918    |
| 2,095              | 2,415           | 465             | 4,657     | 2,245    | 75,700    |
| 2,785              | 2,472           | 439             | 6,299     | 2,133    | 81,973    |
| 425                | ..              | ..              | 37        | 1,952    | 66,526    |
| 483                | ..              | ..              | 14        | 2,672    | 67,752    |
| 818                | ..              | ..              | 15        | 3,081    | 66,568    |
| 1,129              | ..              | ..              | 10        | 3,442    | 66,838    |
| 10,361             | 5,968           | 3,109           | 5,483     | 25,161   | 174,412   |
| 10,228             | 6,422           | 2,743           | 5,793     | 25,444   | 176,115   |
| 12,061             | 6,115           | 2,013           | 7,149     | 25,279   | 181,165   |
| 12,499             | 6,376           | 2,493           | 9,142     | 24,332   | 195,934   |
| ..                 | 34,478          | 192             | ..        | 9,048    | 114,416   |
| ..                 | 35,447          | 139             | ..        | 10,906   | 115,966   |
| ..                 | 33,598          | 172             | ..        | 13,354   | 115,418   |
| ..                 | 33,912          | 105             | ..        | 16,605   | 115,700   |
| 717                | 1,970           | ..              | ..        | 722      | 61,850    |
| 606                | 2,123           | ..              | ..        | 540      | 65,540    |
| 611                | 2,117           | ..              | ..        | 571      | 72,298    |
| 614                | 1,791           | ..              | ..        | 581      | 76,804    |
| 1,644              | 22,201          | 1,288           | 3,864     | 4,694    | 382,609   |
| 2,001              | 23,808          | 1,293           | 10,992    | 7,147    | 404,348   |
| 2,048              | 24,865          | 1,246           | 10,145    | 7,804    | 416,719   |
| 1,818              | 25,214          | 1,130           | 12,187    | 7,941    | 422,973   |
| 20,604             | 104,558         | 24,451          | 74,226    | 31,410   | 701,266   |
| 17,628             | 106,436         | 23,589          | 71,415    | 34,009   | 686,325   |
| 18,712             | 105,330         | 26,569          | 83,064    | 36,822   | 699,486   |
| 20,153             | 105,115         | 25,788          | 75,705    | 40,888   | 694,465   |
| 59,095             | 259,750         | 21,419          | 114,779   | 320,998  | 1,270,114 |
| 54,307             | 269,372         | 21,180          | 118,054   | 323,250  | 1,285,082 |
| 46,695             | 259,778         | 19,459          | 123,059   | 316,484  | 1,285,730 |
| 48,440             | 258,838         | 17,062          | 131,854   | 316,085  | 1,307,616 |
| 2,517              | ..              | ..              | 5,594     | 4,258    | 45,756    |
| 0                  | ..              | ..              | 5,649     | 4,484    | 43,987    |
| 1,213              | ..              | ..              | 6,312     | 4,724    | 44,995    |
| 1,758              | ..              | 253             | 7,206     | 5,233    | 46,726    |
| 3,546              | 4,470           | 11,417          | 5,741     | 3,708    | 129,452   |
| 3,777              | 3,606           | 11,792          | 5,814     | 4,141    | 128,082   |
| 4,322              | 3,417           | 12,757          | 5,925     | 3,916    | 119,657   |
| 3,339              | 4,445           | 13,588          | 6,182     | 3,769    | 117,237   |
| ..                 | ..              | ..              | ..        | 56       | 521       |
| ..                 | ..              | ..              | ..        | 50       | 730       |
| ..                 | ..              | ..              | ..        | 61       | 963       |
| ..                 | ..              | ..              | ..        | 51       | 51        |

Table 12

## Production of biofuels and wastes

Terajoules

| Country or area | Year | Solid biofuels |              |               |         |              |          |
|-----------------|------|----------------|--------------|---------------|---------|--------------|----------|
|                 |      | Fuelwood       | Animal waste | Vegetal waste | Bagasse | Black liquor | Charcoal |
| Ireland         | 2016 | 8,658          | 866          | ..            | ..      | ..           | ..       |
|                 | 2017 | 9,418          | 955          | ..            | ..      | ..           | ..       |
|                 | 2018 | 9,365          | 1,091        | ..            | ..      | ..           | ..       |
|                 | 2019 | 8,896          | 1,022        | ..            | ..      | ..           | ..       |
| Isle of Man     | 2016 | ..             | ..           | ..            | ..      | ..           | ..       |
|                 | 2017 | ..             | ..           | ..            | ..      | ..           | ..       |
|                 | 2018 | ..             | ..           | ..            | ..      | ..           | ..       |
|                 | 2019 | ..             | ..           | ..            | ..      | ..           | ..       |
| Italy           | 2016 | 293,118        | ..           | 9,672         | ..      | ..           | 295      |
|                 | 2017 | 317,411        | ..           | 10,247        | ..      | ..           | 295      |
|                 | 2018 | 284,621        | ..           | 11,211        | ..      | ..           | 295      |
|                 | 2019 | 291,986        | ..           | 12,043        | ..      | ..           | 295      |
| Jersey          | 2016 | ..             | ..           | ..            | ..      | ..           | ..       |
|                 | 2017 | ..             | ..           | ..            | ..      | ..           | ..       |
|                 | 2018 | ..             | ..           | ..            | ..      | ..           | ..       |
|                 | 2019 | ..             | ..           | ..            | ..      | ..           | ..       |
| Kosovo          | 2016 | 14,823         | ..           | ..            | ..      | ..           | ..       |
|                 | 2017 | 15,305         | ..           | ..            | ..      | ..           | ..       |
|                 | 2018 | 15,415         | ..           | ..            | ..      | ..           | ..       |
|                 | 2019 | 13,364         | ..           | ..            | ..      | ..           | ..       |
| Latvia          | 2016 | 86,776         | ..           | 136           | ..      | ..           | 354      |
|                 | 2017 | 85,124         | ..           | 267           | ..      | ..           | 371      |
|                 | 2018 | 102,172        | ..           | 277           | ..      | ..           | 257      |
|                 | 2019 | 102,427        | ..           | 358           | ..      | ..           | 248      |
| Liechtenstein   | 2016 | 202            | ..           | ..            | ..      | ..           | ..       |
|                 | 2017 | 189            | ..           | ..            | ..      | ..           | ..       |
|                 | 2018 | 225            | ..           | ..            | ..      | ..           | ..       |
|                 | 2019 | 207            | ..           | ..            | ..      | ..           | ..       |
| Lithuania       | 2016 | 49,647         | ..           | 731           | ..      | ..           | 30       |
|                 | 2017 | 53,960         | ..           | 721           | ..      | ..           | 9        |
|                 | 2018 | 52,657         | ..           | 1,175         | ..      | ..           | 15       |
|                 | 2019 | 50,969         | ..           | 1,234         | ..      | ..           | 15       |
| Luxembourg      | 2016 | 2,461          | ..           | 186           | ..      | ..           | ..       |
|                 | 2017 | 2,727          | ..           | 201           | ..      | ..           | ..       |
|                 | 2018 | 3,655          | ..           | 208           | ..      | ..           | ..       |
|                 | 2019 | 4,535          | ..           | 226           | ..      | ..           | ..       |
| Malta           | 2016 | ..             | ..           | ..            | ..      | ..           | ..       |
|                 | 2017 | ..             | ..           | ..            | ..      | ..           | ..       |
|                 | 2018 | ..             | ..           | ..            | ..      | ..           | ..       |
|                 | 2019 | ..             | ..           | ..            | ..      | ..           | ..       |
| Montenegro      | 2016 | 8,395          | ..           | ..            | ..      | ..           | 24       |
|                 | 2017 | 9,235          | ..           | ..            | ..      | ..           | 21       |
|                 | 2018 | 7,964          | ..           | ..            | ..      | ..           | 18       |
|                 | 2019 | *8,506         | ..           | ..            | ..      | ..           | 22       |
| Netherlands     | 2016 | 41,401         | ..           | 12,842        | ..      | ..           | ..       |
|                 | 2017 | 40,729         | ..           | 16,326        | ..      | ..           | ..       |
|                 | 2018 | 44,673         | ..           | 11,457        | ..      | ..           | ..       |
|                 | 2019 | 48,210         | ..           | 12,082        | ..      | ..           | ..       |
| North Macedonia | 2016 | 11,817         | ..           | 199           | ..      | ..           | ..       |
|                 | 2017 | 12,072         | ..           | 223           | ..      | ..           | ..       |
|                 | 2018 | 10,206         | ..           | 261           | ..      | ..           | ..       |
|                 | 2019 | 9,428          | ..           | 260           | ..      | ..           | ..       |
| Norway          | 2016 | 35,715         | ..           | ..            | ..      | ..           | ..       |
|                 | 2017 | 36,657         | ..           | ..            | ..      | 425          | ..       |
|                 | 2018 | 36,378         | ..           | ..            | ..      | 369          | ..       |
|                 | 2019 | 38,132         | ..           | ..            | ..      | 408          | ..       |

Table 12

## Production of biofuels and wastes

Terajoules

| Non-biomass wastes |                 | Liquid biofuels |           | Biogases | Total   |
|--------------------|-----------------|-----------------|-----------|----------|---------|
| Industrial waste   | Municipal waste | Biogasoline     | Biodiesel |          |         |
| ..                 | 5,467           | ..              | 994       | 2,328    | 18,313  |
| ..                 | 8,677           | ..              | 1,053     | 2,322    | 22,425  |
| ..                 | 11,953          | ..              | 1,120     | 2,108    | 25,637  |
| ..                 | 11,812          | ..              | 1,222     | 2,092    | 25,043  |
| ..                 | *411            | ..              | ..        | ..       | *411    |
| ..                 | *396            | ..              | ..        | ..       | *396    |
| ..                 | *546            | ..              | ..        | ..       | *546    |
| ..                 | *542            | ..              | ..        | ..       | *542    |
| 13,082             | 72,906          | 7,579           | 21,197    | 78,505   | 496,059 |
| 11,765             | 71,443          | 8,063           | 25,477    | 79,453   | 523,859 |
| 11,989             | 70,893          | 9,011           | 27,659    | 79,221   | 494,605 |
| 12,951             | 73,103          | 9,118           | 32,085    | 84,288   | 515,574 |
| ..                 | *813            | ..              | ..        | ..       | *813    |
| ..                 | *799            | ..              | ..        | ..       | *799    |
| ..                 | *760            | ..              | ..        | ..       | *760    |
| ..                 | *764            | ..              | ..        | ..       | *764    |
| ..                 | ..              | ..              | ..        | ..       | 14,823  |
| ..                 | ..              | ..              | ..        | ..       | 15,305  |
| ..                 | ..              | ..              | ..        | ..       | 15,415  |
| ..                 | ..              | ..              | ..        | ..       | 13,364  |
| 113                | 256             | 134             | 1,656     | 3,762    | 92,833  |
| 73                 | 362             | 233             | 1,965     | 3,902    | 91,926  |
| 119                | 558             | 210             | 3,252     | 3,643    | 110,231 |
| 108                | 652             | 23              | 3,044     | 3,376    | 109,987 |
| ..                 | *706            | ..              | ..        | 20       | *929    |
| ..                 | *703            | ..              | ..        | 23       | *914    |
| ..                 | *759            | ..              | ..        | 24       | *1,008  |
| ..                 | *785            | ..              | ..        | 25       | *1,016  |
| 486                | 2,495           | 375             | 3,790     | 1,341    | 58,866  |
| 183                | 2,476           | 359             | 4,349     | 1,350    | 63,398  |
| 644                | 1,692           | 458             | 5,675     | 1,554    | 63,855  |
| 706                | 1,498           | 456             | 6,146     | 1,632    | 62,640  |
| 546                | 1,400           | ..              | ..        | 833      | 5,426   |
| 578                | 1,557           | ..              | ..        | 867      | 5,930   |
| 624                | 1,552           | ..              | ..        | 915      | 6,954   |
| 620                | 1,567           | ..              | ..        | 753      | 7,701   |
| ..                 | ..              | ..              | 37        | 80       | 117     |
| ..                 | ..              | ..              | 10        | 77       | 87      |
| ..                 | ..              | ..              | ..        | 69       | 69      |
| ..                 | ..              | ..              | ..        | 69       | 69      |
| ..                 | ..              | ..              | ..        | ..       | 8,395   |
| ..                 | ..              | ..              | ..        | ..       | 9,235   |
| ..                 | ..              | ..              | ..        | ..       | 7,964   |
| ..                 | ..              | ..              | ..        | ..       | *8,506  |
| ..                 | 61,527          | ..              | 53,802    | 13,339   | 182,911 |
| ..                 | 60,374          | ..              | 70,987    | 13,432   | 201,849 |
| ..                 | 60,110          | 1,672           | 67,675    | 13,655   | 199,242 |
| ..                 | 60,667          | 1,526           | 69,979    | 14,904   | 207,368 |
| ..                 | ..              | ..              | 0         | ..       | 12,016  |
| ..                 | ..              | ..              | 0         | ..       | 12,295  |
| ..                 | ..              | ..              | 0         | ..       | 10,467  |
| ..                 | ..              | ..              | ..        | ..       | 9,688   |
| 3,356              | 15,245          | ..              | 2,208     | 1,200    | 57,724  |
| 3,192              | 15,812          | ..              | 4,158     | 1,535    | 61,779  |
| 3,525              | 16,600          | ..              | 3,733     | 2,226    | 62,832  |
| 3,568              | 16,267          | ..              | 3,175     | 3,631    | 65,180  |

Table 12

## Production of biofuels and wastes

Terajoules

| Country or area     | Year | Solid biofuels |              |               |         |              |          |
|---------------------|------|----------------|--------------|---------------|---------|--------------|----------|
|                     |      | Fuelwood       | Animal waste | Vegetal waste | Bagasse | Black liquor | Charcoal |
| Poland              | 2016 | 206,522        | ..           | 50,806        | ..      | 11,249       | ..       |
|                     | 2017 | 198,761        | ..           | 47,616        | ..      | 11,574       | ..       |
|                     | 2018 | 198,685        | 377          | 45,408        | ..      | 10,788       | ..       |
|                     | 2019 | 201,031        | 363          | 48,295        | ..      | 10,245       | ..       |
| Portugal            | 2016 | 61,818         | ..           | 3,196         | 428     | 43,610       | 266      |
|                     | 2017 | 58,938         | ..           | 5,888         | 313     | 44,530       | 259      |
|                     | 2018 | 57,515         | ..           | 9,653         | 406     | 43,272       | 259      |
|                     | 2019 | 67,503         | ..           | 7,024         | 489     | 43,452       | 266      |
| Republic of Moldova | 2016 | 21,539         | 12           | 7,246         | ..      | ..           | 30       |
|                     | 2017 | 26,284         | 6            | 4,936         | ..      | ..           | 30       |
|                     | 2018 | 28,063         | 11           | 4,559         | ..      | ..           | 12       |
|                     | 2019 | 23,591         | 7            | 3,362         | ..      | ..           | 15       |
| Romania             | 2016 | 149,864        | ..           | ..            | ..      | ..           | 67       |
|                     | 2017 | 149,227        | ..           | ..            | ..      | ..           | 36       |
|                     | 2018 | 144,164        | ..           | ..            | ..      | ..           | 33       |
|                     | 2019 | 144,700        | ..           | ..            | ..      | ..           | *33      |
| Russian Federation  | 2016 | 121,911        | ..           | ..            | ..      | ..           | 2,065    |
|                     | 2017 | 107,613        | ..           | ..            | ..      | ..           | 2,163    |
|                     | 2018 | 119,089        | ..           | ..            | ..      | ..           | 2,328    |
|                     | 2019 | 126,553        | ..           | ..            | ..      | ..           | 1,963    |
| Serbia              | 2016 | 46,259         | ..           | ..            | ..      | ..           | 443      |
|                     | 2017 | 45,477         | ..           | ..            | ..      | ..           | 585      |
|                     | 2018 | 47,041         | ..           | ..            | ..      | ..           | 413      |
|                     | 2019 | 49,250         | ..           | ..            | ..      | ..           | 354      |
| Slovakia            | 2016 | 19,118         | ..           | 2,153         | ..      | 13,672       | ..       |
|                     | 2017 | 18,957         | ..           | 2,137         | ..      | 14,125       | ..       |
|                     | 2018 | 22,518         | ..           | 2,620         | ..      | 12,861       | ..       |
|                     | 2019 | 38,456         | ..           | 7,309         | ..      | 12,797       | ..       |
| Slovenia            | 2016 | 26,988         | ..           | 236           | ..      | ..           | ..       |
|                     | 2017 | 26,075         | ..           | 245           | ..      | ..           | ..       |
|                     | 2018 | 23,314         | ..           | 218           | ..      | ..           | ..       |
|                     | 2019 | 22,643         | ..           | 240           | ..      | ..           | ..       |
| Spain               | 2016 | 145,115        | 449          | 38,520        | 13,018  | 25,917       | 1,062    |
|                     | 2017 | 148,983        | 449          | 38,923        | 14,078  | 26,942       | 1,062    |
|                     | 2018 | 145,978        | 449          | 39,060        | 14,287  | 28,017       | 1,062    |
|                     | 2019 | 147,062        | 449          | 38,411        | 13,857  | 31,658       | 1,062    |
| Sweden              | 2016 | 225,762        | 52           | ..            | ..      | 166,578      | ..       |
|                     | 2017 | 229,283        | 103          | ..            | ..      | 167,254      | ..       |
|                     | 2018 | 219,212        | 106          | ..            | ..      | 166,828      | ..       |
|                     | 2019 | 220,661        | 64           | ..            | ..      | 175,245      | ..       |
| Switzerland         | 2016 | 42,350         | ..           | ..            | ..      | ..           | ..       |
|                     | 2017 | 42,750         | ..           | ..            | ..      | ..           | ..       |
|                     | 2018 | 39,990         | ..           | ..            | ..      | ..           | ..       |
|                     | 2019 | 42,330         | ..           | ..            | ..      | ..           | ..       |
| Ukraine             | 2016 | 114,133        | ..           | ..            | ..      | ..           | 5,753    |
|                     | 2017 | 121,861        | ..           | ..            | ..      | ..           | 6,402    |
|                     | 2018 | 141,044        | ..           | ..            | ..      | ..           | 6,402    |
|                     | 2019 | 133,765        | ..           | ..            | ..      | ..           | 5,691    |
| United Kingdom      | 2016 | 74,267         | 8,479        | 73,151        | ..      | ..           | ..       |
|                     | 2017 | 71,840         | 8,334        | 95,227        | ..      | ..           | ..       |
|                     | 2018 | 78,126         | 7,862        | 112,662       | ..      | ..           | ..       |
|                     | 2019 | 78,438         | 8,302        | 110,457       | ..      | ..           | ..       |
| Oceania             | 2016 | 139,498        | ..           | 15,762        | 136,078 | 20,073       | 460      |
|                     | 2017 | 181,317        | ..           | 17,950        | 115,744 | 15,727       | 508      |
|                     | 2018 | 177,088        | ..           | 20,247        | 105,189 | 15,220       | 511      |
|                     | 2019 | 178,020        | ..           | 18,251        | 96,554  | 15,438       | 529      |



Table 12

## Production of biofuels and wastes

Terajoules

| Non-biomass wastes |                 | Liquid biofuels |              | Biogases      | Total          |
|--------------------|-----------------|-----------------|--------------|---------------|----------------|
| Industrial waste   | Municipal waste | Biogasoline     | Biodiesel    |               |                |
| 18,795             | 15,484          | 5,281           | 33,046       | 10,930        | 352,113        |
| 22,229             | 18,077          | 5,168           | 33,016       | 11,747        | 348,188        |
| 27,023             | 19,412          | 5,055           | 32,629       | 12,072        | 351,449        |
| 28,437             | 20,415          | 5,468           | 35,341       | 12,498        | 362,091        |
| 2,961              | 8,680           | 82              | 12,291       | 3,364         | 136,430        |
| 2,657              | 8,738           | ..              | 13,162       | 3,561         | 137,787        |
| 2,786              | 8,120           | ..              | 13,373       | 3,453         | 138,579        |
| 3,061              | 8,666           | ..              | 14,455       | 3,355         | 148,005        |
| 142                | ..              | 0               | ..           | 361           | 29,300         |
| 316                | ..              | ..              | ..           | 282           | 31,824         |
| 2,091              | ..              | ..              | ..           | 313           | 35,037         |
| 1,922              | ..              | ..              | ..           | 292           | 29,174         |
| 3,164              | 193             | 1,528           | 6,293        | 739           | 161,780        |
| 3,845              | 207             | 1,192           | 6,129        | 755           | 161,357        |
| 7,203              | 188             | 944             | 6,927        | 865           | 160,291        |
| 6,140              | 188             | 1,447           | 7,726        | 794           | 160,995        |
| 218,670            | ..              | ..              | ..           | ..            | 340,581        |
| 215,266            | ..              | ..              | ..           | ..            | 322,879        |
| 244,991            | ..              | ..              | ..           | ..            | 364,080        |
| 305,868            | ..              | ..              | ..           | ..            | 432,421        |
| 45                 | ..              | ..              | ..           | 307           | 46,611         |
| 44                 | ..              | ..              | ..           | 723           | 46,244         |
| 49                 | ..              | ..              | ..           | 958           | 48,048         |
| 51                 | ..              | ..              | ..           | 1,190         | 50,491         |
| 7,583              | 1,530           | 3,136           | 4,048        | 6,357         | 57,597         |
| 7,283              | 2,214           | 3,136           | 4,011        | 6,384         | 58,247         |
| 6,784              | 1,161           | 3,296           | 4,048        | 6,228         | 59,516         |
| 7,311              | 2,386           | 3,564           | 4,011        | 5,984         | 81,819         |
| 1,876              | ..              | ..              | ..           | 1,264         | 30,364         |
| 2,014              | ..              | ..              | ..           | 1,076         | 29,410         |
| 2,409              | ..              | ..              | ..           | 1,018         | 26,959         |
| 2,597              | ..              | ..              | ..           | 930           | 26,410         |
| ..                 | 19,698          | 6,968           | 50,048       | 10,264        | 309,997        |
| ..                 | 21,743          | 8,871           | 64,842       | 10,943        | 335,773        |
| 2,971              | 21,280          | 11,075          | 63,252       | 11,089        | 337,459        |
| 2,412              | 21,412          | 11,504          | 73,065       | 10,898        | 350,728        |
| 746                | 59,857          | 6,802           | 4,011        | 7,265         | 471,073        |
| 748                | 62,730          | 6,600           | 2,429        | 7,445         | 476,592        |
| 755                | 58,296          | 6,915           | 9,494        | 7,359         | 468,965        |
| 744                | 62,211          | 6,694           | 11,850       | 7,600         | 485,069        |
| 10,790             | 48,150          | ..              | 258          | 4,898         | 106,446        |
| 11,220             | 48,140          | ..              | 278          | 5,059         | 107,447        |
| 11,070             | 48,750          | ..              | 221          | 5,238         | 105,270        |
| 11,670             | 49,050          | ..              | 501          | 5,564         | 109,115        |
| ..                 | ..              | 161             | ..           | 1,367         | 115,660        |
| 2,507              | ..              | 563             | ..           | 1,601         | 126,532        |
| ..                 | ..              | 107             | ..           | 1,995         | 143,147        |
| ..                 | ..              | 1,874           | ..           | 2,028         | 137,667        |
| 16,912             | 73,591          | 9,970           | 12,586       | 112,933       | 381,888        |
| 7,732              | 79,924          | 13,722          | 17,186       | 113,932       | 407,896        |
| 7,075              | 91,262          | 10,988          | 17,517       | 114,177       | 439,669        |
| 7,227              | 100,801         | 5,574           | 18,768       | 114,931       | 444,498        |
| <b>3,915</b>       | ..              | <b>4,904</b>    | <b>1,987</b> | <b>20,773</b> | <b>342,991</b> |
| <b>3,771</b>       | ..              | <b>4,100</b>    | <b>161</b>   | <b>18,290</b> | <b>357,058</b> |
| <b>3,785</b>       | ..              | <b>5,099</b>    | <b>48</b>    | <b>19,384</b> | <b>346,061</b> |
| <b>3,609</b>       | ..              | <b>5,347</b>    | <b>37</b>    | <b>19,606</b> | <b>336,861</b> |

Table 12

## Production of biofuels and wastes

Terajoules

| Country or area             | Year | Solid biofuels |              |               |         |              |          |
|-----------------------------|------|----------------|--------------|---------------|---------|--------------|----------|
|                             |      | Fuelwood       | Animal waste | Vegetal waste | Bagasse | Black liquor | Charcoal |
| Australia                   | 2016 | 34,649         | ..           | 933           | 131,669 | 20,073       | ..       |
|                             | 2017 | 76,467         | ..           | 3,018         | 110,298 | *15,727      | ..       |
|                             | 2018 | 73,548         | ..           | 5,257         | 100,228 | 15,220       | ..       |
|                             | 2019 | 72,141         | ..           | 2,665         | 91,314  | 15,438       | ..       |
| Fiji                        | 2016 | 338            | ..           | ..            | 3,521   | ..           | 73       |
|                             | 2017 | 338            | ..           | ..            | 4,533   | ..           | 73       |
|                             | 2018 | 338            | ..           | ..            | 4,023   | ..           | 73       |
|                             | 2019 | 338            | ..           | ..            | 4,255   | ..           | 74       |
| French Polynesia            | 2016 | 42             | ..           | ..            | ..      | ..           | 16       |
|                             | 2017 | 42             | ..           | ..            | ..      | ..           | 16       |
|                             | 2018 | 42             | ..           | ..            | ..      | ..           | 16       |
|                             | 2019 | 43             | ..           | ..            | ..      | ..           | *16      |
| Kiribati                    | 2016 | 30             | ..           | *502          | ..      | ..           | 12       |
|                             | 2017 | 30             | ..           | *510          | ..      | ..           | 12       |
|                             | 2018 | 30             | ..           | *512          | ..      | ..           | 12       |
|                             | 2019 | 31             | ..           | *514          | ..      | ..           | 12       |
| Marshall Islands            | 2016 | ..             | ..           | *190          | ..      | ..           | ..       |
|                             | 2017 | ..             | ..           | *194          | ..      | ..           | ..       |
|                             | 2018 | ..             | ..           | *195          | ..      | ..           | ..       |
|                             | 2019 | ..             | ..           | *197          | ..      | ..           | ..       |
| Micronesia (Fed. States of) | 2016 | 24             | ..           | ..            | ..      | ..           | 11       |
|                             | 2017 | 24             | ..           | ..            | ..      | ..           | 11       |
|                             | 2018 | 24             | ..           | ..            | ..      | ..           | 11       |
|                             | 2019 | 25             | ..           | ..            | ..      | ..           | 11       |
| New Caledonia               | 2016 | 115            | ..           | ..            | ..      | ..           | 18       |
|                             | 2017 | 115            | ..           | ..            | ..      | ..           | 18       |
|                             | 2018 | 117            | ..           | ..            | ..      | ..           | 19       |
|                             | 2019 | 118            | ..           | ..            | ..      | ..           | 19       |
| New Zealand                 | 2016 | 45,316         | ..           | ..            | ..      | ..           | ..       |
|                             | 2017 | 45,198         | ..           | ..            | ..      | ..           | ..       |
|                             | 2018 | 43,881         | ..           | ..            | ..      | ..           | ..       |
|                             | 2019 | 43,419         | ..           | ..            | ..      | ..           | ..       |
| Niue                        | 2016 | 1              | ..           | ..            | ..      | ..           | 0        |
|                             | 2017 | 1              | ..           | ..            | ..      | ..           | 0        |
|                             | 2018 | 1              | ..           | ..            | ..      | ..           | 0        |
|                             | 2019 | 1              | ..           | ..            | ..      | ..           | 0        |
| Papua New Guinea            | 2016 | 55,813         | ..           | *11,673       | 888     | ..           | 248      |
|                             | 2017 | 55,936         | ..           | *11,773       | 913     | ..           | 293      |
|                             | 2018 | 55,936         | ..           | *11,832       | 938     | ..           | 293      |
|                             | 2019 | *58,733        | ..           | *12,423       | *985    | ..           | 308      |
| Samoa                       | 2016 | 1,097          | ..           | 385           | ..      | ..           | 16       |
|                             | 2017 | *1,089         | ..           | *377          | ..      | ..           | 16       |
|                             | 2018 | *1,089         | ..           | *377          | ..      | ..           | 16       |
|                             | 2019 | *1,087         | ..           | *377          | ..      | ..           | 17       |
| Solomon Islands             | 2016 | 1,223          | ..           | *2,079        | ..      | ..           | 42       |
|                             | 2017 | 1,227          | ..           | *2,078        | ..      | ..           | 43       |
|                             | 2018 | 1,231          | ..           | *2,074        | ..      | ..           | 44       |
|                             | 2019 | 1,235          | ..           | *2,075        | ..      | ..           | *45      |
| Tonga                       | 2016 | 19             | ..           | ..            | ..      | ..           | 7        |
|                             | 2017 | 19             | ..           | ..            | ..      | ..           | 7        |
|                             | 2018 | 19             | ..           | ..            | ..      | ..           | 7        |
|                             | 2019 | 19             | ..           | ..            | ..      | ..           | 7        |
| Vanuatu                     | 2016 | 831            | ..           | ..            | ..      | ..           | 18       |
|                             | 2017 | 831            | ..           | ..            | ..      | ..           | 19       |
|                             | 2018 | 831            | ..           | ..            | ..      | ..           | 19       |
|                             | 2019 | 831            | ..           | ..            | ..      | ..           | 20       |

Table 12

## Production of biofuels and wastes

Terajoules

| Non-biomass wastes |                 | Liquid biofuels |           | Biogases | Total   |
|--------------------|-----------------|-----------------|-----------|----------|---------|
| Industrial waste   | Municipal waste | Biogasoline     | Biodiesel |          |         |
| 3,915              | ..              | 4,770           | 1,987     | 17,471   | 215,468 |
| 3,771              | ..              | 4,020           | 147       | 14,970   | 228,418 |
| 3,785              | ..              | 4,985           | 37        | 16,103   | 219,163 |
| 3,609              | ..              | 5,333           | 37        | 16,325   | 206,862 |
| ..                 | ..              | ..              | ..        | ..       | 3,859   |
| ..                 | ..              | ..              | ..        | ..       | 4,871   |
| ..                 | ..              | ..              | ..        | ..       | 4,361   |
| ..                 | ..              | ..              | ..        | ..       | 4,593   |
| ..                 | ..              | ..              | ..        | ..       | 42      |
| ..                 | ..              | ..              | ..        | ..       | 42      |
| ..                 | ..              | ..              | ..        | ..       | 42      |
| ..                 | ..              | ..              | ..        | ..       | 43      |
| ..                 | ..              | ..              | ..        | ..       | *532    |
| ..                 | ..              | ..              | ..        | ..       | *540    |
| ..                 | ..              | ..              | ..        | ..       | *542    |
| ..                 | ..              | ..              | ..        | ..       | *545    |
| ..                 | ..              | ..              | ..        | ..       | *190    |
| ..                 | ..              | ..              | ..        | ..       | *194    |
| ..                 | ..              | ..              | ..        | ..       | *195    |
| ..                 | ..              | ..              | ..        | ..       | *197    |
| ..                 | ..              | ..              | ..        | ..       | 24      |
| ..                 | ..              | ..              | ..        | ..       | 24      |
| ..                 | ..              | ..              | ..        | ..       | 24      |
| ..                 | ..              | ..              | ..        | ..       | 25      |
| ..                 | ..              | *7              | ..        | ..       | 122     |
| ..                 | ..              | *5              | ..        | ..       | 120     |
| ..                 | ..              | *5              | ..        | ..       | 123     |
| ..                 | ..              | *5              | ..        | ..       | 124     |
| ..                 | ..              | 107             | ..        | 3,302    | 48,725  |
| ..                 | ..              | 75              | 14        | 3,320    | 48,606  |
| ..                 | ..              | 104             | 11        | 3,281    | 47,277  |
| ..                 | ..              | ..              | ..        | 3,281    | 46,700  |
| ..                 | ..              | ..              | ..        | ..       | 1       |
| ..                 | ..              | ..              | ..        | ..       | 1       |
| ..                 | ..              | ..              | ..        | ..       | 1       |
| ..                 | ..              | ..              | ..        | ..       | 1       |
| ..                 | ..              | ..              | ..        | ..       | 68,374  |
| ..                 | ..              | ..              | ..        | ..       | 68,622  |
| ..                 | ..              | ..              | ..        | ..       | 68,706  |
| ..                 | ..              | ..              | ..        | ..       | *72,141 |
| ..                 | ..              | ..              | ..        | 0        | 1,482   |
| ..                 | ..              | ..              | ..        | 0        | *1,466  |
| ..                 | ..              | ..              | ..        | 0        | *1,466  |
| ..                 | ..              | ..              | ..        | 0        | *1,464  |
| ..                 | ..              | ..              | ..        | ..       | *3,302  |
| ..                 | ..              | ..              | ..        | ..       | *3,305  |
| ..                 | ..              | ..              | ..        | ..       | *3,305  |
| ..                 | ..              | ..              | ..        | ..       | *3,310  |
| ..                 | ..              | ..              | ..        | ..       | 19      |
| ..                 | ..              | ..              | ..        | ..       | 19      |
| ..                 | ..              | ..              | ..        | ..       | 19      |
| ..                 | ..              | ..              | ..        | ..       | 19      |
| ..                 | ..              | 19              | ..        | ..       | 850     |
| ..                 | ..              | 0               | ..        | ..       | 831     |
| ..                 | ..              | 5               | ..        | ..       | 837     |
| ..                 | ..              | 8               | ..        | ..       | 840     |

**Table 13**

**Production, trade and supply of conventional crude oil**

Thousand metric tons; kilograms per capita; reserves production ratio (R/P) in years

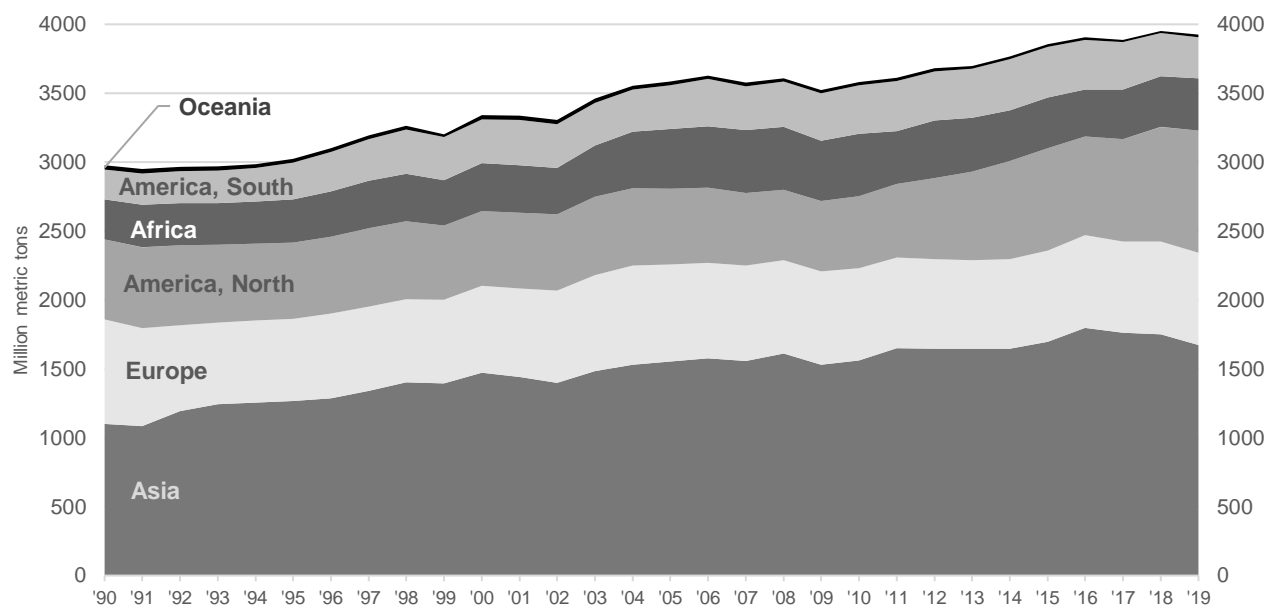
**Table Notes**

The **Reserves / Production** ratio refers to crude oil and natural gas liquids.

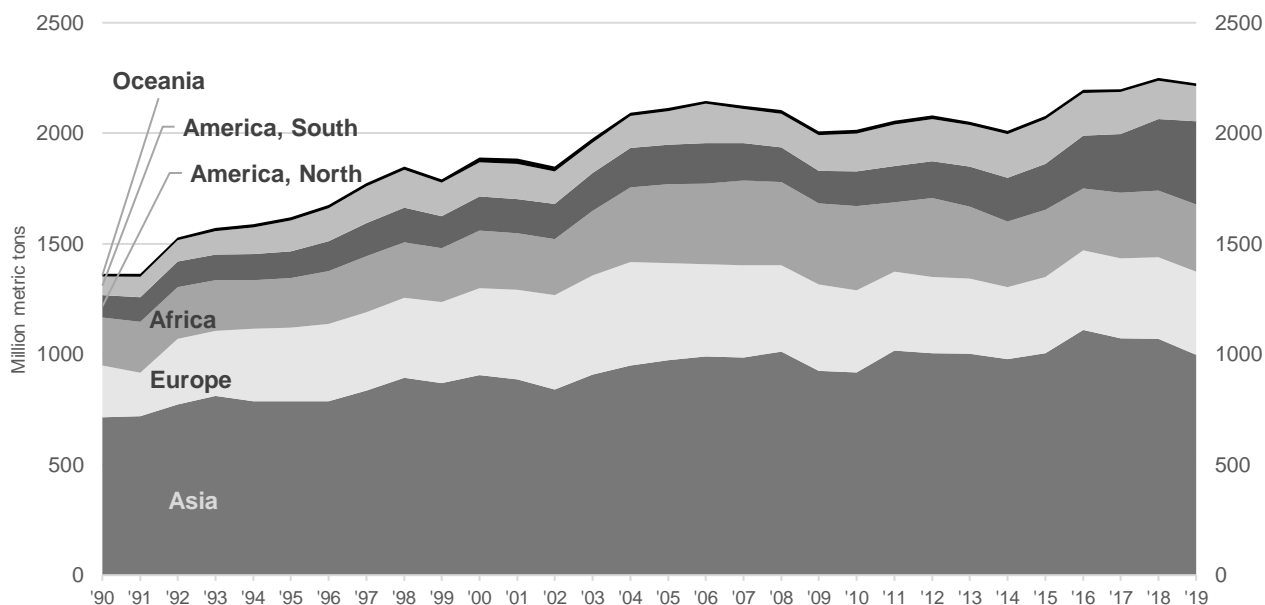
Data on reserves were taken from the Survey of Energy Resources, World Energy Council.

Please refer to the Definitions Section on pages ix to xv for the appropriate product description/classification, and xvi to xvii for the descriptions of relevant flows.

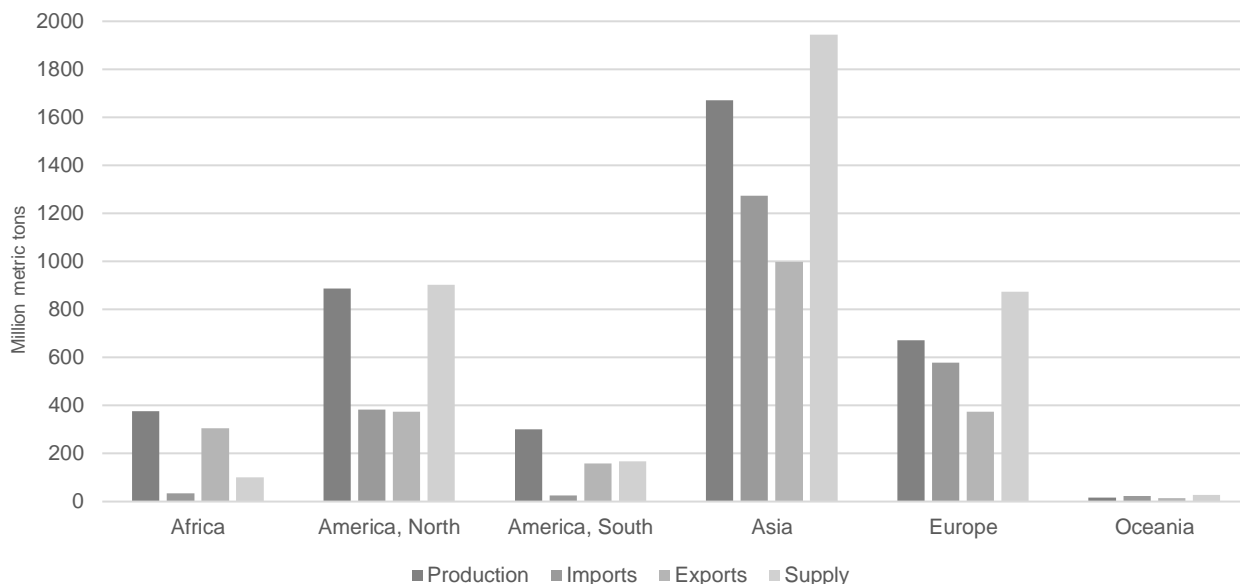
**Figure 36: Production of conventional crude oil by region, 1990-2019**



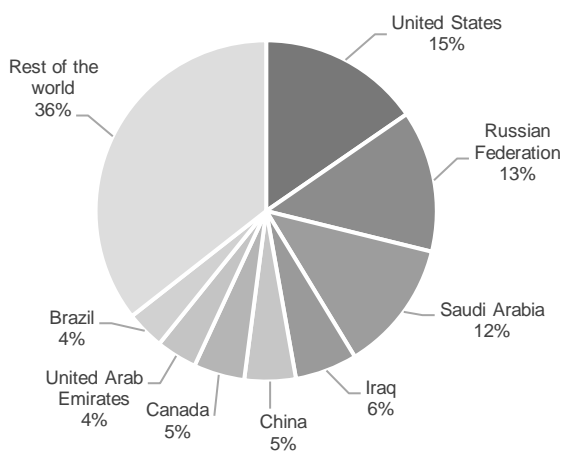
**Figure 37: Exports of conventional crude oil by region, 1990-2019**



**Figure 38: Production, trade and supply of conventional crude oil by region, 2019**



**Figure 39: Major crude oil producing countries, 2019**



**Figure 40: Major crude oil consuming countries, 2019**

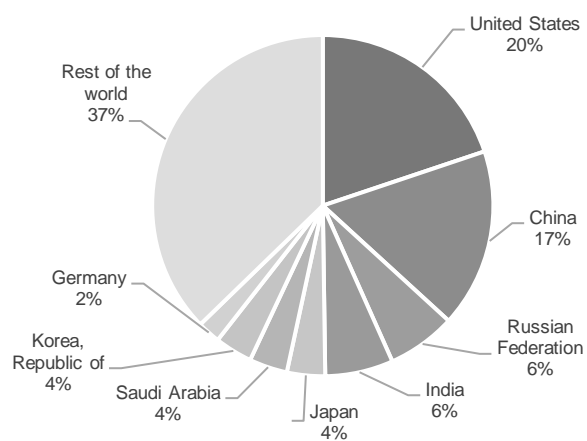


Table 13

## Production, trade and supply of conventional crude oil

Thousand metric tons; kilograms per capita; reserves/production ratio (R/P) in years

| Country or area        | Year        | Production       |                         | Imports          | Exports          | Changes in stocks | Supply           |            |
|------------------------|-------------|------------------|-------------------------|------------------|------------------|-------------------|------------------|------------|
|                        |             | Total            | Reserves/<br>Production |                  |                  |                   | Total            | Per capita |
| <b>World</b>           | <b>2016</b> | <b>3,904,829</b> | <b>51</b>               | <b>2,256,401</b> | <b>2,195,610</b> | <b>-7,193</b>     | <b>3,972,814</b> | <b>532</b> |
|                        | <b>2017</b> | <b>3,885,572</b> | <b>51</b>               | <b>2,325,708</b> | <b>2,198,037</b> | <b>-17,665</b>    | <b>4,030,908</b> | <b>534</b> |
|                        | <b>2018</b> | <b>3,951,682</b> | <b>50</b>               | <b>2,351,100</b> | <b>2,250,344</b> | <b>8,730</b>      | <b>4,043,709</b> | <b>530</b> |
|                        | <b>2019</b> | <b>3,924,240</b> | <b>50</b>               | <b>2,317,937</b> | <b>2,225,617</b> | <b>2,257</b>      | <b>4,014,303</b> | <b>520</b> |
| <b>Africa</b>          | <b>2016</b> | <b>342,002</b>   | <b>46</b>               | <b>36,239</b>    | <b>279,849</b>   | <b>-151</b>       | <b>98,543</b>    | <b>81</b>  |
|                        | <b>2017</b> | <b>362,193</b>   | <b>43</b>               | <b>30,351</b>    | <b>296,466</b>   | <b>798</b>        | <b>95,280</b>    | <b>77</b>  |
|                        | <b>2018</b> | <b>368,561</b>   | <b>43</b>               | <b>36,308</b>    | <b>303,000</b>   | <b>884</b>        | <b>100,986</b>   | <b>79</b>  |
|                        | <b>2019</b> | <b>376,034</b>   | <b>42</b>               | <b>33,459</b>    | <b>306,071</b>   | <b>2,955</b>      | <b>100,467</b>   | <b>77</b>  |
| Algeria                | 2016        | 50,945           | 22                      | 233              | 25,227           | -82               | 26,033           | 642        |
|                        | 2017        | 49,468           | 23                      | 222              | 24,677           | 287               | 24,726           | 597        |
|                        | 2018        | 48,588           | 23                      | 204              | 21,676           | -247              | 27,363           | 648        |
|                        | 2019        | 48,394           | 24                      | 160              | 22,181           | 32                | 26,341           | 612        |
| Angola                 | 2016        | 85,497           | 20                      | ..               | 82,936           | *-225             | 2,786            | 97         |
|                        | 2017        | 80,843           | 20                      | ..               | 78,088           | *-438             | 3,192            | 107        |
|                        | 2018        | 73,245           | 22                      | ..               | 70,606           | -204              | 2,842            | 92         |
|                        | 2019        | 68,498           | 23                      | ..               | 65,308           | *82               | 3,108            | 98         |
| Cameroon               | 2016        | 4,673            | 4                       | 1,508            | 4,348            | ..                | 1,833            | 77         |
|                        | 2017        | 3,845            | 5                       | 1,024            | 3,488            | ..                | 1,382            | 56         |
|                        | 2018        | 3,486            | 5                       | 541              | 2,904            | ..                | 1,122            | 45         |
|                        | 2019        | 3,606            | 5                       | 280              | 3,284            | ..                | 602              | 23         |
| Chad                   | 2016        | 6,500            | 33                      | ..               | 5,800            | ..                | 700              | 48         |
|                        | 2017        | 5,800            | 37                      | ..               | 5,100            | ..                | 700              | 47         |
|                        | 2018        | 6,500            | 33                      | ..               | 5,800            | ..                | 700              | 45         |
|                        | 2019        | 6,700            | 32                      | ..               | 6,000            | ..                | 700              | 44         |
| Congo                  | 2016        | 11,795           | 16                      | ..               | 11,094           | -1                | 702              | 141        |
|                        | 2017        | 13,669           | 14                      | ..               | 12,856           | 0                 | 813              | 159        |
|                        | 2018        | 16,605           | 11                      | ..               | 15,788           | -9                | 826              | 157        |
|                        | 2019        | 16,913           | 11                      | ..               | 15,904           | 174               | 835              | 155        |
| Côte d'Ivoire          | 2016        | 2,188            | 6                       | 2,601            | 2,038            | ..                | 2,751            | 115        |
|                        | 2017        | 2,007            | 7                       | 2,386            | 1,870            | ..                | 2,523            | 103        |
|                        | 2018        | 1,672            | 8                       | 2,469            | 1,514            | ..                | 2,627            | 105        |
|                        | 2019        | 1,810            | 8                       | 2,928            | 1,757            | ..                | 2,981            | 116        |
| Dem. Rep. of the Congo | 2016        | 996              | 24                      | ..               | 996              | ..                | 0                | 0          |
|                        | 2017        | 1,198            | 20                      | ..               | 1,198            | ..                | 0                | 0          |
|                        | 2018        | 1,334            | 18                      | ..               | 1,334            | ..                | 0                | 0          |
|                        | 2019        | 1,170            | 21                      | ..               | 1,170            | ..                | 0                | 0          |
| Egypt                  | 2016        | 30,992           | 14                      | 5,998            | 11,392           | ..                | 25,598           | 271        |
|                        | 2017        | 30,417           | 14                      | 6,283            | 9,594            | ..                | 27,106           | 281        |
|                        | 2018        | 30,850           | 14                      | 6,037            | 10,559           | ..                | 26,328           | 267        |
|                        | 2019        | 30,216           | 15                      | 5,239            | 8,446            | ..                | 27,008           | 269        |
| Equatorial Guinea      | 2016        | 10,186           | 14                      | ..               | 10,190           | -144              | 140              | 115        |
|                        | 2017        | 8,682            | 16                      | ..               | 8,639            | -57               | 100              | 79         |
|                        | 2018        | 7,599            | 18                      | ..               | 7,472            | 27                | 100              | 76         |
|                        | 2019        | 7,162            | 19                      | ..               | 7,058            | *9                | 95               | 70         |
| Gabon                  | 2016        | 11,366           | 24                      | ..               | 10,516           | ..                | 850              | 423        |
|                        | 2017        | 10,499           | 26                      | ..               | 9,375            | 300               | 824              | 399        |
|                        | 2018        | 9,487            | 29                      | ..               | 8,662            | ..                | 825              | 389        |
|                        | 2019        | 10,877           | 25                      | ..               | 10,331           | ..                | 546              | 251        |
| Ghana                  | 2016        | 4,614            | 20                      | 1,446            | 4,272            | 340               | 1,448            | 51         |
|                        | 2017        | 8,380            | 11                      | 233              | 8,141            | 306               | 166              | 6          |
|                        | 2018        | 8,876            | 10                      | 197              | 8,860            | -194              | 407              | 14         |
|                        | 2019        | 10,206           | 9                       | 830              | 10,141           | 14                | 882              | 29         |

## Production, trade and supply of conventional crude oil

Thousand metric tons; kilograms per capita; reserves/production ratio (R/P) in years

| Country or area | Year | Production |                         | Imports | Exports | Changes in stocks | Supply  |            |
|-----------------|------|------------|-------------------------|---------|---------|-------------------|---------|------------|
|                 |      | Total      | Reserves/<br>Production |         |         |                   | Total   | Per capita |
| Libya           | 2016 | 18,193     | 314                     | ..      | 14,683  | ..                | 3,510   | 541        |
|                 | 2017 | 42,322     | 141                     | ..      | 37,955  | ..                | 4,367   | 664        |
|                 | 2018 | 53,338     | 112                     | ..      | 48,483  | ..                | 4,855   | 727        |
|                 | 2019 | 59,710     | 100                     | ..      | 50,288  | ..                | 9,422   | 1,390      |
| Mauritania      | 2016 | 236        | 13                      | ..      | *236    | ..                | 0       | 0          |
|                 | 2017 | 87         | 34                      | ..      | *87     | ..                | 0       | 0          |
|                 | 2018 | 0          | ..                      | ..      | 0       | ..                | 0       | 0          |
|                 | 2019 | ..         | ..                      | ..      | ..      | ..                | ..      | ..         |
| Morocco         | 2016 | 5          | 50                      | ..      | ..      | ..                | 5       | 0          |
|                 | 2017 | 5          | 54                      | ..      | ..      | ..                | 5       | 0          |
|                 | 2018 | 5          | 52                      | ..      | ..      | ..                | 5       | 0          |
|                 | 2019 | 4          | 58                      | ..      | ..      | ..                | 4       | 0          |
| Mozambique      | 2016 | 49         | 41                      | ..      | 49      | ..                | 0       | 0          |
|                 | 2017 | ..         | 220                     | ..      | ..      | ..                | ..      | ..         |
|                 | 2018 | ..         | 237                     | ..      | ..      | ..                | ..      | ..         |
|                 | 2019 | ..         | 274                     | ..      | ..      | ..                | ..      | ..         |
| Niger           | 2016 | 822        | 24                      | ..      | ..      | 88                | 734     | 35         |
|                 | 2017 | 911        | 22                      | ..      | ..      | -20               | 931     | 43         |
|                 | 2018 | 829        | 24                      | ..      | ..      | 10                | 818     | 36         |
|                 | 2019 | 905        | 22                      | ..      | ..      | 150               | 755     | 32         |
| Nigeria         | 2016 | 88,901     | 55                      | ..      | 86,058  | -38               | 2,881   | 15         |
|                 | 2017 | 90,529     | 54                      | ..      | 86,490  | 718               | 3,321   | 17         |
|                 | 2018 | 93,117     | 52                      | ..      | 90,830  | 756               | 1,531   | 8          |
|                 | 2019 | 95,543     | 50                      | ..      | 94,094  | 1,079             | 370     | 2          |
| Senegal         | 2016 | ..         | ..                      | 1,162   | ..      | -68               | 1,230   | 82         |
|                 | 2017 | ..         | ..                      | 1,200   | ..      | *-119             | 1,319   | 86         |
|                 | 2018 | ..         | ..                      | 1,024   | ..      | -26               | 1,050   | 66         |
|                 | 2019 | ..         | ..                      | 1,024   | ..      | ..                | 1,024   | 63         |
| South Africa    | 2016 | 28         | 30                      | 20,818  | 452     | ..                | 20,394  | 363        |
|                 | 2017 | 32         | 21                      | 17,103  | ..      | ..                | 17,135  | 301        |
|                 | 2018 | 26         | 22                      | 24,256  | ..      | 856               | 23,426  | 405        |
|                 | 2019 | 13         | 26                      | 21,713  | ..      | 1,325             | 20,401  | 348        |
| South Sudan     | 2016 | 6,869      | 69                      | ..      | 6,799   | ..                | 70      | 6          |
|                 | 2017 | 7,350      | 64                      | ..      | 7,279   | ..                | 71      | 6          |
|                 | 2018 | 7,200      | 66                      | ..      | 7,131   | ..                | 69      | 6          |
|                 | 2019 | 8,600      | 55                      | ..      | 8,517   | ..                | 83      | 7          |
| Sudan           | 2016 | 4,718      | 43                      | 1,103   | 949     | ..                | 4,872   | 122        |
|                 | 2017 | 4,095      | 49                      | 744     | 167     | ..                | 4,673   | 114        |
|                 | 2018 | 3,818      | 53                      | *450    | ..      | ..                | 4,268   | 102        |
|                 | 2019 | *3,867     | 52                      | *456    | ..      | ..                | *4,322  | *101       |
| Tunisia         | 2016 | 2,429      | 21                      | 886     | 1,814   | 39                | 1,462   | 129        |
|                 | 2017 | 2,054      | 24                      | 635     | 1,461   | -79               | 1,307   | 114        |
|                 | 2018 | 1,987      | 26                      | 512     | 1,380   | -57               | 1,176   | 102        |
|                 | 2019 | 1,842      | 28                      | 125     | 1,594   | 86                | 288     | 25         |
| Zambia          | 2016 | ..         | ..                      | 484     | ..      | -60               | 544     | 33         |
|                 | 2017 | ..         | ..                      | 520     | ..      | -100              | 620     | 37         |
|                 | 2018 | ..         | ..                      | 618     | ..      | -28               | 647     | 37         |
|                 | 2019 | ..         | ..                      | 705     | ..      | 4                 | 700     | 39         |
| America, North  | 2016 | 714,441    | 43                      | 455,015 | 238,357 | 3,477             | 927,622 | 1,620      |
|                 | 2017 | 739,641    | 42                      | 448,435 | 266,271 | -13,314           | 935,119 | 1,619      |
|                 | 2018 | 831,700    | 37                      | 434,730 | 323,488 | 2,858             | 940,085 | 1,615      |
|                 | 2019 | 888,153    | 34                      | 382,440 | 374,785 | -6,027            | 901,834 | 1,537      |

Table 13

## Production, trade and supply of conventional crude oil

Thousand metric tons; kilograms per capita; reserves/production ratio (R/P) in years

| Country or area       | Year        | Production     |                         | Imports       | Exports        | Changes in stocks | Supply         |            |
|-----------------------|-------------|----------------|-------------------------|---------------|----------------|-------------------|----------------|------------|
|                       |             | Total          | Reserves/<br>Production |               |                |                   | Total          | Per capita |
| Barbados              | 2016        | 34             | 7                       | ..            | 34             | 0                 | 0              | 0          |
|                       | 2017        | 32             | 8                       | ..            | 32             | 0                 | 0              | 0          |
|                       | 2018        | 30             | 8                       | ..            | 28             | 2                 | 0              | 0          |
|                       | 2019        | 29             | 9                       | ..            | 32             | -3                | 0              | 0          |
| Belize                | 2016        | 66             | 4                       | ..            | 49             | 4                 | 13             | 35         |
|                       | 2017        | 53             | 5                       | ..            | 39             | 0                 | 14             | 36         |
|                       | 2018        | 44             | 6                       | ..            | 29             | 3                 | 12             | 31         |
|                       | 2019        | 39             | 6                       | ..            | 31             | ..                | 8              | 20         |
| Canada                | 2016        | 158,046        | 160                     | 46,689        | 143,984        | -700              | 61,451         | 1,689      |
|                       | 2017        | 170,757        | 149                     | 40,562        | 144,695        | 226               | 66,398         | 1,808      |
|                       | 2018        | 188,258        | 135                     | 39,311        | 157,340        | 355               | 69,874         | 1,885      |
|                       | 2019        | 189,690        | 133                     | 41,456        | 164,946        | 420               | 65,780         | 1,758      |
| Cuba                  | 2016        | 2,619          | 1                       | 3,712         | ..             | ..                | 6,331          | 559        |
|                       | 2017        | 2,522          | 1                       | 2,840         | ..             | ..                | 5,362          | 473        |
|                       | 2018        | 2,463          | 1                       | 2,550         | ..             | ..                | 5,013          | 442        |
|                       | 2019        | 2,372          | 1                       | 2,416         | ..             | ..                | 4,787          | 422        |
| Curaçao               | 2016        | ..             | ..                      | 8,091         | ..             | ..                | 8,091          | 50,237     |
|                       | 2017        | ..             | ..                      | 4,357         | ..             | ..                | 4,357          | 26,896     |
|                       | 2018        | ..             | ..                      | 3,253         | ..             | ..                | 3,253          | 19,985     |
|                       | 2019        | ..             | ..                      | 0             | ..             | ..                | 0              | 0          |
| Dominican Republic    | 2016        | ..             | ..                      | 1,163         | ..             | -2                | 1,164          | 112        |
|                       | 2017        | ..             | ..                      | 990           | ..             | 44                | 947            | 90         |
|                       | 2018        | ..             | ..                      | 1,245         | ..             | -23               | 1,268          | 119        |
|                       | 2019        | ..             | ..                      | 1,250         | ..             | -34               | 1,283          | 120        |
| Guatemala             | 2016        | 446            | 25                      | ..            | 368            | 22                | 56             | 3          |
|                       | 2017        | 481            | 23                      | ..            | 393            | 0                 | 88             | 5          |
|                       | 2018        | 459            | 24                      | ..            | 309            | ..                | 151            | 9          |
|                       | 2019        | 479            | 23                      | ..            | 268            | ..                | 210            | 12         |
| Jamaica               | 2016        | ..             | ..                      | 1,243         | ..             | ..                | 1,243          | 428        |
|                       | 2017        | ..             | ..                      | 1,165         | ..             | ..                | 1,165          | 399        |
|                       | 2018        | ..             | ..                      | 1,035         | ..             | ..                | 1,035          | 353        |
|                       | 2019        | ..             | ..                      | 1,309         | ..             | ..                | 1,309          | 444        |
| Mexico                | 2016        | 111,482        | 12                      | ..            | 63,247         | 128               | 48,107         | 390        |
|                       | 2017        | 100,827        | 14                      | ..            | 62,607         | 561               | 37,659         | 302        |
|                       | 2018        | 95,073         | 15                      | 192           | 63,626         | 1,554             | 30,085         | 238        |
|                       | 2019        | 88,386         | 16                      | ..            | 59,426         | -1,984            | 30,944         | 243        |
| Nicaragua             | 2016        | ..             | ..                      | 619           | ..             | *-40              | 659            | 105        |
|                       | 2017        | ..             | ..                      | 709           | ..             | *8                | 701            | 110        |
|                       | 2018        | ..             | ..                      | 648           | ..             | *-30              | 678            | 105        |
|                       | 2019        | ..             | ..                      | 559           | ..             | -3                | 562            | 86         |
| Trinidad and Tobago   | 2016        | 3,695          | 25                      | 5,228         | 1,449          | ..                | 7,474          | 5,426      |
|                       | 2017        | 3,702          | 24                      | 4,554         | 1,408          | ..                | 6,847          | 4,947      |
|                       | 2018        | 3,277          | 28                      | 3,233         | 1,137          | ..                | 5,373          | 3,866      |
|                       | 2019        | 3,034          | 29                      | ..            | 3,008          | ..                | 26             | 18         |
| United States         | 2016        | 438,053        | 13                      | 388,271       | 29,226         | 4,065             | 793,033        | 2,455      |
|                       | 2017        | 461,267        | 12                      | 393,259       | 57,097         | -14,153           | 811,582        | 2,497      |
|                       | 2018        | 542,095        | 10                      | 383,263       | 101,019        | 997               | 823,343        | 2,517      |
|                       | 2019        | 604,126        | 9                       | 335,450       | 147,074        | -4,423            | 796,925        | 2,422      |
| <b>America, South</b> | <b>2016</b> | <b>359,963</b> | <b>80</b>               | <b>24,155</b> | <b>193,969</b> | <b>-86</b>        | <b>190,236</b> | <b>457</b> |
|                       | <b>2017</b> | <b>342,641</b> | <b>84</b>               | <b>23,708</b> | <b>189,103</b> | <b>-734</b>       | <b>177,980</b> | <b>424</b> |
|                       | <b>2018</b> | <b>314,296</b> | <b>92</b>               | <b>26,257</b> | <b>174,154</b> | <b>-600</b>       | <b>166,998</b> | <b>395</b> |
|                       | <b>2019</b> | <b>301,247</b> | <b>96</b>               | <b>25,342</b> | <b>159,160</b> | <b>903</b>        | <b>166,526</b> | <b>390</b> |



## Production, trade and supply of conventional crude oil

Thousand metric tons; kilograms per capita; reserves/production ratio (R/P) in years

| Country or area           | Year        | Production       |                         | Imports          | Exports          | Changes in stocks | Supply           |            |
|---------------------------|-------------|------------------|-------------------------|------------------|------------------|-------------------|------------------|------------|
|                           |             | Total            | Reserves/<br>Production |                  |                  |                   | Total            | Per capita |
| Argentina                 | 2016        | 26,440           | 11                      | 820              | 2,643            | -60               | 24,677           | 567        |
|                           | 2017        | 24,766           | 12                      | 1,117            | 1,481            | 78                | 24,324           | 554        |
|                           | 2018        | 25,281           | 11                      | 396              | 3,197            | 31                | 22,449           | 506        |
|                           | 2019        | 26,269           | 11                      | 0                | 3,389            | -373              | 23,253           | 519        |
| Bolivia (Plur. State of)  | 2016        | 2,224            | 7                       | ..               | 0                | -63               | 2,287            | 207        |
|                           | 2017        | 2,110            | 7                       | ..               | 0                | -40               | 2,151            | 192        |
|                           | 2018        | 1,967            | 7                       | ..               | ..               | -73               | 2,040            | 180        |
|                           | 2019        | 1,741            | 8                       | ..               | ..               | -29               | 1,770            | 154        |
| Brazil                    | 2016        | 129,203          | 14                      | 7,937            | 43,419           | 496               | 93,225           | 452        |
|                           | 2017        | 134,534          | 13                      | 7,415            | 53,337           | -223              | 88,835           | 427        |
|                           | 2018        | 132,713          | 14                      | 9,530            | 55,164           | 152               | 86,927           | 415        |
|                           | 2019        | 142,845          | 13                      | 8,796            | 62,866           | 1,701             | 87,074           | 413        |
| Chile                     | 2016        | 203              | 82                      | 8,183            | ..               | -49               | 8,435            | 463        |
|                           | 2017        | 169              | 72                      | 8,468            | ..               | 7                 | 8,631            | 467        |
|                           | 2018        | 154              | 53                      | 8,553            | ..               | -52               | 8,759            | 468        |
|                           | 2019        | 167              | 42                      | 9,305            | ..               | 32                | 9,440            | 498        |
| Colombia                  | 2016        | 47,141           | 7                       | ..               | 33,223           | ..                | 13,918           | 289        |
|                           | 2017        | 45,322           | 7                       | ..               | 33,419           | ..                | 11,902           | 243        |
|                           | 2018        | 45,929           | 7                       | ..               | 31,704           | ..                | 14,225           | 286        |
|                           | 2019        | 47,009           | 7                       | ..               | 29,855           | ..                | 17,153           | 341        |
| Ecuador                   | 2016        | 27,610           | 42                      | 0                | 19,515           | -350              | 8,445            | 512        |
|                           | 2017        | 26,676           | 44                      | 3                | 18,351           | -558              | 8,887            | 529        |
|                           | 2018        | 26,240           | 45                      | ..               | 18,019           | -399              | 8,620            | 505        |
|                           | 2019        | 26,938           | 43                      | ..               | 19,048           | -484              | 8,374            | 482        |
| Peru                      | 2016        | 1,991            | 31                      | 5,188            | 114              | -14               | 7,079            | 229        |
|                           | 2017        | 2,143            | 31                      | 6,164            | 77               | 63                | 8,167            | 260        |
|                           | 2018        | 2,440            | 31                      | 5,629            | 324              | -233              | 7,978            | 249        |
|                           | 2019        | 2,647            | 29                      | 5,242            | 284              | 112               | 7,494            | 231        |
| Suriname                  | 2016        | 817              | 15                      | 41               | ..               | 12                | 846              | 1,497      |
|                           | 2017        | 813              | 15                      | 14               | ..               | ..                | 827              | 1,450      |
|                           | 2018        | 820              | 15                      | 9                | ..               | ..                | 829              | 1,439      |
|                           | 2019        | 827              | 15                      | ..               | ..               | ..                | 827              | 1,422      |
| Uruguay                   | 2016        | ..               | ..                      | 1,986            | ..               | -59               | 2,045            | 597        |
|                           | 2017        | ..               | ..                      | 527              | ..               | -60               | 587              | 171        |
|                           | 2018        | ..               | ..                      | 2,139            | ..               | -26               | 2,165            | 628        |
|                           | 2019        | ..               | ..                      | 1,998            | ..               | -57               | 2,055            | 594        |
| Venezuela (Bolivar. Rep.) | 2016        | 124,335          | 203                     | ..               | 95,055           | ..                | 29,280           | 981        |
|                           | 2017        | 106,108          | 237                     | ..               | 82,438           | ..                | 23,670           | 805        |
|                           | 2018        | 78,752           | 320                     | ..               | 65,746           | ..                | 13,006           | 450        |
|                           | 2019        | 52,804           | 475                     | ..               | 43,718           | ..                | 9,086            | 319        |
| <b>Asia</b>               | <b>2016</b> | <b>1,797,343</b> | <b>59</b>               | <b>1,147,340</b> | <b>1,109,340</b> | <b>-8,302</b>     | <b>1,843,645</b> | <b>412</b> |
|                           | <b>2017</b> | <b>1,762,632</b> | <b>60</b>               | <b>1,208,448</b> | <b>1,072,417</b> | <b>-467</b>       | <b>1,899,129</b> | <b>420</b> |
|                           | <b>2018</b> | <b>1,751,772</b> | <b>61</b>               | <b>1,244,526</b> | <b>1,069,052</b> | <b>4,605</b>      | <b>1,922,641</b> | <b>422</b> |
|                           | <b>2019</b> | <b>1,671,222</b> | <b>64</b>               | <b>1,274,132</b> | <b>997,397</b>   | <b>3,617</b>      | <b>1,944,341</b> | <b>423</b> |
| Afghanistan               | 2016        | ..               | ..                      | *110             | ..               | ..                | *110             | *3         |
|                           | 2017        | ..               | ..                      | 117              | ..               | ..                | 117              | 3          |
|                           | 2018        | ..               | ..                      | 185              | ..               | ..                | 185              | 5          |
|                           | 2019        | ..               | ..                      | 118              | ..               | ..                | 118              | 3          |
| Azerbaijan                | 2016        | 38,253           | 23                      | ..               | 32,479           | 24                | 5,750            | 591        |
|                           | 2017        | 36,032           | 25                      | 63               | 30,488           | -23               | 5,629            | 572        |
|                           | 2018        | 35,925           | 25                      | ..               | 30,141           | -15               | 5,799            | 583        |
|                           | 2019        | 33,597           | 26                      | ..               | 27,704           | 18                | 5,876            | 585        |

Table 13

## Production, trade and supply of conventional crude oil

Thousand metric tons; kilograms per capita; reserves/production ratio (R/P) in years

| Country or area        | Year | Production |                         | Imports  | Exports | Changes in stocks | Supply   |            |
|------------------------|------|------------|-------------------------|----------|---------|-------------------|----------|------------|
|                        |      | Total      | Reserves/<br>Production |          |         |                   | Total    | Per capita |
| Bahrain                | 2016 | 10,102     | 1                       | 10,476   | 7,724   | ..                | 12,854   | 9,015      |
|                        | 2017 | 9,830      | 1                       | 10,953   | 7,601   | ..                | 13,182   | 8,823      |
|                        | 2018 | 9,682      | 1                       | 10,951   | 7,693   | ..                | 12,940   | 8,245      |
|                        | 2019 | 9,684      | 1                       | 11,119   | 7,654   | ..                | 13,149   | 8,012      |
| Bangladesh             | 2016 | ..         | 12                      | 1,308    | ..      | ..                | 1,308    | 8          |
|                        | 2017 | ..         | 10                      | 1,687    | ..      | ..                | 1,687    | 11         |
|                        | 2018 | ..         | 10                      | 1,209    | ..      | ..                | 1,209    | 7          |
|                        | 2019 | ..         | 10                      | 1,166    | ..      | ..                | 1,166    | 7          |
| Brunei Darussalam      | 2016 | 5,431      | 25                      | ..       | 5,209   | -18               | 240      | 572        |
|                        | 2017 | 4,995      | 27                      | ..       | 4,871   | -74               | 198      | 466        |
|                        | 2018 | 4,943      | 27                      | ..       | 4,571   | 151               | 222      | 517        |
|                        | 2019 | 5,442      | 25                      | 1,453    | 5,312   | -65               | 1,648    | 3,804      |
| China                  | 2016 | 199,685    | 13                      | 381,007  | 2,941   | 4,428             | 573,323  | 405        |
|                        | 2017 | 191,506    | 13                      | 419,462  | 4,861   | 6,418             | 599,690  | 422        |
|                        | 2018 | 189,324    | 13                      | 461,886  | 2,627   | 10,091            | 638,492  | 447        |
|                        | 2019 | 191,014    | 13                      | 505,676  | 810     | 15,805            | 680,075  | 474        |
| Georgia                | 2016 | 39         | 130                     | 43       | 18      | 0                 | 64       | 16         |
|                        | 2017 | 32         | 156                     | 60       | 7       | -5                | 89       | 22         |
|                        | 2018 | 30         | 166                     | 2        | 9       | 1                 | 22       | 5          |
|                        | 2019 | 35         | 143                     | 9        | ..      | 7                 | 38       | 9          |
| India                  | 2016 | 36,801     | 19                      | 218,618  | ..      | 0                 | 255,419  | 193        |
|                        | 2017 | 36,468     | 19                      | 225,282  | ..      | ..                | 261,750  | 196        |
|                        | 2018 | 34,200     | 20                      | 226,500  | ..      | ..                | 260,700  | 193        |
|                        | 2019 | *32,169    | 21                      | *226,955 | ..      | ..                | *259,124 | *190       |
| Indonesia              | 2016 | 40,063     | 11                      | 17,452   | 15,131  | -2,725            | 45,109   | 172        |
|                        | 2017 | 41,901     | 11                      | 15,889   | 12,035  | 34                | 45,721   | 173        |
|                        | 2018 | 40,691     | 11                      | 15,404   | 8,929   | 1,769             | 45,397   | 170        |
|                        | 2019 | 39,026     | 12                      | 10,122   | 3,526   | -3,515            | 49,137   | 182        |
| Iran (Islamic Rep. of) | 2016 | 187,209    | 100                     | ..       | 104,500 | 0                 | 82,709   | 1,040      |
|                        | 2017 | 191,392    | 97                      | ..       | 106,951 | -20               | 84,461   | 1,047      |
|                        | 2018 | 175,835    | 104                     | ..       | 91,446  | ..                | 84,389   | 1,032      |
|                        | 2019 | 117,329    | 146                     | ..       | 32,330  | ..                | 84,999   | 1,025      |
| Iraq                   | 2016 | 220,339    | 87                      | ..       | 187,360 | 3,140             | 29,839   | 815        |
|                        | 2017 | 224,404    | 85                      | ..       | 186,774 | 385               | 37,245   | 992        |
|                        | 2018 | 224,404    | 85                      | ..       | 189,721 | 634               | 34,049   | 886        |
|                        | 2019 | 231,478    | 83                      | ..       | 194,941 | -371              | 36,908   | 939        |
| Israel                 | 2016 | 97         | 21                      | 10,332   | ..      | -385              | 10,814   | 1,334      |
|                        | 2017 | 64         | 31                      | 11,698   | ..      | 649               | 11,113   | 1,348      |
|                        | 2018 | 74         | 27                      | 11,533   | ..      | -448              | 12,055   | 1,438      |
|                        | 2019 | 84         | 24                      | 12,313   | ..      | 80                | 12,316   | 1,446      |
| Japan                  | 2016 | 187        | 9                       | 155,851  | ..      | -1,546            | 157,584  | 1,233      |
|                        | 2017 | 180        | 10                      | 155,715  | ..      | -896              | 156,791  | 1,230      |
|                        | 2018 | 166        | 10                      | 149,208  | ..      | 442               | 148,932  | 1,171      |
|                        | 2019 | 211        | 10                      | 145,382  | ..      | 203               | 145,390  | 1,146      |
| Jordan                 | 2016 | 0          | 563                     | 2,978    | ..      | 23                | 2,955    | 309        |
|                        | 2017 | 0          | 862                     | 2,795    | ..      | 16                | 2,779    | 284        |
|                        | 2018 | 1          | 250                     | 2,366    | ..      | 11                | 2,356    | 236        |
|                        | 2019 | 1          | 250                     | 2,366    | ..      | *-36              | 2,403    | 238        |
| Kazakhstan             | 2016 | 65,570     | 50                      | 23       | 49,774  | 197               | 15,622   | 876        |
|                        | 2017 | 72,925     | 46                      | 42       | 56,684  | *57               | 16,226   | 897        |
|                        | 2018 | 77,496     | 44                      | 25       | 58,435  | 442               | 18,645   | 1,018      |
|                        | 2019 | 78,643     | 43                      | 36       | 59,649  | -462              | 19,492   | 1,051      |

Table 13

## Production, trade and supply of conventional crude oil

Thousand metric tons; kilograms per capita; reserves/production ratio (R/P) in years

| Country or area       | Year | Production |                         | Imports | Exports | Changes in stocks | Supply  |            |
|-----------------------|------|------------|-------------------------|---------|---------|-------------------|---------|------------|
|                       |      | Total      | Reserves/<br>Production |         |         |                   | Total   | Per capita |
| Korea, Dem.Ppl's.Rep. | 2016 | ..         | ..                      | 532     | ..      | ..                | 532     | 21         |
|                       | 2017 | ..         | ..                      | 532     | ..      | ..                | 532     | 21         |
|                       | 2018 | ..         | ..                      | 532     | ..      | ..                | 532     | 21         |
|                       | 2019 | ..         | ..                      | 532     | ..      | ..                | 532     | 21         |
| Korea, Republic of    | 2016 | 15         | ..                      | 145,537 | ..      | 947               | 144,605 | 2,836      |
|                       | 2017 | 30         | ..                      | 150,613 | ..      | -29               | 150,672 | 2,949      |
|                       | 2018 | 26         | ..                      | 150,281 | ..      | -2,144            | 152,451 | 2,979      |
|                       | 2019 | 21         | ..                      | 144,555 | ..      | 1,538             | 143,038 | 2,792      |
| Kuwait                | 2016 | 149,758    | 89                      | ..      | 107,535 | ..                | 42,223  | 10,671     |
|                       | 2017 | 137,090    | 96                      | ..      | 102,455 | ..                | 34,635  | 8,539      |
|                       | 2018 | 138,731    | 95                      | ..      | 103,615 | ..                | 35,116  | 8,488      |
|                       | 2019 | 135,742    | 97                      | ..      | 100,500 | ..                | 35,242  | 8,377      |
| Kyrgyzstan            | 2016 | 145        | 34                      | 250     | 7       | 1                 | 387     | 64         |
|                       | 2017 | 173        | 29                      | 297     | 20      | 5                 | 445     | 72         |
|                       | 2018 | 200        | 25                      | 410     | 70      | -9                | 549     | 87         |
|                       | 2019 | 233        | 21                      | 134     | 51      | -6                | 322     | 50         |
| Malaysia              | 2016 | 32,113     | 14                      | 10,488  | 16,045  | -68               | 26,624  | 868        |
|                       | 2017 | 31,071     | 14                      | 9,793   | 14,453  | 287               | 26,124  | 840        |
|                       | 2018 | 30,917     | 14                      | 8,927   | 14,506  | 435               | 24,903  | 790        |
|                       | 2019 | 28,616     | 15                      | 9,508   | 14,392  | *200              | 23,532  | 737        |
| Mongolia              | 2016 | 976        | 36                      | ..      | 949     | 28                | 0       | 0          |
|                       | 2017 | 902        | 39                      | ..      | 889     | 13                | 0       | 0          |
|                       | 2018 | 756        | 46                      | ..      | 733     | 24                | 0       | 0          |
|                       | 2019 | 814        | 43                      | ..      | 775     | *39               | 0       | 0          |
| Myanmar               | 2016 | 653        | 5                       | ..      | 149     | 32                | 472     | 9          |
|                       | 2017 | 589        | 5                       | ..      | 241     | -1                | 349     | 7          |
|                       | 2018 | 766        | 4                       | ..      | 242     | ..                | 524     | 10         |
|                       | 2019 | 432        | 7                       | ..      | 201     | ..                | 231     | 4          |
| Oman                  | 2016 | 49,409     | 14                      | ..      | 43,266  | ..                | 6,143   | 1,371      |
|                       | 2017 | 47,685     | 15                      | ..      | 39,596  | ..                | 8,089   | 1,734      |
|                       | 2018 | 48,784     | 15                      | ..      | 39,522  | ..                | 9,262   | 1,918      |
|                       | 2019 | 48,415     | 15                      | ..      | 42,391  | ..                | 6,025   | 1,211      |
| Other Asia            | 2016 | 8          | 4                       | 44,837  | ..      | -141              | 44,986  | 1,905      |
|                       | 2017 | 5          | 6                       | 44,517  | ..      | 247               | 44,274  | 1,870      |
|                       | 2018 | 4          | 7                       | 45,959  | ..      | -481              | 46,444  | 1,957      |
|                       | 2019 | 3          | 9                       | 46,404  | ..      | -84               | 46,492  | 1,956      |
| Pakistan              | 2016 | 4,246      | 11                      | 8,368   | 208     | 0                 | 12,406  | 61         |
|                       | 2017 | 4,329      | 10                      | 10,404  | 412     | ..                | 14,321  | 69         |
|                       | 2018 | 4,368      | 10                      | 9,029   | 572     | ..                | 12,825  | 60         |
|                       | 2019 | 4,359      | 10                      | 6,677   | 474     | ..                | 10,562  | 49         |
| Philippines           | 2016 | 275        | 22                      | 10,743  | 247     | 221               | 10,551  | 102        |
|                       | 2017 | 217        | 25                      | 10,590  | 193     | -239              | 10,853  | 103        |
|                       | 2018 | 173        | 27                      | 11,702  | 146     | 10                | 11,719  | 110        |
|                       | 2019 | 106        | 31                      | 8,288   | 136     | 83                | 8,175   | 76         |
| Qatar                 | 2016 | 31,798     | 36                      | ..      | 28,051  | ..                | 3,747   | 1,412      |
|                       | 2017 | 29,199     | 38                      | ..      | 25,647  | ..                | 3,552   | 1,304      |
|                       | 2018 | 29,233     | 37                      | ..      | 25,676  | ..                | 3,557   | 1,279      |
|                       | 2019 | 31,638     | 37                      | ..      | 27,789  | ..                | 3,849   | 1,359      |
| Saudi Arabia          | 2016 | 523,010    | 64                      | ..      | 373,168 | -7,220            | 157,062 | 4,841      |
|                       | 2017 | 508,235    | 66                      | ..      | 347,464 | -3,772            | 164,543 | 4,971      |
|                       | 2018 | 514,362    | 65                      | ..      | 367,570 | *-5,412           | 152,204 | 4,516      |
|                       | 2019 | 489,066    | 68                      | ..      | 350,943 | *-6,852           | 144,975 | 4,231      |

Table 13

## Production, trade and supply of conventional crude oil

Thousand metric tons; kilograms per capita; reserves/production ratio (R/P) in years

| Country or area      | Year        | Production     |                         | Imports        | Exports        | Changes in stocks | Supply         |              |
|----------------------|-------------|----------------|-------------------------|----------------|----------------|-------------------|----------------|--------------|
|                      |             | Total          | Reserves/<br>Production |                |                |                   | Total          | Per capita   |
| Singapore            | 2016        | ..             | ..                      | 51,118         | 1,016          | -142              | 50,244         | 8,887        |
|                      | 2017        | ..             | ..                      | 56,053         | 127            | 432               | 55,494         | 9,722        |
|                      | 2018        | ..             | ..                      | 54,625         | 109            | -196              | 54,712         | 9,503        |
|                      | 2019        | ..             | ..                      | 51,866         | ..             | 142               | 51,725         | 8,911        |
| Sri Lanka            | 2016        | ..             | ..                      | 1,685          | ..             | -61               | 1,746          | 83           |
|                      | 2017        | ..             | ..                      | 1,499          | ..             | -147              | 1,646          | 78           |
|                      | 2018        | ..             | ..                      | 1,763          | ..             | 0                 | 1,763          | 83           |
|                      | 2019        | ..             | ..                      | 1,843          | ..             | ..                | 1,843          | 86           |
| Syrian Arab Republic | 2016        | 961            | 328                     | 6,118          | ..             | ..                | 7,079          | 405          |
|                      | 2017        | 961            | 328                     | 6,900          | ..             | ..                | 7,861          | 460          |
|                      | 2018        | 904            | 347                     | 6,456          | ..             | ..                | 7,360          | 434          |
|                      | 2019        | 1,413          | 227                     | 4,945          | ..             | ..                | 6,359          | 373          |
| Tajikistan           | 2016        | 25             | 80                      | ..             | ..             | ..                | 25             | 3            |
|                      | 2017        | 23             | 85                      | ..             | ..             | ..                | 23             | 3            |
|                      | 2018        | 24             | 85                      | 45             | ..             | ..                | 69             | 8            |
|                      | 2019        | 12             | 164                     | *21            | ..             | ..                | *33            | *4           |
| Thailand             | 2016        | 12,860         | 3                       | 43,862         | 1,546          | -6,288            | 61,464         | 891          |
|                      | 2017        | 11,974         | 3                       | 46,278         | 1,670          | -6,278            | 62,860         | 908          |
|                      | 2018        | 11,399         | 3                       | 48,925         | 1,531          | -4,114            | 62,908         | 906          |
|                      | 2019        | 11,245         | 3                       | 43,609         | 1,278          | -3,409            | 56,985         | 818          |
| Timor-Leste          | 2016        | 2,455          | 24                      | ..             | *2,455         | ..                | 0              | 0            |
|                      | 2017        | 2,010          | 29                      | ..             | *2,010         | ..                | 0              | 0            |
|                      | 2018        | 1,641          | 36                      | ..             | *1,641         | ..                | 0              | 0            |
|                      | 2019        | 1,388          | 43                      | ..             | *1,388         | ..                | 0              | 0            |
| Turkey               | 2016        | 2,573          | 18                      | 24,958         | ..             | 165               | 27,366         | 343          |
|                      | 2017        | 2,553          | 18                      | 25,767         | ..             | 233               | 28,087         | 346          |
|                      | 2018        | 2,851          | 16                      | 20,972         | ..             | -81               | 23,904         | 290          |
|                      | 2019        | 2,986          | 15                      | 31,075         | ..             | 301               | 33,760         | 405          |
| Turkmenistan         | 2016        | 11,080         | 7                       | ..             | 2,480          | ..                | 8,600          | 1,519        |
|                      | 2017        | 10,300         | 7                       | ..             | 1,700          | ..                | 8,600          | 1,494        |
|                      | 2018        | 9,650          | 8                       | ..             | 1,050          | ..                | 8,600          | 1,470        |
|                      | 2019        | 9,400          | 8                       | ..             | 800            | ..                | 8,600          | 1,447        |
| United Arab Emirates | 2016        | 154,189        | 68                      | ..             | 120,236        | ..                | 33,953         | 3,627        |
|                      | 2017        | 149,937        | 70                      | ..             | 118,463        | 417               | 31,057         | 3,274        |
|                      | 2018        | 149,985        | 70                      | ..             | 114,539        | 1,464             | 33,982         | 3,528        |
|                      | 2019        | 152,482        | 71                      | ..             | 120,379        | ..                | 32,103         | 3,286        |
| Uzbekistan           | 2016        | 868            | 31                      | 212            | ..             | ..                | 1,080          | 34           |
|                      | 2017        | 814            | 29                      | 263            | ..             | ..                | 1,077          | 34           |
|                      | 2018        | 746            | 28                      | 456            | ..             | ..                | 1,201          | 37           |
|                      | 2019        | 701            | 27                      | 183            | ..             | ..                | 885            | 27           |
| Viet Nam             | 2016        | 15,200         | 39                      | 435            | 6,848          | *1,087            | 7,700          | 82           |
|                      | 2017        | 13,557         | 43                      | 1,181          | 6,806          | 1,822             | 6,110          | 65           |
|                      | 2018        | 11,989         | 48                      | 5,177          | 3,961          | 2,032             | 11,173         | 117          |
|                      | 2019        | 11,043         | 52                      | 7,776          | 3,976          | ..                | 14,843         | 154          |
| Yemen                | 2016        | 950            | 413                     | ..             | 0              | ..                | 950            | 35           |
|                      | 2017        | 1,248          | 319                     | ..             | ..             | ..                | 1,248          | 45           |
|                      | 2018        | 1,491          | 272                     | ..             | ..             | ..                | 1,491          | 52           |
|                      | 2019        | 2,393          | 170                     | ..             | ..             | ..                | 2,393          | 82           |
| <b>Europe</b>        | <b>2016</b> | <b>673,315</b> | <b>22</b>               | <b>571,675</b> | <b>360,756</b> | <b>-2,080</b>     | <b>886,314</b> | <b>1,187</b> |
|                      | <b>2017</b> | <b>663,035</b> | <b>22</b>               | <b>592,181</b> | <b>361,705</b> | <b>-4,063</b>     | <b>897,573</b> | <b>1,201</b> |
|                      | <b>2018</b> | <b>670,914</b> | <b>22</b>               | <b>585,335</b> | <b>368,815</b> | <b>1,095</b>      | <b>886,338</b> | <b>1,184</b> |
|                      | <b>2019</b> | <b>671,275</b> | <b>22</b>               | <b>578,863</b> | <b>375,016</b> | <b>784</b>        | <b>874,337</b> | <b>1,167</b> |

## Production, trade and supply of conventional crude oil

Thousand metric tons; kilograms per capita; reserves/production ratio (R/P) in years

| Country or area        | Year | Production |                         | Imports | Exports | Changes in stocks | Supply |            |
|------------------------|------|------------|-------------------------|---------|---------|-------------------|--------|------------|
|                        |      | Total      | Reserves/<br>Production |         |         |                   | Total  | Per capita |
| Albania                | 2016 | 1,056      | 25                      | ..      | 888     | -16               | 184    | 64         |
|                        | 2017 | 959        | 27                      | ..      | 488     | -42               | 513    | 178        |
|                        | 2018 | 911        | 29                      | ..      | 583     | 30                | 298    | 103        |
|                        | 2019 | 1,005      | 26                      | ..      | 631     | 39                | 335    | 116        |
| Austria                | 2016 | 786        | 9                       | 7,332   | ..      | -66               | 8,184  | 936        |
|                        | 2017 | 698        | 10                      | 7,219   | ..      | -148              | 8,064  | 914        |
|                        | 2018 | 670        | 10                      | 8,333   | ..      | 34                | 8,970  | 1,009      |
|                        | 2019 | 634        | 11                      | 8,592   | ..      | 102               | 9,124  | 1,019      |
| Belarus                | 2016 | 1,645      | 16                      | 18,142  | 1,617   | -448              | 18,618 | 1,971      |
|                        | 2017 | 1,650      | 16                      | 18,130  | 1,621   | -31               | 18,190 | 1,925      |
|                        | 2018 | 1,670      | 15                      | 18,248  | 1,640   | 7                 | 18,271 | 1,933      |
|                        | 2019 | 1,690      | 15                      | 17,998  | 1,649   | 163               | 17,876 | 1,891      |
| Belgium                | 2016 | ..         | ..                      | 31,870  | ..      | -99               | 31,969 | 2,816      |
|                        | 2017 | ..         | ..                      | 34,117  | ..      | 30                | 34,087 | 2,985      |
|                        | 2018 | ..         | ..                      | 33,017  | ..      | -7                | 33,024 | 2,876      |
|                        | 2019 | ..         | ..                      | 34,513  | ..      | -3                | 34,517 | 2,991      |
| Bosnia and Herzegovina | 2016 | ..         | ..                      | 911     | ..      | 75                | 836    | 247        |
|                        | 2017 | ..         | ..                      | 856     | ..      | -22               | 878    | 262        |
|                        | 2018 | ..         | ..                      | 683     | ..      | -14               | 697    | 210        |
|                        | 2019 | ..         | ..                      | 6       | ..      | -77               | 83     | 25         |
| Bulgaria               | 2016 | 24         | 83                      | 6,195   | ..      | -40               | 6,259  | 875        |
|                        | 2017 | 24         | 84                      | 6,859   | ..      | 99                | 6,784  | 955        |
|                        | 2018 | 22         | 89                      | 5,858   | ..      | -6                | 5,886  | 835        |
|                        | 2019 | ..         | ..                      | 6,985   | ..      | 175               | 6,810  | 973        |
| Croatia                | 2016 | 684        | 9                       | 2,513   | ..      | -27               | 3,224  | 766        |
|                        | 2017 | 689        | 9                       | 2,818   | ..      | 24                | 3,483  | 833        |
|                        | 2018 | 688        | 9                       | 2,966   | ..      | 64                | 3,590  | 864        |
|                        | 2019 | 664        | 10                      | 2,006   | 122     | -46               | 2,595  | 628        |
| Czechia                | 2016 | 117        | 17                      | 5,325   | 28      | -8                | 5,422  | 511        |
|                        | 2017 | 108        | 19                      | 7,814   | 24      | 34                | 7,864  | 739        |
|                        | 2018 | 110        | 18                      | 7,439   | 22      | 4                 | 7,523  | 705        |
|                        | 2019 | 81         | 25                      | 7,738   | ..      | -28               | 7,847  | 734        |
| Denmark                | 2016 | 6,924      | 11                      | 3,835   | 3,877   | -27               | 6,909  | 1,210      |
|                        | 2017 | 6,737      | 11                      | 4,823   | 4,098   | -32               | 7,495  | 1,307      |
|                        | 2018 | 5,666      | 13                      | 4,714   | 2,809   | 25                | 7,546  | 1,312      |
|                        | 2019 | 5,017      | 15                      | 5,037   | 2,301   | 151               | 7,602  | 1,317      |
| Finland                | 2016 | ..         | ..                      | 11,249  | ..      | 59                | 11,190 | 2,035      |
|                        | 2017 | ..         | ..                      | 11,014  | ..      | -136              | 11,150 | 2,023      |
|                        | 2018 | ..         | ..                      | 11,511  | ..      | 12                | 11,499 | 2,082      |
|                        | 2019 | ..         | ..                      | 11,901  | ..      | -126              | 12,027 | 2,174      |
| France                 | 2016 | 815        | 13                      | 54,894  | 0       | -863              | 56,572 | 846        |
|                        | 2017 | 758        | 15                      | 57,053  | 67      | 400               | 57,344 | 855        |
|                        | 2018 | 774        | 14                      | 52,727  | 0       | -448              | 53,948 | 802        |
|                        | 2019 | 725        | 15                      | 48,335  | 67      | -119              | 49,112 | 729        |
| Germany                | 2016 | 2,357      | 13                      | 91,244  | 101     | -761              | 94,261 | 1,147      |
|                        | 2017 | 2,217      | 14                      | 90,738  | ..      | -249              | 93,204 | 1,128      |
|                        | 2018 | 2,070      | 15                      | 85,209  | ..      | -503              | 87,782 | 1,056      |
|                        | 2019 | 1,927      | 16                      | 85,991  | 106     | 421               | 87,391 | 1,046      |
| Greece                 | 2016 | 176        | 6                       | 23,462  | 156     | 295               | 23,187 | 2,184      |
|                        | 2017 | 142        | 7                       | 23,667  | 163     | -385              | 24,030 | 2,274      |
|                        | 2018 | 206        | 5                       | 24,330  | 202     | 7                 | 24,327 | 2,312      |
|                        | 2019 | 168        | 6                       | 22,826  | 242     | -275              | 23,027 | 2,199      |

Table 13

## Production, trade and supply of conventional crude oil

Thousand metric tons; kilograms per capita; reserves/production ratio (R/P) in years

| Country or area     | Year | Production |                         | Imports | Exports | Changes in stocks | Supply  |            |
|---------------------|------|------------|-------------------------|---------|---------|-------------------|---------|------------|
|                     |      | Total      | Reserves/<br>Production |         |         |                   | Total   | Per capita |
| Hungary             | 2016 | 712        | 4                       | 6,012   | 75      | 12                | 6,637   | 681        |
|                     | 2017 | 714        | 4                       | 5,984   | 161     | 12                | 6,525   | 671        |
|                     | 2018 | 808        | 4                       | 6,677   | 394     | 51                | 7,040   | 725        |
|                     | 2019 | 930        | 4                       | 6,108   | 191     | 42                | 6,805   | 703        |
| Ireland             | 2016 | ..         | ..                      | 3,197   | ..      | 3                 | 3,194   | 680        |
|                     | 2017 | ..         | ..                      | 2,918   | ..      | -265              | 3,183   | 670        |
|                     | 2018 | ..         | ..                      | 2,986   | ..      | -38               | 3,024   | 628        |
|                     | 2019 | ..         | ..                      | 2,553   | ..      | 22                | 2,531   | 518        |
| Italy               | 2016 | 3,746      | 22                      | 60,878  | 624     | -586              | 64,586  | 1,064      |
|                     | 2017 | 4,138      | 20                      | 66,348  | 697     | -319              | 70,108  | 1,155      |
|                     | 2018 | 4,684      | 17                      | 62,053  | 502     | -757              | 66,992  | 1,104      |
|                     | 2019 | 4,279      | 19                      | 63,140  | ..      | 146               | 67,272  | 1,110      |
| Lithuania           | 2016 | 64         | 16                      | 9,321   | 52      | 9                 | 9,324   | 3,227      |
|                     | 2017 | 56         | 18                      | 9,817   | 42      | 10                | 9,821   | 3,451      |
|                     | 2018 | 46         | 22                      | 9,653   | 45      | -35               | 9,689   | 3,459      |
|                     | 2019 | 40         | 25                      | 9,630   | 38      | 116               | 9,516   | 3,448      |
| Netherlands         | 2016 | 957        | 24                      | 54,318  | 326     | 557               | 54,392  | 3,203      |
|                     | 2017 | 952        | 25                      | 52,851  | 440     | -162              | 53,525  | 3,145      |
|                     | 2018 | 901        | 27                      | 54,305  | 434     | -169              | 54,942  | 3,221      |
|                     | 2019 | 747        | 34                      | 57,636  | 393     | 1,061             | 56,929  | 3,330      |
| Norway              | 2016 | 79,836     | 11                      | 493     | 69,254  | 731               | 10,344  | 1,970      |
|                     | 2017 | 78,413     | 11                      | 1,797   | 67,076  | -773              | 13,907  | 2,626      |
|                     | 2018 | 73,721     | 12                      | 3,283   | 61,535  | 393               | 15,076  | 2,824      |
|                     | 2019 | 70,008     | 13                      | 3,187   | 60,860  | -616              | 12,951  | 2,408      |
| Poland              | 2016 | 1,001      | 15                      | 24,573  | 224     | -426              | 25,776  | 679        |
|                     | 2017 | 996        | 15                      | 24,648  | 220     | 280               | 25,144  | 663        |
|                     | 2018 | 1,010      | 15                      | 26,847  | 296     | 554               | 27,007  | 712        |
|                     | 2019 | 973        | 15                      | 26,622  | 243     | 76                | 27,276  | 720        |
| Portugal            | 2016 | ..         | ..                      | 13,731  | ..      | -177              | 13,908  | 1,347      |
|                     | 2017 | ..         | ..                      | 14,191  | ..      | 54                | 14,137  | 1,374      |
|                     | 2018 | ..         | ..                      | 12,651  | ..      | 111               | 12,539  | 1,223      |
|                     | 2019 | ..         | ..                      | 11,165  | ..      | 48                | 11,118  | 1,087      |
| Republic of Moldova | 2016 | 6          | ..                      | 0       | ..      | -1                | 7       | 2          |
|                     | 2017 | 5          | ..                      | 0       | ..      | 1                 | 4       | 1          |
|                     | 2018 | 5          | ..                      | 0       | ..      | 0                 | 5       | 1          |
|                     | 2019 | 5          | ..                      | ..      | ..      | ..                | 5       | 1          |
| Romania             | 2016 | 3,686      | 21                      | 7,468   | 14      | -165              | 11,305  | 571        |
|                     | 2017 | 3,538      | 22                      | 7,754   | 37      | -188              | 11,444  | 582        |
|                     | 2018 | 3,486      | 22                      | 8,265   | 0       | 87                | 11,663  | 598        |
|                     | 2019 | 3,440      | 22                      | 8,665   | 5       | 122               | 11,977  | 618        |
| Russian Federation  | 2016 | 521,715    | 26                      | 0       | 252,844 | 485               | 268,386 | 1,847      |
|                     | 2017 | 514,536    | 26                      | 0       | 252,169 | -1,605            | 263,972 | 1,814      |
|                     | 2018 | 523,321    | 25                      | 0       | 259,830 | 2,327             | 261,165 | 1,792      |
|                     | 2019 | 527,586    | 25                      | ..      | 267,337 | -1,569            | 261,818 | 1,795      |
| Serbia              | 2016 | 930        | 7                       | 2,190   | ..      | 14                | 3,106   | 439        |
|                     | 2017 | 889        | 8                       | 2,447   | ..      | 3                 | 3,333   | 473        |
|                     | 2018 | 877        | 8                       | 2,686   | ..      | 5                 | 3,558   | 508        |
|                     | 2019 | 850        | 8                       | 2,346   | ..      | 58                | 3,138   | 450        |
| Slovakia            | 2016 | 8          | 100                     | 5,792   | 9       | 53                | 5,738   | 1,054      |
|                     | 2017 | 6          | 125                     | 5,587   | 56      | -20               | 5,557   | 1,020      |
|                     | 2018 | 5          | 143                     | 5,436   | 5       | 8                 | 5,428   | 995        |
|                     | 2019 | 4          | 167                     | 5,143   | 4       | 33                | 5,110   | 936        |

## Production, trade and supply of conventional crude oil

Thousand metric tons; kilograms per capita; reserves/production ratio (R/P) in years

| Country or area  | Year        | Production    |                         | Imports       | Exports       | Changes in stocks | Supply        |            |
|------------------|-------------|---------------|-------------------------|---------------|---------------|-------------------|---------------|------------|
|                  |             | Total         | Reserves/<br>Production |               |               |                   | Total         | Per capita |
| Spain            | 2016        | 141           | 135                     | 64,171        | ..            | -676              | 64,988        | 1,394      |
|                  | 2017        | 120           | 158                     | 65,958        | ..            | 40                | 66,038        | 1,416      |
|                  | 2018        | 87            | 218                     | 67,586        | ..            | -220              | 67,893        | 1,454      |
|                  | 2019        | 40            | 475                     | 66,303        | ..            | 695               | 65,648        | 1,405      |
| Sweden           | 2016        | ..            | ..                      | 19,689        | ..            | -8                | 19,697        | 2,003      |
|                  | 2017        | ..            | ..                      | 19,061        | ..            | -384              | 19,445        | 1,963      |
|                  | 2018        | ..            | ..                      | 19,969        | ..            | -140              | 20,109        | 2,017      |
|                  | 2019        | ..            | ..                      | 16,351        | ..            | -4                | 16,355        | 1,630      |
| Switzerland      | 2016        | ..            | ..                      | 2,930         | 16            | -16               | 2,930         | 350        |
|                  | 2017        | ..            | ..                      | 2,847         | ..            | -3                | 2,850         | 337        |
|                  | 2018        | ..            | ..                      | 3,018         | ..            | 4                 | 3,014         | 354        |
|                  | 2019        | ..            | ..                      | 2,732         | ..            | 9                 | 2,723         | 317        |
| Ukraine          | 2016        | 1,623         | 24                      | 502           | ..            | 5                 | 2,120         | 47         |
|                  | 2017        | 1,505         | 25                      | 905           | 83            | 41                | 2,286         | 51         |
|                  | 2018        | 1,624         | 24                      | 723           | ..            | -6                | 2,353         | 53         |
|                  | 2019        | 1,719         | 22                      | 790           | ..            | -16               | 2,525         | 57         |
| United Kingdom   | 2016        | 44,306        | 8                       | 39,438        | 30,651        | 32                | 53,061        | 800        |
|                  | 2017        | 43,185        | 8                       | 43,960        | 34,264        | -326              | 53,207        | 797        |
|                  | 2018        | 47,550        | 7                       | 44,163        | 40,519        | -284              | 51,479        | 767        |
|                  | 2019        | 48,743        | 7                       | 44,564        | 40,827        | 184               | 52,295        | 774        |
| <b>Oceania</b>   | <b>2016</b> | <b>17,765</b> | <b>25</b>               | <b>21,977</b> | <b>13,338</b> | <b>-51</b>        | <b>26,455</b> | <b>654</b> |
|                  | <b>2017</b> | <b>15,430</b> | <b>28</b>               | <b>22,586</b> | <b>12,075</b> | <b>115</b>        | <b>25,826</b> | <b>630</b> |
|                  | <b>2018</b> | <b>14,440</b> | <b>30</b>               | <b>23,944</b> | <b>11,835</b> | <b>-112</b>       | <b>26,661</b> | <b>641</b> |
|                  | <b>2019</b> | <b>16,309</b> | <b>27</b>               | <b>23,700</b> | <b>13,187</b> | <b>24</b>         | <b>26,797</b> | <b>636</b> |
| Australia        | 2016        | 15,024        | 27                      | 15,323        | 10,669        | -141              | 19,819        | 817        |
|                  | 2017        | 12,993        | 30                      | 15,959        | 9,698         | -67               | 19,321        | 786        |
|                  | 2018        | 12,392        | 32                      | 17,674        | 9,792         | -119              | 20,393        | 819        |
|                  | 2019        | 14,175        | 28                      | 17,184        | 11,075        | 143               | 20,141        | 799        |
| New Zealand      | 2016        | 1,575         | 10                      | 5,286         | 1,503         | 122               | 5,236         | 1,124      |
|                  | 2017        | 1,399         | 11                      | 5,215         | 1,339         | 101               | 5,174         | 1,100      |
|                  | 2018        | 1,075         | 14                      | 4,948         | 1,070         | -42               | 4,995         | 1,053      |
|                  | 2019        | 1,112         | 13                      | 5,127         | 1,091         | -170              | 5,319         | 1,112      |
| Papua New Guinea | 2016        | 1,166         | 21                      | 1,368         | 1,166         | -32               | 1,400         | 169        |
|                  | 2017        | 1,038         | 23                      | 1,412         | 1,038         | 81                | 1,331         | 158        |
|                  | 2018        | 973           | 25                      | 1,322         | 973           | 49                | 1,273         | 148        |
|                  | 2019        | *1,022        | 23                      | *1,388        | *1,022        | *52               | *1,337        | *152       |





## Production of additives and other hydrocarbons

Thousand metric tons

### Table Notes

**Additives** production refers to any quantities of additives (as per the definition in page x) which come from non-energy sources, such as Tetraethyllead (TEL) or detergents.

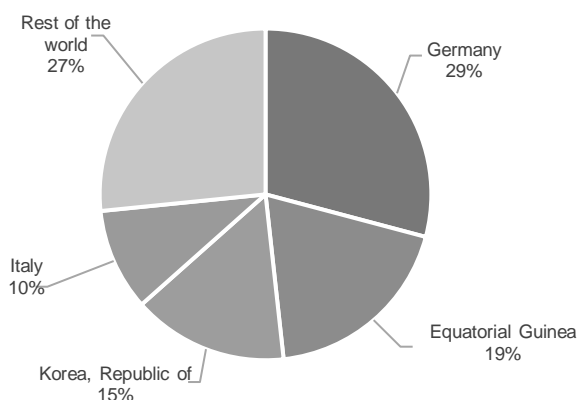
**Additives** from other sources refers to quantities of additives (as per the definition in page x) already accounted for in energy statistics, such as oxygenates from a biomass or hydrocarbon origin.

**Other hydrocarbons** production refers to quantities of other hydrocarbons which are oils obtained by non-conventional production techniques and are primary for the purposes of energy statistics.

**Other hydrocarbons** from other sources refers to the oils extracted from extra heavy oils, oil sands, coal and oil shale whose production has been already accounted for in energy statistics, together with the output of GTL plants.

Please refer to the Definitions Section on pages ix to xv for the appropriate product description/classification, and xvi to xvii for the descriptions of relevant flows.

**Figure 41: Major additives producing countries, 2019**



**Figure 42: Major other hydrocarbons producing countries, 2019**

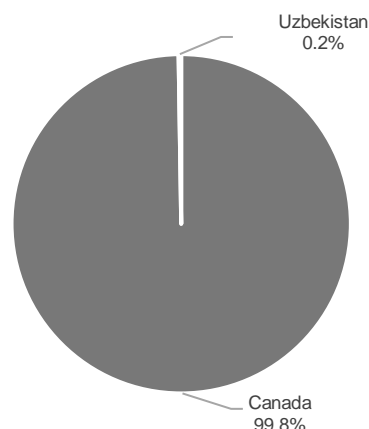


Table 14

## Production of additives and other hydrocarbons

Thousand metric tons

| Country or area       | Year        | Additives    |                    | Other hydrocarbons |                    |
|-----------------------|-------------|--------------|--------------------|--------------------|--------------------|
|                       |             | Production   | From other sources | Production         | From other sources |
| <b>World</b>          | <b>2016</b> | <b>4,415</b> | <b>3,059</b>       | <b>46,994</b>      | <b>29,899</b>      |
|                       | <b>2017</b> | <b>4,729</b> | <b>2,787</b>       | <b>57,114</b>      | <b>29,800</b>      |
|                       | <b>2018</b> | <b>5,073</b> | <b>2,884</b>       | <b>55,944</b>      | <b>30,539</b>      |
|                       | <b>2019</b> | <b>4,878</b> | <b>3,329</b>       | <b>58,598</b>      | <b>35,375</b>      |
| <b>Africa</b>         | <b>2016</b> | <b>1,069</b> | ..                 | ..                 | <b>4,455</b>       |
|                       | <b>2017</b> | <b>1,083</b> | ..                 | ..                 | <b>4,680</b>       |
|                       | <b>2018</b> | <b>1,024</b> | ..                 | ..                 | <b>5,035</b>       |
|                       | <b>2019</b> | <b>933</b>   | ..                 | ..                 | <b>5,041</b>       |
| Equatorial Guinea     | 2016        | 1,069        | ..                 | ..                 | ..                 |
|                       | 2017        | 1,083        | ..                 | ..                 | ..                 |
|                       | 2018        | 1,024        | ..                 | ..                 | ..                 |
|                       | 2019        | 933          | ..                 | ..                 | ..                 |
| Nigeria               | 2016        | ..           | ..                 | ..                 | 201                |
|                       | 2017        | ..           | ..                 | ..                 | 200                |
|                       | 2018        | ..           | ..                 | ..                 | 200                |
|                       | 2019        | ..           | ..                 | ..                 | 200                |
| South Africa          | 2016        | ..           | ..                 | ..                 | 4,254              |
|                       | 2017        | ..           | ..                 | ..                 | 4,480              |
|                       | 2018        | ..           | ..                 | ..                 | 4,835              |
|                       | 2019        | ..           | ..                 | ..                 | 4,840              |
| <b>America, North</b> | <b>2016</b> | <b>274</b>   | <b>2,775</b>       | <b>46,863</b>      | <b>7,230</b>       |
|                       | <b>2017</b> | <b>197</b>   | <b>2,554</b>       | <b>56,975</b>      | <b>7,225</b>       |
|                       | <b>2018</b> | <b>240</b>   | <b>2,673</b>       | <b>55,799</b>      | <b>7,636</b>       |
|                       | <b>2019</b> | <b>184</b>   | <b>3,139</b>       | <b>58,453</b>      | <b>7,641</b>       |
| Canada                | 2016        | ..           | ..                 | 46,863             | 3,129              |
|                       | 2017        | ..           | 4                  | 56,975             | 3,037              |
|                       | 2018        | ..           | 86                 | 55,799             | 3,452              |
|                       | 2019        | ..           | 1                  | 58,453             | 3,627              |
| Mexico                | 2016        | 274          | ..                 | ..                 | 37                 |
|                       | 2017        | 197          | ..                 | ..                 | 33                 |
|                       | 2018        | 240          | ..                 | ..                 | 36                 |
|                       | 2019        | 184          | ..                 | ..                 | 31                 |
| United States         | 2016        | ..           | 2,775              | ..                 | 4,064              |
|                       | 2017        | ..           | 2,550              | ..                 | 4,155              |
|                       | 2018        | ..           | 2,587              | ..                 | 4,148              |
|                       | 2019        | ..           | 3,138              | ..                 | 3,983              |
| <b>America, South</b> | <b>2016</b> | ..           | ..                 | ..                 | <b>451</b>         |
|                       | <b>2017</b> | ..           | ..                 | ..                 | <b>518</b>         |
|                       | <b>2018</b> | ..           | ..                 | ..                 | <b>283</b>         |
|                       | <b>2019</b> | ..           | ..                 | ..                 | <b>475</b>         |
| Brazil                | 2016        | ..           | ..                 | ..                 | 451                |
|                       | 2017        | ..           | ..                 | ..                 | 472                |
|                       | 2018        | ..           | ..                 | ..                 | 283                |
|                       | 2019        | ..           | ..                 | ..                 | 475                |
| Chile                 | 2016        | ..           | ..                 | ..                 | ..                 |
|                       | 2017        | ..           | ..                 | ..                 | 46                 |
|                       | 2018        | ..           | ..                 | ..                 | ..                 |
|                       | 2019        | ..           | ..                 | ..                 | ..                 |
| <b>Asia</b>           | <b>2016</b> | <b>674</b>   | ..                 | <b>131</b>         | <b>10,288</b>      |
|                       | <b>2017</b> | <b>879</b>   | ..                 | <b>139</b>         | <b>12,479</b>      |
|                       | <b>2018</b> | <b>960</b>   | ..                 | <b>145</b>         | <b>12,142</b>      |
|                       | <b>2019</b> | <b>1,133</b> | ..                 | <b>145</b>         | <b>14,626</b>      |

## Production of additives and other hydrocarbons

Thousand metric tons

| Country or area    | Year        | Additives    |                    | Other hydrocarbons |                    |
|--------------------|-------------|--------------|--------------------|--------------------|--------------------|
|                    |             | Production   | From other sources | Production         | From other sources |
| China              | 2016        | ..           | ..                 | ..                 | 3,978              |
|                    | 2017        | ..           | ..                 | ..                 | 7,044              |
|                    | 2018        | ..           | ..                 | ..                 | 5,815              |
|                    | 2019        | ..           | ..                 | ..                 | 7,481              |
| Israel             | 2016        | ..           | ..                 | ..                 | 99                 |
|                    | 2017        | ..           | ..                 | ..                 | 114                |
|                    | 2018        | ..           | ..                 | ..                 | 98                 |
|                    | 2019        | ..           | ..                 | ..                 | 124                |
| Korea, Republic of | 2016        | 674          | ..                 | ..                 | ..                 |
|                    | 2017        | 688          | ..                 | ..                 | ..                 |
|                    | 2018        | 748          | ..                 | ..                 | ..                 |
|                    | 2019        | 741          | ..                 | ..                 | ..                 |
| Malaysia           | 2016        | ..           | ..                 | ..                 | 569                |
|                    | 2017        | ..           | ..                 | ..                 | 509                |
|                    | 2018        | ..           | ..                 | ..                 | *531               |
|                    | 2019        | ..           | ..                 | ..                 | 549                |
| Other Asia         | 2016        | ..           | ..                 | ..                 | ..                 |
|                    | 2017        | 191          | ..                 | ..                 | ..                 |
|                    | 2018        | 212          | ..                 | ..                 | ..                 |
|                    | 2019        | 392          | ..                 | ..                 | ..                 |
| Qatar              | 2016        | ..           | ..                 | ..                 | 5,180              |
|                    | 2017        | ..           | ..                 | ..                 | 4,319              |
|                    | 2018        | ..           | ..                 | ..                 | 5,180              |
|                    | 2019        | ..           | ..                 | ..                 | 5,180              |
| Turkey             | 2016        | ..           | ..                 | ..                 | 462                |
|                    | 2017        | ..           | ..                 | ..                 | 492                |
|                    | 2018        | ..           | ..                 | ..                 | 517                |
|                    | 2019        | ..           | ..                 | ..                 | 927                |
| Turkmenistan       | 2016        | ..           | ..                 | ..                 | ..                 |
|                    | 2017        | ..           | ..                 | ..                 | ..                 |
|                    | 2018        | ..           | ..                 | ..                 | ..                 |
|                    | 2019        | ..           | ..                 | ..                 | 365                |
| Uzbekistan         | 2016        | ..           | ..                 | 131                | ..                 |
|                    | 2017        | ..           | ..                 | 139                | ..                 |
|                    | 2018        | ..           | ..                 | 145                | ..                 |
|                    | 2019        | ..           | ..                 | 145                | ..                 |
| <b>Europe</b>      | <b>2016</b> | <b>2,398</b> | <b>284</b>         | <b>0</b>           | <b>7,343</b>       |
|                    | <b>2017</b> | <b>2,570</b> | <b>233</b>         | <b>0</b>           | <b>4,897</b>       |
|                    | <b>2018</b> | <b>2,849</b> | <b>210</b>         | <b>..</b>          | <b>5,442</b>       |
|                    | <b>2019</b> | <b>2,628</b> | <b>190</b>         | <b>..</b>          | <b>7,592</b>       |
| Belgium            | 2016        | ..           | ..                 | ..                 | ..                 |
|                    | 2017        | ..           | ..                 | ..                 | ..                 |
|                    | 2018        | ..           | ..                 | ..                 | 34                 |
|                    | 2019        | ..           | ..                 | ..                 | 53                 |
| Bulgaria           | 2016        | ..           | ..                 | ..                 | 169                |
|                    | 2017        | ..           | ..                 | ..                 | 188                |
|                    | 2018        | ..           | 9                  | ..                 | 152                |
|                    | 2019        | ..           | 4                  | ..                 | 183                |
| Croatia            | 2016        | ..           | ..                 | ..                 | 71                 |
|                    | 2017        | ..           | ..                 | ..                 | 67                 |
|                    | 2018        | ..           | ..                 | ..                 | 75                 |
|                    | 2019        | ..           | ..                 | ..                 | 54                 |

Table 14

## Production of additives and other hydrocarbons

Thousand metric tons

| Country or area | Year | Additives  |                    | Other hydrocarbons |                    |
|-----------------|------|------------|--------------------|--------------------|--------------------|
|                 |      | Production | From other sources | Production         | From other sources |
| Czechia         | 2016 | 70         | 5                  | ..                 | ..                 |
|                 | 2017 | 105        | 18                 | ..                 | ..                 |
|                 | 2018 | 89         | 23                 | ..                 | ..                 |
|                 | 2019 | 82         | 31                 | ..                 | ..                 |
| Estonia         | 2016 | ..         | ..                 | ..                 | 724                |
|                 | 2017 | ..         | ..                 | ..                 | 1,016              |
|                 | 2018 | ..         | ..                 | ..                 | 1,111              |
|                 | 2019 | ..         | ..                 | ..                 | 1,159              |
| Finland         | 2016 | ..         | ..                 | ..                 | 229                |
|                 | 2017 | ..         | ..                 | ..                 | 208                |
|                 | 2018 | ..         | ..                 | ..                 | 183                |
|                 | 2019 | ..         | ..                 | ..                 | 240                |
| France          | 2016 | 177        | ..                 | ..                 | ..                 |
|                 | 2017 | 206        | ..                 | ..                 | ..                 |
|                 | 2018 | 139        | ..                 | ..                 | ..                 |
|                 | 2019 | 240        | ..                 | ..                 | ..                 |
| Germany         | 2016 | 1,344      | ..                 | ..                 | ..                 |
|                 | 2017 | 1,444      | ..                 | ..                 | ..                 |
|                 | 2018 | 1,570      | ..                 | ..                 | ..                 |
|                 | 2019 | 1,421      | ..                 | ..                 | ..                 |
| Hungary         | 2016 | 14         | 0                  | 0                  | 33                 |
|                 | 2017 | 43         | ..                 | ..                 | 33                 |
|                 | 2018 | 53         | ..                 | ..                 | 40                 |
|                 | 2019 | 46         | ..                 | ..                 | 39                 |
| Ireland         | 2016 | ..         | ..                 | ..                 | 48                 |
|                 | 2017 | ..         | ..                 | ..                 | 40                 |
|                 | 2018 | ..         | ..                 | ..                 | 36                 |
|                 | 2019 | ..         | ..                 | ..                 | 39                 |
| Italy           | 2016 | 320        | ..                 | ..                 | ..                 |
|                 | 2017 | 360        | ..                 | ..                 | ..                 |
|                 | 2018 | 460        | ..                 | ..                 | ..                 |
|                 | 2019 | 486        | ..                 | ..                 | ..                 |
| Netherlands     | 2016 | 321        | ..                 | ..                 | ..                 |
|                 | 2017 | 278        | ..                 | ..                 | ..                 |
|                 | 2018 | 375        | ..                 | ..                 | ..                 |
|                 | 2019 | 233        | ..                 | ..                 | ..                 |
| Norway          | 2016 | 85         | ..                 | ..                 | ..                 |
|                 | 2017 | 68         | ..                 | ..                 | ..                 |
|                 | 2018 | 70         | ..                 | ..                 | ..                 |
|                 | 2019 | 36         | ..                 | ..                 | ..                 |
| Poland          | 2016 | 11         | ..                 | ..                 | 589                |
|                 | 2017 | 1          | ..                 | ..                 | 584                |
|                 | 2018 | 7          | ..                 | ..                 | 636                |
|                 | 2019 | 22         | ..                 | ..                 | 592                |
| Portugal        | 2016 | ..         | 7                  | ..                 | 64                 |
|                 | 2017 | ..         | ..                 | ..                 | 71                 |
|                 | 2018 | ..         | ..                 | ..                 | 65                 |
|                 | 2019 | ..         | ..                 | ..                 | 66                 |
| Romania         | 2016 | 22         | ..                 | ..                 | 89                 |
|                 | 2017 | 22         | ..                 | ..                 | 74                 |
|                 | 2018 | 31         | ..                 | ..                 | 66                 |
|                 | 2019 | 35         | ..                 | ..                 | 77                 |

## Production of additives and other hydrocarbons

Thousand metric tons

| Country or area    | Year        | Additives  |                    | Other hydrocarbons |                    |
|--------------------|-------------|------------|--------------------|--------------------|--------------------|
|                    |             | Production | From other sources | Production         | From other sources |
| Russian Federation | 2016        | ..         | ..                 | ..                 | *5,160             |
|                    | 2017        | ..         | ..                 | ..                 | 2,448              |
|                    | 2018        | ..         | ..                 | ..                 | 2,886              |
|                    | 2019        | ..         | ..                 | ..                 | *4,749             |
| Serbia             | 2016        | 12         | ..                 | ..                 | 26                 |
|                    | 2017        | 13         | ..                 | ..                 | 23                 |
|                    | 2018        | 16         | ..                 | ..                 | 28                 |
|                    | 2019        | 12         | ..                 | ..                 | 28                 |
| Slovakia           | 2016        | ..         | 215                | ..                 | 141                |
|                    | 2017        | ..         | 215                | ..                 | 146                |
|                    | 2018        | ..         | 178                | ..                 | 131                |
|                    | 2019        | ..         | 155                | ..                 | 129                |
| Sweden             | 2016        | ..         | ..                 | ..                 | ..                 |
|                    | 2017        | ..         | ..                 | ..                 | ..                 |
|                    | 2018        | ..         | ..                 | ..                 | ..                 |
|                    | 2019        | ..         | ..                 | ..                 | 184                |
| Ukraine            | 2016        | 22         | 57                 | ..                 | ..                 |
|                    | 2017        | 30         | ..                 | ..                 | ..                 |
|                    | 2018        | 39         | ..                 | ..                 | ..                 |
|                    | 2019        | 15         | ..                 | ..                 | ..                 |
| <b>Oceania</b>     | <b>2016</b> | ..         | ..                 | ..                 | <b>132</b>         |
|                    | <b>2017</b> | ..         | ..                 | ..                 | <b>0</b>           |
|                    | <b>2018</b> | ..         | ..                 | ..                 | <b>0</b>           |
|                    | <b>2019</b> | ..         | ..                 | ..                 | <b>0</b>           |
| Australia          | 2016        | ..         | ..                 | ..                 | 132                |
|                    | 2017        | ..         | ..                 | ..                 | 0                  |
|                    | 2018        | ..         | ..                 | ..                 | 0                  |
|                    | 2019        | ..         | ..                 | ..                 | 0                  |

Table 15

**International trade of conventional crude oil  
(Principal importers/exporters)**

Thousand metric tons

**2018**

| Importers          | Exporters |         |        |          |        |            |        |       |
|--------------------|-----------|---------|--------|----------|--------|------------|--------|-------|
|                    | World     | Angola  | Brazil | Canada   | Iraq   | Kazakhstan | Kuwait | Libya |
| Australia          | 17,674    | 39      | ..     | ..       | ..     | ..         | ..     | 624   |
| Bahrain            | 10,951    | ..      | ..     | ..       | ..     | ..         | ..     | ..    |
| Belarus            | 18,248    | ..      | ..     | ..       | ..     | ..         | ..     | ..    |
| Belgium            | 33,017    | 107     | ..     | 167      | 1,296  | ..         | 4      | 80    |
| Brazil             | 9,530     | ..      | ..     | ..       | 771    | ..         | ..     | 178   |
| Canada             | 39,311    | ..      | ..     | ..       | ..     | ..         | ..     | 125   |
| Chile              | 8,553     | ..      | 4,375  | 90       | ..     | ..         | ..     | ..    |
| China              | 461,886   | *46,756 | 31,622 | 477      | 45,044 | 2,287      | 23,212 | 8,570 |
| Finland            | 11,511    | ..      | ..     | ..       | ..     | ..         | ..     | ..    |
| France             | 52,727    | 1,124   | 69     | 95       | 1,189  | 8,142      | 256    | 4,644 |
| Germany            | 85,209    | 85      | ..     | 237      | 3,031  | 6,821      | 353    | 7,205 |
| Greece             | 24,330    | ..      | ..     | ..       | 10,904 | 3,071      | ..     | 1,762 |
| India              | 226,500   | 6,473   | 3,124  | 133      | 47,838 | 804        | 11,381 | 273   |
| Indonesia          | 15,404    | 1,247   | ..     | ..       | ..     | ..         | ..     | 328   |
| Italy              | 62,053    | 956     | ..     | 775      | 9,078  | 2,887      | 1,041  | 6,328 |
| Japan              | 149,208   | 331     | ..     | ..       | 2,219  | 1,293      | 11,514 | ..    |
| Korea, Republic of | 150,281   | ..      | ..     | 162      | 18,742 | 7,522      | 21,724 | 533   |
| Netherlands        | 54,305    | ..      | 222    | 51       | 6,423  | ..         | 3,545  | 941   |
| Philippines        | 11,702    | ..      | ..     | ..       | ..     | 364        | *3,450 | 1,039 |
| Poland             | 26,847    | ..      | ..     | ..       | 427    | 695        | ..     | ..    |
| Portugal           | 12,651    | 2,069   | 694    | 183      | 573    | 1,124      | 168    | ..    |
| Singapore          | 54,625    | ..      | ..     | ..       | 1,305  | ..         | 6,956  | ..    |
| South Africa       | 24,256    | 2,352   | ..     | ..       | ..     | ..         | ..     | ..    |
| Spain              | 67,586    | 2,693   | 4,631  | 1,137    | 4,678  | 4,476      | ..     | 7,112 |
| Sweden             | 19,969    | ..      | ..     | ..       | 272    | ..         | ..     | 892   |
| Thailand           | 48,925    | 1,834   | ..     | ..       | 108    | ..         | 561    | 791   |
| Turkey             | 20,972    | ..      | ..     | ..       | 6,612  | 1,214      | 1,405  | 233   |
| United Kingdom     | 44,163    | 80      | ..     | 931      | ..     | ..         | ..     | 1,118 |
| United States      | 383,263   | 4,459   | 6,296  | *152,901 | 25,561 | 1,095      | 3,843  | 2,732 |

**International trade of conventional crude oil  
(Principal importers/exporters)**

Thousand metric tons

**2018**

| Exporters |         |        |         |                    |              |                      |                |               |                           |
|-----------|---------|--------|---------|--------------------|--------------|----------------------|----------------|---------------|---------------------------|
| Mexico    | Nigeria | Norway | Oman    | Russian Federation | Saudi Arabia | United Arab Emirates | United Kingdom | United States | Venezuela (Bolivar. Rep.) |
| ..        | 1,378   | ..     | ..      | 213                | ..           | 3,049                | ..             | 32            | ..                        |
| ..        | ..      | ..     | ..      | ..                 | 10,861       | ..                   | ..             | ..            | ..                        |
| ..        | ..      | ..     | ..      | ..                 | ..           | ..                   | ..             | ..            | ..                        |
| 295       | 3,931   | 2,283  | ..      | 12,856             | 5,696        | ..                   | 3,689          | 1,376         | 434                       |
| ..        | 2,198   | ..     | ..      | ..                 | 3,206        | ..                   | ..             | 1,218         | ..                        |
| 174       | 679     | 1,057  | ..      | 220                | 5,804        | ..                   | 519            | 27,896        | ..                        |
| ..        | ..      | ..     | ..      | ..                 | ..           | ..                   | 276            | 419           | ..                        |
| 642       | 465     | 1,204  | *32,833 | ..                 | 56,734       | 12,199               | 6,795          | 11,388        | 16,635                    |
| ..        | ..      | 1,006  | ..      | 10,273             | ..           | ..                   | ..             | ..            | ..                        |
| ..        | 5,806   | 3,314  | ..      | 7,542              | 7,950        | ..                   | 774            | 1,602         | ..                        |
| 191       | 5,468   | 10,044 | ..      | 30,969             | 1,425        | ..                   | 6,685          | 3,886         | 666                       |
| ..        | ..      | ..     | ..      | 2,794              | 1,797        | ..                   | 261            | 246           | ..                        |
| 9,315     | 16,827  | ..     | 3,423   | ..                 | 39,489       | 16,052               | 100            | 7,449         | 17,453                    |
| ..        | 4,509   | 89     | ..      | ..                 | 4,825        | ..                   | ..             | ..            | ..                        |
| ..        | 2,274   | 1,219  | ..      | 5,679              | 7,236        | ..                   | 168            | 1,548         | 138                       |
| 1,257     | ..      | ..     | 2,808   | 6,657              | 57,880       | 38,385               | ..             | 3,571         | ..                        |
| 4,339     | 1,217   | 692    | 200     | 5,337              | 42,991       | 9,773                | 4,254          | 8,269         | ..                        |
| 819       | 3,202   | 5,988  | ..      | 21,787             | 1,327        | ..                   | 6,136          | 313           | ..                        |
| ..        | 51      | ..     | ..      | 169                | *3,772       | 2,842                | ..             | ..            | ..                        |
| ..        | 399     | 827    | ..      | 20,742             | 2,115        | 120                  | 661            | 687           | ..                        |
| 142       | ..      | 170    | ..      | 2,472              | 1,229        | ..                   | ..             | 155           | ..                        |
| ..        | 127     | ..     | 130     | 1,743              | 10,684       | 10,650               | ..             | 2,106         | ..                        |
| ..        | 6,745   | ..     | ..      | ..                 | 8,780        | 794                  | ..             | 279           | ..                        |
| 9,381     | 10,264  | 1,559  | ..      | 1,018              | 7,492        | ..                   | 650            | 966           | 629                       |
| ..        | 3,812   | 5,474  | ..      | 6,548              | 99           | ..                   | 357            | 45            | 875                       |
| ..        | 809     | 127    | 127     | 2,882              | ..           | 17,433               | ..             | 1,886         | ..                        |
| ..        | 490     | ..     | ..      | 1,898              | 1,757        | ..                   | ..             | ..            | ..                        |
| ..        | 5,707   | 17,134 | ..      | 2,256              | 1,136        | ..                   | ..             | 7,584         | 102                       |
| 32,807    | 8,656   | 2,636  | ..      | 3,609              | 42,919       | ..                   | 2,807          | ..            | 24,937                    |

**Table 15**

**International trade of conventional crude oil  
(Principal importers/exporters)**

Thousand metric tons

**2019**

| Importers          | Exporters |        |        |         |        |            |        |       |
|--------------------|-----------|--------|--------|---------|--------|------------|--------|-------|
|                    | World     | Angola | Brazil | Canada  | Iraq   | Kazakhstan | Kuwait | Libya |
| Australia          | 17,184    | ..     | ..     | ..      | ..     | ..         | ..     | 914   |
| Bahrain            | 11,119    | ..     | ..     | ..      | ..     | ..         | ..     | ..    |
| Belarus            | 17,998    | ..     | ..     | ..      | ..     | ..         | ..     | ..    |
| Belgium            | 34,513    | ..     | 93     | 613     | 2,134  | 1,312      | 329    | 7     |
| Brazil             | 8,796     | ..     | ..     | ..      | 553    | ..         | ..     | 187   |
| Canada             | 41,456    | ..     | ..     | ..      | ..     | ..         | ..     | 138   |
| Chile              | 9,305     | 384    | 3,352  | ..      | ..     | ..         | ..     | ..    |
| China              | 505,676   | 47,369 | 40,157 | 825     | 51,799 | 2,743      | 22,688 | 9,404 |
| Finland            | 11,901    | ..     | ..     | ..      | ..     | ..         | ..     | ..    |
| France             | 48,335    | 900    | 400    | ..      | 2,741  | 6,761      | 145    | 2,554 |
| Germany            | 85,991    | ..     | ..     | 114     | 2,696  | 6,324      | 607    | 8,332 |
| Greece             | 22,826    | ..     | ..     | ..      | 11,284 | 3,410      | ..     | 1,228 |
| India              | 226,955   | 5,779  | 2,206  | ..      | 49,203 | 2,894      | 10,626 | 133   |
| Indonesia          | 10,122    | 130    | ..     | ..      | ..     | ..         | ..     | ..    |
| Italy              | 63,140    | 1,243  | ..     | 702     | 12,600 | 2,887      | ..     | 7,785 |
| Japan              | 145,382   | 122    | ..     | 40      | 1,699  | 1,293      | 13,196 | 44    |
| Korea, Republic of | 144,555   | ..     | ..     | 187     | 15,939 | 7,522      | 20,242 | 210   |
| Netherlands        | 57,636    | 123    | 1,251  | 1,183   | 4,660  | ..         | 4,154  | 318   |
| Philippines        | 8,288     | ..     | 281    | ..      | ..     | 398        | 2,225  | ..    |
| Poland             | 26,622    | 511    | ..     | ..      | ..     | 715        | ..     | ..    |
| Portugal           | 11,165    | 2,405  | 1,072  | ..      | 548    | 352        | ..     | ..    |
| Singapore          | 51,866    | ..     | ..     | ..      | 2,730  | ..         | 2,733  | 718   |
| South Africa       | 21,713    | 1,153  | ..     | ..      | ..     | ..         | ..     | ..    |
| Spain              | 66,303    | 2,144  | 2,361  | 669     | 5,264  | 3,912      | ..     | 8,505 |
| Sweden             | 16,351    | ..     | ..     | ..      | ..     | ..         | ..     | 203   |
| Thailand           | 43,609    | 1,094  | ..     | ..      | ..     | ..         | 798    | 902   |
| Turkey             | 31,075    | ..     | ..     | ..      | 9,526  | 3,179      | 19     | 1,106 |
| United Kingdom     | 44,564    | ..     | ..     | 628     | ..     | ..         | ..     | 793   |
| United States      | 335,450   | 1,630  | 5,982  | 157,688 | 16,349 | 1,625      | 2,207  | 2,969 |



**International trade of conventional crude oil  
(Principal importers/exporters)**

Thousand metric tons

**2019**

| Exporters |         |        |        |                    |              |                      |                |               |                           |
|-----------|---------|--------|--------|--------------------|--------------|----------------------|----------------|---------------|---------------------------|
| Mexico    | Nigeria | Norway | Oman   | Russian Federation | Saudi Arabia | United Arab Emirates | United Kingdom | United States | Venezuela (Bolivar. Rep.) |
| ..        | 665     | ..     | ..     | 155                | ..           | 2,897                | ..             | 442           | ..                        |
| ..        | ..      | ..     | ..     | ..                 | 10,644       | ..                   | ..             | ..            | ..                        |
| ..        | ..      | ..     | ..     | ..                 | ..           | ..                   | ..             | ..            | ..                        |
| 25        | 3,742   | 1,927  | ..     | 11,178             | 5,313        | ..                   | 2,734          | 3,285         | 639                       |
| ..        | 1,339   | 86     | ..     | ..                 | 3,332        | ..                   | ..             | 2,374         | ..                        |
| ..        | 400     | 644    | ..     | 881                | 5,703        | ..                   | 527            | 32,085        | ..                        |
| ..        | ..      | ..     | ..     | ..                 | ..           | ..                   | ..             | 1,623         | ..                        |
| 409       | 2,437   | 3,327  | 33,872 | ..                 | 83,322       | 15,294               | 10,033         | 6,756         | 11,408                    |
| ..        | ..      | 777    | ..     | 10,958             | ..           | ..                   | ..             | ..            | ..                        |
| ..        | 5,928   | 3,153  | ..     | 6,171              | 7,274        | ..                   | 570            | 3,750         | ..                        |
| 57        | 5,241   | 9,702  | ..     | 27,091             | 1,595        | ..                   | 10,217         | 5,325         | 751                       |
| ..        | ..      | ..     | ..     | 2,174              | 1,630        | 85                   | 78             | 563           | 50                        |
| 9,084     | 18,489  | ..     | 1,897  | ..                 | 42,594       | *12,596              | ..             | 12,563        | 15,894                    |
| ..        | 3,724   | 38     | ..     | ..                 | 4,863        | 184                  | ..             | ..            | ..                        |
| 89        | 3,413   | 914    | ..     | 9,096              | 4,974        | ..                   | 665            | 1,414         | 437                       |
| 342       | ..      | ..     | 2,510  | 7,052              | 50,419       | 48,328               | ..             | 2,309         | ..                        |
| 6,228     | 526     | 99     | 49     | 4,171              | 39,777       | 12,050               | 411            | 18,710        | ..                        |
| 423       | 5,219   | 6,076  | ..     | 13,809             | 2,656        | ..                   | 8,359          | 5,283         | ..                        |
| ..        | 50      | ..     | 153    | 236                | 2,811        | *1,835               | ..             | 38            | ..                        |
| ..        | 1,382   | 537    | ..     | 18,199             | 3,848        | ..                   | 662            | 723           | ..                        |
| ..        | 516     | 274    | ..     | 1,208              | 1,244        | ..                   | 159            | ..            | ..                        |
| ..        | 584     | 90     | ..     | 1,428              | 6,096        | 13,222               | 81             | 3,827         | ..                        |
| ..        | 7,174   | 111    | ..     | ..                 | 6,122        | 2,011                | ..             | 175           | ..                        |
| 9,431     | 11,198  | 2,213  | ..     | 1,591              | 8,246        | ..                   | 857            | 1,909         | 2,297                     |
| ..        | 1,710   | 6,655  | ..     | 4,759              | ..           | ..                   | 439            | 342           | 1,021                     |
| ..        | 724     | ..     | 67     | 2,270              | ..           | 11,867               | ..             | 5,396         | ..                        |
| ..        | 1,829   | ..     | ..     | 10,449             | 1,916        | ..                   | ..             | ..            | ..                        |
| ..        | 2,777   | 17,458 | ..     | 3,800              | 1,024        | ..                   | ..             | 11,405        | 83                        |
| 29,563    | 9,197   | 2,329  | ..     | 6,618              | 24,654       | ..                   | 3,152          | ..            | 3,973                     |

**Table 16**

**Refinery distillation capacity, throughput and output**

Thousand metric tons

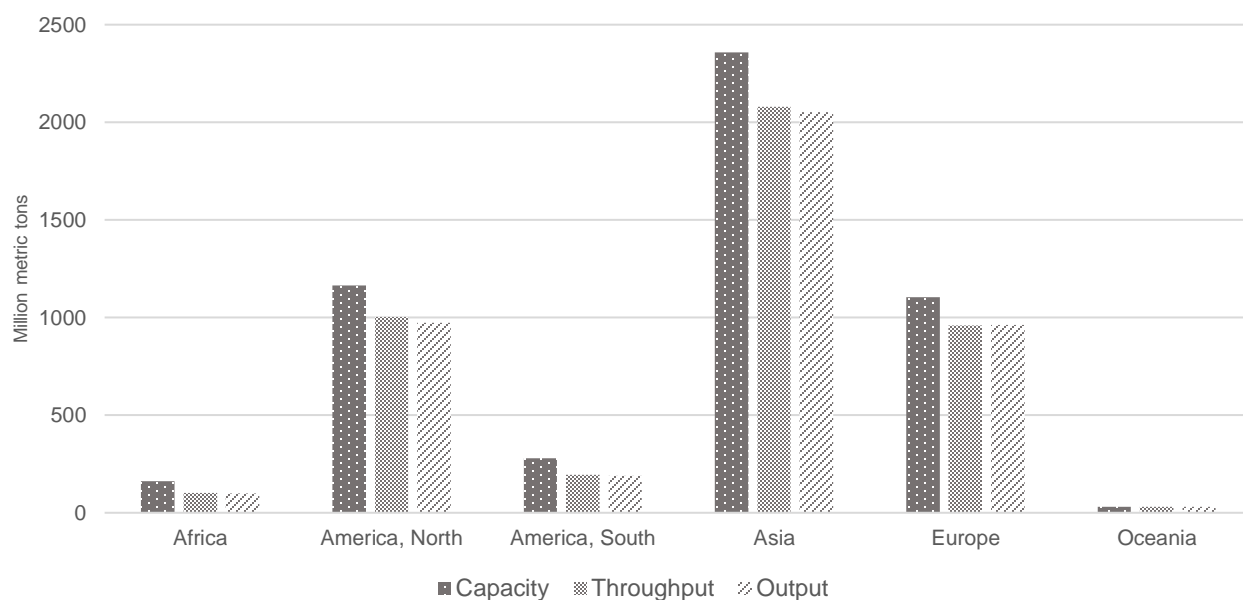
**Table Notes**

**Output** is equal to the sum of “production from refineries” for aviation gasoline, bitumen, gas/diesel oil, ethane, feedstocks, gasoline-type jet fuel, kerosene-type jet fuel, other kerosene, liquefied petroleum gas, lubricants, motor gasoline, naphtha, petroleum coke, other oil products, paraffin waxes, fuel oil, refinery gas and white spirits.

**Throughput** is equal to the sum of “transformation in refineries” for conventional crude oil, feedstocks, other hydrocarbons, additives and oxygenates, and natural gas liquids.

Please refer to the Definitions Section on pages ix to xv for the appropriate product description/ classification, and xvi to xvii for the descriptions of relevant flows.

**Figure 43: Refinery distillation capacity, throughput and output by region, 2019**



**Figure 44: Total refinery distillation capacity by region, 1990-2019**

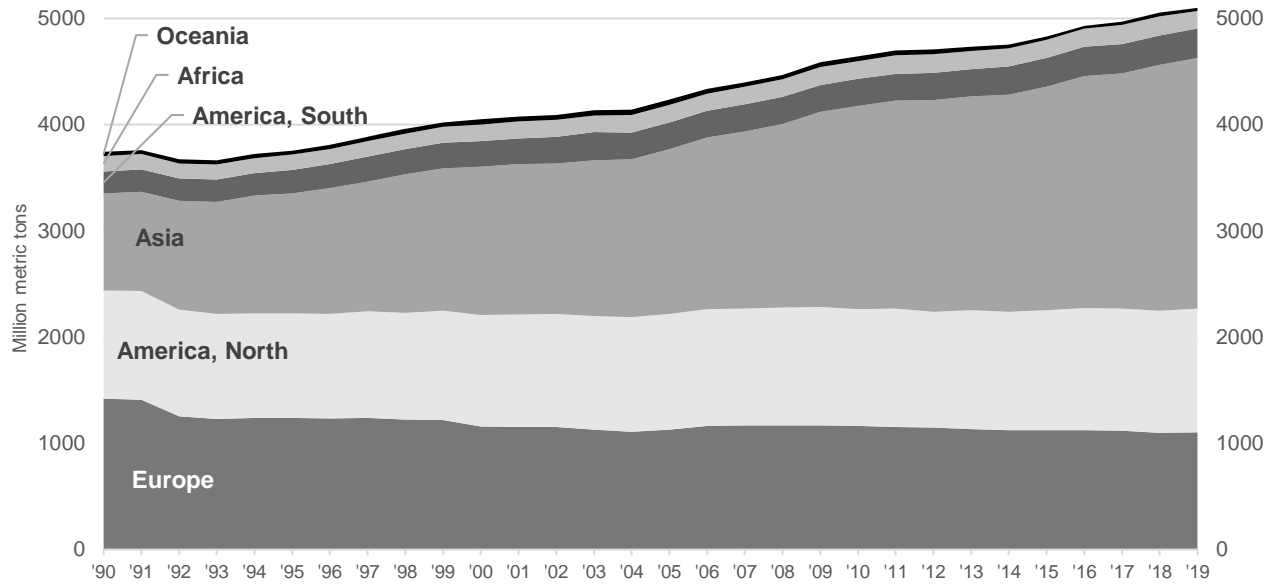


Table 16

## Refinery distillation capacity, throughput and output

Thousand metric tons

| Country or area | Year        | Capacity         | Throughput       | Output           |
|-----------------|-------------|------------------|------------------|------------------|
| <b>World</b>    | <b>2016</b> | <b>4,931,311</b> | <b>4,266,430</b> | <b>4,181,061</b> |
|                 | <b>2017</b> | <b>4,969,960</b> | <b>4,349,209</b> | <b>4,258,112</b> |
|                 | <b>2018</b> | <b>5,052,062</b> | <b>4,388,039</b> | <b>4,311,362</b> |
|                 | <b>2019</b> | <b>5,098,632</b> | <b>4,370,833</b> | <b>4,303,360</b> |
| <b>Africa</b>   | <b>2016</b> | <b>169,703</b>   | <b>101,871</b>   | <b>100,247</b>   |
|                 | <b>2017</b> | <b>181,235</b>   | <b>100,487</b>   | <b>95,459</b>    |
|                 | <b>2018</b> | <b>182,182</b>   | <b>103,608</b>   | <b>98,683</b>    |
|                 | <b>2019</b> | <b>161,752</b>   | <b>100,854</b>   | <b>97,866</b>    |
| Algeria         | 2016        | 32,459           | 29,355           | 29,160           |
|                 | 2017        | 32,459           | 28,513           | 28,317           |
|                 | 2018        | 32,858           | 30,784           | 29,914           |
|                 | 2019        | 32,858           | 28,628           | 28,298           |
| Angola          | 2016        | 4,005            | 2,656            | 2,641            |
|                 | 2017        | 4,005            | 2,577            | 2,547            |
|                 | 2018        | 4,005            | 1,852            | 1,853            |
|                 | 2019        | 4,005            | 2,520            | 2,514            |
| Cameroon        | 2016        | *2,100           | 1,805            | 1,596            |
|                 | 2017        | 2,100            | 1,485            | 1,313            |
|                 | 2018        | 2,100            | 1,346            | 1,191            |
|                 | 2019        | 2,100            | 696              | 616              |
| Chad            | 2016        | *998             | 700              | *669             |
|                 | 2017        | *998             | 700              | *670             |
|                 | 2018        | *998             | 700              | *671             |
|                 | 2019        | *998             | 700              | *678             |
| Congo           | 2016        | 1,047            | 723              | 649              |
|                 | 2017        | 1,047            | 838              | 716              |
|                 | 2018        | 1,047            | 851              | 725              |
|                 | 2019        | 1,047            | 860              | 735              |
| Côte d'Ivoire   | 2016        | 3,192            | 3,474            | 3,186            |
|                 | 2017        | 3,192            | 3,296            | *3,064           |
|                 | 2018        | *3,740           | 3,433            | 3,366            |
|                 | 2019        | *3,740           | 3,738            | 3,711            |
| Egypt           | 2016        | 38,040           | 24,955           | 25,052           |
|                 | 2017        | 38,040           | 27,107           | 23,888           |
|                 | 2018        | 38,040           | 26,328           | 26,083           |
|                 | 2019        | 39,133           | 28,489           | 28,310           |
| Gabon           | 2016        | 1,197            | 850              | 849              |
|                 | 2017        | *1,197           | 811              | 793              |
|                 | 2018        | *1,197           | 742              | 726              |
|                 | 2019        | 1,197            | 638              | 624              |
| Ghana           | 2016        | 2,244            | 769              | 739              |
|                 | 2017        | 2,244            | 24               | 19               |
|                 | 2018        | *2,244           | 405              | 310              |
|                 | 2019        | 2,244            | 619              | 624              |
| Libya           | 2016        | 18,953           | 4,063            | 4,004            |
|                 | 2017        | 18,953           | 4,835            | 4,793            |
|                 | 2018        | 18,953           | 5,647            | 5,598            |
|                 | 2019        | *18,953          | 4,794            | 4,677            |
| Morocco         | 2016        | 7,726            | 0                | 0                |
|                 | 2017        | 7,725            | ..               | ..               |
|                 | 2018        | 7,725            | ..               | ..               |
|                 | 2019        | 7,716            | ..               | ..               |

## Refinery distillation capacity, throughput and output

Thousand metric tons

| Country or area       | Year        | Capacity         | Throughput       | Output         |
|-----------------------|-------------|------------------|------------------|----------------|
| Niger                 | 2016        | 1,200            | 734              | 596            |
|                       | 2017        | *1,200           | 931              | 814            |
|                       | 2018        | *1,200           | 818              | 763            |
|                       | 2019        | *1,200           | 755              | 634            |
| Nigeria               | 2016        | 21,135           | 3,503            | 3,351          |
|                       | 2017        | 22,195           | 4,722            | 4,379          |
|                       | 2018        | *22,195          | 2,744            | 2,389          |
|                       | 2019        | 10,743           | 846              | 742            |
| Senegal               | 2016        | 1,248            | 1,231            | 1,124          |
|                       | 2017        | 1,248            | 1,319            | 1,202          |
|                       | 2018        | 1,248            | 1,051            | 981            |
|                       | 2019        | 1,248            | 1,024            | 886            |
| Sierra Leone          | 2016        | 499              | ..               | ..             |
|                       | 2017        | 499              | ..               | ..             |
|                       | 2018        | *499             | ..               | ..             |
|                       | 2019        | *499             | ..               | ..             |
| South Africa          | 2016        | 24,589           | 20,933           | 20,809         |
|                       | 2017        | 35,062           | 17,998           | 17,918         |
|                       | 2018        | *35,062          | 21,704           | 19,125         |
|                       | 2019        | *25,000          | 22,141           | 20,633         |
| Sudan                 | 2016        | 6,074            | *4,384           | 4,165          |
|                       | 2017        | 6,074            | *3,799           | 3,609          |
|                       | 2018        | 6,074            | *3,495           | 3,320          |
|                       | 2019        | *6,074           | *3,540           | *3,362         |
| Tunisia               | 2016        | 1,800            | 1,192            | 1,192          |
|                       | 2017        | 1,800            | 912              | 848            |
|                       | 2018        | 1,800            | 1,062            | 1,074          |
|                       | 2019        | 1,800            | *165             | 163            |
| Zambia                | 2016        | 1,197            | 544              | 465            |
|                       | 2017        | 1,197            | 620              | 569            |
|                       | 2018        | 1,197            | 647              | 595            |
|                       | 2019        | 1,197            | 700              | 658            |
| <b>America, North</b> | <b>2016</b> | <b>1,147,766</b> | <b>1,012,953</b> | <b>987,261</b> |
|                       | <b>2017</b> | <b>1,149,870</b> | <b>1,019,523</b> | <b>990,990</b> |
|                       | <b>2018</b> | <b>1,152,192</b> | <b>1,023,600</b> | <b>995,146</b> |
|                       | <b>2019</b> | <b>1,165,140</b> | <b>1,003,754</b> | <b>972,071</b> |
| Aruba                 | 2016        | *11,463          | ..               | ..             |
|                       | 2017        | *11,463          | ..               | ..             |
|                       | 2018        | *11,463          | ..               | ..             |
|                       | 2019        | *11,463          | ..               | ..             |
| Canada                | 2016        | 102,618          | 92,850           | 88,966         |
|                       | 2017        | 95,342           | 97,848           | 92,827         |
|                       | 2018        | 95,342           | 95,716           | 89,859         |
|                       | 2019        | 97,134           | 105,302          | 99,453         |
| Cuba                  | 2016        | 6,135            | *2,305           | 2,205          |
|                       | 2017        | 6,135            | *2,763           | 2,632          |
|                       | 2018        | 6,135            | *2,888           | 2,751          |
|                       | 2019        | *6,135           | *2,823           | 2,566          |
| Curaçao               | 2016        | 16,708           | 8,539            | 8,216          |
|                       | 2017        | 16,708           | 4,598            | 4,295          |
|                       | 2018        | *16,708          | 3,433            | 3,060          |
|                       | 2019        | *16,708          | 0                | 0              |

Table 16

## Refinery distillation capacity, throughput and output

Thousand metric tons

| Country or area          | Year        | Capacity       | Throughput     | Output         |
|--------------------------|-------------|----------------|----------------|----------------|
| Dominican Republic       | 2016        | 1,721          | 1,171          | 1,097          |
|                          | 2017        | 1,721          | 955            | 899            |
|                          | 2018        | 1,721          | 1,279          | 1,208          |
|                          | 2019        | 2,486          | 1,283          | 1,156          |
| Guatemala                | 2016        | 247            | 56             | 56             |
|                          | 2017        | 247            | 88             | 85             |
|                          | 2018        | *249           | *151           | 147            |
|                          | 2019        | *250           | *210           | 203            |
| Jamaica                  | 2016        | 1,795          | 1,155          | 1,094          |
|                          | 2017        | 1,796          | 1,115          | 1,048          |
|                          | 2018        | 1,796          | 1,035          | 1,032          |
|                          | 2019        | 1,747          | 1,240          | 1,240          |
| Mexico                   | 2016        | 79,900         | 55,732         | 50,634         |
|                          | 2017        | 81,147         | 45,496         | 44,357         |
|                          | 2018        | 81,796         | 36,589         | 35,566         |
|                          | 2019        | 81,796         | 35,914         | 34,410         |
| Nicaragua                | 2016        | 995            | 682            | 659            |
|                          | 2017        | 998            | 701            | 692            |
|                          | 2018        | 998            | *678           | 639            |
|                          | 2019        | *988           | 547            | 518            |
| Trinidad and Tobago      | 2016        | 8,379          | 7,663          | 7,303          |
|                          | 2017        | 8,379          | 6,740          | 6,387          |
|                          | 2018        | *8,379         | 5,373          | 5,032          |
|                          | 2019        | *8,379         | ..             | ..             |
| United States            | 2016        | 917,805        | 842,800        | 827,031        |
|                          | 2017        | 925,935        | 859,220        | 837,767        |
|                          | 2018        | 927,606        | 876,458        | 855,853        |
|                          | 2019        | 938,055        | 856,434        | 832,525        |
| <b>America, South</b>    | <b>2016</b> | <b>276,519</b> | <b>213,929</b> | <b>209,245</b> |
|                          | <b>2017</b> | <b>277,897</b> | <b>205,702</b> | <b>200,858</b> |
|                          | <b>2018</b> | <b>277,789</b> | <b>197,825</b> | <b>195,618</b> |
|                          | <b>2019</b> | <b>278,063</b> | <b>195,105</b> | <b>188,480</b> |
| Argentina                | 2016        | 31,621         | 26,205         | 26,363         |
|                          | 2017        | 31,621         | 25,559         | 25,741         |
|                          | 2018        | 31,621         | 24,082         | 24,053         |
|                          | 2019        | 31,621         | 24,379         | 24,127         |
| Bolivia (Plur. State of) | 2016        | *3,394         | 2,834          | 2,514          |
|                          | 2017        | 3,394          | 2,700          | 2,341          |
|                          | 2018        | 3,394          | 2,551          | 2,213          |
|                          | 2019        | 3,394          | 2,210          | 1,934          |
| Brazil                   | 2016        | 123,309        | 97,091         | 97,217         |
|                          | 2017        | 123,309        | 93,719         | 93,083         |
|                          | 2018        | 123,122        | 90,953         | 91,463         |
|                          | 2019        | 123,396        | 91,799         | 91,193         |
| Chile                    | 2016        | 10,972         | 9,934          | 9,429          |
|                          | 2017        | 11,471         | 9,934          | 9,648          |
|                          | 2018        | *11,471        | 10,307         | 9,727          |
|                          | 2019        | *11,471        | 10,978         | 10,245         |
| Colombia                 | 2016        | 20,948         | 18,057         | 15,184         |
|                          | 2017        | 20,948         | 18,861         | 17,180         |
|                          | 2018        | 20,948         | 19,923         | 19,408         |
|                          | 2019        | 20,948         | 20,045         | 19,518         |

## Refinery distillation capacity, throughput and output

Thousand metric tons

| Country or area           | Year        | Capacity         | Throughput       | Output           |
|---------------------------|-------------|------------------|------------------|------------------|
| Ecuador                   | 2016        | 8,723            | 8,134            | 7,695            |
|                           | 2017        | 8,786            | 8,350            | 7,759            |
|                           | 2018        | 8,865            | 8,563            | 8,259            |
|                           | 2019        | 8,865            | 7,786            | 7,168            |
| Paraguay                  | 2016        | 370              | ..               | ..               |
|                           | 2017        | 370              | ..               | ..               |
|                           | 2018        | 370              | ..               | ..               |
|                           | 2019        | 370              | ..               | ..               |
| Peru                      | 2016        | 9,923            | 8,792            | 8,561            |
|                           | 2017        | 9,923            | 9,632            | 9,373            |
|                           | 2018        | 9,923            | 9,515            | 8,660            |
|                           | 2019        | 9,923            | 9,030            | 8,162            |
| Suriname                  | 2016        | 745              | 514              | 542              |
|                           | 2017        | 743              | 660              | 685              |
|                           | 2018        | 743              | 649              | 671              |
|                           | 2019        | 743              | 617              | 637              |
| Uruguay                   | 2016        | 2,494            | 2,043            | 1,994            |
|                           | 2017        | 2,494            | 585              | 557              |
|                           | 2018        | 2,494            | 2,165            | 2,073            |
|                           | 2019        | 2,494            | 2,054            | 1,991            |
| Venezuela (Bolivar. Rep.) | 2016        | 64,020           | 40,324           | 39,747           |
|                           | 2017        | 64,838           | 35,703           | 34,492           |
|                           | 2018        | 64,838           | 29,117           | 29,092           |
|                           | 2019        | 64,838           | 26,208           | 23,503           |
| <b>Asia</b>               | <b>2016</b> | <b>2,184,865</b> | <b>1,942,536</b> | <b>1,909,553</b> |
|                           | <b>2017</b> | <b>2,210,644</b> | <b>2,010,040</b> | <b>1,974,117</b> |
|                           | <b>2018</b> | <b>2,310,919</b> | <b>2,059,016</b> | <b>2,028,252</b> |
|                           | <b>2019</b> | <b>2,358,043</b> | <b>2,078,966</b> | <b>2,052,263</b> |
| Afghanistan               | 2016        | 150              | *110             | *106             |
|                           | 2017        | 150              | *117             | *112             |
|                           | 2018        | *185             | *185             | *176             |
|                           | 2019        | *185             | *119             | *112             |
| Azerbaijan                | 2016        | 10,000           | 6,000            | 5,793            |
|                           | 2017        | 5,985            | 5,878            | 5,559            |
|                           | 2018        | *5,985           | 6,091            | 5,963            |
|                           | 2019        | *5,985           | 6,194            | 6,041            |
| Bahrain                   | 2016        | 12,968           | 12,854           | 13,058           |
|                           | 2017        | 12,968           | 13,182           | 13,303           |
|                           | 2018        | 12,968           | 12,940           | 13,227           |
|                           | 2019        | 13,317           | 13,149           | 13,386           |
| Bangladesh                | 2016        | 1,502            | 1,268            | 1,174            |
|                           | 2017        | 1,502            | 1,621            | 1,432            |
|                           | 2018        | 1,920            | 1,439            | 1,249            |
|                           | 2019        | 1,920            | 1,576            | 1,408            |
| Brunei Darussalam         | 2016        | *900             | 332              | 306              |
|                           | 2017        | 900              | 285              | 232              |
|                           | 2018        | 900              | 357              | 321              |
|                           | 2019        | *8,734           | 1,879            | 1,330            |
| China                     | 2016        | *748,130         | 632,529          | 637,212          |
|                           | 2017        | *790,000         | 671,438          | 675,125          |
|                           | 2018        | *835,611         | 713,743          | 711,792          |
|                           | 2019        | *860,000         | 764,674          | 764,010          |

Table 16

## Refinery distillation capacity, throughput and output

Thousand metric tons

| Country or area        | Year | Capacity | Throughput | Output  |
|------------------------|------|----------|------------|---------|
| Georgia                | 2016 | *5,440   | 26         | 25      |
|                        | 2017 | *5,440   | 25         | 24      |
|                        | 2018 | *5,440   | 24         | 22      |
|                        | 2019 | *5,440   | 38         | 37      |
| India                  | 2016 | 233,966  | 255,343    | 253,122 |
|                        | 2017 | 247,566  | 262,114    | 260,900 |
|                        | 2018 | 249,366  | 267,061    | 273,711 |
|                        | 2019 | 249,866  | *263,999   | 263,195 |
| Indonesia              | 2016 | 46,957   | 44,250     | 37,793  |
|                        | 2017 | 46,957   | 44,402     | 38,923  |
|                        | 2018 | 58,210   | 42,375     | 38,887  |
|                        | 2019 | 58,309   | *48,174    | 42,353  |
| Iran (Islamic Rep. of) | 2016 | 92,600   | 87,369     | 87,830  |
|                        | 2017 | 92,347   | 89,736     | 87,782  |
|                        | 2018 | 104,314  | 88,823     | 88,357  |
|                        | 2019 | 109,776  | 89,349     | 88,068  |
| Iraq                   | 2016 | 26,434   | 22,325     | 20,404  |
|                        | 2017 | 26,421   | 26,640     | 24,034  |
|                        | 2018 | 40,648   | 30,130     | 27,271  |
|                        | 2019 | 41,087   | 31,954     | 29,953  |
| Israel                 | 2016 | 14,300   | 14,172     | 14,174  |
|                        | 2017 | 15,225   | 14,088     | 14,088  |
|                        | 2018 | 15,225   | 14,782     | 14,782  |
|                        | 2019 | *15,225  | 15,268     | 15,268  |
| Japan                  | 2016 | 195,347  | 165,375    | 162,776 |
|                        | 2017 | 175,960  | 161,082    | 157,198 |
|                        | 2018 | 175,511  | 154,242    | 150,956 |
|                        | 2019 | 172,459  | 150,938    | 147,426 |
| Jordan                 | 2016 | 4,509    | 3,193      | 2,861   |
|                        | 2017 | *4,509   | 3,005      | 2,671   |
|                        | 2018 | *4,509   | 2,521      | 2,281   |
|                        | 2019 | *4,509   | 2,566      | 2,251   |
| Kazakhstan             | 2016 | 16,958   | *13,703    | 12,881  |
|                        | 2017 | 16,958   | *14,523    | 13,619  |
|                        | 2018 | 16,958   | 16,257     | 14,617  |
|                        | 2019 | 21,446   | 17,070     | 15,910  |
| Korea, Dem.Ppl's.Rep.  | 2016 | 3,541    | 532        | 515     |
|                        | 2017 | 3,494    | 532        | 515     |
|                        | 2018 | 3,494    | 532        | 515     |
|                        | 2019 | 3,494    | 532        | 515     |
| Korea, Republic of     | 2016 | 152,780  | 152,491    | 146,029 |
|                        | 2017 | 158,404  | 161,936    | 153,142 |
|                        | 2018 | 166,883  | 165,075    | 158,099 |
|                        | 2019 | 166,883  | 163,247    | 157,811 |
| Kuwait                 | 2016 | 46,683   | 41,749     | 37,847  |
|                        | 2017 | 39,202   | 33,813     | 32,151  |
|                        | 2018 | 36,708   | 35,101     | 32,449  |
|                        | 2019 | 39,900   | 31,400     | 30,906  |
| Kyrgyzstan             | 2016 | *750     | 387        | 379     |
|                        | 2017 | *800     | 445        | 431     |
|                        | 2018 | *800     | 549        | 544     |
|                        | 2019 | 800      | 322        | 318     |



## Refinery distillation capacity, throughput and output

Thousand metric tons

| Country or area      | Year | Capacity | Throughput | Output  |
|----------------------|------|----------|------------|---------|
| Malaysia             | 2016 | 26,862   | 26,596     | 24,249  |
|                      | 2017 | 26,862   | 26,333     | 26,501  |
|                      | 2018 | 26,862   | 24,727     | 24,093  |
|                      | 2019 | 26,862   | 23,399     | 22,506  |
| Myanmar              | 2016 | 2,545    | *428       | 405     |
|                      | 2017 | 2,545    | *410       | 406     |
|                      | 2018 | 2,545    | 258        | 247     |
|                      | 2019 | *2,545   | 213        | 207     |
| Oman                 | 2016 | 11,072   | 8,289      | 7,981   |
|                      | 2017 | 15,112   | 10,523     | 9,625   |
|                      | 2018 | 15,112   | 12,910     | 12,141  |
|                      | 2019 | *15,112  | 13,023     | 11,982  |
| Other Asia           | 2016 | 65,382   | 45,443     | 45,311  |
|                      | 2017 | 56,898   | 44,622     | 44,406  |
|                      | 2018 | 56,898   | 46,828     | 46,752  |
|                      | 2019 | 56,898   | 46,741     | 46,305  |
| Pakistan             | 2016 | 19,370   | 12,497     | 12,276  |
|                      | 2017 | 19,950   | *14,440    | 13,751  |
|                      | 2018 | 20,818   | 13,856     | 13,472  |
|                      | 2019 | 20,798   | 12,504     | 11,939  |
| Philippines          | 2016 | 13,766   | 10,671     | 10,089  |
|                      | 2017 | *13,766  | 10,380     | 9,847   |
|                      | 2018 | *13,766  | 11,743     | 11,110  |
|                      | 2019 | *13,766  | 8,129      | 7,735   |
| Qatar                | 2016 | 21,397   | 12,935     | 12,853  |
|                      | 2017 | 21,446   | 15,943     | 15,883  |
|                      | 2018 | 21,446   | 15,947     | 15,867  |
|                      | 2019 | 21,446   | 16,239     | 16,047  |
| Saudi Arabia         | 2016 | 140,279  | 149,752    | 146,396 |
|                      | 2017 | 142,475  | 150,891    | 148,540 |
|                      | 2018 | 140,960  | 149,454    | 146,532 |
|                      | 2019 | 144,404  | *126,366   | 128,774 |
| Singapore            | 2016 | 67,057   | 50,580     | 50,852  |
|                      | 2017 | 67,057   | 54,300     | 53,684  |
|                      | 2018 | 67,057   | 53,728     | 49,002  |
|                      | 2019 | 67,057   | 50,147     | 50,315  |
| Sri Lanka            | 2016 | 2,494    | 1,746      | 1,647   |
|                      | 2017 | 2,494    | 1,646      | 1,636   |
|                      | 2018 | 2,494    | 1,675      | 1,607   |
|                      | 2019 | 2,494    | 1,865      | 1,797   |
| Syrian Arab Republic | 2016 | 11,963   | 7,079      | 6,996   |
|                      | 2017 | 11,963   | 7,861      | 7,768   |
|                      | 2018 | 11,963   | 7,360      | 7,275   |
|                      | 2019 | 11,963   | 6,359      | 6,284   |
| Tajikistan           | 2016 | 150      | 25         | 24      |
|                      | 2017 | 150      | 24         | 23      |
|                      | 2018 | *150     | 45         | 46      |
|                      | 2019 | 150      | 33         | 30      |
| Thailand             | 2016 | 61,571   | 60,820     | 57,789  |
|                      | 2017 | 61,571   | 62,238     | 59,202  |
|                      | 2018 | 61,571   | 62,245     | 60,363  |
|                      | 2019 | 61,571   | 56,363     | 54,687  |

Table 16

## Refinery distillation capacity, throughput and output

Thousand metric tons

| Country or area        | Year        | Capacity         | Throughput     | Output         |
|------------------------|-------------|------------------|----------------|----------------|
| Turkey                 | 2016        | 33,067           | 29,751         | 29,605         |
|                        | 2017        | *33,067          | 32,071         | 31,940         |
|                        | 2018        | *33,067          | 28,498         | 28,227         |
|                        | 2019        | *33,067          | 37,430         | 37,005         |
| Turkmenistan           | 2016        | 13,017           | 8,896          | 8,540          |
|                        | 2017        | 13,017           | 8,888          | 8,532          |
|                        | 2018        | 13,017           | 8,882          | 8,526          |
|                        | 2019        | 13,017           | 8,879          | 8,524          |
| United Arab Emirates   | 2016        | 56,119           | 51,141         | 49,179         |
|                        | 2017        | 56,119           | 53,299         | 50,401         |
|                        | 2018        | 56,210           | 51,926         | 52,431         |
|                        | 2019        | 56,210           | 48,493         | 49,487         |
| Uzbekistan             | 2016        | *7,880           | 3,807          | 3,653          |
|                        | 2017        | *7,880           | 3,971          | 3,609          |
|                        | 2018        | *7,880           | 4,215          | 3,847          |
|                        | 2019        | *7,880           | 4,074          | 3,611          |
| Viet Nam               | 2016        | 9,975            | 7,150          | 6,662          |
|                        | 2017        | 6,500            | 6,128          | 6,122          |
|                        | 2018        | 16,484           | 11,047         | 10,301         |
|                        | 2019        | *16,484          | 13,938         | 12,815         |
| Yemen                  | 2016        | 6,983            | 922            | 761            |
|                        | 2017        | *6,983           | 1,211          | 999            |
|                        | 2018        | *6,983           | 1,447          | 1,194          |
|                        | 2019        | *6,983           | 2,322          | 1,916          |
| <b>Europe</b>          | <b>2016</b> | <b>1,123,197</b> | <b>964,803</b> | <b>945,991</b> |
|                        | <b>2017</b> | <b>1,119,656</b> | <b>983,904</b> | <b>968,832</b> |
|                        | <b>2018</b> | <b>1,098,296</b> | <b>973,133</b> | <b>965,096</b> |
|                        | <b>2019</b> | <b>1,104,617</b> | <b>960,641</b> | <b>961,624</b> |
| Albania                | 2016        | 1,494            | 184            | 183            |
|                        | 2017        | 1,494            | 513            | 503            |
|                        | 2018        | 1,494            | 298            | 291            |
|                        | 2019        | 1,494            | 335            | 323            |
| Austria                | 2016        | 9,661            | 8,721          | 8,554          |
|                        | 2017        | 9,576            | 8,653          | 8,496          |
|                        | 2018        | 9,576            | 9,281          | 9,165          |
|                        | 2019        | 9,576            | 9,642          | 9,555          |
| Belarus                | 2016        | 24,605           | 18,964         | 18,697         |
|                        | 2017        | 24,605           | 18,723         | 18,451         |
|                        | 2018        | 27,082           | 19,026         | 18,752         |
|                        | 2019        | 27,082           | 17,854         | 17,607         |
| Belgium                | 2016        | 38,738           | 33,755         | 33,631         |
|                        | 2017        | 38,703           | 35,510         | 35,283         |
|                        | 2018        | *38,703          | 34,344         | 34,070         |
|                        | 2019        | *38,703          | 35,478         | 35,152         |
| Bosnia and Herzegovina | 2016        | *11,970          | 836            | 826            |
|                        | 2017        | *11,970          | 878            | 862            |
|                        | 2018        | *11,970          | 697            | 704            |
|                        | 2019        | *11,970          | 83             | 74             |
| Bulgaria               | 2016        | 9,726            | 7,268          | 6,942          |
|                        | 2017        | *9,726           | 7,588          | 7,142          |
|                        | 2018        | *9,726           | 6,486          | 6,189          |
|                        | 2019        | *9,726           | 7,347          | 6,968          |

## Refinery distillation capacity, throughput and output

Thousand metric tons

| Country or area | Year | Capacity | Throughput | Output  |
|-----------------|------|----------|------------|---------|
| Croatia         | 2016 | 10,699   | 3,765      | 3,715   |
|                 | 2017 | *10,699  | 3,947      | 3,882   |
|                 | 2018 | *10,699  | 3,979      | 3,929   |
|                 | 2019 | *10,699  | 2,933      | 2,908   |
| Czechia         | 2016 | 9,676    | 5,710      | 5,604   |
|                 | 2017 | *9,676   | 8,250      | 8,183   |
|                 | 2018 | *9,676   | 7,864      | 7,848   |
|                 | 2019 | *9,676   | 8,161      | 8,089   |
| Denmark         | 2016 | 8,449    | 9,141      | 9,091   |
|                 | 2017 | 9,027    | 8,796      | 8,759   |
|                 | 2018 | *9,027   | 9,114      | 9,095   |
|                 | 2019 | *9,027   | 8,620      | 8,602   |
| Finland         | 2016 | 13,017   | 14,563     | 14,307  |
|                 | 2017 | 13,017   | 14,806     | 14,727  |
|                 | 2018 | 13,017   | 14,798     | 14,866  |
|                 | 2019 | 13,017   | 14,884     | 14,808  |
| France          | 2016 | 70,120   | 59,877     | 59,365  |
|                 | 2017 | 70,124   | 59,828     | 59,348  |
|                 | 2018 | 70,124   | 56,115     | 55,639  |
|                 | 2019 | 70,124   | 51,216     | 50,842  |
| Germany         | 2016 | 109,176  | 102,772    | 100,381 |
|                 | 2017 | 104,400  | 103,934    | 101,529 |
|                 | 2018 | *104,400 | 99,453     | 97,088  |
|                 | 2019 | *104,400 | 99,884     | 97,682  |
| Greece          | 2016 | *26,234  | 30,232     | 30,217  |
|                 | 2017 | *26,234  | 31,777     | 31,766  |
|                 | 2018 | *26,234  | 32,785     | 32,771  |
|                 | 2019 | *26,234  | 30,138     | 30,133  |
| Hungary         | 2016 | 8,030    | 7,403      | 7,334   |
|                 | 2017 | 8,100    | 7,220      | 7,146   |
|                 | 2018 | 8,229    | 7,737      | 7,658   |
|                 | 2019 | 8,229    | 7,480      | 7,402   |
| Ireland         | 2016 | 3,541    | 3,233      | 3,180   |
|                 | 2017 | 3,741    | 3,190      | 3,184   |
|                 | 2018 | 3,741    | 3,061      | 3,057   |
|                 | 2019 | 3,741    | 2,767      | 2,733   |
| Italy           | 2016 | 100,418  | 72,039     | 71,361  |
|                 | 2017 | 100,904  | 75,646     | 74,946  |
|                 | 2018 | 100,904  | 72,400     | 71,741  |
|                 | 2019 | 100,900  | 74,242     | 73,437  |
| Lithuania       | 2016 | *10,220  | 9,914      | 9,790   |
|                 | 2017 | *10,220  | 10,128     | 10,021  |
|                 | 2018 | 10,220   | 9,891      | 9,782   |
|                 | 2019 | 10,220   | 9,720      | 9,605   |
| Netherlands     | 2016 | 60,503   | 60,492     | 60,097  |
|                 | 2017 | 65,835   | 60,004     | 59,664  |
|                 | 2018 | 65,835   | 61,097     | 60,920  |
|                 | 2019 | *64,374  | 62,099     | 61,863  |
| North Macedonia | 2016 | 2,494    | 0          | 0       |
|                 | 2017 | 2,494    | 0          | 0       |
|                 | 2018 | 2,494    | ..         | ..      |
|                 | 2019 | 2,494    | ..         | ..      |

Table 16

## Refinery distillation capacity, throughput and output

Thousand metric tons

| Country or area     | Year | Capacity | Throughput | Output  |
|---------------------|------|----------|------------|---------|
| Norway              | 2016 | 15,910   | 13,028     | 13,014  |
|                     | 2017 | 17,955   | 16,094     | 16,358  |
|                     | 2018 | *17,955  | 17,046     | 16,823  |
|                     | 2019 | *17,955  | 15,291     | 15,100  |
| Poland              | 2016 | 29,250   | 27,470     | 27,027  |
|                     | 2017 | 29,250   | 27,220     | 26,694  |
|                     | 2018 | 29,250   | 28,858     | 28,226  |
|                     | 2019 | 29,250   | 28,983     | 28,457  |
| Portugal            | 2016 | 16,459   | 14,915     | 14,915  |
|                     | 2017 | 16,459   | 15,478     | 15,478  |
|                     | 2018 | 16,459   | 13,847     | 13,796  |
|                     | 2019 | 16,459   | 12,813     | 12,762  |
| Republic of Moldova | 2016 | 19       | 16         | 16      |
|                     | 2017 | 19       | 15         | 15      |
|                     | 2018 | 19       | 10         | 10      |
|                     | 2019 | 19       | 6          | 5       |
| Romania             | 2016 | 18,824   | 12,194     | 12,194  |
|                     | 2017 | 18,853   | 12,484     | 12,462  |
|                     | 2018 | *18,853  | 12,595     | 12,584  |
|                     | 2019 | *18,853  | 13,337     | 13,327  |
| Russian Federation  | 2016 | 287,200  | 285,274    | 273,944 |
|                     | 2017 | 287,200  | 289,136    | 281,548 |
|                     | 2018 | *287,200 | 286,135    | 285,776 |
|                     | 2019 | *287,200 | 286,916    | 297,661 |
| Serbia              | 2016 | 10,715   | 3,456      | 3,435   |
|                     | 2017 | 10,715   | 3,659      | 3,638   |
|                     | 2018 | *10,715  | 3,880      | 3,859   |
|                     | 2019 | *10,715  | 3,514      | 3,496   |
| Slovakia            | 2016 | 5,736    | 6,274      | 6,214   |
|                     | 2017 | *5,736   | 6,150      | 6,119   |
|                     | 2018 | *5,736   | 5,950      | 5,930   |
|                     | 2019 | *5,736   | 5,602      | 5,580   |
| Slovenia            | 2016 | 673      | ..         | ..      |
|                     | 2017 | 673      | ..         | ..      |
|                     | 2018 | 673      | ..         | ..      |
|                     | 2019 | 673      | ..         | ..      |
| Spain               | 2016 | 71,197   | 65,696     | 64,893  |
|                     | 2017 | 71,197   | 66,825     | 65,766  |
|                     | 2018 | 71,197   | 68,717     | 67,599  |
|                     | 2019 | *79,083  | 66,539     | 65,221  |
| Sweden              | 2016 | 21,796   | 21,085     | 21,211  |
|                     | 2017 | *21,796  | 20,703     | 21,132  |
|                     | 2018 | *21,796  | 21,994     | 21,649  |
|                     | 2019 | *21,796  | 18,933     | 18,078  |
| Switzerland         | 2016 | 3,392    | 3,007      | 3,005   |
|                     | 2017 | 3,392    | 2,895      | 2,877   |
|                     | 2018 | 3,392    | 3,070      | 3,069   |
|                     | 2019 | 3,292    | 2,781      | 2,763   |
| Ukraine             | 2016 | 43,944   | 3,014      | 2,851   |
|                     | 2017 | 43,566   | 3,584      | 3,050   |
|                     | 2018 | *19,600  | 3,890      | 4,008   |
|                     | 2019 | *19,600  | 3,707      | *2,843  |

## Refinery distillation capacity, throughput and output

Thousand metric tons

| Country or area  | Year        | Capacity      | Throughput    | Output        |
|------------------|-------------|---------------|---------------|---------------|
| United Kingdom   | 2016        | 69,312        | 60,505        | 59,997        |
|                  | 2017        | *62,300       | 60,270        | 59,805        |
|                  | 2018        | *62,300       | 58,715        | 58,205        |
|                  | 2019        | *62,300       | 59,338        | 58,548        |
| <b>Oceania</b>   | <b>2016</b> | <b>29,262</b> | <b>30,339</b> | <b>28,763</b> |
|                  | <b>2017</b> | <b>30,658</b> | <b>29,552</b> | <b>27,855</b> |
|                  | <b>2018</b> | <b>30,683</b> | <b>30,857</b> | <b>28,567</b> |
|                  | <b>2019</b> | <b>31,017</b> | <b>31,513</b> | <b>31,056</b> |
| Australia        | 2016        | 22,329        | 23,410        | 21,873        |
|                  | 2017        | 22,329        | 22,604        | 21,135        |
|                  | 2018        | 22,354        | 24,065        | 22,070        |
|                  | 2019        | 22,688        | 24,234        | 23,778        |
| New Zealand      | 2016        | 5,337         | 5,522         | 5,522         |
|                  | 2017        | 6,733         | 5,527         | 5,343         |
|                  | 2018        | 6,733         | 5,532         | 5,330         |
|                  | 2019        | 6,733         | 5,956         | 6,053         |
| Papua New Guinea | 2016        | 1,596         | 1,407         | 1,368         |
|                  | 2017        | *1,596        | 1,421         | 1,378         |
|                  | 2018        | *1,596        | 1,260         | 1,167         |
|                  | 2019        | *1,596        | *1,323        | *1,226        |



**Production, trade and supply of liquefied petroleum gases (LPG)**

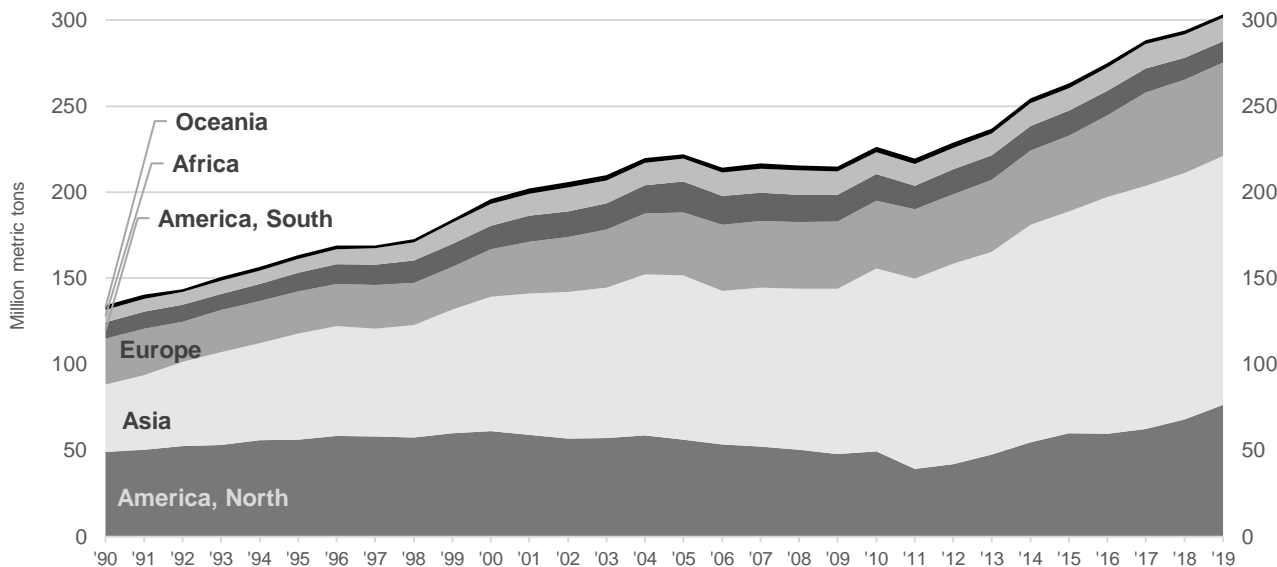
Thousand metric tons and kilograms per capita

**Table Notes**

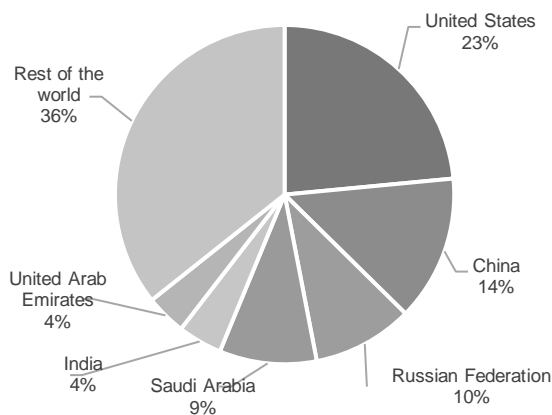
**Production** includes output from refineries and plants.

Please refer to the Definitions Section on pages ix to xv for the appropriate product description/ classification, and xvi to xvii for the descriptions of relevant flows.

**Figure 45: Production of LPG by region, 1990-2019**



**Figure 46: Major LPG producing countries, 2019**



**Figure 47: Major LPG consuming countries, 2019**

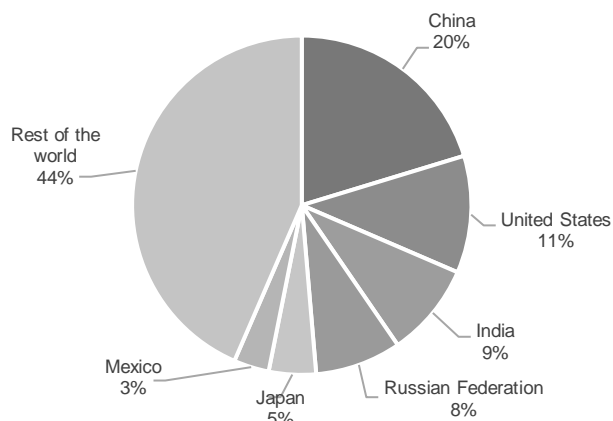


Table 17

## Production, trade and supply of liquefied petroleum gases (LPG)

Thousand metric tons and kilograms per capita

| Country or area      | Year        | Production     | Imports        | Exports        | Changes in stocks | Supply         |            |
|----------------------|-------------|----------------|----------------|----------------|-------------------|----------------|------------|
|                      |             |                |                |                |                   | Total          | Per capita |
| <b>World</b>         | <b>2016</b> | <b>274,879</b> | <b>111,390</b> | <b>118,845</b> | <b>-3,244</b>     | <b>270,669</b> | <b>36</b>  |
|                      | <b>2017</b> | <b>288,254</b> | <b>116,871</b> | <b>123,184</b> | <b>-669</b>       | <b>282,610</b> | <b>37</b>  |
|                      | <b>2018</b> | <b>293,850</b> | <b>123,010</b> | <b>126,485</b> | <b>-497</b>       | <b>290,871</b> | <b>38</b>  |
|                      | <b>2019</b> | <b>303,251</b> | <b>129,177</b> | <b>127,817</b> | <b>1,117</b>      | <b>303,493</b> | <b>39</b>  |
| <b>Africa</b>        | <b>2016</b> | <b>13,662</b>  | <b>6,974</b>   | <b>8,519</b>   | <b>-868</b>       | <b>12,985</b>  | <b>11</b>  |
|                      | <b>2017</b> | <b>14,122</b>  | <b>7,545</b>   | <b>8,729</b>   | <b>-642</b>       | <b>13,579</b>  | <b>11</b>  |
|                      | <b>2018</b> | <b>13,605</b>  | <b>7,982</b>   | <b>8,376</b>   | <b>-724</b>       | <b>13,935</b>  | <b>11</b>  |
|                      | <b>2019</b> | <b>13,480</b>  | <b>8,257</b>   | <b>7,315</b>   | <b>-182</b>       | <b>14,604</b>  | <b>11</b>  |
| Algeria              | 2016        | 9,358          | ..             | 7,310          | 9                 | 2,039          | 50         |
|                      | 2017        | 9,155          | ..             | 6,932          | 24                | 2,199          | 53         |
|                      | 2018        | 8,972          | ..             | 6,617          | 27                | 2,328          | 55         |
|                      | 2019        | 8,917          | ..             | 6,260          | -17               | 2,674          | 62         |
| Angola               | 2016        | 252            | 71             | 360            | *-840             | *803           | *28        |
|                      | 2017        | 968            | 327            | 957            | *-705             | 1,043          | 35         |
|                      | 2018        | 839            | 336            | 1,045          | *-744             | 874            | 28         |
|                      | 2019        | 1,085          | 429            | 353            | *169              | 992            | 31         |
| Benin                | 2016        | ..             | 16             | ..             | -1                | 17             | 2          |
|                      | 2017        | ..             | 17             | ..             | 0                 | 17             | 1          |
|                      | 2018        | ..             | 22             | ..             | 0                 | 21             | 2          |
|                      | 2019        | ..             | 27             | ..             | -1                | 27             | 2          |
| Botswana             | 2016        | ..             | 11             | ..             | ..                | 11             | 5          |
|                      | 2017        | ..             | 11             | ..             | ..                | 11             | 5          |
|                      | 2018        | ..             | 12             | ..             | ..                | 12             | 5          |
|                      | 2019        | ..             | 12             | ..             | ..                | 12             | 5          |
| Burkina Faso         | 2016        | ..             | 74             | ..             | *2                | 72             | 4          |
|                      | 2017        | ..             | 85             | ..             | *6                | 79             | 4          |
|                      | 2018        | ..             | 100            | ..             | *11               | 89             | 5          |
|                      | 2019        | ..             | 100            | ..             | 0                 | 100            | 5          |
| Cabo Verde           | 2016        | ..             | 13             | ..             | ..                | 13             | 24         |
|                      | 2017        | ..             | *13            | ..             | ..                | *13            | *24        |
|                      | 2018        | ..             | 14             | ..             | ..                | 14             | 25         |
|                      | 2019        | ..             | *14            | ..             | ..                | *14            | *25        |
| Cameroon             | 2016        | 13             | 69             | ..             | ..                | 82             | 3          |
|                      | 2017        | 11             | 93             | ..             | ..                | 103            | 4          |
|                      | 2018        | 10             | 94             | ..             | ..                | 104            | 4          |
|                      | 2019        | 5              | 88             | ..             | ..                | 93             | 4          |
| Central African Rep. | 2016        | ..             | 2              | ..             | ..                | 2              | 0          |
|                      | 2017        | ..             | 2              | ..             | ..                | 2              | 0          |
|                      | 2018        | ..             | 2              | ..             | ..                | 2              | 0          |
|                      | 2019        | ..             | 2              | ..             | ..                | 2              | 0          |
| Chad                 | 2016        | *52            | ..             | *25            | ..                | *27            | *2         |
|                      | 2017        | *52            | ..             | *23            | ..                | *28            | *2         |
|                      | 2018        | *52            | ..             | *15            | ..                | *37            | *2         |
|                      | 2019        | *50            | ..             | *15            | ..                | *35            | *2         |
| Comoros              | 2016        | ..             | *1             | ..             | ..                | *1             | *1         |
|                      | 2017        | ..             | *1             | ..             | ..                | *1             | *1         |
|                      | 2018        | ..             | *1             | ..             | ..                | *1             | *2         |
|                      | 2019        | ..             | *1             | ..             | ..                | *1             | *2         |
| Congo                | 2016        | 7              | ..             | ..             | ..                | 7              | 1          |
|                      | 2017        | 8              | ..             | ..             | ..                | 8              | 2          |
|                      | 2018        | 8              | ..             | ..             | ..                | 8              | 2          |
|                      | 2019        | 8              | ..             | ..             | ..                | 8              | 2          |



Table 17

## Production, trade and supply of liquefied petroleum gases (LPG)

Thousand metric tons and kilograms per capita

| Country or area   | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|-------------------|------|------------|---------|---------|-------------------|--------|------------|
|                   |      |            |         |         |                   | Total  | Per capita |
| Côte d'Ivoire     | 2016 | 22         | 248     | 1       | ..                | 269    | 11         |
|                   | 2017 | *16        | *297    | 1       | ..                | *312   | *13        |
|                   | 2018 | 23         | 341     | 1       | ..                | 363    | 14         |
|                   | 2019 | 28         | 385     | 20      | ..                | 393    | 15         |
| Djibouti          | 2016 | ..         | 15      | ..      | ..                | 15     | 16         |
|                   | 2017 | ..         | *15     | ..      | ..                | *15    | *16        |
|                   | 2018 | ..         | *15     | ..      | ..                | *15    | *16        |
|                   | 2019 | ..         | *15     | ..      | ..                | *15    | *15        |
| Egypt             | 2016 | 1,852      | 2,444   | ..      | -25               | 4,321  | 46         |
|                   | 2017 | 1,763      | 2,444   | ..      | 35                | 4,172  | 43         |
|                   | 2018 | 1,890      | 2,327   | ..      | 0                 | 4,217  | 43         |
|                   | 2019 | 1,764      | 2,229   | ..      | ..                | 3,993  | 40         |
| Equatorial Guinea | 2016 | 605        | ..      | 604     | *-23              | 24     | 20         |
|                   | 2017 | 660        | ..      | 656     | -17               | 22     | 17         |
|                   | 2018 | 587        | ..      | 574     | *-10              | 23     | 17         |
|                   | 2019 | 512        | ..      | 495     | *-5               | 22     | 16         |
| Eritrea           | 2016 | ..         | 6       | ..      | ..                | 6      | 2          |
|                   | 2017 | ..         | 6       | ..      | ..                | 6      | 2          |
|                   | 2018 | ..         | 7       | ..      | ..                | 7      | 2          |
|                   | 2019 | ..         | 7       | ..      | ..                | 7      | 2          |
| Eswatini          | 2016 | ..         | *2      | ..      | ..                | *2     | *2         |
|                   | 2017 | ..         | 0       | ..      | ..                | 0      | 0          |
|                   | 2018 | ..         | 4       | ..      | ..                | 4      | 4          |
|                   | 2019 | ..         | 4       | ..      | ..                | 4      | 3          |
| Ethiopia          | 2016 | ..         | 8       | ..      | ..                | 8      | 0          |
|                   | 2017 | ..         | 5       | ..      | ..                | 5      | 0          |
|                   | 2018 | ..         | 5       | ..      | ..                | 5      | 0          |
|                   | 2019 | ..         | 7       | ..      | ..                | 7      | 0          |
| Gabon             | 2016 | 14         | 23      | ..      | ..                | 37     | 18         |
|                   | 2017 | 41         | 36      | ..      | ..                | 77     | 37         |
|                   | 2018 | 37         | 32      | ..      | ..                | 70     | 33         |
|                   | 2019 | 38         | 33      | ..      | ..                | 71     | 33         |
| Gambia            | 2016 | ..         | *2      | ..      | ..                | *2     | *1         |
|                   | 2017 | ..         | *2      | ..      | ..                | *2     | *1         |
|                   | 2018 | ..         | *2      | ..      | ..                | *2     | *1         |
|                   | 2019 | ..         | *2      | ..      | ..                | *2     | *1         |
| Ghana             | 2016 | 114        | 178     | 25      | ..                | 267    | 9          |
|                   | 2017 | 114        | 202     | 40      | ..                | 276    | 9          |
|                   | 2018 | 88         | 315     | 5       | ..                | 398    | 13         |
|                   | 2019 | 70         | 275     | 1       | -4                | 348    | 11         |
| Guinea-Bissau     | 2016 | ..         | *3      | ..      | ..                | *3     | *2         |
|                   | 2017 | ..         | *3      | ..      | ..                | *3     | *2         |
|                   | 2018 | ..         | *3      | ..      | ..                | *3     | *2         |
|                   | 2019 | ..         | *3      | ..      | ..                | *3     | *2         |
| Kenya             | 2016 | 0          | 172     | 3       | 0                 | 169    | 3          |
|                   | 2017 | 0          | 190     | 1       | 0                 | 189    | 4          |
|                   | 2018 | ..         | 222     | ..      | ..                | 222    | 4          |
|                   | 2019 | ..         | 304     | 3       | ..                | 301    | 6          |
| Lesotho           | 2016 | ..         | 7       | ..      | ..                | 7      | 4          |
|                   | 2017 | ..         | 9       | ..      | ..                | 9      | 4          |
|                   | 2018 | ..         | 10      | ..      | ..                | 10     | 5          |
|                   | 2019 | ..         | 14      | ..      | ..                | 14     | 6          |

Table 17

## Production, trade and supply of liquefied petroleum gases (LPG)

Thousand metric tons and kilograms per capita

| Country or area | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|-----------------|------|------------|---------|---------|-------------------|--------|------------|
|                 |      |            |         |         |                   | Total  | Per capita |
| Liberia         | 2016 | ..         | 2       | ..      | ..                | 2      | 0          |
|                 | 2017 | ..         | 2       | ..      | ..                | 2      | 0          |
|                 | 2018 | ..         | *2      | ..      | ..                | *2     | 0          |
|                 | 2019 | ..         | *2      | ..      | ..                | *2     | 0          |
| Libya           | 2016 | 311        | ..      | 42      | ..                | 269    | 41         |
|                 | 2017 | 320        | ..      | 43      | ..                | 278    | 42         |
|                 | 2018 | 327        | ..      | 46      | ..                | 281    | 42         |
|                 | 2019 | 319        | ..      | 38      | ..                | 281    | 41         |
| Madagascar      | 2016 | ..         | 13      | ..      | *6                | 8      | 0          |
|                 | 2017 | ..         | 12      | ..      | -2                | 13     | 1          |
|                 | 2018 | ..         | 14      | 0       | 0                 | 14     | 1          |
|                 | 2019 | ..         | 17      | 0       | 2                 | 15     | 1          |
| Malawi          | 2016 | ..         | *3      | ..      | ..                | *3     | 0          |
|                 | 2017 | ..         | *3      | ..      | ..                | *3     | 0          |
|                 | 2018 | ..         | *3      | ..      | ..                | *3     | 0          |
|                 | 2019 | ..         | *3      | ..      | ..                | *3     | 0          |
| Mali            | 2016 | ..         | 15      | ..      | 0                 | 15     | 1          |
|                 | 2017 | ..         | 20      | ..      | *4                | 16     | 1          |
|                 | 2018 | ..         | *18     | ..      | 0                 | *18    | *1         |
|                 | 2019 | ..         | *19     | ..      | ..                | *19    | *1         |
| Mauritania      | 2016 | ..         | 62      | ..      | ..                | 62     | 15         |
|                 | 2017 | ..         | 61      | ..      | *-2               | 64     | 15         |
|                 | 2018 | ..         | 58      | ..      | *-3               | 61     | 14         |
|                 | 2019 | ..         | 85      | ..      | *32               | 53     | 12         |
| Mauritius       | 2016 | ..         | 167     | *91     | 1                 | 75     | 59         |
|                 | 2017 | ..         | 149     | ..      | 74                | 75     | 59         |
|                 | 2018 | ..         | 169     | ..      | 91                | 78     | 62         |
|                 | 2019 | ..         | 175     | 62      | 29                | 84     | 66         |
| Morocco         | 2016 | 0          | 2,472   | ..      | 7                 | 2,465  | 69         |
|                 | 2017 | ..         | 2,493   | ..      | -59               | 2,552  | 71         |
|                 | 2018 | ..         | 2,592   | ..      | -13               | 2,605  | 71         |
|                 | 2019 | ..         | 2,729   | ..      | -27               | 2,756  | 74         |
| Mozambique      | 2016 | ..         | 19      | ..      | 0                 | 19     | 1          |
|                 | 2017 | ..         | 33      | ..      | ..                | 33     | 1          |
|                 | 2018 | ..         | 32      | ..      | ..                | 32     | 1          |
|                 | 2019 | ..         | 37      | ..      | ..                | 37     | 1          |
| Namibia         | 2016 | ..         | 22      | ..      | ..                | 22     | 9          |
|                 | 2017 | ..         | 37      | ..      | ..                | 37     | 15         |
|                 | 2018 | ..         | 55      | ..      | ..                | 55     | 22         |
|                 | 2019 | ..         | 49      | ..      | ..                | 49     | 20         |
| Niger           | 2016 | 35         | 0       | 4       | 0                 | 32     | 2          |
|                 | 2017 | 47         | 0       | *15     | 0                 | 32     | 1          |
|                 | 2018 | 53         | 1       | 16      | ..                | 38     | 2          |
|                 | 2019 | 60         | 0       | ..      | ..                | 61     | 3          |
| Nigeria         | 2016 | 66         | ..      | ..      | ..                | 66     | 0          |
|                 | 2017 | 79         | ..      | ..      | ..                | 79     | 0          |
|                 | 2018 | 48         | 57      | ..      | -81               | 187    | 1          |
|                 | 2019 | 3          | ..      | ..      | -361              | 364    | 2          |
| Rwanda          | 2016 | ..         | 6       | ..      | ..                | 6      | 0          |
|                 | 2017 | ..         | 13      | ..      | ..                | 13     | 1          |
|                 | 2018 | ..         | 19      | ..      | ..                | 19     | 2          |
|                 | 2019 | ..         | 25      | ..      | ..                | 25     | 2          |

Table 17

## Production, trade and supply of liquefied petroleum gases (LPG)

Thousand metric tons and kilograms per capita

| Country or area         | Year        | Production    | Imports       | Exports       | Changes in stocks | Supply        |            |
|-------------------------|-------------|---------------|---------------|---------------|-------------------|---------------|------------|
|                         |             |               |               |               |                   | Total         | Per capita |
| Senegal                 | 2016        | 3             | 147           | 14            | -1                | 137           | 9          |
|                         | 2017        | 3             | 151           | ..            | 0                 | 154           | 10         |
|                         | 2018        | 3             | 138           | ..            | 0                 | 141           | 9          |
|                         | 2019        | 3             | 176           | 7             | 0                 | 172           | 11         |
| Seychelles              | 2016        | ..            | 3             | ..            | ..                | 3             | 36         |
|                         | 2017        | ..            | 5             | ..            | ..                | 5             | 52         |
|                         | 2018        | ..            | 4             | ..            | ..                | 4             | 37         |
|                         | 2019        | ..            | 4             | ..            | ..                | 4             | 40         |
| Somalia                 | 2016        | ..            | *6            | ..            | ..                | *6            | 0          |
|                         | 2017        | ..            | *6            | ..            | ..                | *6            | 0          |
|                         | 2018        | ..            | *6            | ..            | ..                | *6            | 0          |
|                         | 2019        | ..            | *6            | ..            | ..                | *6            | 0          |
| South Africa            | 2016        | 420           | 105           | 41            | ..                | 484           | 9          |
|                         | 2017        | 405           | 105           | 60            | ..                | 450           | 8          |
|                         | 2018        | 246           | 114           | 56            | ..                | 304           | 5          |
|                         | 2019        | 221           | 86            | 60            | ..                | 247           | 4          |
| South Sudan             | 2016        | ..            | 3             | ..            | ..                | 3             | 0          |
|                         | 2017        | ..            | 3             | ..            | ..                | 3             | 0          |
|                         | 2018        | ..            | 3             | ..            | ..                | 3             | 0          |
|                         | 2019        | ..            | 3             | ..            | ..                | 3             | 0          |
| Sudan                   | 2016        | 373           | 57            | ..            | ..                | 430           | 11         |
|                         | 2017        | 329           | 115           | ..            | ..                | 444           | 11         |
|                         | 2018        | 277           | 161           | ..            | ..                | 439           | 10         |
|                         | 2019        | *281          | *163          | ..            | ..                | *444          | *10        |
| Togo                    | 2016        | ..            | 7             | ..            | ..                | 7             | 1          |
|                         | 2017        | ..            | 12            | ..            | ..                | 12            | 2          |
|                         | 2018        | ..            | 12            | ..            | -1                | 13            | 2          |
|                         | 2019        | ..            | 12            | ..            | ..                | 12            | 1          |
| Tunisia                 | 2016        | 160           | 363           | ..            | -3                | 526           | 47         |
|                         | 2017        | 142           | 420           | ..            | 0                 | 562           | 49         |
|                         | 2018        | 136           | 443           | ..            | ..                | 579           | 50         |
|                         | 2019        | 105           | 495           | ..            | 1                 | 599           | 51         |
| Uganda                  | 2016        | ..            | *5            | ..            | ..                | *5            | 0          |
|                         | 2017        | ..            | *4            | ..            | ..                | *4            | 0          |
|                         | 2018        | ..            | 62            | ..            | ..                | 62            | 1          |
|                         | 2019        | ..            | 62            | ..            | ..                | 62            | 1          |
| United Rep. of Tanzania | 2016        | ..            | 107           | ..            | ..                | 107           | 2          |
|                         | 2017        | ..            | 121           | ..            | ..                | 121           | 2          |
|                         | 2018        | ..            | 128           | ..            | ..                | 128           | 2          |
|                         | 2019        | ..            | 128           | ..            | ..                | 128           | 2          |
| Zambia                  | 2016        | 5             | ..            | 1             | ..                | 4             | 0          |
|                         | 2017        | 9             | ..            | 1             | ..                | 8             | 0          |
|                         | 2018        | 9             | ..            | 1             | ..                | 8             | 0          |
|                         | 2019        | 11            | ..            | 1             | ..                | 10            | 1          |
| Zimbabwe                | 2016        | ..            | 25            | ..            | ..                | 25            | 2          |
|                         | 2017        | ..            | 22            | ..            | ..                | 22            | 2          |
|                         | 2018        | ..            | 27            | ..            | ..                | 27            | 2          |
|                         | 2019        | ..            | 28            | ..            | ..                | 28            | 2          |
| <b>America, North</b>   | <b>2016</b> | <b>59,605</b> | <b>11,718</b> | <b>28,619</b> | <b>-2,166</b>     | <b>44,871</b> | <b>78</b>  |
|                         | <b>2017</b> | <b>62,422</b> | <b>13,988</b> | <b>32,427</b> | <b>23</b>         | <b>43,961</b> | <b>76</b>  |
|                         | <b>2018</b> | <b>68,148</b> | <b>15,258</b> | <b>36,168</b> | <b>103</b>        | <b>47,134</b> | <b>81</b>  |
|                         | <b>2019</b> | <b>76,582</b> | <b>16,854</b> | <b>42,676</b> | <b>1,636</b>      | <b>49,124</b> | <b>84</b>  |

Table 17

## Production, trade and supply of liquefied petroleum gases (LPG)

Thousand metric tons and kilograms per capita

| Country or area             | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|-----------------------------|------|------------|---------|---------|-------------------|--------|------------|
|                             |      |            |         |         |                   | Total  | Per capita |
| Anguilla                    | 2016 | ..         | 9       | ..      | ..                | 9      | 630        |
|                             | 2017 | ..         | *9      | ..      | ..                | *9     | *590       |
|                             | 2018 | ..         | *9      | ..      | ..                | *9     | *590       |
|                             | 2019 | ..         | *9      | ..      | ..                | *9     | *592       |
| Antigua and Barbuda         | 2016 | ..         | *4      | ..      | ..                | *4     | *38        |
|                             | 2017 | ..         | *4      | ..      | ..                | *4     | *38        |
|                             | 2018 | ..         | *4      | ..      | ..                | *4     | *38        |
|                             | 2019 | ..         | *4      | ..      | ..                | *4     | *38        |
| Aruba                       | 2016 | ..         | *11     | ..      | ..                | *11    | *102       |
|                             | 2017 | ..         | *11     | ..      | ..                | *11    | *104       |
|                             | 2018 | ..         | *11     | ..      | ..                | *11    | *105       |
|                             | 2019 | ..         | *11     | ..      | ..                | *11    | *105       |
| Bahamas                     | 2016 | ..         | 14      | ..      | ..                | 14     | 38         |
|                             | 2017 | ..         | 14      | ..      | ..                | 14     | 37         |
|                             | 2018 | ..         | 19      | ..      | ..                | 19     | 49         |
|                             | 2019 | ..         | 18      | ..      | ..                | 18     | 46         |
| Barbados                    | 2016 | ..         | 8       | ..      | 0                 | 8      | 26         |
|                             | 2017 | ..         | 8       | ..      | 0                 | 8      | 27         |
|                             | 2018 | ..         | 8       | ..      | 0                 | 8      | 27         |
|                             | 2019 | ..         | 8       | ..      | 0                 | 8      | 27         |
| Belize                      | 2016 | 1          | 23      | ..      | ..                | 24     | 66         |
|                             | 2017 | 1          | 25      | ..      | ..                | 26     | 70         |
|                             | 2018 | 1          | 27      | ..      | ..                | 28     | 73         |
|                             | 2019 | 1          | 26      | ..      | ..                | 27     | 69         |
| Bermuda                     | 2016 | ..         | 26      | ..      | ..                | 26     | 403        |
|                             | 2017 | ..         | 4       | ..      | ..                | 4      | 70         |
|                             | 2018 | ..         | 16      | ..      | ..                | 16     | 247        |
|                             | 2019 | ..         | 14      | ..      | ..                | 14     | 221        |
| Bonaire, St Eustatius, Saba | 2016 | ..         | *1      | ..      | ..                | *1     | *46        |
|                             | 2017 | ..         | *1      | ..      | ..                | *1     | *47        |
|                             | 2018 | ..         | *1      | ..      | ..                | *1     | *47        |
|                             | 2019 | ..         | *1      | ..      | ..                | *1     | *49        |
| Canada                      | 2016 | 1,165      | 244     | 137     | -110              | 1,382  | 38         |
|                             | 2017 | 1,524      | 249     | 144     | 33                | 1,596  | 43         |
|                             | 2018 | 1,362      | 200     | 120     | -9                | 1,451  | 39         |
|                             | 2019 | 1,576      | 391     | 187     | 41                | 1,739  | 46         |
| Cayman Islands              | 2016 | ..         | 5       | ..      | ..                | 5      | 80         |
|                             | 2017 | ..         | 5       | ..      | ..                | 5      | 79         |
|                             | 2018 | ..         | 4       | ..      | ..                | 4      | 64         |
|                             | 2019 | ..         | 8       | ..      | ..                | 8      | 128        |
| Costa Rica                  | 2016 | ..         | 160     | ..      | 1                 | 159    | 32         |
|                             | 2017 | ..         | 173     | ..      | 4                 | 169    | 34         |
|                             | 2018 | ..         | 167     | ..      | -4                | 171    | 34         |
|                             | 2019 | ..         | 186     | ..      | 4                 | 181    | 36         |
| Cuba                        | 2016 | 36         | 77      | ..      | *-28              | 141    | 12         |
|                             | 2017 | 51         | 115     | ..      | ..                | 167    | 15         |
|                             | 2018 | 30         | 135     | ..      | ..                | 165    | 15         |
|                             | 2019 | 22         | 119     | ..      | ..                | 141    | 12         |
| Curaçao                     | 2016 | 96         | 0       | 38      | ..                | 58     | 360        |
|                             | 2017 | 59         | ..      | 20      | ..                | 39     | 243        |
|                             | 2018 | 44         | ..      | 15      | ..                | 29     | 180        |
|                             | 2019 | 0          | ..      | 0       | ..                | 0      | 0          |

Table 17

## Production, trade and supply of liquefied petroleum gases (LPG)

Thousand metric tons and kilograms per capita

| Country or area    | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|--------------------|------|------------|---------|---------|-------------------|--------|------------|
|                    |      |            |         |         |                   | Total  | Per capita |
| Dominica           | 2016 | ..         | *2      | ..      | ..                | *2     | *33        |
|                    | 2017 | ..         | *2      | ..      | ..                | *2     | *32        |
|                    | 2018 | ..         | *2      | ..      | ..                | *2     | *32        |
|                    | 2019 | ..         | *2      | ..      | ..                | *2     | *33        |
| Dominican Republic | 2016 | 16         | 961     | ..      | -2                | 980    | 94         |
|                    | 2017 | 11         | 977     | ..      | -2                | 989    | 94         |
|                    | 2018 | 14         | 1,012   | ..      | 3                 | 1,023  | 96         |
|                    | 2019 | 27         | 1,010   | ..      | 4                 | 1,033  | 96         |
| El Salvador        | 2016 | 0          | 201     | ..      | ..                | 201    | 32         |
|                    | 2017 | ..         | 179     | ..      | ..                | 179    | 28         |
|                    | 2018 | ..         | 312     | ..      | ..                | 312    | 49         |
|                    | 2019 | ..         | 444     | ..      | ..                | 444    | 69         |
| Greenland          | 2016 | ..         | 0       | ..      | ..                | 0      | 1          |
|                    | 2017 | ..         | 0       | ..      | ..                | 0      | 1          |
|                    | 2018 | ..         | 0       | ..      | ..                | 0      | *1         |
|                    | 2019 | ..         | 0       | ..      | ..                | 0      | *1         |
| Grenada            | 2016 | ..         | 4       | ..      | ..                | 4      | 37         |
|                    | 2017 | ..         | 4       | ..      | ..                | 4      | 38         |
|                    | 2018 | ..         | 4       | ..      | ..                | 4      | 39         |
|                    | 2019 | ..         | 5       | ..      | ..                | 5      | 48         |
| Guatemala          | 2016 | ..         | 369     | 109     | 8                 | 251    | 15         |
|                    | 2017 | ..         | 581     | 169     | 17                | 395    | 23         |
|                    | 2018 | ..         | 544     | 154     | -21               | 411    | 24         |
|                    | 2019 | ..         | 576     | 120     | 24                | 431    | 25         |
| Haiti              | 2016 | ..         | 20      | ..      | ..                | 20     | 2          |
|                    | 2017 | ..         | 17      | ..      | ..                | 17     | 2          |
|                    | 2018 | ..         | 18      | ..      | ..                | 18     | 2          |
|                    | 2019 | ..         | 12      | ..      | ..                | 12     | 1          |
| Honduras           | 2016 | ..         | 224     | 334     | -362              | 252    | 27         |
|                    | 2017 | ..         | 600     | 0       | 287               | 314    | 33         |
|                    | 2018 | ..         | 653     | 414     | 11                | 227    | 24         |
|                    | 2019 | ..         | 682     | 385     | -19               | 316    | 32         |
| Jamaica            | 2016 | 9          | 68      | ..      | 1                 | 76     | 26         |
|                    | 2017 | 13         | 87      | ..      | 1                 | 99     | 34         |
|                    | 2018 | 11         | 85      | ..      | 1                 | 95     | 32         |
|                    | 2019 | 7          | 60      | ..      | 0                 | 67     | 23         |
| Mexico             | 2016 | 4,722      | 4,556   | 154     | 39                | 9,085  | 74         |
|                    | 2017 | 4,311      | 5,587   | 178     | -54               | 9,774  | 78         |
|                    | 2018 | 3,674      | 6,185   | 86      | -35               | 9,808  | 78         |
|                    | 2019 | 3,270      | 6,989   | 21      | 24                | 10,214 | 80         |
| Montserrat         | 2016 | ..         | 0       | ..      | 0                 | 0      | 60         |
|                    | 2017 | ..         | 1       | ..      | 0                 | 1      | 120        |
|                    | 2018 | ..         | 0       | ..      | ..                | 0      | 72         |
|                    | 2019 | ..         | 0       | ..      | ..                | 0      | 66         |
| Nicaragua          | 2016 | 18         | 100     | ..      | 0                 | 118    | 19         |
|                    | 2017 | 20         | 105     | ..      | 0                 | 125    | 20         |
|                    | 2018 | 17         | 108     | ..      | ..                | 125    | 19         |
|                    | 2019 | 21         | 103     | ..      | 1                 | 123    | 19         |
| Panama             | 2016 | ..         | 222     | 0       | 23                | 199    | 49         |
|                    | 2017 | ..         | 288     | 0       | -40               | 328    | 80         |
|                    | 2018 | ..         | 323     | 0       | 7                 | 316    | 76         |
|                    | 2019 | ..         | 333     | 0       | 11                | 322    | 76         |

Table 17

## Production, trade and supply of liquefied petroleum gases (LPG)

Thousand metric tons and kilograms per capita

| Country or area           | Year        | Production    | Imports      | Exports      | Changes in stocks | Supply        |            |
|---------------------------|-------------|---------------|--------------|--------------|-------------------|---------------|------------|
|                           |             |               |              |              |                   | Total         | Per capita |
| Sint Maarten (Dutch part) | 2016        | ..            | *2           | ..           | ..                | *2            | *49        |
|                           | 2017        | ..            | *2           | ..           | ..                | *2            | *46        |
|                           | 2018        | ..            | *2           | ..           | ..                | *2            | *45        |
|                           | 2019        | ..            | *2           | ..           | ..                | *2            | *45        |
| St. Kitts-Nevis           | 2016        | ..            | *2           | ..           | ..                | *2            | *41        |
|                           | 2017        | ..            | *2           | ..           | ..                | *2            | *40        |
|                           | 2018        | ..            | *2           | ..           | ..                | *2            | *42        |
|                           | 2019        | ..            | *2           | ..           | ..                | *2            | *42        |
| St. Lucia                 | 2016        | ..            | 7            | ..           | ..                | 7             | 37         |
|                           | 2017        | ..            | 9            | ..           | ..                | 9             | 51         |
|                           | 2018        | ..            | 8            | ..           | ..                | 8             | 46         |
|                           | 2019        | ..            | 7            | ..           | ..                | 7             | 39         |
| St. Vincent-Grenadines    | 2016        | ..            | 9            | ..           | ..                | 9             | 79         |
|                           | 2017        | ..            | 8            | ..           | ..                | 8             | 68         |
|                           | 2018        | ..            | 8            | ..           | ..                | 8             | 74         |
|                           | 2019        | ..            | 8            | ..           | ..                | 8             | 69         |
| Trinidad and Tobago       | 2016        | 561           | ..           | 379          | 188               | -6            | -4         |
|                           | 2017        | 609           | ..           | 433          | 163               | 13            | 9          |
|                           | 2018        | 494           | ..           | 362          | 133               | -2            | -2         |
|                           | 2019        | 436           | ..           | 377          | ..                | 59            | 42         |
| Turks and Caicos Islands  | 2016        | ..            | *5           | ..           | ..                | *5            | *126       |
|                           | 2017        | ..            | *5           | ..           | ..                | *5            | *132       |
|                           | 2018        | ..            | *5           | ..           | ..                | *5            | *133       |
|                           | 2019        | ..            | *5           | ..           | ..                | *5            | *134       |
| United States             | 2016        | 52,981        | 4,386        | 27,468       | -1,924            | 31,823        | 99         |
|                           | 2017        | 55,823        | 4,916        | 31,483       | -386              | 29,642        | 91         |
|                           | 2018        | 62,501        | 5,385        | 35,017       | 17                | 32,852        | 100        |
|                           | 2019        | 71,223        | 5,818        | 41,586       | 1,544             | 33,910        | 103        |
| <b>America, South</b>     | <b>2016</b> | <b>14,091</b> | <b>3,966</b> | <b>1,191</b> | <b>-195</b>       | <b>17,061</b> | <b>41</b>  |
|                           | <b>2017</b> | <b>13,928</b> | <b>4,149</b> | <b>1,285</b> | <b>-91</b>        | <b>16,883</b> | <b>40</b>  |
|                           | <b>2018</b> | <b>12,828</b> | <b>4,514</b> | <b>1,475</b> | <b>-41</b>        | <b>15,908</b> | <b>38</b>  |
|                           | <b>2019</b> | <b>12,451</b> | <b>4,582</b> | <b>1,532</b> | <b>-150</b>       | <b>15,651</b> | <b>37</b>  |
| Argentina                 | 2016        | 2,604         | ..           | 879          | -27               | 1,752         | 40         |
|                           | 2017        | 2,577         | ..           | 891          | 35                | 1,651         | 38         |
|                           | 2018        | 2,668         | ..           | 1,133        | -22               | 1,557         | 35         |
|                           | 2019        | 2,768         | ..           | 1,224        | 6                 | 1,538         | 34         |
| Bolivia (Plur. State of)  | 2016        | 533           | ..           | 128          | -22               | 427           | 39         |
|                           | 2017        | 522           | ..           | 115          | -38               | 445           | 40         |
|                           | 2018        | 543           | ..           | 107          | -13               | 449           | 40         |
|                           | 2019        | 563           | ..           | 126          | -6                | 442           | 38         |
| Brazil                    | 2016        | 5,417         | 1,864        | 0            | -40               | 7,321         | 36         |
|                           | 2017        | 5,492         | 1,777        | 1            | 59                | 7,209         | 35         |
|                           | 2018        | 5,350         | 1,881        | 0            | 84                | 7,147         | 34         |
|                           | 2019        | 5,214         | 1,918        | 0            | -17               | 7,149         | 34         |
| Chile                     | 2016        | 251           | 1,070        | 12           | -31               | 1,340         | 74         |
|                           | 2017        | 286           | 1,047        | 72           | -6                | 1,268         | 69         |
|                           | 2018        | 434           | 1,072        | 114          | 44                | 1,349         | 72         |
|                           | 2019        | 543           | 1,000        | 131          | 54                | 1,358         | 72         |
| Colombia                  | 2016        | 899           | 13           | 52           | ..                | 859           | 18         |
|                           | 2017        | 981           | 69           | 39           | ..                | 1,012         | 21         |
|                           | 2018        | 613           | 91           | 0            | ..                | 703           | 14         |
|                           | 2019        | 682           | 122          | 0            | ..                | 804           | 16         |

Table 17

## Production, trade and supply of liquefied petroleum gases (LPG)

Thousand metric tons and kilograms per capita

| Country or area           | Year        | Production     | Imports       | Exports       | Changes in stocks | Supply         |            |
|---------------------------|-------------|----------------|---------------|---------------|-------------------|----------------|------------|
|                           |             |                |               |               |                   | Total          | Per capita |
| Ecuador                   | 2016        | 252            | 814           | ..            | 1                 | 1,065          | 65         |
|                           | 2017        | 256            | 814           | ..            | -1                | 1,071          | 64         |
|                           | 2018        | 390            | 957           | ..            | 0                 | 1,347          | 79         |
|                           | 2019        | 267            | 1,043         | ..            | -2                | 1,311          | 75         |
| Guyana                    | 2016        | ..             | 16            | ..            | -2                | 18             | 24         |
|                           | 2017        | ..             | 16            | ..            | -1                | 17             | 22         |
|                           | 2018        | ..             | 17            | ..            | -2                | 19             | 24         |
|                           | 2019        | ..             | 20            | ..            | 0                 | 20             | 25         |
| Paraguay                  | 2016        | ..             | 92            | ..            | 11                | 81             | 12         |
|                           | 2017        | ..             | 84            | ..            | 3                 | 81             | 12         |
|                           | 2018        | ..             | 90            | ..            | 4                 | 87             | 12         |
|                           | 2019        | ..             | 92            | ..            | 4                 | 88             | 12         |
| Peru                      | 2016        | 1,641          | 34            | 0             | -84               | 1,759          | 57         |
|                           | 2017        | 1,551          | 222           | 54            | -140              | 1,858          | 59         |
|                           | 2018        | 1,410          | 356           | 6             | -138              | 1,899          | 59         |
|                           | 2019        | 1,476          | 341           | 0             | -186              | 2,003          | 62         |
| Suriname                  | 2016        | ..             | 25            | ..            | ..                | 25             | 44         |
|                           | 2017        | ..             | 24            | ..            | ..                | 24             | 42         |
|                           | 2018        | ..             | 26            | ..            | ..                | 26             | 45         |
|                           | 2019        | ..             | 23            | ..            | ..                | 23             | 40         |
| Uruguay                   | 2016        | 96             | 38            | ..            | 0                 | 135            | 39         |
|                           | 2017        | 22             | 96            | ..            | -3                | 121            | 35         |
|                           | 2018        | 106            | 24            | ..            | 2                 | 128            | 37         |
|                           | 2019        | 102            | 25            | 1             | -3                | 129            | 37         |
| Venezuela (Bolivar. Rep.) | 2016        | 2,399          | ..            | 120           | ..                | 2,279          | 76         |
|                           | 2017        | 2,239          | ..            | 112           | ..                | 2,127          | 72         |
|                           | 2018        | 1,313          | ..            | 116           | ..                | 1,197          | 41         |
|                           | 2019        | 835            | ..            | 50            | ..                | 785            | 28         |
| <b>Asia</b>               | <b>2016</b> | <b>137,571</b> | <b>64,523</b> | <b>58,790</b> | <b>133</b>        | <b>143,171</b> | <b>32</b>  |
|                           | <b>2017</b> | <b>141,311</b> | <b>67,125</b> | <b>58,942</b> | <b>-131</b>       | <b>149,626</b> | <b>33</b>  |
|                           | <b>2018</b> | <b>143,105</b> | <b>70,073</b> | <b>58,679</b> | <b>50</b>         | <b>154,449</b> | <b>34</b>  |
|                           | <b>2019</b> | <b>144,566</b> | <b>74,464</b> | <b>54,822</b> | <b>169</b>        | <b>164,039</b> | <b>36</b>  |
| Afghanistan               | 2016        | ..             | 741           | ..            | ..                | 741            | 21         |
|                           | 2017        | ..             | 627           | ..            | ..                | 627            | 17         |
|                           | 2018        | ..             | 614           | ..            | ..                | 614            | 17         |
|                           | 2019        | ..             | 675           | ..            | ..                | 675            | 18         |
| Armenia                   | 2016        | ..             | 4             | ..            | ..                | 4              | 1          |
|                           | 2017        | ..             | 6             | ..            | ..                | 6              | 2          |
|                           | 2018        | ..             | 16            | ..            | ..                | 16             | 5          |
|                           | 2019        | ..             | 30            | ..            | ..                | 30             | 10         |
| Azerbaijan                | 2016        | 200            | ..            | 59            | 0                 | 141            | 14         |
|                           | 2017        | 212            | ..            | 82            | -3                | 133            | 14         |
|                           | 2018        | 216            | ..            | 82            | 1                 | 132            | 13         |
|                           | 2019        | 210            | 1             | 53            | -10               | 168            | 17         |
| Bahrain                   | 2016        | 162            | ..            | 79            | 18                | 65             | 46         |
|                           | 2017        | 149            | ..            | 66            | 14                | 69             | 46         |
|                           | 2018        | 166            | ..            | 66            | 29                | 71             | 45         |
|                           | 2019        | 136            | ..            | 62            | 2                 | 72             | 44         |
| Bangladesh                | 2016        | 18             | ..            | ..            | ..                | 18             | 0          |
|                           | 2017        | 18             | ..            | ..            | ..                | 18             | 0          |
|                           | 2018        | 15             | ..            | ..            | ..                | 15             | 0          |
|                           | 2019        | 19             | ..            | ..            | ..                | 19             | 0          |

Table 17

## Production, trade and supply of liquefied petroleum gases (LPG)

Thousand metric tons and kilograms per capita

| Country or area        | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|------------------------|------|------------|---------|---------|-------------------|--------|------------|
|                        |      |            |         |         |                   | Total  | Per capita |
| Bhutan                 | 2016 | ..         | 8       | ..      | ..                | 8      | 10         |
|                        | 2017 | ..         | 8       | ..      | ..                | 8      | 11         |
|                        | 2018 | ..         | 5       | ..      | ..                | 5      | 7          |
|                        | 2019 | ..         | 10      | ..      | ..                | 10     | 13         |
| Brunei Darussalam      | 2016 | 16         | ..      | ..      | ..                | 16     | 38         |
|                        | 2017 | 17         | ..      | ..      | ..                | 17     | 40         |
|                        | 2018 | 17         | ..      | ..      | ..                | 17     | 40         |
|                        | 2019 | 93         | ..      | 48      | 28                | 17     | 38         |
| Cambodia               | 2016 | ..         | 193     | ..      | ..                | 193    | 12         |
|                        | 2017 | ..         | 225     | ..      | ..                | 225    | 14         |
|                        | 2018 | ..         | 270     | ..      | ..                | 270    | 17         |
|                        | 2019 | ..         | 336     | ..      | ..                | 336    | 20         |
| China                  | 2016 | 35,039     | 16,785  | 1,323   | 160               | 50,340 | 36         |
|                        | 2017 | 36,625     | 19,219  | 1,322   | -59               | 54,581 | 38         |
|                        | 2018 | 39,156     | 19,664  | 1,135   | 351               | 57,334 | 40         |
|                        | 2019 | 42,100     | 21,093  | 1,409   | 178               | 61,606 | 43         |
| China, Hong Kong SAR   | 2016 | ..         | 362     | 0       | -11               | 373    | 51         |
|                        | 2017 | ..         | 378     | ..      | 41                | 337    | 46         |
|                        | 2018 | ..         | 373     | ..      | 34                | 339    | 46         |
|                        | 2019 | ..         | 347     | ..      | -31               | 378    | 51         |
| China, Macao SAR       | 2016 | ..         | 43      | ..      | 0                 | 43     | 70         |
|                        | 2017 | ..         | 42      | ..      | 0                 | 42     | 67         |
|                        | 2018 | ..         | 41      | ..      | 0                 | 41     | 65         |
|                        | 2019 | ..         | 40      | ..      | 1                 | 39     | 61         |
| Cyprus                 | 2016 | ..         | 53      | ..      | ..                | 53     | 45         |
|                        | 2017 | ..         | 55      | ..      | 1                 | 54     | 46         |
|                        | 2018 | ..         | 54      | ..      | 0                 | 54     | 45         |
|                        | 2019 | ..         | 62      | ..      | 0                 | 62     | 52         |
| Georgia                | 2016 | ..         | 13      | ..      | -4                | 16     | 4          |
|                        | 2017 | ..         | 15      | ..      | -1                | 17     | 4          |
|                        | 2018 | ..         | 21      | ..      | -1                | 21     | 5          |
|                        | 2019 | ..         | 28      | 0       | 0                 | 28     | 7          |
| India                  | 2016 | 11,326     | 11,026  | 317     | 0                 | 22,035 | 17         |
|                        | 2017 | 12,380     | 11,382  | 359     | ..                | 23,403 | 17         |
|                        | 2018 | *12,786    | 13,235  | 417     | ..                | 25,604 | 19         |
|                        | 2019 | 12,823     | 14,809  | 463     | ..                | 27,169 | 20         |
| Indonesia              | 2016 | 2,302      | 4,435   | 65      | ..                | 6,672  | 26         |
|                        | 2017 | 2,033      | 5,475   | 93      | -41               | 7,456  | 28         |
|                        | 2018 | 2,034      | 5,517   | 1       | 1                 | 7,549  | 28         |
|                        | 2019 | 2,001      | 5,715   | 0       | -1                | 7,716  | 29         |
| Iran (Islamic Rep. of) | 2016 | 4,819      | ..      | 2,745   | ..                | 2,074  | 26         |
|                        | 2017 | 4,843      | ..      | 2,555   | 0                 | 2,289  | 28         |
|                        | 2018 | 4,476      | ..      | *2,573  | ..                | 1,903  | 23         |
|                        | 2019 | 4,991      | ..      | *2,691  | ..                | 2,300  | 28         |
| Iraq                   | 2016 | 1,369      | 297     | ..      | 1                 | 1,665  | 45         |
|                        | 2017 | 1,622      | 0       | ..      | -29               | 1,651  | 44         |
|                        | 2018 | 1,782      | ..      | 206     | ..                | 1,576  | 41         |
|                        | 2019 | 1,779      | ..      | 163     | ..                | 1,616  | 41         |
| Israel                 | 2016 | 354        | 273     | 170     | -2                | 459    | 57         |
|                        | 2017 | 362        | 308     | 186     | 6                 | 478    | 58         |
|                        | 2018 | 422        | 202     | 164     | 1                 | 458    | 55         |
|                        | 2019 | 425        | 218     | 137     | -4                | 510    | 60         |



Table 17

## Production, trade and supply of liquefied petroleum gases (LPG)

Thousand metric tons and kilograms per capita

| Country or area        | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|------------------------|------|------------|---------|---------|-------------------|--------|------------|
|                        |      |            |         |         |                   | Total  | Per capita |
| Japan                  | 2016 | 4,210      | 10,542  | 76      | -56               | 14,732 | 115        |
|                        | 2017 | 4,416      | 10,740  | 86      | -29               | 15,099 | 118        |
|                        | 2018 | 3,755      | 10,608  | 66      | -94               | 14,391 | 113        |
|                        | 2019 | 3,401      | 10,440  | 55      | 144               | 13,643 | 108        |
| Jordan                 | 2016 | 81         | 327     | ..      | ..                | 408    | 43         |
|                        | 2017 | 78         | 368     | ..      | ..                | 446    | 46         |
|                        | 2018 | 65         | 357     | ..      | -6                | 428    | 43         |
|                        | 2019 | 68         | 375     | ..      | ..                | 442    | 44         |
| Kazakhstan             | 2016 | *2,111     | 2       | 1,876   | 8                 | *229   | *13        |
|                        | 2017 | 2,315      | 1       | 2,031   | ..                | 285    | 16         |
|                        | 2018 | 2,488      | 0       | 1,826   | ..                | 662    | 36         |
|                        | 2019 | 2,587      | 1       | 1,866   | 38                | 684    | 37         |
| Korea, Republic of     | 2016 | 2,244      | 7,250   | 164     | 78                | 9,252  | 181        |
|                        | 2017 | 2,773      | 6,363   | 210     | 169               | 8,757  | 171        |
|                        | 2018 | 2,922      | 6,515   | 430     | -203              | 9,210  | 180        |
|                        | 2019 | 2,882      | 7,872   | 477     | 64                | 10,213 | 199        |
| Kuwait                 | 2016 | 6,032      | ..      | 5,574   | ..                | 458    | 116        |
|                        | 2017 | 6,877      | ..      | 6,353   | ..                | 524    | 129        |
|                        | 2018 | 7,042      | ..      | 6,462   | ..                | 580    | 140        |
|                        | 2019 | 6,037      | ..      | 5,306   | ..                | 731    | 174        |
| Kyrgyzstan             | 2016 | 27         | 11      | ..      | -1                | 39     | 6          |
|                        | 2017 | 44         | 45      | ..      | ..                | 89     | 14         |
|                        | 2018 | 55         | 36      | 1       | 4                 | 86     | 14         |
|                        | 2019 | 15         | 37      | 1       | 1                 | 50     | 8          |
| Lao People's Dem. Rep. | 2016 | ..         | 7       | ..      | ..                | 7      | 1          |
|                        | 2017 | ..         | 13      | ..      | ..                | 13     | 2          |
|                        | 2018 | ..         | 14      | ..      | ..                | 14     | 2          |
|                        | 2019 | ..         | *14     | ..      | ..                | *14    | *2         |
| Lebanon                | 2016 | ..         | 239     | ..      | ..                | 239    | 36         |
|                        | 2017 | ..         | 235     | ..      | ..                | 235    | 34         |
|                        | 2018 | ..         | 229     | ..      | ..                | 229    | 33         |
|                        | 2019 | ..         | 219     | ..      | ..                | 219    | 32         |
| Malaysia               | 2016 | 3,074      | 450     | 326     | -28               | 3,226  | 105        |
|                        | 2017 | 2,602      | 405     | 191     | -19               | 2,835  | 91         |
|                        | 2018 | 2,732      | 491     | 419     | -102              | 2,906  | 92         |
|                        | 2019 | 2,620      | 419     | 297     | *-128             | 2,870  | 90         |
| Maldives               | 2016 | ..         | 14      | ..      | ..                | 14     | 29         |
|                        | 2017 | ..         | 14      | ..      | ..                | 14     | 29         |
|                        | 2018 | ..         | 15      | ..      | ..                | 15     | 29         |
|                        | 2019 | ..         | 17      | ..      | ..                | 17     | 32         |
| Myanmar                | 2016 | 6          | 22      | ..      | -2                | 30     | 1          |
|                        | 2017 | 8          | 39      | ..      | -3                | 50     | 1          |
|                        | 2018 | 13         | 71      | ..      | -1                | 84     | 2          |
|                        | 2019 | 13         | 18      | ..      | ..                | 31     | 1          |
| Nepal                  | 2016 | ..         | 313     | ..      | ..                | 313    | 11         |
|                        | 2017 | ..         | 371     | ..      | ..                | 371    | 13         |
|                        | 2018 | ..         | 429     | ..      | ..                | 429    | 15         |
|                        | 2019 | ..         | 401     | ..      | ..                | 401    | 14         |
| Oman                   | 2016 | 532        | ..      | 376     | ..                | 156    | 35         |
|                        | 2017 | 655        | ..      | 464     | ..                | 191    | 41         |
|                        | 2018 | 765        | ..      | 560     | ..                | 205    | 42         |
|                        | 2019 | 776        | ..      | 556     | ..                | 220    | 44         |

Table 17

## Production, trade and supply of liquefied petroleum gases (LPG)

Thousand metric tons and kilograms per capita

| Country or area      | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|----------------------|------|------------|---------|---------|-------------------|--------|------------|
|                      |      |            |         |         |                   | Total  | Per capita |
| Other Asia           | 2016 | 1,108      | 1,722   | 4       | -30               | 2,856  | 121        |
|                      | 2017 | 1,018      | 1,260   | 26      | -31               | 2,283  | 96         |
|                      | 2018 | 1,131      | 1,742   | 80      | 50                | 2,743  | 116        |
|                      | 2019 | 1,050      | 1,746   | 33      | -31               | 2,793  | 118        |
| Pakistan             | 2016 | 667        | 498     | ..      | ..                | 1,165  | 6          |
|                      | 2017 | *963       | 495     | ..      | ..                | *1,458 | *7         |
|                      | 2018 | *774       | 478     | ..      | ..                | *1,252 | *6         |
|                      | 2019 | *1,041     | 675     | ..      | ..                | *1,716 | *8         |
| Philippines          | 2016 | 460        | 997     | 3       | 4                 | 1,449  | 14         |
|                      | 2017 | 446        | 1,194   | 6       | 13                | 1,621  | 15         |
|                      | 2018 | 509        | 1,307   | 1       | 9                 | 1,806  | 17         |
|                      | 2019 | 286        | 1,370   | 5       | -4                | 1,655  | 15         |
| Qatar                | 2016 | 10,173     | ..      | 9,220   | ..                | 953    | 359        |
|                      | 2017 | 10,019     | ..      | 9,030   | ..                | 989    | 363        |
|                      | 2018 | 10,814     | ..      | 9,824   | ..                | 990    | 356        |
|                      | 2019 | 8,305      | ..      | 7,310   | ..                | 995    | 351        |
| Saudi Arabia         | 2016 | 29,169     | ..      | 25,103  | 14                | 4,052  | 125        |
|                      | 2017 | 28,804     | ..      | *24,601 | -12               | 4,216  | 127        |
|                      | 2018 | 26,729     | ..      | 23,797  | ..                | 2,932  | 87         |
|                      | 2019 | *28,130    | ..      | *23,534 | *-5               | *4,601 | *134       |
| Singapore            | 2016 | 333        | 9       | 236     | ..                | 106    | 19         |
|                      | 2017 | 224        | 218     | 317     | ..                | 125    | 22         |
|                      | 2018 | 833        | 400     | 242     | ..                | 991    | 172        |
|                      | 2019 | 873        | 570     | 181     | ..                | 1,262  | 217        |
| Sri Lanka            | 2016 | 9          | 345     | ..      | -2                | 356    | 17         |
|                      | 2017 | 19         | 205     | ..      | -187              | 412    | 19         |
|                      | 2018 | 22         | 413     | ..      | -9                | 444    | 21         |
|                      | 2019 | 27         | 430     | ..      | 0                 | 457    | 21         |
| State of Palestine   | 2016 | ..         | 172     | ..      | ..                | 172    | 37         |
|                      | 2017 | ..         | 190     | ..      | ..                | 190    | 40         |
|                      | 2018 | ..         | 167     | ..      | ..                | 167    | 34         |
|                      | 2019 | ..         | 178     | ..      | ..                | 178    | 36         |
| Syrian Arab Republic | 2016 | 149        | 334     | ..      | ..                | 483    | 28         |
|                      | 2017 | 157        | 381     | ..      | ..                | 538    | 31         |
|                      | 2018 | 152        | 352     | ..      | ..                | 504    | 30         |
|                      | 2019 | 151        | 283     | ..      | ..                | 434    | 25         |
| Tajikistan           | 2016 | ..         | 349     | ..      | ..                | 349    | 40         |
|                      | 2017 | ..         | 353     | ..      | ..                | 353    | 40         |
|                      | 2018 | ..         | 381     | ..      | ..                | 381    | 42         |
|                      | 2019 | ..         | 431     | ..      | ..                | 431    | 46         |
| Thailand             | 2016 | 5,719      | 456     | 82      | ..                | 6,093  | 88         |
|                      | 2017 | 6,056      | 642     | 247     | ..                | 6,451  | 93         |
|                      | 2018 | 6,247      | 682     | 385     | ..                | 6,544  | 94         |
|                      | 2019 | 5,980      | 550     | 299     | ..                | 6,231  | 89         |
| Timor-Leste          | 2016 | ..         | 0       | ..      | ..                | 0      | 0          |
|                      | 2017 | ..         | 1       | ..      | ..                | 1      | 1          |
|                      | 2018 | ..         | 1       | ..      | ..                | 1      | 1          |
|                      | 2019 | ..         | 1       | ..      | ..                | 1      | 1          |
| Turkey               | 2016 | 972        | 3,419   | 214     | -25               | 4,202  | 53         |
|                      | 2017 | 1,015      | 3,387   | 269     | 41                | 4,092  | 50         |
|                      | 2018 | 913        | 3,312   | 110     | -14               | 4,129  | 50         |
|                      | 2019 | 1,082      | 3,108   | 101     | -73               | 4,162  | 50         |

Table 17

## Production, trade and supply of liquefied petroleum gases (LPG)

Thousand metric tons and kilograms per capita

| Country or area        | Year        | Production    | Imports       | Exports       | Changes in stocks | Supply        |            |
|------------------------|-------------|---------------|---------------|---------------|-------------------|---------------|------------|
|                        |             |               |               |               |                   | Total         | Per capita |
| Turkmenistan           | 2016        | 998           | ..            | ..            | ..                | 998           | 176        |
|                        | 2017        | 1,015         | ..            | ..            | ..                | 1,015         | 176        |
|                        | 2018        | 1,067         | ..            | ..            | ..                | 1,067         | 182        |
|                        | 2019        | 1,096         | ..            | ..            | ..                | 1,096         | 184        |
| United Arab Emirates   | 2016        | 12,140        | 438           | 10,777        | ..                | 1,800         | 192        |
|                        | 2017        | 11,841        | ..            | 10,448        | ..                | 1,393         | 147        |
|                        | 2018        | 10,716        | ..            | 9,833         | ..                | 883           | 92         |
|                        | 2019        | 11,691        | 26            | 9,774         | ..                | 1,942         | 199        |
| Uzbekistan             | 2016        | 856           | ..            | ..            | 12                | 844           | 27         |
|                        | 2017        | 830           | ..            | ..            | -2                | 832           | 26         |
|                        | 2018        | 819           | ..            | ..            | -1                | 819           | 25         |
|                        | 2019        | 830           | ..            | ..            | -1                | 831           | 25         |
| Viet Nam               | 2016        | 798           | 1,925         | ..            | ..                | 2,723         | 29         |
|                        | 2017        | 761           | 2,158         | ..            | ..                | 2,919         | 31         |
|                        | 2018        | 1,369         | 1,810         | ..            | ..                | 3,179         | 33         |
|                        | 2019        | 887           | 1,810         | ..            | ..                | 2,697         | 28         |
| Yemen                  | 2016        | 101           | *450          | ..            | ..                | *551          | *20        |
|                        | 2017        | 113           | *305          | ..            | ..                | *418          | *15        |
|                        | 2018        | 106           | *252          | ..            | ..                | *358          | *13        |
|                        | 2019        | 163           | *109          | ..            | ..                | 272           | 9          |
| <b>Europe</b>          | <b>2016</b> | <b>47,550</b> | <b>23,629</b> | <b>20,595</b> | <b>-228</b>       | <b>50,812</b> | <b>68</b>  |
|                        | <b>2017</b> | <b>54,219</b> | <b>23,444</b> | <b>20,579</b> | <b>206</b>        | <b>56,878</b> | <b>76</b>  |
|                        | <b>2018</b> | <b>54,024</b> | <b>24,651</b> | <b>20,548</b> | <b>42</b>         | <b>58,085</b> | <b>78</b>  |
|                        | <b>2019</b> | <b>54,033</b> | <b>24,508</b> | <b>19,856</b> | <b>-331</b>       | <b>59,015</b> | <b>79</b>  |
| Albania                | 2016        | ..            | 189           | 0             | 49                | 140           | 49         |
|                        | 2017        | ..            | 252           | 0             | 90                | 162           | 56         |
|                        | 2018        | ..            | 196           | ..            | 25                | 171           | 59         |
|                        | 2019        | ..            | 173           | ..            | 2                 | 171           | 60         |
| Andorra                | 2016        | ..            | *2            | ..            | ..                | *2            | *28        |
|                        | 2017        | ..            | *2            | ..            | ..                | *2            | *29        |
|                        | 2018        | ..            | *2            | ..            | ..                | *2            | *31        |
|                        | 2019        | ..            | *2            | ..            | ..                | *2            | *30        |
| Austria                | 2016        | 122           | 53            | 68            | 2                 | 105           | 12         |
|                        | 2017        | 102           | 62            | 62            | -3                | 104           | 12         |
|                        | 2018        | 111           | 62            | 86            | -1                | 89            | 10         |
|                        | 2019        | 137           | 61            | 89            | 9                 | 99            | 11         |
| Belarus                | 2016        | 419           | 65            | 346           | -11               | 149           | 16         |
|                        | 2017        | 481           | 251           | 591           | -4                | 145           | 15         |
|                        | 2018        | 562           | 177           | 601           | -1                | 139           | 15         |
|                        | 2019        | 390           | 90            | 344           | 2                 | 134           | 14         |
| Belgium                | 2016        | 697           | 1,681         | 818           | 23                | 1,537         | 135        |
|                        | 2017        | 738           | 1,671         | 845           | -13               | 1,578         | 138        |
|                        | 2018        | 829           | 2,128         | 672           | 9                 | 2,275         | 198        |
|                        | 2019        | 1,069         | 2,109         | 696           | 9                 | 2,474         | 214        |
| Bosnia and Herzegovina | 2016        | 19            | 63            | ..            | ..                | 82            | 24         |
|                        | 2017        | 24            | 76            | ..            | ..                | 100           | 30         |
|                        | 2018        | 19            | 72            | ..            | ..                | 91            | 27         |
|                        | 2019        | 1             | 80            | ..            | -1                | 82            | 25         |
| Bulgaria               | 2016        | 103           | 416           | 19            | -6                | 506           | 71         |
|                        | 2017        | 120           | 407           | 20            | 5                 | 501           | 71         |
|                        | 2018        | 97            | 410           | 29            | -2                | 479           | 68         |
|                        | 2019        | 131           | 367           | 44            | -1                | 455           | 65         |

Table 17

## Production, trade and supply of liquefied petroleum gases (LPG)

Thousand metric tons and kilograms per capita

| Country or area | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|-----------------|------|------------|---------|---------|-------------------|--------|------------|
|                 |      |            |         |         |                   | Total  | Per capita |
| Croatia         | 2016 | 248        | 54      | 155     | 2                 | 145    | 34         |
|                 | 2017 | 283        | 47      | 188     | -1                | 143    | 34         |
|                 | 2018 | 254        | 41      | 159     | -3                | 138    | 33         |
|                 | 2019 | 196        | 75      | 135     | 1                 | 134    | 32         |
| Czechia         | 2016 | 255        | 183     | 139     | 5                 | 294    | 28         |
|                 | 2017 | 358        | 172     | 90      | -1                | 441    | 41         |
|                 | 2018 | 356        | 231     | 134     | ..                | 453    | 42         |
|                 | 2019 | 400        | 210     | 145     | ..                | 465    | 44         |
| Denmark         | 2016 | 102        | 32      | 78      | -2                | 58     | 10         |
|                 | 2017 | 118        | 35      | 85      | 3                 | 65     | 11         |
|                 | 2018 | 126        | 21      | 87      | 0                 | 59     | 10         |
|                 | 2019 | 127        | 17      | 84      | -1                | 61     | 11         |
| Estonia         | 2016 | ..         | 36      | 13      | 1                 | 22     | 17         |
|                 | 2017 | ..         | 40      | 14      | 1                 | 25     | 19         |
|                 | 2018 | ..         | 25      | 5       | ..                | 20     | 15         |
|                 | 2019 | ..         | 41      | 11      | 2                 | 28     | 21         |
| Finland         | 2016 | 275        | 738     | 10      | -57               | 1,060  | 193        |
|                 | 2017 | 285        | 707     | ..      | 103               | 889    | 161        |
|                 | 2018 | 254        | 785     | 5       | -53               | 1,087  | 197        |
|                 | 2019 | 289        | 824     | 23      | -7                | 1,097  | 198        |
| France          | 2016 | 1,528      | 3,483   | 1,188   | -12               | 3,835  | 57         |
|                 | 2017 | 1,618      | 3,315   | 1,225   | 15                | 3,693  | 55         |
|                 | 2018 | 1,421      | 3,148   | 1,056   | 9                 | 3,504  | 52         |
|                 | 2019 | 1,357      | 3,326   | 902     | -18               | 3,799  | 56         |
| Germany         | 2016 | 2,744      | 790     | 189     | -7                | 3,352  | 41         |
|                 | 2017 | 3,419      | 944     | 201     | 1                 | 4,161  | 50         |
|                 | 2018 | 3,224      | 1,080   | 161     | 13                | 4,130  | 50         |
|                 | 2019 | 3,232      | 1,224   | 252     | 2                 | 4,202  | 50         |
| Greece          | 2016 | 824        | 33      | 250     | 6                 | 601    | 57         |
|                 | 2017 | 837        | 43      | 309     | -3                | 574    | 54         |
|                 | 2018 | 847        | 31      | 329     | 1                 | 549    | 52         |
|                 | 2019 | 802        | 73      | 284     | -3                | 593    | 57         |
| Hungary         | 2016 | 222        | 375     | 94      | 3                 | 500    | 51         |
|                 | 2017 | 188        | 461     | 96      | 6                 | 547    | 56         |
|                 | 2018 | 185        | 446     | 87      | -2                | 546    | 56         |
|                 | 2019 | 153        | 479     | 93      | -4                | 543    | 56         |
| Iceland         | 2016 | ..         | 3       | ..      | ..                | 3      | 9          |
|                 | 2017 | ..         | 2       | ..      | ..                | 2      | 7          |
|                 | 2018 | ..         | 3       | ..      | 0                 | 3      | 8          |
|                 | 2019 | ..         | 3       | ..      | ..                | 3      | 9          |
| Ireland         | 2016 | 41         | 122     | 17      | ..                | 146    | 31         |
|                 | 2017 | 49         | 132     | 24      | 1                 | 156    | 33         |
|                 | 2018 | 58         | 140     | 31      | -1                | 167    | 35         |
|                 | 2019 | 45         | 139     | 21      | -3                | 166    | 34         |
| Italy           | 2016 | 1,236      | 2,403   | 326     | 40                | 3,273  | 54         |
|                 | 2017 | 1,348      | 2,361   | 305     | -44               | 3,448  | 57         |
|                 | 2018 | 1,228      | 2,264   | 227     | -36               | 3,301  | 54         |
|                 | 2019 | 1,269      | 2,422   | 244     | 41                | 3,407  | 56         |
| Kosovo          | 2016 | ..         | 35      | ..      | ..                | 35     | 20         |
|                 | 2017 | ..         | 33      | ..      | ..                | 33     | 18         |
|                 | 2018 | ..         | 31      | ..      | ..                | 31     | 17         |
|                 | 2019 | ..         | 30      | ..      | ..                | 30     | 17         |

Table 17

## Production, trade and supply of liquefied petroleum gases (LPG)

Thousand metric tons and kilograms per capita

| Country or area     | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|---------------------|------|------------|---------|---------|-------------------|--------|------------|
|                     |      |            |         |         |                   | Total  | Per capita |
| Latvia              | 2016 | ..         | 232     | 139     | 2                 | 91     | 46         |
|                     | 2017 | ..         | 239     | 145     | 2                 | 93     | 48         |
|                     | 2018 | ..         | 227     | 142     | 0                 | 85     | 44         |
|                     | 2019 | ..         | 177     | 101     | 1                 | 75     | 40         |
| Lithuania           | 2016 | 345        | 79      | 213     | 0                 | 211    | 73         |
|                     | 2017 | 363        | 82      | 242     | -2                | 204    | 72         |
|                     | 2018 | 342        | 82      | 237     | 0                 | 187    | 67         |
|                     | 2019 | 399        | 77      | 285     | 2                 | 188    | 68         |
| Luxembourg          | 2016 | ..         | 14      | 3       | ..                | 11     | 19         |
|                     | 2017 | ..         | 10      | 1       | 0                 | 9      | 15         |
|                     | 2018 | ..         | 8       | 0       | ..                | 8      | 13         |
|                     | 2019 | ..         | 10      | 0       | ..                | 9      | 15         |
| Malta               | 2016 | ..         | 17      | ..      | 1                 | 16     | 37         |
|                     | 2017 | ..         | 23      | ..      | -3                | 26     | 59         |
|                     | 2018 | ..         | 27      | ..      | 2                 | 25     | 58         |
|                     | 2019 | ..         | 25      | ..      | -1                | 27     | 61         |
| Montenegro          | 2016 | ..         | 19      | ..      | 2                 | 17     | 27         |
|                     | 2017 | ..         | 19      | ..      | 2                 | 17     | 27         |
|                     | 2018 | ..         | 20      | ..      | 2                 | 18     | 29         |
|                     | 2019 | ..         | 21      | ..      | 3                 | 18     | 29         |
| Netherlands         | 2016 | 1,650      | 3,686   | 2,420   | -106              | 3,022  | 178        |
|                     | 2017 | 1,557      | 3,217   | 2,056   | -21               | 2,739  | 161        |
|                     | 2018 | 1,481      | 3,953   | 2,167   | 29                | 3,238  | 190        |
|                     | 2019 | 1,566      | 3,304   | 2,099   | -52               | 2,823  | 165        |
| North Macedonia     | 2016 | 0          | 79      | 2       | 0                 | 77     | 37         |
|                     | 2017 | 0          | 79      | 2       | 1                 | 77     | 37         |
|                     | 2018 | ..         | 80      | 2       | 1                 | 78     | 37         |
|                     | 2019 | ..         | 81      | 2       | -1                | 80     | 39         |
| Norway              | 2016 | 6,852      | 363     | 6,347   | -83               | 951    | 181        |
|                     | 2017 | 7,380      | 206     | 6,459   | 21                | 1,106  | 209        |
|                     | 2018 | 6,902      | 283     | 6,353   | 35                | 797    | 149        |
|                     | 2019 | 6,394      | 228     | 6,389   | -28               | 260    | 48         |
| Poland              | 2016 | 601        | 2,196   | 259     | 12                | 2,526  | 66         |
|                     | 2017 | 545        | 2,488   | 448     | -2                | 2,588  | 68         |
|                     | 2018 | 605        | 2,562   | 545     | 3                 | 2,619  | 69         |
|                     | 2019 | 630        | 2,613   | 479     | -1                | 2,765  | 73         |
| Portugal            | 2016 | 240        | 685     | 66      | 7                 | 852    | 83         |
|                     | 2017 | 214        | 595     | 32      | -5                | 781    | 76         |
|                     | 2018 | 205        | 547     | 63      | -8                | 697    | 68         |
|                     | 2019 | 165        | 752     | 82      | -27               | 862    | 84         |
| Republic of Moldova | 2016 | ..         | 77      | 0       | -1                | 78     | 19         |
|                     | 2017 | ..         | 72      | 0       | 0                 | 72     | 18         |
|                     | 2018 | ..         | 72      | 0       | 1                 | 71     | 18         |
|                     | 2019 | ..         | 66      | ..      | ..                | 66     | 16         |
| Romania             | 2016 | 597        | 179     | 297     | -1                | 480    | 24         |
|                     | 2017 | 617        | 233     | 312     | 5                 | 532    | 27         |
|                     | 2018 | 624        | 226     | 324     | 2                 | 524    | 27         |
|                     | 2019 | 625        | 186     | 312     | 0                 | 498    | 26         |
| Russian Federation  | 2016 | 22,259     | 112     | 4,877   | -46               | 17,540 | 121        |
|                     | 2017 | 27,605     | 143     | 4,461   | 81                | 23,206 | 159        |
|                     | 2018 | 28,730     | 99      | 4,945   | -5                | 23,890 | 164        |
|                     | 2019 | 29,077     | 122     | 4,443   | -188              | 24,945 | 171        |

Table 17

## Production, trade and supply of liquefied petroleum gases (LPG)

Thousand metric tons and kilograms per capita

| Country or area  | Year        | Production   | Imports    | Exports      | Changes in stocks | Supply       |            |
|------------------|-------------|--------------|------------|--------------|-------------------|--------------|------------|
|                  |             |              |            |              |                   | Total        | Per capita |
| Serbia           | 2016        | 166          | 183        | 66           | -2                | 285          | 40         |
|                  | 2017        | 127          | 144        | 54           | -6                | 224          | 32         |
|                  | 2018        | 83           | 120        | 51           | 4                 | 148          | 21         |
|                  | 2019        | 94           | 105        | 32           | -1                | 168          | 24         |
| Slovakia         | 2016        | 176          | 49         | 69           | -2                | 158          | 29         |
|                  | 2017        | 177          | 54         | 65           | -1                | 167          | 31         |
|                  | 2018        | 180          | 67         | 82           | 1                 | 164          | 30         |
|                  | 2019        | 164          | 48         | 63           | 3                 | 146          | 27         |
| Slovenia         | 2016        | ..           | 80         | 0            | 0                 | 80           | 39         |
|                  | 2017        | ..           | 88         | ..           | 2                 | 86           | 42         |
|                  | 2018        | ..           | 94         | ..           | 1                 | 93           | 45         |
|                  | 2019        | ..           | 103        | 7            | 2                 | 94           | 45         |
| Spain            | 2016        | 1,541        | 1,443      | 462          | -40               | 2,562        | 55         |
|                  | 2017        | 1,401        | 1,296      | 563          | -90               | 2,224        | 48         |
|                  | 2018        | 1,311        | 1,366      | 474          | 55                | 2,148        | 46         |
|                  | 2019        | 1,167        | 1,242      | 553          | -15               | 1,871        | 40         |
| Sweden           | 2016        | 481          | 1,324      | 685          | -26               | 1,146        | 117        |
|                  | 2017        | 421          | 1,215      | 619          | 4                 | 1,013        | 102        |
|                  | 2018        | 499          | 1,121      | 575          | -8                | 1,053        | 106        |
|                  | 2019        | 446          | 1,233      | 690          | -14               | 1,003        | 100        |
| Switzerland      | 2016        | 104          | 71         | 8            | 0                 | 167          | 20         |
|                  | 2017        | 107          | 70         | 14           | 0                 | 163          | 19         |
|                  | 2018        | 133          | 63         | 21           | 0                 | 175          | 20         |
|                  | 2019        | 108          | 81         | 20           | 0                 | 169          | 20         |
| Ukraine          | 2016        | 409          | 1,081      | ..           | 27                | 1,463        | 33         |
|                  | 2017        | 411          | 1,119      | ..           | 43                | 1,487        | 33         |
|                  | 2018        | 397          | 1,317      | 24           | -17               | 1,707        | 39         |
|                  | 2019        | 409          | 1,466      | 59           | -35               | 1,851        | 42         |
| United Kingdom   | 2016        | 3,294        | 904        | 972          | -8                | 3,234        | 49         |
|                  | 2017        | 3,326        | 1,037      | 1,050        | 18                | 3,295        | 49         |
|                  | 2018        | 2,962        | 1,024      | 872          | -11               | 3,125        | 47         |
|                  | 2019        | 3,191        | 825        | 873          | -8                | 3,151        | 47         |
| <b>Oceania</b>   | <b>2016</b> | <b>2,399</b> | <b>580</b> | <b>1,131</b> | <b>81</b>         | <b>1,768</b> | <b>44</b>  |
|                  | <b>2017</b> | <b>2,252</b> | <b>620</b> | <b>1,222</b> | <b>-34</b>        | <b>1,683</b> | <b>41</b>  |
|                  | <b>2018</b> | <b>2,141</b> | <b>531</b> | <b>1,239</b> | <b>72</b>         | <b>1,361</b> | <b>33</b>  |
|                  | <b>2019</b> | <b>2,139</b> | <b>511</b> | <b>1,616</b> | <b>-26</b>        | <b>1,061</b> | <b>25</b>  |
| Australia        | 2016        | 2,213        | 470        | 1,081        | 83                | 1,519        | 63         |
|                  | 2017        | 2,054        | 512        | 1,209        | -37               | 1,394        | 57         |
|                  | 2018        | 1,940        | 425        | 1,234        | 71                | 1,060        | 43         |
|                  | 2019        | 1,950        | 409        | 1,616        | -24               | 768          | 30         |
| Fiji             | 2016        | ..           | 29         | 0            | ..                | 29           | 33         |
|                  | 2017        | ..           | 30         | 1            | ..                | 29           | 33         |
|                  | 2018        | ..           | *35        | *1           | ..                | *34          | *38        |
|                  | 2019        | ..           | *32        | ..           | ..                | *32          | *36        |
| French Polynesia | 2016        | ..           | 10         | ..           | ..                | 10           | 36         |
|                  | 2017        | ..           | 10         | ..           | ..                | 10           | 36         |
|                  | 2018        | ..           | 11         | ..           | ..                | 11           | 40         |
|                  | 2019        | ..           | 9          | ..           | ..                | 9            | 33         |
| Kiribati         | 2016        | ..           | 0          | ..           | ..                | 0            | 2          |
|                  | 2017        | ..           | 0          | ..           | ..                | 0            | 2          |
|                  | 2018        | ..           | 0          | ..           | ..                | 0            | *2         |
|                  | 2019        | ..           | 0          | ..           | ..                | 0            | *2         |

Table 17

## Production, trade and supply of liquefied petroleum gases (LPG)

Thousand metric tons and kilograms per capita

| Country or area          | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|--------------------------|------|------------|---------|---------|-------------------|--------|------------|
|                          |      |            |         |         |                   | Total  | Per capita |
| Marshall Islands         | 2016 | ..         | 0       | ..      | ..                | 0      | *3         |
|                          | 2017 | ..         | 0       | ..      | ..                | 0      | *3         |
|                          | 2018 | ..         | 0       | ..      | ..                | 0      | *3         |
|                          | 2019 | ..         | 0       | ..      | ..                | 0      | *3         |
| Nauru                    | 2016 | ..         | 0       | ..      | ..                | 0      | *1         |
|                          | 2017 | ..         | 0       | ..      | ..                | 0      | *1         |
|                          | 2018 | ..         | 0       | ..      | ..                | 0      | *1         |
|                          | 2019 | ..         | 0       | ..      | ..                | 0      | *1         |
| New Caledonia            | 2016 | ..         | 32      | ..      | -3                | 34     | 125        |
|                          | 2017 | ..         | 37      | ..      | 2                 | 35     | 127        |
|                          | 2018 | ..         | 31      | ..      | 0                 | 31     | 110        |
|                          | 2019 | ..         | 21      | ..      | -2                | 22     | 79         |
| New Zealand              | 2016 | 173        | 24      | 50      | 0                 | 147    | 32         |
|                          | 2017 | 181        | 14      | 12      | ..                | 183    | 39         |
|                          | 2018 | 184        | 12      | 4       | 1                 | 191    | 40         |
|                          | 2019 | 172        | 24      | ..      | 0                 | 195    | 41         |
| Niue                     | 2016 | ..         | 0       | ..      | ..                | 0      | *22        |
|                          | 2017 | ..         | 0       | ..      | ..                | 0      | *21        |
|                          | 2018 | ..         | 0       | ..      | ..                | 0      | *22        |
|                          | 2019 | ..         | 0       | ..      | ..                | 0      | *23        |
| Northern Mariana Islands | 2016 | ..         | *4      | ..      | ..                | *4     | *71        |
|                          | 2017 | ..         | *5      | ..      | ..                | *5     | *88        |
|                          | 2018 | ..         | *5      | ..      | ..                | *5     | *88        |
|                          | 2019 | ..         | *5      | ..      | ..                | *5     | *87        |
| Papua New Guinea         | 2016 | 13         | 1       | ..      | ..                | 14     | 2          |
|                          | 2017 | 17         | *1      | ..      | 1                 | 17     | 2          |
|                          | 2018 | 17         | 1       | ..      | ..                | 18     | 2          |
|                          | 2019 | *18        | *1      | ..      | ..                | *19    | *2         |
| Samoa                    | 2016 | ..         | 6       | ..      | 0                 | 6      | 30         |
|                          | 2017 | ..         | *6      | ..      | 0                 | *6     | *31        |
|                          | 2018 | ..         | *6      | ..      | 0                 | *6     | *31        |
|                          | 2019 | ..         | *6      | ..      | 0                 | *6     | *31        |
| Tonga                    | 2016 | ..         | 2       | ..      | ..                | 2      | 20         |
|                          | 2017 | ..         | 2       | ..      | ..                | 2      | 19         |
|                          | 2018 | ..         | 2       | ..      | ..                | 2      | 21         |
|                          | 2019 | ..         | 2       | ..      | ..                | 2      | 20         |
| Tuvalu                   | 2016 | ..         | 0       | ..      | ..                | 0      | *12        |
|                          | 2017 | ..         | 0       | ..      | ..                | 0      | *11        |
|                          | 2018 | ..         | 0       | ..      | ..                | 0      | *11        |
|                          | 2019 | ..         | 0       | ..      | ..                | 0      | *10        |
| Vanuatu                  | 2016 | ..         | *1      | ..      | ..                | *1     | *5         |
|                          | 2017 | ..         | *1      | ..      | ..                | *1     | *5         |
|                          | 2018 | ..         | *1      | ..      | ..                | *1     | *4         |
|                          | 2019 | ..         | *1      | ..      | ..                | *1     | *4         |
| Wallis and Futuna Is.    | 2016 | ..         | 0       | ..      | ..                | 0      | *21        |
|                          | 2017 | ..         | 0       | ..      | ..                | 0      | *23        |
|                          | 2018 | ..         | 0       | ..      | ..                | 0      | *22        |
|                          | 2019 | ..         | 0       | ..      | ..                | 0      | *22        |





### Production, trade and supply of motor gasoline

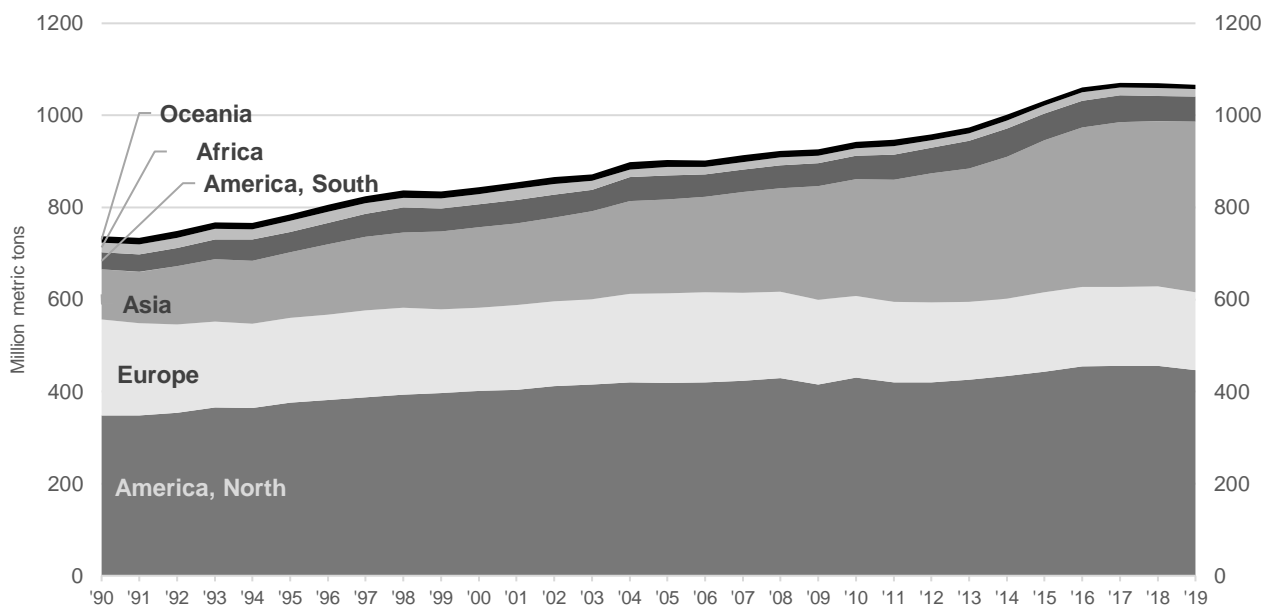
Thousand metric tons and kilograms per capita

#### Table Notes

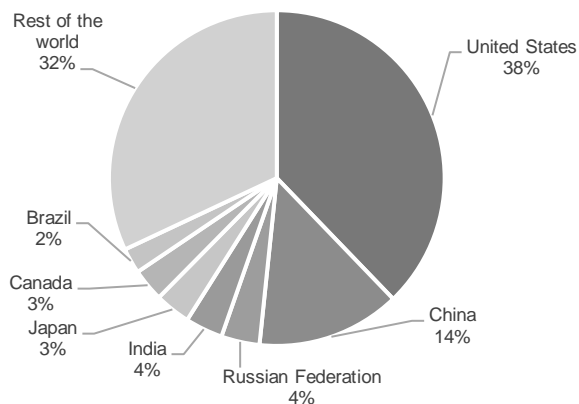
**Production** includes output from refineries and plants, together with quantities from other sources which include any blended biogasoline.

Please refer to the Definitions Section on pages ix to xv for the appropriate product description/ classification, and xvi to xvii for the descriptions of relevant flows.

**Figure 48: Production of motor gasoline by region, 1990-2019**



**Figure 49: Major motor gasoline producing countries, 2019**



**Figure 50: Major motor gasoline consuming countries, 2019**

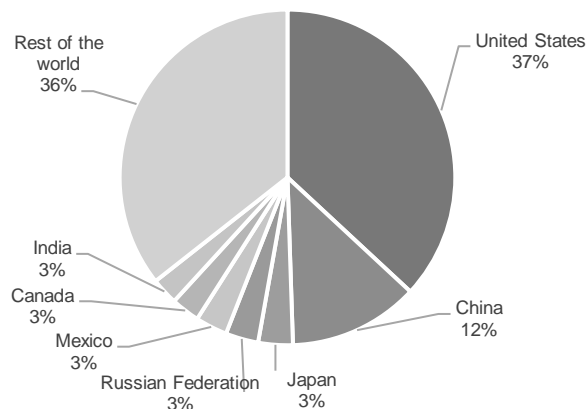


Table 18

## Production, trade and supply of motor gasoline

Thousand metric tons and kilograms per capita

| Country or area      | Year | Production | Imports | Exports | Changes in stocks | Supply    |            |
|----------------------|------|------------|---------|---------|-------------------|-----------|------------|
|                      |      |            |         |         |                   | Total     | Per capita |
| World                | 2016 | 1,061,082  | 227,703 | 228,167 | 2,236             | 1,058,382 | 142        |
|                      | 2017 | 1,070,627  | 229,331 | 234,437 | -2,229            | 1,067,750 | 141        |
|                      | 2018 | 1,069,885  | 239,920 | 248,996 | -1,675            | 1,062,485 | 139        |
|                      | 2019 | 1,066,978  | 246,210 | 236,742 | -5,575            | 1,082,022 | 140        |
| Africa               | 2016 | 19,417     | 35,585  | 2,601   | 827               | 51,574    | 43         |
|                      | 2017 | 17,157     | 34,957  | 2,403   | -26               | 49,737    | 40         |
|                      | 2018 | 17,802     | 30,254  | 2,084   | -2,238            | 48,210    | 38         |
|                      | 2019 | 16,563     | 37,671  | 1,901   | -655              | 52,989    | 41         |
| Algeria              | 2016 | 2,613      | 1,608   | ..      | -13               | 4,234     | 104        |
|                      | 2017 | 2,547      | 1,554   | ..      | 19                | 4,082     | 99         |
|                      | 2018 | 3,749      | 124     | ..      | 336               | 3,537     | 84         |
|                      | 2019 | 3,253      | 578     | ..      | -32               | 3,863     | 90         |
| Angola               | 2016 | 33         | 1,030   | 7       | ..                | 1,057     | 37         |
|                      | 2017 | 35         | 958     | 8       | ..                | 985       | 33         |
|                      | 2018 | 5          | 1,794   | 8       | ..                | 1,792     | 58         |
|                      | 2019 | 39         | 1,077   | 4       | ..                | 1,112     | 35         |
| Benin                | 2016 | ..         | 1,164   | ..      | -2                | 1,166     | 107        |
|                      | 2017 | ..         | 1,191   | ..      | -19               | 1,210     | 108        |
|                      | 2018 | ..         | 1,314   | ..      | -2                | 1,315     | 115        |
|                      | 2019 | ..         | 1,107   | ..      | 10                | 1,097     | 93         |
| Botswana             | 2016 | ..         | 409     | ..      | ..                | 409       | 190        |
|                      | 2017 | ..         | 440     | ..      | ..                | 440       | 200        |
|                      | 2018 | ..         | 446     | ..      | ..                | 446       | 198        |
|                      | 2019 | ..         | 452     | ..      | ..                | 452       | 196        |
| Burkina Faso         | 2016 | ..         | 257     | ..      | *-22              | 278       | 15         |
|                      | 2017 | ..         | 320     | ..      | *-45              | 365       | 19         |
|                      | 2018 | ..         | 465     | ..      | *51               | 415       | 21         |
|                      | 2019 | ..         | 376     | ..      | *-63              | 439       | 22         |
| Burundi              | 2016 | ..         | 62      | ..      | 0                 | 62        | 6          |
|                      | 2017 | ..         | 70      | ..      | ..                | 70        | 6          |
|                      | 2018 | ..         | 96      | ..      | ..                | 96        | 9          |
|                      | 2019 | ..         | 96      | ..      | ..                | 96        | 8          |
| Cabo Verde           | 2016 | ..         | 9       | ..      | ..                | 9         | 16         |
|                      | 2017 | ..         | *9      | ..      | ..                | *9        | *17        |
|                      | 2018 | ..         | 9       | ..      | ..                | 9         | 17         |
|                      | 2019 | ..         | *10     | ..      | ..                | *10       | *17        |
| Cameroon             | 2016 | 292        | 248     | 40      | 0                 | 500       | 21         |
|                      | 2017 | 240        | 269     | 39      | ..                | 470       | 19         |
|                      | 2018 | 218        | 243     | 35      | ..                | 426       | 17         |
|                      | 2019 | 113        | 364     | 34      | ..                | 443       | 17         |
| Central African Rep. | 2016 | ..         | *20     | ..      | ..                | *20       | *4         |
|                      | 2017 | ..         | *23     | ..      | ..                | *23       | *5         |
|                      | 2018 | ..         | *24     | ..      | ..                | *24       | *5         |
|                      | 2019 | ..         | *25     | ..      | ..                | *25       | *5         |
| Chad                 | 2016 | *231       | ..      | *190    | ..                | *41       | *3         |
|                      | 2017 | *231       | ..      | *190    | ..                | *41       | *3         |
|                      | 2018 | *235       | ..      | *193    | ..                | *42       | *3         |
|                      | 2019 | *240       | ..      | *197    | ..                | *43       | *3         |
| Comoros              | 2016 | ..         | *13     | ..      | ..                | *13       | *16        |
|                      | 2017 | ..         | *19     | ..      | ..                | *19       | *24        |
|                      | 2018 | ..         | *22     | ..      | ..                | *22       | *26        |
|                      | 2019 | ..         | *24     | ..      | ..                | *24       | *28        |

## Production, trade and supply of motor gasoline

Thousand metric tons and kilograms per capita

| Country or area        | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|------------------------|------|------------|---------|---------|-------------------|--------|------------|
|                        |      |            |         |         |                   | Total  | Per capita |
| Congo                  | 2016 | 56         | 134     | ..      | ..                | 190    | 38         |
|                        | 2017 | 64         | 88      | ..      | ..                | 151    | 30         |
|                        | 2018 | 65         | 88      | ..      | ..                | 153    | 29         |
|                        | 2019 | 65         | 89      | ..      | ..                | 154    | 29         |
| Côte d'Ivoire          | 2016 | 693        | ..      | 230     | 0                 | 462    | 19         |
|                        | 2017 | *888       | ..      | *309    | -17               | *596   | *24        |
|                        | 2018 | 771        | ..      | 289     | ..                | 482    | 19         |
|                        | 2019 | 844        | ..      | 296     | ..                | 549    | 21         |
| Dem. Rep. of the Congo | 2016 | ..         | 239     | ..      | ..                | 239    | 3          |
|                        | 2017 | ..         | 257     | ..      | ..                | 257    | 3          |
|                        | 2018 | ..         | 264     | ..      | ..                | 264    | 3          |
|                        | 2019 | ..         | 313     | ..      | ..                | 313    | 4          |
| Djibouti               | 2016 | ..         | 13      | ..      | ..                | 13     | 14         |
|                        | 2017 | ..         | 14      | ..      | ..                | 14     | 15         |
|                        | 2018 | ..         | *14     | ..      | ..                | *14    | *14        |
|                        | 2019 | ..         | *14     | ..      | ..                | *14    | *14        |
| Egypt                  | 2016 | 4,536      | 2,933   | 196     | ..                | 7,273  | 77         |
|                        | 2017 | 4,453      | 2,765   | 128     | ..                | 7,090  | 74         |
|                        | 2018 | 4,827      | 2,725   | 299     | ..                | 7,253  | 74         |
|                        | 2019 | 5,258      | 2,172   | 250     | ..                | 7,180  | 72         |
| Equatorial Guinea      | 2016 | ..         | *62     | ..      | ..                | *62    | *51        |
|                        | 2017 | ..         | *65     | ..      | ..                | *65    | *52        |
|                        | 2018 | ..         | *67     | ..      | ..                | *67    | *51        |
|                        | 2019 | ..         | *70     | ..      | ..                | *70    | *51        |
| Eritrea                | 2016 | ..         | 10      | ..      | ..                | 10     | 3          |
|                        | 2017 | ..         | 10      | ..      | ..                | 10     | 3          |
|                        | 2018 | ..         | 10      | ..      | ..                | 10     | 3          |
|                        | 2019 | ..         | 11      | ..      | ..                | 11     | 3          |
| Eswatini               | 2016 | ..         | 115     | ..      | ..                | 115    | 103        |
|                        | 2017 | ..         | 123     | ..      | ..                | 123    | 109        |
|                        | 2018 | ..         | 128     | ..      | ..                | 128    | 113        |
|                        | 2019 | ..         | *135    | ..      | ..                | *135   | *118       |
| Ethiopia               | 2016 | ..         | 367     | ..      | 0                 | 367    | 4          |
|                        | 2017 | ..         | 443     | ..      | ..                | 443    | 4          |
|                        | 2018 | ..         | 473     | ..      | ..                | 473    | 4          |
|                        | 2019 | ..         | 524     | ..      | ..                | 524    | 5          |
| Gabon                  | 2016 | 76         | 6       | ..      | ..                | 82     | 41         |
|                        | 2017 | 32         | 44      | ..      | ..                | 76     | 37         |
|                        | 2018 | 29         | 40      | ..      | ..                | 70     | 33         |
|                        | 2019 | 30         | 41      | ..      | ..                | 71     | 32         |
| Gambia                 | 2016 | ..         | 25      | ..      | ..                | 25     | 12         |
|                        | 2017 | ..         | 25      | ..      | ..                | 25     | 12         |
|                        | 2018 | ..         | 24      | ..      | ..                | 24     | 11         |
|                        | 2019 | ..         | *25     | ..      | ..                | *25    | *11        |
| Ghana                  | 2016 | 244        | 1,236   | 272     | 0                 | 1,208  | 42         |
|                        | 2017 | 7          | 1,304   | 184     | 0                 | 1,126  | 39         |
|                        | 2018 | 102        | 1,326   | 67      | 0                 | 1,360  | 46         |
|                        | 2019 | 125        | 1,265   | 108     | -97               | 1,379  | 45         |
| Guinea                 | 2016 | ..         | 306     | ..      | ..                | 306    | 26         |
|                        | 2017 | ..         | 362     | ..      | ..                | 362    | 30         |
|                        | 2018 | ..         | 279     | ..      | ..                | 279    | 22         |
|                        | 2019 | ..         | 442     | ..      | ..                | 442    | 35         |

Table 18

## Production, trade and supply of motor gasoline

Thousand metric tons and kilograms per capita

| Country or area | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|-----------------|------|------------|---------|---------|-------------------|--------|------------|
|                 |      |            |         |         |                   | Total  | Per capita |
| Guinea-Bissau   | 2016 | ..         | *2      | ..      | ..                | *2     | *1         |
|                 | 2017 | ..         | *2      | ..      | ..                | *2     | *1         |
|                 | 2018 | ..         | *2      | ..      | ..                | *2     | *1         |
|                 | 2019 | ..         | *2      | ..      | ..                | *2     | *1         |
| Kenya           | 2016 | 0          | 1,810   | 537     | ..                | 1,273  | 26         |
|                 | 2017 | 0          | 1,701   | 553     | ..                | 1,148  | 23         |
|                 | 2018 | ..         | 1,239   | ..      | ..                | 1,239  | 24         |
|                 | 2019 | ..         | 1,941   | 2       | ..                | 1,938  | 37         |
| Lesotho         | 2016 | ..         | 94      | ..      | ..                | 94     | 45         |
|                 | 2017 | ..         | 99      | ..      | ..                | 99     | 47         |
|                 | 2018 | ..         | 103     | ..      | ..                | 103    | 49         |
|                 | 2019 | ..         | 103     | ..      | ..                | 103    | 48         |
| Liberia         | 2016 | ..         | *148    | ..      | ..                | *148   | *32        |
|                 | 2017 | ..         | *130    | ..      | ..                | *130   | *28        |
|                 | 2018 | ..         | *111    | ..      | ..                | *111   | *23        |
|                 | 2019 | ..         | *113    | ..      | ..                | *113   | *23        |
| Libya           | 2016 | 399        | 3,556   | ..      | ..                | 3,955  | 609        |
|                 | 2017 | 470        | 3,484   | ..      | ..                | 3,953  | 601        |
|                 | 2018 | 391        | 3,559   | ..      | ..                | 3,950  | 591        |
|                 | 2019 | 339        | 3,678   | ..      | ..                | 4,017  | 593        |
| Madagascar      | 2016 | ..         | 107     | ..      | *8                | 99     | 4          |
|                 | 2017 | ..         | 115     | ..      | 5                 | 111    | 4          |
|                 | 2018 | ..         | 108     | ..      | -11               | 118    | 5          |
|                 | 2019 | ..         | 135     | ..      | 10                | 126    | 5          |
| Malawi          | 2016 | ..         | 123     | ..      | ..                | 123    | 7          |
|                 | 2017 | ..         | 137     | ..      | ..                | 137    | 8          |
|                 | 2018 | ..         | 155     | ..      | ..                | 155    | 9          |
|                 | 2019 | ..         | 183     | ..      | ..                | 183    | 10         |
| Mali            | 2016 | ..         | *132    | 10      | ..                | *122   | *7         |
|                 | 2017 | ..         | *135    | *10     | ..                | *125   | *7         |
|                 | 2018 | ..         | *138    | *10     | ..                | *128   | *7         |
|                 | 2019 | ..         | *140    | *10     | ..                | *130   | *7         |
| Mauritania      | 2016 | ..         | *39     | ..      | ..                | *39    | *9         |
|                 | 2017 | ..         | 34      | ..      | ..                | 34     | 8          |
|                 | 2018 | ..         | 51      | ..      | *10               | 41     | 9          |
|                 | 2019 | ..         | 84      | ..      | *33               | 51     | 11         |
| Mauritius       | 2016 | ..         | 169     | ..      | 3                 | 165    | 131        |
|                 | 2017 | ..         | 172     | ..      | -2                | 174    | 138        |
|                 | 2018 | ..         | 172     | ..      | -5                | 177    | 140        |
|                 | 2019 | ..         | 183     | ..      | -10               | 193    | 152        |
| Morocco         | 2016 | 0          | 649     | 1       | -24               | 672    | 19         |
|                 | 2017 | ..         | 650     | ..      | -41               | 691    | 19         |
|                 | 2018 | ..         | 670     | ..      | -42               | 711    | 19         |
|                 | 2019 | ..         | 672     | ..      | -43               | 715    | 19         |
| Mozambique      | 2016 | ..         | 502     | ..      | *45               | 457    | 16         |
|                 | 2017 | ..         | 302     | ..      | ..                | 302    | 11         |
|                 | 2018 | ..         | 297     | ..      | ..                | 297    | 10         |
|                 | 2019 | ..         | 289     | ..      | ..                | 289    | 10         |
| Namibia         | 2016 | ..         | 341     | ..      | ..                | 341    | 145        |
|                 | 2017 | ..         | 318     | ..      | ..                | 318    | 132        |
|                 | 2018 | ..         | 318     | ..      | ..                | 318    | 130        |
|                 | 2019 | ..         | 309     | ..      | ..                | 309    | 124        |

## Production, trade and supply of motor gasoline

Thousand metric tons and kilograms per capita

| Country or area        | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|------------------------|------|------------|---------|---------|-------------------|--------|------------|
|                        |      |            |         |         |                   | Total  | Per capita |
| Niger                  | 2016 | 184        | 0       | 90      | 0                 | 94     | 5          |
|                        | 2017 | 228        | 0       | *94     | 0                 | 134    | 6          |
|                        | 2018 | 197        | 1       | 101     | ..                | 97     | 4          |
|                        | 2019 | 175        | 0       | *24     | ..                | 151    | 6          |
| Nigeria                | 2016 | 931        | 13,557  | ..      | 851               | 13,637 | 73         |
|                        | 2017 | 675        | 12,461  | ..      | 73                | 13,063 | 68         |
|                        | 2018 | 368        | 8,028   | ..      | -2,536            | 10,932 | 56         |
|                        | 2019 | 107        | 15,745  | ..      | -458              | 16,310 | 81         |
| Rwanda                 | 2016 | ..         | 96      | ..      | ..                | 96     | 8          |
|                        | 2017 | ..         | 99      | ..      | ..                | 99     | 8          |
|                        | 2018 | ..         | 108     | ..      | ..                | 108    | 9          |
|                        | 2019 | ..         | 184     | ..      | ..                | 184    | 15         |
| Sao Tome and Principe  | 2016 | ..         | *9      | ..      | ..                | *9     | *43        |
|                        | 2017 | ..         | *9      | ..      | ..                | *9     | *43        |
|                        | 2018 | ..         | *9      | ..      | ..                | *9     | *44        |
|                        | 2019 | ..         | *9      | ..      | ..                | *9     | *44        |
| Senegal                | 2016 | 116        | 68      | 23      | -1                | 162    | 11         |
|                        | 2017 | 97         | 94      | 2       | ..                | 189    | 12         |
|                        | 2018 | 93         | 134     | ..      | ..                | 227    | 14         |
|                        | 2019 | 84         | 212     | ..      | 0                 | 296    | 18         |
| Seychelles             | 2016 | ..         | 20      | ..      | ..                | 20     | 211        |
|                        | 2017 | ..         | 27      | ..      | ..                | 27     | 282        |
|                        | 2018 | ..         | 41      | ..      | ..                | 41     | 423        |
|                        | 2019 | ..         | 37      | ..      | ..                | 37     | 378        |
| Sierra Leone           | 2016 | ..         | 154     | ..      | ..                | 154    | 21         |
|                        | 2017 | ..         | 138     | ..      | ..                | 138    | 18         |
|                        | 2018 | ..         | 143     | ..      | ..                | 143    | 19         |
|                        | 2019 | ..         | 148     | ..      | ..                | 148    | 19         |
| Somalia                | 2016 | ..         | *34     | ..      | ..                | *34    | *2         |
|                        | 2017 | ..         | *34     | ..      | ..                | *34    | *2         |
|                        | 2018 | ..         | *34     | ..      | ..                | *34    | *2         |
|                        | 2019 | ..         | *34     | ..      | ..                | *34    | *2         |
| South Africa           | 2016 | 7,693      | 1,033   | 858     | ..                | 7,868  | 140        |
|                        | 2017 | 5,983      | 1,565   | 764     | ..                | 6,784  | 119        |
|                        | 2018 | 5,668      | 1,624   | 979     | ..                | 6,313  | 109        |
|                        | 2019 | 4,795      | 1,093   | 873     | ..                | 5,015  | 86         |
| South Sudan            | 2016 | ..         | 51      | ..      | ..                | 51     | 5          |
|                        | 2017 | ..         | 45      | ..      | ..                | 45     | 4          |
|                        | 2018 | ..         | 46      | ..      | ..                | 46     | 4          |
|                        | 2019 | ..         | 52      | ..      | ..                | 52     | 5          |
| St. Helena and Depend. | 2016 | ..         | 1       | ..      | ..                | 1      | 114        |
|                        | 2017 | ..         | 1       | ..      | ..                | 1      | 90         |
|                        | 2018 | ..         | 1       | ..      | ..                | 1      | 120        |
|                        | 2019 | ..         | 1       | ..      | ..                | 1      | 135        |
| Sudan                  | 2016 | 1,196      | ..      | 147     | ..                | 1,050  | 26         |
|                        | 2017 | 1,063      | 267     | 122     | ..                | 1,209  | 30         |
|                        | 2018 | 925        | 349     | 103     | ..                | 1,171  | 28         |
|                        | 2019 | *937       | *353    | *104    | ..                | *1,186 | *28        |
| Togo                   | 2016 | ..         | 121     | ..      | -4                | 125    | 17         |
|                        | 2017 | ..         | 125     | ..      | -4                | 129    | 17         |
|                        | 2018 | ..         | 155     | ..      | -6                | 161    | 20         |
|                        | 2019 | ..         | 155     | ..      | ..                | 155    | 19         |

Table 18

## Production, trade and supply of motor gasoline

Thousand metric tons and kilograms per capita

| Country or area         | Year        | Production     | Imports       | Exports       | Changes in stocks | Supply         |            |
|-------------------------|-------------|----------------|---------------|---------------|-------------------|----------------|------------|
|                         |             |                |               |               |                   | Total          | Per capita |
| Tunisia                 | 2016        | 29             | 516           | ..            | -15               | 560            | 50         |
|                         | 2017        | 21             | 530           | ..            | 6                 | 545            | 48         |
|                         | 2018        | 23             | 650           | ..            | -35               | 708            | 61         |
|                         | 2019        | 22             | 664           | ..            | -5                | 690            | 59         |
| Uganda                  | 2016        | ..             | 601           | ..            | ..                | 601            | 15         |
|                         | 2017        | ..             | 662           | ..            | ..                | 662            | 16         |
|                         | 2018        | ..             | 689           | ..            | ..                | 689            | 16         |
|                         | 2019        | ..             | 759           | ..            | ..                | 759            | 17         |
| United Rep. of Tanzania | 2016        | ..             | 813           | ..            | ..                | 813            | 15         |
|                         | 2017        | ..             | 752           | ..            | ..                | 752            | 14         |
|                         | 2018        | ..             | 753           | ..            | ..                | 753            | 13         |
|                         | 2019        | ..             | 657           | ..            | ..                | 657            | 11         |
| Zambia                  | 2016        | 95             | 248           | ..            | ..                | 343            | 21         |
|                         | 2017        | 124            | 188           | ..            | ..                | 312            | 18         |
|                         | 2018        | 136            | 137           | ..            | ..                | 273            | 16         |
|                         | 2019        | 138            | 191           | ..            | ..                | 329            | 18         |
| Zimbabwe                | 2016        | ..             | 328           | ..            | ..                | 328            | 23         |
|                         | 2017        | ..             | 328           | ..            | ..                | 328            | 23         |
|                         | 2018        | ..             | 454           | ..            | ..                | 454            | 31         |
|                         | 2019        | ..             | 336           | ..            | ..                | 336            | 23         |
| <b>America, North</b>   | <b>2016</b> | <b>455,018</b> | <b>63,814</b> | <b>44,388</b> | <b>792</b>        | <b>473,652</b> | <b>827</b> |
|                         | <b>2017</b> | <b>455,992</b> | <b>62,106</b> | <b>46,525</b> | <b>122</b>        | <b>471,450</b> | <b>816</b> |
|                         | <b>2018</b> | <b>455,731</b> | <b>67,197</b> | <b>49,677</b> | <b>968</b>        | <b>472,283</b> | <b>811</b> |
|                         | <b>2019</b> | <b>446,237</b> | <b>73,094</b> | <b>47,384</b> | <b>143</b>        | <b>471,804</b> | <b>804</b> |
| Anguilla                | 2016        | ..             | *7            | ..            | ..                | *7             | *457       |
|                         | 2017        | ..             | *6            | ..            | ..                | *6             | *432       |
|                         | 2018        | ..             | *6            | ..            | ..                | *6             | *434       |
|                         | 2019        | ..             | *6            | ..            | ..                | *6             | *430       |
| Antigua and Barbuda     | 2016        | ..             | *44           | *3            | ..                | *41            | *434       |
|                         | 2017        | ..             | *44           | *3            | ..                | *41            | *430       |
|                         | 2018        | ..             | *45           | *3            | ..                | *42            | *436       |
|                         | 2019        | ..             | *45           | *3            | ..                | *42            | *432       |
| Aruba                   | 2016        | ..             | *63           | ..            | ..                | *63            | *598       |
|                         | 2017        | ..             | *65           | ..            | ..                | *65            | *617       |
|                         | 2018        | ..             | *66           | ..            | ..                | *66            | *620       |
|                         | 2019        | ..             | *66           | ..            | ..                | *66            | *623       |
| Bahamas                 | 2016        | ..             | 112           | 0             | ..                | 112            | 295        |
|                         | 2017        | ..             | 173           | *1            | ..                | 172            | 451        |
|                         | 2018        | ..             | 322           | ..            | ..                | 322            | 834        |
|                         | 2019        | ..             | 250           | ..            | ..                | 250            | 642        |
| Barbados                | 2016        | ..             | 95            | ..            | 5                 | 90             | 316        |
|                         | 2017        | ..             | 90            | ..            | -1                | 90             | 315        |
|                         | 2018        | ..             | 87            | ..            | ..                | 87             | 302        |
|                         | 2019        | ..             | 86            | ..            | -4                | 90             | 312        |
| Belize                  | 2016        | ..             | 76            | ..            | ..                | 76             | 206        |
|                         | 2017        | ..             | 75            | ..            | ..                | 75             | 199        |
|                         | 2018        | ..             | 78            | ..            | ..                | 78             | 203        |
|                         | 2019        | ..             | 85            | ..            | ..                | 85             | 217        |
| Bermuda                 | 2016        | ..             | 22            | ..            | 0                 | 22             | 350        |
|                         | 2017        | ..             | 18            | ..            | 0                 | 18             | 289        |
|                         | 2018        | ..             | 21            | ..            | 0                 | 21             | 342        |
|                         | 2019        | ..             | 14            | ..            | 0                 | 14             | 221        |

Table 18

## Production, trade and supply of motor gasoline

Thousand metric tons and kilograms per capita

| Country or area             | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|-----------------------------|------|------------|---------|---------|-------------------|--------|------------|
|                             |      |            |         |         |                   | Total  | Per capita |
| Bonaire, St Eustatius, Saba | 2016 | ..         | *1      | ..      | ..                | *1     | *60        |
|                             | 2017 | ..         | *1      | ..      | ..                | *1     | *58        |
|                             | 2018 | ..         | *2      | ..      | ..                | *2     | *59        |
|                             | 2019 | ..         | *2      | ..      | ..                | *2     | *58        |
| British Virgin Islands      | 2016 | ..         | *15     | ..      | ..                | *15    | *494       |
|                             | 2017 | ..         | *12     | ..      | ..                | *12    | *392       |
|                             | 2018 | ..         | *11     | ..      | ..                | *11    | *369       |
|                             | 2019 | ..         | *12     | ..      | ..                | *12    | *383       |
| Canada                      | 2016 | 33,983     | 3,785   | 7,301   | -81               | 30,548 | 840        |
|                             | 2017 | 35,699     | 3,477   | 8,144   | -19               | 31,051 | 845        |
|                             | 2018 | 33,343     | 4,011   | 6,588   | 78                | 30,688 | 828        |
|                             | 2019 | 33,605     | 3,654   | 7,609   | -219              | 29,869 | 798        |
| Cayman Islands              | 2016 | ..         | 37      | ..      | ..                | 37     | 591        |
|                             | 2017 | ..         | 40      | ..      | ..                | 40     | 631        |
|                             | 2018 | ..         | 48      | ..      | ..                | 48     | 743        |
|                             | 2019 | ..         | 50      | ..      | ..                | 50     | 771        |
| Costa Rica                  | 2016 | ..         | 927     | ..      | -6                | 933    | 191        |
|                             | 2017 | ..         | 997     | ..      | 45                | 953    | 192        |
|                             | 2018 | ..         | 913     | ..      | -38               | 951    | 190        |
|                             | 2019 | ..         | 1,017   | ..      | 28                | 989    | 196        |
| Cuba                        | 2016 | 185        | 299     | *246    | ..                | 238    | 21         |
|                             | 2017 | 139        | 169     | *45     | ..                | 262    | 23         |
|                             | 2018 | 212        | 254     | *212    | ..                | 254    | 22         |
|                             | 2019 | 199        | 236     | *203    | ..                | 232    | 20         |
| Curaçao                     | 2016 | 1,788      | 71      | 1,788   | ..                | 71     | 441        |
|                             | 2017 | 1,181      | 71      | 1,181   | ..                | 71     | 439        |
|                             | 2018 | 843        | 70      | 843     | ..                | 70     | 431        |
|                             | 2019 | 0          | 67      | 0       | ..                | 67     | 408        |
| Dominica                    | 2016 | ..         | *10     | ..      | 0                 | *11    | *148       |
|                             | 2017 | ..         | *10     | ..      | 0                 | *10    | *141       |
|                             | 2018 | ..         | *10     | ..      | 0                 | *10    | *145       |
|                             | 2019 | ..         | *10     | ..      | 0                 | *11    | *147       |
| Dominican Republic          | 2016 | 229        | 819     | ..      | 7                 | 1,041  | 100        |
|                             | 2017 | 189        | 866     | ..      | 1                 | 1,055  | 100        |
|                             | 2018 | 256        | 908     | ..      | -20               | 1,184  | 111        |
|                             | 2019 | 251        | 940     | ..      | -21               | 1,212  | 113        |
| El Salvador                 | 2016 | ..         | 591     | ..      | ..                | 591    | 93         |
|                             | 2017 | ..         | 641     | ..      | ..                | 641    | 100        |
|                             | 2018 | ..         | 660     | ..      | ..                | 660    | 103        |
|                             | 2019 | ..         | 730     | ..      | ..                | 730    | 113        |
| Greenland                   | 2016 | ..         | 15      | ..      | -1                | 16     | 287        |
|                             | 2017 | ..         | 16      | ..      | -1                | 16     | 288        |
|                             | 2018 | ..         | *14     | ..      | ..                | *14    | *240       |
|                             | 2019 | ..         | *14     | ..      | ..                | *14    | *246       |
| Grenada                     | 2016 | ..         | 24      | ..      | 0                 | 24     | 217        |
|                             | 2017 | ..         | 25      | ..      | 0                 | 25     | 224        |
|                             | 2018 | ..         | 26      | ..      | -2                | 28     | 254        |
|                             | 2019 | ..         | 28      | ..      | 1                 | 27     | 245        |
| Guatemala                   | 2016 | ..         | 1,387   | 106     | -17               | 1,297  | 78         |
|                             | 2017 | ..         | 1,605   | 51      | 27                | 1,527  | 90         |
|                             | 2018 | ..         | 1,629   | 33      | -3                | 1,599  | 93         |
|                             | 2019 | ..         | 1,869   | 39      | 55                | 1,776  | 101        |

Table 18

## Production, trade and supply of motor gasoline

Thousand metric tons and kilograms per capita

| Country or area           | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|---------------------------|------|------------|---------|---------|-------------------|--------|------------|
|                           |      |            |         |         |                   | Total  | Per capita |
| Haiti                     | 2016 | ..         | 222     | ..      | ..                | 222    | 20         |
|                           | 2017 | ..         | 259     | ..      | ..                | 259    | 24         |
|                           | 2018 | ..         | 321     | ..      | ..                | 321    | 29         |
|                           | 2019 | ..         | 273     | ..      | ..                | 273    | 24         |
| Honduras                  | 2016 | ..         | 632     | ..      | 1                 | 631    | 68         |
|                           | 2017 | ..         | 776     | ..      | 15                | 761    | 81         |
|                           | 2018 | ..         | 814     | 1       | 18                | 795    | 83         |
|                           | 2019 | ..         | 869     | 14      | ..                | 855    | 88         |
| Jamaica                   | 2016 | 133        | 397     | ..      | -6                | 536    | 184        |
|                           | 2017 | 143        | 379     | ..      | 7                 | 515    | 176        |
|                           | 2018 | 119        | 378     | ..      | ..                | 497    | 169        |
|                           | 2019 | 154        | 373     | ..      | 3                 | 524    | 178        |
| Mexico                    | 2016 | 13,563     | 20,575  | ..      | 280               | 33,858 | 275        |
|                           | 2017 | 10,715     | 21,695  | ..      | 10                | 32,400 | 260        |
|                           | 2018 | 8,654      | 24,017  | ..      | 157               | 32,514 | 258        |
|                           | 2019 | 8,213      | 24,377  | ..      | -692              | 33,282 | 261        |
| Montserrat                | 2016 | ..         | 3       | ..      | ..                | 3      | 583        |
|                           | 2017 | ..         | 3       | ..      | ..                | 3      | 581        |
|                           | 2018 | ..         | 4       | ..      | ..                | 4      | 781        |
|                           | 2019 | ..         | 3       | ..      | ..                | 3      | 581        |
| Nicaragua                 | 2016 | 91         | 240     | ..      | 1                 | 330    | 52         |
|                           | 2017 | 101        | 252     | ..      | 0                 | 353    | 55         |
|                           | 2018 | 96         | 227     | ..      | ..                | 323    | 50         |
|                           | 2019 | 108        | 230     | ..      | 0                 | 338    | 52         |
| Panama                    | 2016 | ..         | 874     | ..      | -26               | 900    | 223        |
|                           | 2017 | ..         | 912     | ..      | -47               | 959    | 234        |
|                           | 2018 | ..         | 903     | ..      | -30               | 933    | 223        |
|                           | 2019 | ..         | 945     | ..      | -11               | 956    | 225        |
| Sint Maarten (Dutch part) | 2016 | ..         | *14     | ..      | ..                | *14    | *345       |
|                           | 2017 | ..         | *14     | ..      | ..                | *14    | *333       |
|                           | 2018 | ..         | *14     | ..      | ..                | *14    | *322       |
|                           | 2019 | ..         | *14     | ..      | ..                | *14    | *321       |
| St. Kitts-Nevis           | 2016 | ..         | *18     | ..      | ..                | *18    | *341       |
|                           | 2017 | ..         | *18     | ..      | ..                | *18    | *342       |
|                           | 2018 | ..         | *18     | ..      | ..                | *18    | *343       |
|                           | 2019 | ..         | *19     | ..      | ..                | *19    | *350       |
| St. Lucia                 | 2016 | ..         | *42     | ..      | ..                | *42    | *233       |
|                           | 2017 | ..         | *43     | ..      | ..                | *43    | *240       |
|                           | 2018 | ..         | *42     | ..      | ..                | *42    | *233       |
|                           | 2019 | ..         | *44     | ..      | ..                | *44    | *239       |
| St. Pierre-Miquelon       | 2016 | ..         | *4      | ..      | ..                | *4     | *657       |
|                           | 2017 | ..         | *4      | ..      | ..                | *4     | *663       |
|                           | 2018 | ..         | *3      | ..      | ..                | *3     | *582       |
|                           | 2019 | ..         | *4      | ..      | ..                | *4     | *636       |
| St. Vincent-Grenadines    | 2016 | ..         | 26      | ..      | ..                | 26     | 241        |
|                           | 2017 | ..         | 26      | ..      | ..                | 26     | 237        |
|                           | 2018 | ..         | 30      | ..      | ..                | 30     | 271        |
|                           | 2019 | ..         | 27      | ..      | ..                | 27     | 240        |
| Trinidad and Tobago       | 2016 | 2,453      | 0       | 1,972   | -11               | 492    | 357        |
|                           | 2017 | 2,007      | 0       | 1,496   | -7                | 518    | 375        |
|                           | 2018 | 1,823      | ..      | 1,395   | 20                | 408    | 294        |
|                           | 2019 | 408        | 813     | 754     | ..                | 466    | 334        |



## Production, trade and supply of motor gasoline

Thousand metric tons and kilograms per capita

| Country or area          | Year        | Production    | Imports       | Exports      | Changes in stocks | Supply        |            |
|--------------------------|-------------|---------------|---------------|--------------|-------------------|---------------|------------|
|                          |             |               |               |              |                   | Total         | Per capita |
| Turks and Caicos Islands | 2016        | ..            | *33           | ..           | ..                | *33           | *892       |
|                          | 2017        | ..            | *35           | ..           | ..                | *35           | *948       |
|                          | 2018        | ..            | *36           | ..           | ..                | *36           | *953       |
|                          | 2019        | ..            | *36           | ..           | ..                | *36           | *948       |
| United States            | 2016        | 402,592       | 32,336        | 32,972       | 646               | 401,310       | 1,242      |
|                          | 2017        | 405,819       | 29,288        | 35,605       | 91                | 399,411       | 1,229      |
|                          | 2018        | 410,384       | 31,210        | 40,602       | 788               | 400,204       | 1,224      |
|                          | 2019        | 403,298       | 35,888        | 38,762       | 1,003             | 399,421       | 1,214      |
| <b>America, South</b>    | <b>2016</b> | <b>57,743</b> | <b>9,952</b>  | <b>3,426</b> | <b>-3</b>         | <b>64,272</b> | <b>155</b> |
|                          | <b>2017</b> | <b>58,901</b> | <b>11,526</b> | <b>3,372</b> | <b>-197</b>       | <b>67,251</b> | <b>160</b> |
|                          | <b>2018</b> | <b>54,653</b> | <b>10,190</b> | <b>3,992</b> | <b>-184</b>       | <b>61,035</b> | <b>144</b> |
|                          | <b>2019</b> | <b>54,481</b> | <b>11,001</b> | <b>4,221</b> | <b>256</b>        | <b>61,005</b> | <b>143</b> |
| Argentina                | 2016        | 6,946         | 183           | ..           | 61                | 7,068         | 162        |
|                          | 2017        | 7,451         | 308           | ..           | -34               | 7,793         | 177        |
|                          | 2018        | 7,457         | 457           | *788         | -47               | 7,173         | 162        |
|                          | 2019        | 7,331         | 385           | *811         | -29               | 6,934         | 155        |
| Bolivia (Plur. State of) | 2016        | 1,055         | 150           | ..           | -75               | 1,280         | 116        |
|                          | 2017        | 1,035         | 242           | ..           | -80               | 1,357         | 121        |
|                          | 2018        | 993           | 322           | ..           | -65               | 1,380         | 122        |
|                          | 2019        | 895           | 486           | ..           | 8                 | 1,373         | 119        |
| Brazil                   | 2016        | 28,788        | 2,821         | 534          | 33                | 31,042        | 151        |
|                          | 2017        | 29,411        | 3,323         | 349          | 49                | 32,336        | 156        |
|                          | 2018        | 26,295        | 2,393         | 1,029        | -142              | 27,801        | 133        |
|                          | 2019        | 26,182        | 3,574         | 1,491        | 258               | 28,007        | 133        |
| Chile                    | 2016        | 2,974         | 455           | 22           | -2                | 3,409         | 187        |
|                          | 2017        | 3,055         | 526           | 40           | 44                | 3,497         | 189        |
|                          | 2018        | 2,964         | 549           | 28           | 2                 | 3,483         | 186        |
|                          | 2019        | 3,319         | 271           | 69           | 16                | 3,505         | 185        |
| Colombia                 | 2016        | 2,997         | 1,678         | 0            | ..                | 4,675         | 97         |
|                          | 2017        | 4,336         | 1,583         | 689          | ..                | 5,230         | 107        |
|                          | 2018        | 4,458         | 1,190         | 91           | ..                | 5,557         | 112        |
|                          | 2019        | 4,691         | 1,167         | 33           | ..                | 5,824         | 116        |
| Ecuador                  | 2016        | 1,599         | 1,877         | 61           | 12                | 3,403         | 206        |
|                          | 2017        | 1,535         | 1,923         | 0            | -31               | 3,489         | 208        |
|                          | 2018        | 1,513         | 1,853         | ..           | 13                | 3,352         | 196        |
|                          | 2019        | 1,387         | 2,141         | 4            | 12                | 3,513         | 202        |
| Falkland Is. (Malvinas)  | 2016        | ..            | 0             | ..           | ..                | 0             | 67         |
|                          | 2017        | ..            | 0             | ..           | ..                | 0             | 67         |
|                          | 2018        | ..            | 0             | ..           | ..                | 0             | 60         |
|                          | 2019        | ..            | 0             | ..           | ..                | 0             | 46         |
| Guyana                   | 2016        | ..            | 153           | ..           | 3                 | 150           | 195        |
|                          | 2017        | ..            | 140           | ..           | -2                | 141           | 182        |
|                          | 2018        | ..            | 155           | ..           | -4                | 159           | 204        |
|                          | 2019        | ..            | 174           | ..           | -3                | 177           | 226        |
| Paraguay                 | 2016        | 216           | 622           | ..           | 6                 | 832           | 123        |
|                          | 2017        | 223           | 686           | ..           | -64               | 973           | 142        |
|                          | 2018        | 244           | 814           | ..           | -14               | 1,071         | 154        |
|                          | 2019        | 287           | 756           | ..           | -29               | 1,071         | 152        |
| Peru                     | 2016        | 3,420         | 800           | 2,142        | -40               | 2,118         | 68         |
|                          | 2017        | 3,463         | 892           | 2,289        | -66               | 2,132         | 68         |
|                          | 2018        | 3,331         | 971           | 2,051        | 58                | 2,193         | 69         |
|                          | 2019        | 3,431         | 770           | 1,808        | 46                | 2,348         | 72         |

Table 18

## Production, trade and supply of motor gasoline

Thousand metric tons and kilograms per capita

| Country or area           | Year        | Production     | Imports       | Exports       | Changes in stocks | Supply         |            |
|---------------------------|-------------|----------------|---------------|---------------|-------------------|----------------|------------|
|                           |             |                |               |               |                   | Total          | Per capita |
| Suriname                  | 2016        | 34             | 175           | 3             | ..                | 206            | 365        |
|                           | 2017        | 64             | 96            | 5             | ..                | 155            | 271        |
|                           | 2018        | 66             | 66            | 5             | ..                | 127            | 220        |
|                           | 2019        | 61             | 112           | ..            | ..                | 173            | 298        |
| Uruguay                   | 2016        | 598            | 14            | 0             | -1                | 612            | 179        |
|                           | 2017        | 203            | 430           | 0             | -12               | 645            | 188        |
|                           | 2018        | 588            | 11            | 0             | 14                | 586            | 170        |
|                           | 2019        | 611            | 0             | 6             | -24               | 629            | 182        |
| Venezuela (Bolivar. Rep.) | 2016        | 9,116          | 1,025         | 664           | 0                 | 9,477          | 317        |
|                           | 2017        | 8,125          | 1,378         | ..            | 0                 | 9,503          | 323        |
|                           | 2018        | 6,745          | 1,408         | ..            | ..                | 8,153          | 282        |
|                           | 2019        | 6,286          | 1,165         | ..            | ..                | 7,451          | 261        |
| <b>Asia</b>               | <b>2016</b> | <b>346,448</b> | <b>78,799</b> | <b>84,514</b> | <b>-325</b>       | <b>341,058</b> | <b>76</b>  |
|                           | <b>2017</b> | <b>357,235</b> | <b>81,913</b> | <b>87,325</b> | <b>-1,738</b>     | <b>353,560</b> | <b>78</b>  |
|                           | <b>2018</b> | <b>359,251</b> | <b>97,244</b> | <b>99,364</b> | <b>317</b>        | <b>356,814</b> | <b>78</b>  |
|                           | <b>2019</b> | <b>370,498</b> | <b>88,559</b> | <b>89,042</b> | <b>-5,540</b>     | <b>375,554</b> | <b>82</b>  |
| Afghanistan               | 2016        | *43            | 459           | ..            | ..                | 502            | 14         |
|                           | 2017        | *44            | 535           | ..            | ..                | 579            | 16         |
|                           | 2018        | *68            | 705           | ..            | ..                | 773            | 21         |
|                           | 2019        | *44            | 795           | ..            | ..                | 839            | 22         |
| Armenia                   | 2016        | ..             | 141           | ..            | ..                | 141            | 48         |
|                           | 2017        | ..             | 142           | ..            | ..                | 142            | 48         |
|                           | 2018        | ..             | 139           | ..            | ..                | 139            | 47         |
|                           | 2019        | ..             | 175           | ..            | ..                | 175            | 59         |
| Azerbaijan                | 2016        | 1,153          | 81            | 4             | -35               | 1,265          | 130        |
|                           | 2017        | 1,215          | 130           | 7             | 31                | 1,307          | 133        |
|                           | 2018        | 1,186          | 131           | ..            | 19                | 1,298          | 130        |
|                           | 2019        | 1,161          | 170           | ..            | -26               | 1,357          | 135        |
| Bahrain                   | 2016        | 784            | ..            | 4             | -1                | 781            | 548        |
|                           | 2017        | 744            | ..            | 0             | -53               | 797            | 533        |
|                           | 2018        | 741            | ..            | 0             | -102              | 843            | 537        |
|                           | 2019        | 755            | ..            | ..            | -107              | 862            | 525        |
| Bangladesh                | 2016        | 133            | 151           | ..            | ..                | 284            | 2          |
|                           | 2017        | 125            | 33            | ..            | ..                | 158            | 1          |
|                           | 2018        | 195            | 33            | ..            | ..                | 227            | 1          |
|                           | 2019        | 229            | 116           | ..            | ..                | 344            | 2          |
| Bhutan                    | 2016        | ..             | 27            | ..            | ..                | 27             | 36         |
|                           | 2017        | ..             | 29            | ..            | ..                | 29             | 39         |
|                           | 2018        | ..             | 35            | ..            | ..                | 35             | 46         |
|                           | 2019        | ..             | 38            | ..            | ..                | 38             | 49         |
| Brunei Darussalam         | 2016        | 92             | 181           | ..            | -5                | 278            | 662        |
|                           | 2017        | 73             | 213           | ..            | 8                 | 278            | 655        |
|                           | 2018        | 133            | 141           | ..            | -5                | 279            | 650        |
|                           | 2019        | 325            | 181           | 226           | -5                | 285            | 659        |
| Cambodia                  | 2016        | ..             | 506           | ..            | ..                | 506            | 32         |
|                           | 2017        | ..             | 576           | ..            | ..                | 576            | 36         |
|                           | 2018        | ..             | 624           | ..            | ..                | 624            | 38         |
|                           | 2019        | ..             | 668           | ..            | ..                | 668            | 41         |
| China                     | 2016        | 129,320        | 208           | 9,693         | 1,542             | 118,294        | 84         |
|                           | 2017        | 132,762        | 16            | 10,514        | 260               | 122,005        | 86         |
|                           | 2018        | 142,647        | 445           | 12,879        | -140              | 130,353        | 91         |
|                           | 2019        | 147,816        | 333           | 16,371        | -4,133            | 135,912        | 95         |

## Production, trade and supply of motor gasoline

Thousand metric tons and kilograms per capita

| Country or area        | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|------------------------|------|------------|---------|---------|-------------------|--------|------------|
|                        |      |            |         |         |                   | Total  | Per capita |
| China, Hong Kong SAR   | 2016 | ..         | 506     | 8       | 30                | 467    | 64         |
|                        | 2017 | ..         | 475     | 11      | 1                 | 463    | 63         |
|                        | 2018 | ..         | 482     | 12      | 11                | 459    | 62         |
|                        | 2019 | ..         | 453     | 12      | -19               | 460    | 62         |
| China, Macao SAR       | 2016 | ..         | 76      | ..      | 2                 | 74     | 121        |
|                        | 2017 | ..         | 77      | ..      | 1                 | 76     | 122        |
|                        | 2018 | ..         | 83      | ..      | 1                 | 82     | 130        |
|                        | 2019 | ..         | 79      | ..      | -1                | 80     | 125        |
| Cyprus                 | 2016 | ..         | 356     | ..      | 4                 | 352    | 301        |
|                        | 2017 | ..         | 350     | ..      | 0                 | 350    | 297        |
|                        | 2018 | ..         | 339     | ..      | -5                | 345    | 290        |
|                        | 2019 | ..         | 335     | ..      | 1                 | 334    | 279        |
| Georgia                | 2016 | 7          | 576     | 0       | -14               | 598    | 149        |
|                        | 2017 | 2          | 534     | 1       | -2                | 537    | 134        |
|                        | 2018 | 1          | 548     | 1       | 8                 | 540    | 135        |
|                        | 2019 | 1          | 544     | 0       | -5                | 550    | 138        |
| India                  | 2016 | 36,593     | 476     | 15,417  | 0                 | 21,652 | 16         |
|                        | 2017 | 37,784     | 174     | 14,035  | ..                | 23,923 | 18         |
|                        | 2018 | 38,039     | 670     | 12,885  | ..                | 25,824 | 19         |
|                        | 2019 | 38,616     | 2,146   | 12,710  | ..                | 28,052 | 21         |
| Indonesia              | 2016 | 10,297     | 12,500  | 52      | *-716             | 23,461 | 90         |
|                        | 2017 | 9,473      | 13,704  | 68      | *-603             | 23,712 | 90         |
|                        | 2018 | 7,746      | 14,093  | 76      | *28               | 21,735 | 81         |
|                        | 2019 | 11,310     | 14,618  | 86      | 26                | 25,816 | 95         |
| Iran (Islamic Rep. of) | 2016 | 16,798     | 2,270   | ..      | ..                | 19,069 | 240        |
|                        | 2017 | 22,130     | 3,271   | ..      | ..                | 25,401 | 315        |
|                        | 2018 | 16,917     | 4,516   | ..      | ..                | 21,433 | 262        |
|                        | 2019 | 18,169     | 3,876   | ..      | ..                | 22,044 | 266        |
| Iraq                   | 2016 | 2,117      | 2,145   | ..      | 0                 | 4,262  | 116        |
|                        | 2017 | 2,483      | 2,396   | ..      | ..                | 4,879  | 130        |
|                        | 2018 | 2,832      | 2,526   | ..      | ..                | 5,358  | 139        |
|                        | 2019 | 2,553      | 2,716   | ..      | ..                | 5,269  | 134        |
| Israel                 | 2016 | 2,945      | 674     | 558     | -33               | 3,094  | 382        |
|                        | 2017 | 2,766      | 645     | 487     | 10                | 2,914  | 353        |
|                        | 2018 | 3,055      | 843     | 822     | 0                 | 3,076  | 367        |
|                        | 2019 | 2,946      | 654     | 649     | -20               | 2,970  | 349        |
| Japan                  | 2016 | 40,099     | 622     | 2,285   | 18                | 38,418 | 301        |
|                        | 2017 | 39,795     | 902     | 2,771   | -77               | 38,004 | 298        |
|                        | 2018 | 38,117     | 1,576   | 2,446   | 25                | 37,222 | 293        |
|                        | 2019 | 36,640     | 1,820   | 2,298   | 100               | 36,063 | 284        |
| Jordan                 | 2016 | 583        | 832     | ..      | *-31              | 1,446  | 151        |
|                        | 2017 | 557        | 923     | ..      | 48                | 1,432  | 146        |
|                        | 2018 | 483        | 964     | ..      | *37               | 1,410  | 141        |
|                        | 2019 | 507        | 1,075   | ..      | ..                | 1,582  | 157        |
| Kazakhstan             | 2016 | 2,939      | 1,134   | 1       | -397              | 4,469  | 251        |
|                        | 2017 | 3,055      | 1,073   | 2       | -208              | 4,334  | 240        |
|                        | 2018 | 3,955      | 595     | 20      | 23                | 4,507  | 246        |
|                        | 2019 | 4,533      | 19      | 54      | -65               | 4,563  | 246        |
| Korea, Dem.Ppl's.Rep.  | 2016 | 178        | 17      | ..      | ..                | 195    | 8          |
|                        | 2017 | 178        | 14      | ..      | ..                | 192    | 8          |
|                        | 2018 | 178        | 14      | ..      | ..                | 192    | 8          |
|                        | 2019 | 178        | 17      | ..      | ..                | 195    | 8          |

Table 18

## Production, trade and supply of motor gasoline

Thousand metric tons and kilograms per capita

| Country or area        | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|------------------------|------|------------|---------|---------|-------------------|--------|------------|
|                        |      |            |         |         |                   | Total  | Per capita |
| Korea, Republic of     | 2016 | 17,266     | 161     | 8,911   | 61                | 8,455  | 166        |
|                        | 2017 | 18,343     | 130     | 9,611   | 12                | 8,850  | 173        |
|                        | 2018 | 19,601     | 20      | 10,291  | 216               | 9,114  | 178        |
|                        | 2019 | 19,722     | 15      | 10,285  | -152              | 9,604  | 187        |
| Kuwait                 | 2016 | 2,405      | ..      | 609     | -1,577            | 3,373  | 852        |
|                        | 2017 | 2,113      | ..      | 522     | -1,614            | 3,205  | 790        |
|                        | 2018 | 2,097      | ..      | 677     | -1,564            | 2,984  | 721        |
|                        | 2019 | 2,587      | ..      | 339     | -1,017            | 3,265  | 776        |
| Kyrgyzstan             | 2016 | 171        | 719     | 7       | -42               | 925    | 152        |
|                        | 2017 | 235        | 468     | 7       | 5                 | 691    | 112        |
|                        | 2018 | 219        | 632     | 28      | 31                | 792    | 126        |
|                        | 2019 | 103        | 485     | 17      | -6                | 577    | 90         |
| Lao People's Dem. Rep. | 2016 | ..         | 190     | ..      | ..                | 190    | 28         |
|                        | 2017 | ..         | 190     | ..      | ..                | 190    | 27         |
|                        | 2018 | ..         | 182     | ..      | ..                | 182    | 26         |
|                        | 2019 | ..         | *185    | ..      | ..                | *185   | *26        |
| Lebanon                | 2016 | ..         | 2,026   | ..      | ..                | 2,026  | 302        |
|                        | 2017 | ..         | 2,097   | ..      | ..                | 2,097  | 307        |
|                        | 2018 | ..         | 1,983   | ..      | ..                | 1,983  | 289        |
|                        | 2019 | ..         | 2,075   | ..      | ..                | 2,075  | 303        |
| Malaysia               | 2016 | 4,801      | 8,139   | 436     | -261              | 12,765 | 416        |
|                        | 2017 | 7,855      | 4,901   | 268     | -47               | 12,535 | 403        |
|                        | 2018 | 5,258      | 10,130  | 2,941   | 9                 | 12,438 | 395        |
|                        | 2019 | 4,979      | 7,662   | 813     | *-249             | 12,078 | 378        |
| Maldives               | 2016 | ..         | 48      | ..      | ..                | 48     | 101        |
|                        | 2017 | ..         | 58      | ..      | ..                | 58     | 116        |
|                        | 2018 | ..         | 69      | ..      | ..                | 69     | 133        |
|                        | 2019 | ..         | 85      | ..      | ..                | 85     | 160        |
| Mongolia               | 2016 | ..         | 385     | ..      | ..                | 385    | 126        |
|                        | 2017 | ..         | 411     | ..      | ..                | 411    | 132        |
|                        | 2018 | ..         | 435     | ..      | ..                | 435    | 137        |
|                        | 2019 | ..         | 542     | ..      | ..                | 542    | 168        |
| Myanmar                | 2016 | 153        | 1,154   | ..      | 12                | 1,295  | 24         |
|                        | 2017 | 145        | 1,091   | ..      | -141              | 1,377  | 26         |
|                        | 2018 | 70         | 1,951   | ..      | -103              | 2,124  | 40         |
|                        | 2019 | 52         | 1,853   | ..      | ..                | 1,905  | 35         |
| Nepal                  | 2016 | ..         | 289     | ..      | ..                | 289    | 11         |
|                        | 2017 | ..         | 346     | ..      | ..                | 346    | 13         |
|                        | 2018 | ..         | 402     | ..      | ..                | 402    | 14         |
|                        | 2019 | ..         | 363     | ..      | ..                | 363    | 13         |
| Oman                   | 2016 | 3,018      | 0       | 0       | 163               | 2,855  | 637        |
|                        | 2017 | 2,990      | 57      | 167     | 4                 | 2,876  | 616        |
|                        | 2018 | 3,185      | 0       | 410     | 0                 | 2,775  | 574        |
|                        | 2019 | 3,311      | 0       | 550     | 0                 | 2,761  | 555        |
| Other Asia             | 2016 | 9,248      | 124     | 4,497   | 146               | 4,729  | 200        |
|                        | 2017 | 8,463      | 126     | 4,201   | -244              | 4,632  | 196        |
|                        | 2018 | 8,537      | 99      | 3,962   | 64                | 4,610  | 194        |
|                        | 2019 | 8,141      | 183     | 3,515   | -29               | 4,839  | 204        |
| Pakistan               | 2016 | 1,839      | 5,156   | 0       | 0                 | 6,995  | 34         |
|                        | 2017 | 2,212      | 5,235   | ..      | ..                | 7,447  | 36         |
|                        | 2018 | 2,383      | 5,591   | ..      | ..                | 7,974  | 38         |
|                        | 2019 | 2,183      | 6,560   | ..      | ..                | 8,744  | 40         |

## Production, trade and supply of motor gasoline

Thousand metric tons and kilograms per capita

| Country or area      | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|----------------------|------|------------|---------|---------|-------------------|--------|------------|
|                      |      |            |         |         |                   | Total  | Per capita |
| Philippines          | 2016 | 2,197      | 1,822   | 229     | -33               | 3,824  | 37         |
|                      | 2017 | 2,153      | 1,991   | 85      | 80                | 3,979  | 38         |
|                      | 2018 | 2,435      | 2,205   | 230     | 169               | 4,240  | 40         |
|                      | 2019 | 1,689      | 2,172   | 46      | -54               | 3,870  | 36         |
| Qatar                | 2016 | 1,963      | ..      | 296     | ..                | 1,667  | 628        |
|                      | 2017 | 1,937      | ..      | 111     | ..                | 1,826  | 670        |
|                      | 2018 | 1,770      | 147     | 129     | ..                | 1,788  | 643        |
|                      | 2019 | 1,671      | 154     | 96      | ..                | 1,729  | 611        |
| Saudi Arabia         | 2016 | 24,065     | 8,600   | 9,054   | 322               | 23,289 | 718        |
|                      | 2017 | 23,949     | 8,488   | 10,314  | -170              | 22,293 | 673        |
|                      | 2018 | 23,418     | 14,114  | 17,738  | ..                | 19,794 | 587        |
|                      | 2019 | 22,772     | *3,962  | *4,267  | *-367             | 22,834 | 666        |
| Singapore            | 2016 | 9,096      | 15,964  | 24,650  | *-200             | 610    | 108        |
|                      | 2017 | 9,108      | 16,683  | 25,567  | *-400             | 624    | 109        |
|                      | 2018 | 8,491      | 15,727  | 25,705  | 192               | -1,679 | -292       |
|                      | 2019 | 8,122      | 15,663  | 26,554  | -356              | -2,413 | -416       |
| Sri Lanka            | 2016 | 166        | 957     | ..      | -341              | 1,463  | 70         |
|                      | 2017 | 165        | 1,097   | ..      | -227              | 1,489  | 70         |
|                      | 2018 | 165        | 1,128   | ..      | 7                 | 1,286  | 61         |
|                      | 2019 | 186        | 1,160   | ..      | -31               | 1,377  | 65         |
| State of Palestine   | 2016 | ..         | 236     | ..      | 0                 | 236    | 51         |
|                      | 2017 | ..         | 233     | ..      | ..                | 233    | 49         |
|                      | 2018 | ..         | 226     | ..      | 0                 | 226    | 47         |
|                      | 2019 | ..         | 226     | ..      | ..                | 226    | 45         |
| Syrian Arab Republic | 2016 | 581        | 395     | ..      | ..                | 976    | 56         |
|                      | 2017 | 645        | 442     | ..      | ..                | 1,087  | 64         |
|                      | 2018 | 604        | 415     | ..      | ..                | 1,019  | 60         |
|                      | 2019 | 522        | 360     | ..      | ..                | 882    | 52         |
| Tajikistan           | 2016 | 1          | 194     | ..      | ..                | 195    | 22         |
|                      | 2017 | 1          | 177     | ..      | ..                | 177    | 20         |
|                      | 2018 | 1          | 173     | ..      | ..                | 174    | 19         |
|                      | 2019 | 0          | 171     | ..      | ..                | 171    | 18         |
| Thailand             | 2016 | 7,764      | 1,131   | 1,022   | 1,060             | 6,813  | 99         |
|                      | 2017 | 8,090      | 1,287   | 1,180   | 1,172             | 7,025  | 102        |
|                      | 2018 | 8,398      | 1,143   | 1,246   | 1,101             | 7,194  | 104        |
|                      | 2019 | 7,604      | 1,636   | 893     | 1,046             | 7,302  | 105        |
| Timor-Leste          | 2016 | ..         | 27      | ..      | ..                | 27     | 22         |
|                      | 2017 | ..         | 29      | ..      | ..                | 29     | 24         |
|                      | 2018 | ..         | 30      | ..      | ..                | 30     | 24         |
|                      | 2019 | ..         | 35      | ..      | ..                | 35     | 27         |
| Turkey               | 2016 | 5,175      | ..      | 2,890   | 45                | 2,240  | 28         |
|                      | 2017 | 5,444      | ..      | 3,172   | -32               | 2,304  | 28         |
|                      | 2018 | 4,767      | ..      | 2,442   | 57                | 2,268  | 28         |
|                      | 2019 | 5,374      | ..      | 2,974   | -19               | 2,419  | 29         |
| Turkmenistan         | 2016 | 2,610      | ..      | 1,105   | ..                | 1,505  | 266        |
|                      | 2017 | 2,610      | ..      | 1,105   | ..                | 1,505  | 261        |
|                      | 2018 | 2,610      | ..      | 1,105   | ..                | 1,505  | 257        |
|                      | 2019 | 2,610      | ..      | 1,105   | ..                | 1,505  | 253        |
| United Arab Emirates | 2016 | 5,863      | 4,004   | 2,571   | ..                | 7,296  | 779        |
|                      | 2017 | 3,819      | 6,390   | 2,862   | 373               | 6,974  | 735        |
|                      | 2018 | 3,578      | 8,308   | 3,110   | ..                | 8,776  | 911        |
|                      | 2019 | 6,412      | 9,561   | 4,980   | ..                | 10,993 | 1,125      |

Table 18

## Production, trade and supply of motor gasoline

Thousand metric tons and kilograms per capita

| Country or area        | Year        | Production     | Imports       | Exports       | Changes in stocks | Supply         |            |
|------------------------|-------------|----------------|---------------|---------------|-------------------|----------------|------------|
|                        |             |                |               |               |                   | Total          | Per capita |
| Uzbekistan             | 2016        | 1,134          | 0             | 0             | 3                 | 1,131          | 36         |
|                        | 2017        | 1,112          | 0             | 6             | 35                | 1,071          | 34         |
|                        | 2018        | 1,147          | 0             | 0             | 103               | 1,044          | 32         |
|                        | 2019        | 1,016          | 4             | 0             | -51               | 1,072          | 32         |
| Viet Nam               | 2016        | 2,777          | 2,488         | 215           | -47               | 5,097          | 54         |
|                        | 2017        | 2,565          | 3,180         | 252           | 42                | 5,451          | 58         |
|                        | 2018        | 4,109          | 2,053         | 208           | 135               | 5,819          | 61         |
|                        | 2019        | 5,470          | 2,003         | 202           | ..                | 7,271          | 75         |
| Yemen                  | 2016        | 74             | 655           | ..            | ..                | 729            | 27         |
|                        | 2017        | 97             | 595           | ..            | ..                | 692            | 25         |
|                        | 2018        | 116            | 581           | ..            | ..                | 697            | 24         |
|                        | 2019        | 186            | 614           | ..            | ..                | 800            | 27         |
| <b>Europe</b>          | <b>2016</b> | <b>172,211</b> | <b>33,272</b> | <b>93,157</b> | <b>818</b>        | <b>111,507</b> | <b>149</b> |
|                        | <b>2017</b> | <b>171,729</b> | <b>32,274</b> | <b>94,583</b> | <b>-172</b>       | <b>109,591</b> | <b>147</b> |
|                        | <b>2018</b> | <b>172,488</b> | <b>28,932</b> | <b>93,723</b> | <b>-540</b>       | <b>108,236</b> | <b>145</b> |
|                        | <b>2019</b> | <b>169,337</b> | <b>30,014</b> | <b>94,016</b> | <b>106</b>        | <b>105,230</b> | <b>140</b> |
| Albania                | 2016        | ..             | 133           | ..            | 26                | 107            | 37         |
|                        | 2017        | ..             | 148           | ..            | 42                | 106            | 37         |
|                        | 2018        | ..             | 133           | ..            | 27                | 105            | 36         |
|                        | 2019        | 0              | 136           | ..            | 27                | 110            | 38         |
| Andorra                | 2016        | ..             | 19            | ..            | ..                | 19             | 246        |
|                        | 2017        | ..             | 19            | ..            | ..                | 19             | 253        |
|                        | 2018        | ..             | 21            | ..            | ..                | 21             | 267        |
|                        | 2019        | ..             | 22            | ..            | ..                | 22             | 286        |
| Austria                | 2016        | 1,759          | 799           | 873           | 37                | 1,649          | 189        |
|                        | 2017        | 1,781          | 749           | 864           | 13                | 1,654          | 188        |
|                        | 2018        | 2,029          | 710           | 1,059         | -48               | 1,728          | 194        |
|                        | 2019        | 2,074          | 652           | 978           | 56                | 1,692          | 189        |
| Belarus                | 2016        | 3,573          | 206           | 2,621         | 14                | 1,144          | 121        |
|                        | 2017        | 3,481          | 108           | 2,411         | 11                | 1,167          | 123        |
|                        | 2018        | 3,335          | 20            | 2,163         | -7                | 1,199          | 127        |
|                        | 2019        | 2,900          | 4             | 1,662         | -3                | 1,245          | 132        |
| Belgium                | 2016        | 4,860          | 1,440         | 5,136         | -15               | 1,179          | 104        |
|                        | 2017        | 4,748          | 890           | 4,687         | -37               | 988            | 87         |
|                        | 2018        | 4,173          | 1,541         | 4,269         | 99                | 1,347          | 117        |
|                        | 2019        | 4,435          | 1,280         | 4,726         | -52               | 1,041          | 90         |
| Bosnia and Herzegovina | 2016        | 140            | 132           | 78            | -7                | 201            | 59         |
|                        | 2017        | 142            | 118           | 60            | 10                | 190            | 57         |
|                        | 2018        | 116            | 118           | 59            | -7                | 182            | 55         |
|                        | 2019        | 18             | 153           | 10            | -15               | 176            | 53         |
| Bulgaria               | 2016        | 1,785          | 215           | 1,524         | 7                 | 469            | 66         |
|                        | 2017        | 1,848          | 269           | 1,646         | -9                | 480            | 68         |
|                        | 2018        | 1,508          | 216           | 1,262         | -12               | 474            | 67         |
|                        | 2019        | 1,778          | 269           | 1,601         | -23               | 468            | 67         |
| Croatia                | 2016        | 864            | 194           | 517           | 7                 | 534            | 127        |
|                        | 2017        | 1,005          | 160           | 643           | 9                 | 513            | 123        |
|                        | 2018        | 895            | 134           | 479           | 51                | 499            | 120        |
|                        | 2019        | 712            | 155           | 425           | -36               | 477            | 115        |
| Czechia                | 2016        | 1,265          | 805           | 403           | 8                 | 1,659          | 156        |
|                        | 2017        | 1,638          | 583           | 624           | -4                | 1,601          | 150        |
|                        | 2018        | 1,519          | 716           | 567           | 64                | 1,604          | 150        |
|                        | 2019        | 1,624          | 560           | 596           | -26               | 1,614          | 151        |

Table 18

## Production, trade and supply of motor gasoline

Thousand metric tons and kilograms per capita

| Country or area | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|-----------------|------|------------|---------|---------|-------------------|--------|------------|
|                 |      |            |         |         |                   | Total  | Per capita |
| Denmark         | 2016 | 2,167      | 494     | 1,087   | -20               | 1,594  | 279        |
|                 | 2017 | 2,309      | 390     | 1,222   | -25               | 1,503  | 262        |
|                 | 2018 | 2,257      | 428     | 1,185   | -32               | 1,532  | 266        |
|                 | 2019 | 2,293      | 462     | 1,280   | -7                | 1,481  | 257        |
| Estonia         | 2016 | ..         | 482     | 256     | -25               | 251    | 191        |
|                 | 2017 | ..         | 455     | 167     | 26                | 262    | 198        |
|                 | 2018 | ..         | 513     | 266     | -22               | 269    | 203        |
|                 | 2019 | ..         | 414     | 113     | 27                | 274    | 207        |
| Faeroe Islands  | 2016 | ..         | *11     | ..      | ..                | *11    | *221       |
|                 | 2017 | ..         | *11     | ..      | ..                | *11    | *225       |
|                 | 2018 | ..         | *11     | ..      | ..                | *11    | *225       |
|                 | 2019 | ..         | *11     | ..      | ..                | *11    | *229       |
| Finland         | 2016 | 4,210      | 594     | 2,991   | -27               | 1,840  | 335        |
|                 | 2017 | 4,531      | 606     | 3,123   | 12                | 2,002  | 363        |
|                 | 2018 | 4,570      | 579     | 3,005   | 21                | 2,123  | 384        |
|                 | 2019 | 4,582      | 614     | 3,337   | -32               | 1,891  | 342        |
| France          | 2016 | 11,913     | 1,220   | 4,607   | 110               | 8,416  | 126        |
|                 | 2017 | 12,085     | 1,467   | 4,349   | 13                | 9,190  | 137        |
|                 | 2018 | 11,265     | 1,361   | 3,167   | -58               | 9,517  | 142        |
|                 | 2019 | 10,270     | 1,486   | 2,619   | -9                | 9,146  | 136        |
| Germany         | 2016 | 20,871     | 1,513   | 5,051   | 89                | 17,244 | 210        |
|                 | 2017 | 20,975     | 2,158   | 5,719   | -210              | 17,624 | 213        |
|                 | 2018 | 21,923     | 2,440   | 5,052   | -16               | 19,327 | 233        |
|                 | 2019 | 21,427     | 3,163   | 4,853   | 127               | 19,610 | 235        |
| Gibraltar       | 2016 | ..         | 37      | ..      | ..                | 37     | 1,097      |
|                 | 2017 | ..         | 40      | ..      | ..                | 40     | 1,198      |
|                 | 2018 | ..         | 44      | ..      | ..                | 44     | 1,299      |
|                 | 2019 | ..         | 47      | ..      | ..                | 47     | 1,388      |
| Greece          | 2016 | 5,169      | 560     | 3,398   | 197               | 2,134  | 201        |
|                 | 2017 | 5,291      | 321     | 3,935   | 40                | 1,637  | 155        |
|                 | 2018 | 5,351      | 352     | 4,499   | -136              | 1,341  | 127        |
|                 | 2019 | 5,048      | 627     | 4,074   | 8                 | 1,593  | 152        |
| Hungary         | 2016 | 1,139      | 572     | 331     | 58                | 1,322  | 136        |
|                 | 2017 | 1,080      | 598     | 318     | 16                | 1,344  | 138        |
|                 | 2018 | 1,188      | 508     | 258     | 29                | 1,409  | 145        |
|                 | 2019 | 1,167      | 795     | 431     | 21                | 1,510  | 156        |
| Iceland         | 2016 | 5          | 136     | ..      | -1                | 142    | 427        |
|                 | 2017 | 5          | 138     | ..      | 0                 | 142    | 426        |
|                 | 2018 | 6          | 134     | ..      | 5                 | 134    | 399        |
|                 | 2019 | 6          | 122     | ..      | 0                 | 129    | 380        |
| Ireland         | 2016 | 589        | 810     | 350     | 9                 | 1,040  | 222        |
|                 | 2017 | 589        | 893     | 486     | 88                | 908    | 191        |
|                 | 2018 | 629        | 534     | 342     | 9                 | 811    | 168        |
|                 | 2019 | 535        | 519     | 407     | -127              | 774    | 159        |
| Italy           | 2016 | 15,144     | 352     | 8,131   | -138              | 7,503  | 124        |
|                 | 2017 | 15,717     | 140     | 8,445   | -9                | 7,421  | 122        |
|                 | 2018 | 15,639     | 353     | 8,483   | -142              | 7,651  | 126        |
|                 | 2019 | 16,413     | 405     | 8,481   | 63                | 8,274  | 137        |
| Kosovo          | 2016 | ..         | 69      | ..      | ..                | 69     | 39         |
|                 | 2017 | ..         | 63      | ..      | ..                | 63     | 35         |
|                 | 2018 | ..         | 59      | ..      | ..                | 59     | 33         |
|                 | 2019 | ..         | 59      | ..      | ..                | 59     | 33         |

Table 18

## Production, trade and supply of motor gasoline

Thousand metric tons and kilograms per capita

| Country or area     | Year | Production | Imports | Exports | Changes in stocks | Supply  |            |
|---------------------|------|------------|---------|---------|-------------------|---------|------------|
|                     |      |            |         |         |                   | Total   | Per capita |
| Latvia              | 2016 | 13         | 234     | 41      | 4                 | 202     | 102        |
|                     | 2017 | 12         | 213     | 37      | -4                | 192     | 99         |
|                     | 2018 | 13         | 201     | 26      | 0                 | 188     | 97         |
|                     | 2019 | 11         | 193     | 24      | 0                 | 180     | 94         |
| Lithuania           | 2016 | 2,627      | 67      | 2,532   | -2                | 164     | 57         |
|                     | 2017 | 2,752      | 65      | 2,672   | -21               | 167     | 59         |
|                     | 2018 | 2,575      | 47      | 2,438   | -9                | 193     | 69         |
|                     | 2019 | 2,489      | 46      | 2,326   | 3                 | 207     | 75         |
| Luxembourg          | 2016 | ..         | 295     | 0       | 4                 | 291     | 502        |
|                     | 2017 | ..         | 303     | ..      | 1                 | 303     | 512        |
|                     | 2018 | ..         | 332     | ..      | -3                | 335     | 554        |
|                     | 2019 | ..         | 359     | ..      | -1                | 360     | 585        |
| Malta               | 2016 | ..         | 70      | ..      | -7                | 77      | 177        |
|                     | 2017 | ..         | 84      | ..      | 6                 | 78      | 178        |
|                     | 2018 | ..         | 79      | ..      | 1                 | 78      | 179        |
|                     | 2019 | ..         | 76      | ..      | -7                | 83      | 189        |
| Montenegro          | 2016 | ..         | 43      | 8       | -2                | 37      | 59         |
|                     | 2017 | ..         | 41      | 7       | -3                | 37      | 59         |
|                     | 2018 | ..         | 39      | 7       | -5                | 37      | 59         |
|                     | 2019 | ..         | 36      | 2       | -3                | 37      | 59         |
| Netherlands         | 2016 | 4,105      | 9,924   | 19,601  | 30                | -5,601  | -330       |
|                     | 2017 | 3,176      | 10,787  | 20,282  | -64               | -6,254  | -367       |
|                     | 2018 | 4,219      | 7,636   | 23,200  | -257              | -11,089 | -650       |
|                     | 2019 | 4,314      | 7,221   | 25,751  | -133              | -14,082 | -824       |
| North Macedonia     | 2016 | 0          | 107     | 3       | 0                 | 104     | 50         |
|                     | 2017 | 0          | 108     | 4       | 1                 | 103     | 49         |
|                     | 2018 | ..         | 104     | 2       | 1                 | 101     | 49         |
|                     | 2019 | ..         | 120     | 17      | 0                 | 103     | 50         |
| Norway              | 2016 | 3,815      | 383     | 3,339   | -7                | 866     | 165        |
|                     | 2017 | 4,647      | 351     | 3,614   | -32               | 1,416   | 267        |
|                     | 2018 | 4,477      | 390     | 3,885   | 4                 | 978     | 183        |
|                     | 2019 | 3,688      | 508     | 3,713   | 44                | 439     | 82         |
| Poland              | 2016 | 4,207      | 345     | 509     | 20                | 4,023   | 106        |
|                     | 2017 | 4,164      | 481     | 221     | 35                | 4,389   | 116        |
|                     | 2018 | 4,451      | 468     | 367     | 6                 | 4,546   | 120        |
|                     | 2019 | 4,577      | 423     | 246     | 38                | 4,715   | 124        |
| Portugal            | 2016 | 2,653      | 167     | 1,742   | 18                | 1,060   | 103        |
|                     | 2017 | 2,753      | 124     | 1,885   | -48               | 1,040   | 101        |
|                     | 2018 | 2,508      | 149     | 1,644   | 2                 | 1,012   | 99         |
|                     | 2019 | 2,408      | 261     | 1,585   | 11                | 1,073   | 105        |
| Republic of Moldova | 2016 | ..         | 166     | ..      | -1                | 167     | 41         |
|                     | 2017 | ..         | 164     | ..      | 0                 | 164     | 40         |
|                     | 2018 | ..         | 169     | ..      | -1                | 170     | 42         |
|                     | 2019 | ..         | 178     | ..      | 2                 | 176     | 44         |
| Romania             | 2016 | 3,405      | 127     | 2,124   | 54                | 1,354   | 68         |
|                     | 2017 | 3,285      | 109     | 1,930   | 61                | 1,403   | 71         |
|                     | 2018 | 3,381      | 104     | 2,165   | -58               | 1,378   | 71         |
|                     | 2019 | 3,485      | 70      | 2,187   | -14               | 1,381   | 71         |
| Russian Federation  | 2016 | 40,004     | 171     | 5,216   | 232               | 34,727  | 239        |
|                     | 2017 | 38,027     | 32      | 4,415   | 182               | 33,462  | 230        |
|                     | 2018 | 39,053     | 31      | 4,210   | 26                | 34,849  | 239        |
|                     | 2019 | 39,494     | 1       | 5,183   | 107               | 34,205  | 234        |



## Production, trade and supply of motor gasoline

Thousand metric tons and kilograms per capita

| Country or area | Year        | Production    | Imports      | Exports    | Changes in stocks | Supply        |            |
|-----------------|-------------|---------------|--------------|------------|-------------------|---------------|------------|
|                 |             |               |              |            |                   | Total         | Per capita |
| Serbia          | 2016        | 482           | 51           | 125        | -6                | 414           | 59         |
|                 | 2017        | 499           | 78           | 143        | 14                | 420           | 60         |
|                 | 2018        | 516           | 68           | 150        | 11                | 423           | 60         |
|                 | 2019        | 445           | 77           | 111        | -20               | 431           | 62         |
| Slovakia        | 2016        | 1,535         | 258          | 1,157      | 23                | 613           | 113        |
|                 | 2017        | 1,456         | 263          | 1,136      | -37               | 620           | 114        |
|                 | 2018        | 1,420         | 207          | 1,025      | 23                | 579           | 106        |
|                 | 2019        | 1,193         | 217          | 838        | 8                 | 564           | 103        |
| Slovenia        | 2016        | ..            | 603          | 168        | 11                | 424           | 204        |
|                 | 2017        | ..            | 643          | 220        | 10                | 414           | 199        |
|                 | 2018        | ..            | 610          | 198        | -10               | 422           | 203        |
|                 | 2019        | ..            | 658          | 260        | -3                | 401           | 193        |
| Spain           | 2016        | 9,765         | 160          | 4,442      | 158               | 5,325         | 114        |
|                 | 2017        | 9,318         | 417          | 4,514      | -108              | 5,329         | 114        |
|                 | 2018        | 9,451         | 441          | 4,347      | -129              | 5,674         | 122        |
|                 | 2019        | 9,289         | 1,438        | 4,740      | 288               | 5,699         | 122        |
| Sweden          | 2016        | 5,116         | 1,877        | 3,647      | -16               | 3,362         | 342        |
|                 | 2017        | 4,909         | 1,504        | 3,830      | -161              | 2,744         | 277        |
|                 | 2018        | 5,278         | 785          | 3,650      | 40                | 2,373         | 238        |
|                 | 2019        | 3,917         | 612          | 1,974      | -46               | 2,601         | 259        |
| Switzerland     | 2016        | 720           | 1,724        | 18         | -19               | 2,445         | 292        |
|                 | 2017        | 689           | 1,639        | 2          | -37               | 2,363         | 279        |
|                 | 2018        | 689           | 1,587        | 2          | -72               | 2,346         | 275        |
|                 | 2019        | 649           | 1,690        | 1          | -3                | 2,341         | 272        |
| Ukraine         | 2016        | *365          | *1,806       | 0          | 0                 | *2,171        | *49        |
|                 | 2017        | 802           | 1,268        | 7          | -1                | 2,064         | 46         |
|                 | 2018        | *874          | 1,138        | ..         | 23                | 1,989         | 45         |
|                 | 2019        | *1,034        | 1,042        | 0          | -30               | 2,105         | 48         |
| United Kingdom  | 2016        | 17,946        | 3,901        | 11,132     | -5                | 10,720        | 162        |
|                 | 2017        | 18,014        | 3,273        | 10,966     | 49                | 10,271        | 154        |
|                 | 2018        | 17,179        | 3,424        | 10,292     | 42                | 10,270        | 153        |
|                 | 2019        | 17,061        | 2,834        | 9,464      | -134              | 10,565        | 156        |
| <b>Oceania</b>  | <b>2016</b> | <b>10,246</b> | <b>6,280</b> | <b>80</b>  | <b>128</b>        | <b>16,318</b> | <b>404</b> |
|                 | <b>2017</b> | <b>9,613</b>  | <b>6,557</b> | <b>228</b> | <b>-219</b>       | <b>16,160</b> | <b>394</b> |
|                 | <b>2018</b> | <b>9,961</b>  | <b>6,103</b> | <b>156</b> | <b>2</b>          | <b>15,906</b> | <b>383</b> |
|                 | <b>2019</b> | <b>9,863</b>  | <b>5,871</b> | <b>179</b> | <b>114</b>        | <b>15,441</b> | <b>367</b> |
| American Samoa  | 2016        | ..            | *13          | ..         | ..                | *13           | *240       |
|                 | 2017        | ..            | *13          | ..         | ..                | *13           | *241       |
|                 | 2018        | ..            | *13          | ..         | ..                | *13           | *242       |
|                 | 2019        | ..            | *13          | ..         | ..                | *13           | *242       |
| Australia       | 2016        | 8,757         | 4,854        | 54         | 124               | 13,433        | 554        |
|                 | 2017        | 8,281         | 5,081        | 162        | -131              | 13,331        | 542        |
|                 | 2018        | 8,587         | 4,662        | 112        | 64                | 13,073        | 525        |
|                 | 2019        | 8,370         | 4,434        | 153        | 33                | 12,619        | 501        |
| Cook Islands    | 2016        | ..            | *6           | ..         | ..                | *6            | *331       |
|                 | 2017        | ..            | *7           | ..         | ..                | *7            | *371       |
|                 | 2018        | ..            | *7           | ..         | ..                | *7            | *371       |
|                 | 2019        | ..            | *7           | ..         | ..                | *7            | *376       |
| Fiji            | 2016        | ..            | 114          | 26         | ..                | 88            | 101        |
|                 | 2017        | ..            | 124          | 24         | ..                | 101           | 115        |
|                 | 2018        | ..            | *150         | *22        | ..                | *128          | *145       |
|                 | 2019        | ..            | *153         | *26        | ..                | *127          | *143       |

Table 18

## Production, trade and supply of motor gasoline

Thousand metric tons and kilograms per capita

| Country or area             | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|-----------------------------|------|------------|---------|---------|-------------------|--------|------------|
|                             |      |            |         |         |                   | Total  | Per capita |
| French Polynesia            | 2016 | ..         | 49      | ..      | *-4               | 53     | 192        |
|                             | 2017 | ..         | 50      | ..      | *-1               | 51     | 186        |
|                             | 2018 | ..         | 54      | ..      | *1                | 53     | 192        |
|                             | 2019 | ..         | 53      | ..      | -2                | 55     | 196        |
| Kiribati                    | 2016 | ..         | 5       | ..      | ..                | 5      | 46         |
|                             | 2017 | ..         | 7       | ..      | ..                | 7      | 61         |
|                             | 2018 | ..         | *7      | ..      | ..                | *7     | *61        |
|                             | 2019 | ..         | *7      | ..      | ..                | *7     | *61        |
| Marshall Islands            | 2016 | ..         | *12     | ..      | ..                | *12    | *199       |
|                             | 2017 | ..         | *12     | ..      | ..                | *12    | *202       |
|                             | 2018 | ..         | *12     | ..      | ..                | *12    | *204       |
|                             | 2019 | ..         | *12     | ..      | ..                | *12    | *204       |
| Micronesia (Fed. States of) | 2016 | ..         | *18     | ..      | ..                | *18    | *162       |
|                             | 2017 | ..         | *18     | ..      | ..                | *18    | *161       |
|                             | 2018 | ..         | *18     | ..      | ..                | *18    | *162       |
|                             | 2019 | ..         | *18     | ..      | ..                | *18    | *162       |
| Nauru                       | 2016 | ..         | 3       | ..      | ..                | 3      | 306        |
|                             | 2017 | ..         | 3       | ..      | ..                | 3      | 284        |
|                             | 2018 | ..         | *3      | ..      | ..                | *3     | *273       |
|                             | 2019 | ..         | *3      | ..      | ..                | *3     | *265       |
| New Caledonia               | 2016 | ..         | 76      | ..      | -5                | 81     | 295        |
|                             | 2017 | ..         | 75      | ..      | 4                 | 72     | 259        |
|                             | 2018 | ..         | 74      | ..      | *3                | 71     | 254        |
|                             | 2019 | ..         | 66      | ..      | -6                | 72     | 253        |
| New Zealand                 | 2016 | 1,489      | 982     | ..      | 8                 | 2,463  | 529        |
|                             | 2017 | 1,332      | 1,002   | 42      | -77               | 2,369  | 504        |
|                             | 2018 | 1,374      | 984     | 22      | -49               | 2,385  | 503        |
|                             | 2019 | 1,493      | 953     | ..      | 86                | 2,360  | 493        |
| Niue                        | 2016 | ..         | *1      | ..      | ..                | *1     | *453       |
|                             | 2017 | ..         | *1      | ..      | ..                | *1     | *440       |
|                             | 2018 | ..         | *1      | ..      | ..                | *1     | *453       |
|                             | 2019 | ..         | *1      | ..      | ..                | *1     | *465       |
| Northern Mariana Islands    | 2016 | ..         | *16     | ..      | ..                | *16    | *285       |
|                             | 2017 | ..         | *17     | ..      | ..                | *17    | *301       |
|                             | 2018 | ..         | *16     | ..      | ..                | *16    | *281       |
|                             | 2019 | ..         | *16     | ..      | ..                | *16    | *280       |
| Palau                       | 2016 | ..         | 6       | ..      | ..                | 6      | 337        |
|                             | 2017 | ..         | *7      | ..      | ..                | *7     | *393       |
|                             | 2018 | ..         | *8      | ..      | ..                | *8     | *447       |
|                             | 2019 | ..         | *9      | ..      | ..                | *9     | *500       |
| Papua New Guinea            | 2016 | 0          | 53      | ..      | 2                 | 51     | 6          |
|                             | 2017 | 0          | 64      | ..      | -16               | 80     | 9          |
|                             | 2018 | ..         | 19      | ..      | -16               | 35     | 4          |
|                             | 2019 | ..         | *37     | ..      | 0                 | *37    | *4         |
| Samoa                       | 2016 | ..         | 27      | 0       | 3                 | 24     | 126        |
|                             | 2017 | ..         | 30      | 0       | *3                | 27     | 138        |
|                             | 2018 | ..         | 28      | 0       | 0                 | 28     | 144        |
|                             | 2019 | ..         | 33      | 0       | *2                | 30     | 153        |
| Solomon Islands             | 2016 | ..         | *21     | ..      | ..                | *21    | *34        |
|                             | 2017 | ..         | *21     | ..      | ..                | *21    | *33        |
|                             | 2018 | ..         | *21     | ..      | ..                | *21    | *33        |
|                             | 2019 | ..         | *22     | ..      | ..                | *22    | *32        |

### Production, trade and supply of motor gasoline

Thousand metric tons and kilograms per capita

| Country or area       | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|-----------------------|------|------------|---------|---------|-------------------|--------|------------|
|                       |      |            |         |         |                   | Total  | Per capita |
| Tonga                 | 2016 | ..         | 15      | ..      | ..                | 15     | 148        |
|                       | 2017 | ..         | 17      | ..      | ..                | 17     | 165        |
|                       | 2018 | ..         | 17      | ..      | ..                | 17     | 166        |
|                       | 2019 | ..         | 25      | ..      | ..                | 25     | 237        |
| Tuvalu                | 2016 | ..         | 0       | ..      | ..                | 0      | *30        |
|                       | 2017 | ..         | 0       | ..      | ..                | 0      | *30        |
|                       | 2018 | ..         | 0       | ..      | ..                | 0      | *30        |
|                       | 2019 | ..         | 0       | ..      | ..                | 0      | *31        |
| Vanuatu               | 2016 | ..         | 8       | ..      | ..                | 8      | 28         |
|                       | 2017 | ..         | 6       | ..      | ..                | 6      | 20         |
|                       | 2018 | ..         | 8       | ..      | ..                | 8      | 26         |
|                       | 2019 | ..         | 8       | ..      | ..                | 8      | 26         |
| Wallis and Futuna Is. | 2016 | ..         | *1      | ..      | ..                | *1     | *101       |
|                       | 2017 | ..         | *1      | ..      | ..                | *1     | *103       |
|                       | 2018 | ..         | *1      | ..      | ..                | *1     | *103       |
|                       | 2019 | ..         | *1      | ..      | ..                | *1     | *104       |



### Production, trade and supply of other kerosene

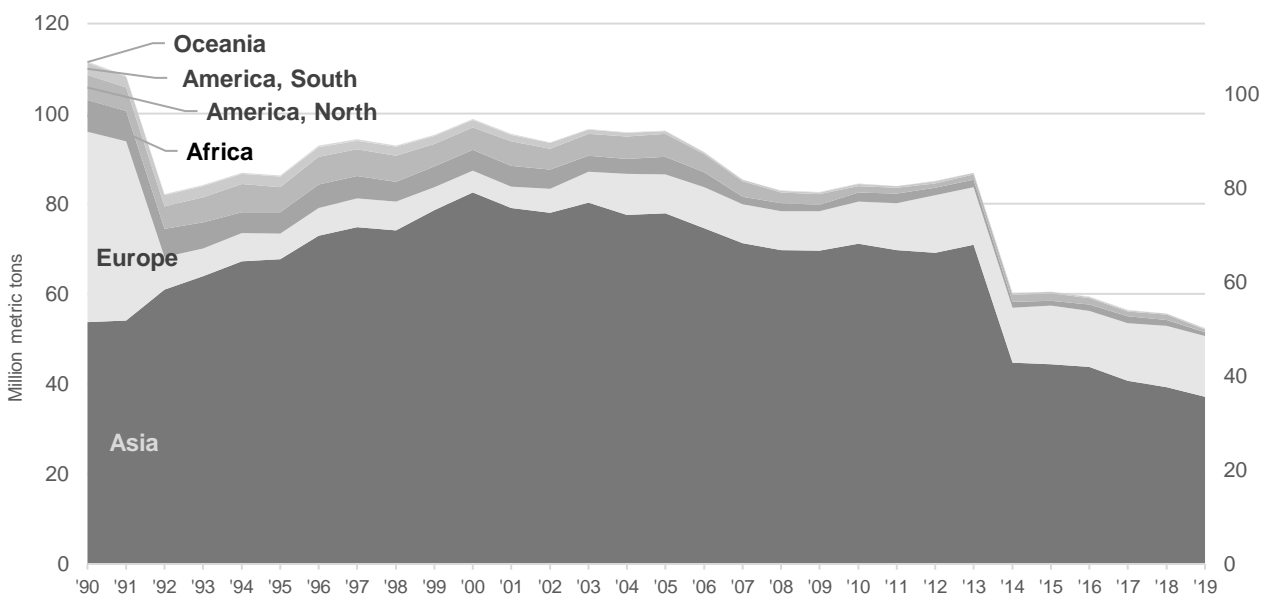
Thousand metric tons and kilograms per capita

#### Table Notes

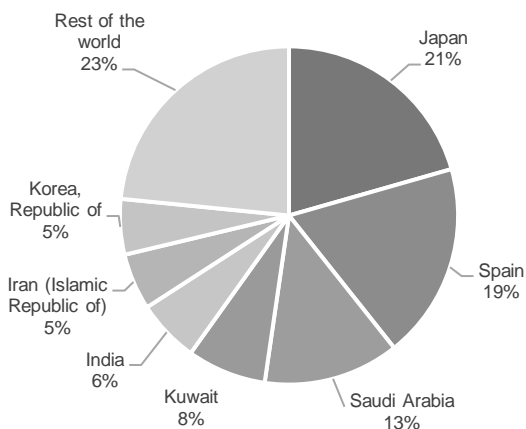
**Production** includes output from refineries and plants.

Please refer to the Definitions Section on pages ix to xv for the appropriate product description/ classification, and xvi to xvii for the descriptions of relevant flows.

**Figure 51: Production of other kerosene by region, 1990-2019**



**Figure 52: Major other kerosene producing countries, 2019**



**Figure 53: Major other kerosene consuming countries, 2019**

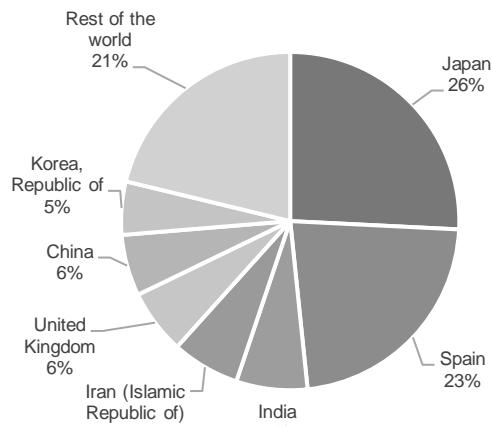


Table 19

## Production, trade and supply of other kerosene

Thousand metric tons and kilograms per capita

| Country or area      | Year        | Production    | Imports      | Exports       | Changes in stocks | Supply        |            |
|----------------------|-------------|---------------|--------------|---------------|-------------------|---------------|------------|
|                      |             |               |              |               |                   | Total         | Per capita |
| <b>World</b>         | <b>2016</b> | <b>59,368</b> | <b>6,761</b> | <b>15,735</b> | <b>1,604</b>      | <b>48,790</b> | <b>7</b>   |
|                      | <b>2017</b> | <b>56,422</b> | <b>7,132</b> | <b>15,617</b> | <b>1,400</b>      | <b>46,537</b> | <b>6</b>   |
|                      | <b>2018</b> | <b>55,641</b> | <b>6,583</b> | <b>15,645</b> | <b>2,211</b>      | <b>44,368</b> | <b>6</b>   |
|                      | <b>2019</b> | <b>52,381</b> | <b>7,271</b> | <b>14,511</b> | <b>1,586</b>      | <b>43,555</b> | <b>6</b>   |
| <b>Africa</b>        | <b>2016</b> | <b>1,424</b>  | <b>1,501</b> | <b>215</b>    | <b>9</b>          | <b>2,701</b>  | <b>2</b>   |
|                      | <b>2017</b> | <b>1,494</b>  | <b>1,301</b> | <b>191</b>    | <b>-12</b>        | <b>2,616</b>  | <b>2</b>   |
|                      | <b>2018</b> | <b>1,261</b>  | <b>1,107</b> | <b>97</b>     | <b>-5</b>         | <b>2,276</b>  | <b>2</b>   |
|                      | <b>2019</b> | <b>879</b>    | <b>1,280</b> | <b>62</b>     | <b>10</b>         | <b>2,087</b>  | <b>2</b>   |
| Algeria              | 2016        | *21           | ..           | ..            | ..                | *21           | *1         |
|                      | 2017        | *17           | ..           | ..            | ..                | *17           | 0          |
|                      | 2018        | *18           | ..           | ..            | ..                | *18           | 0          |
|                      | 2019        | *15           | ..           | ..            | ..                | *15           | 0          |
| Angola               | 2016        | 85            | ..           | ..            | ..                | 85            | 3          |
|                      | 2017        | 52            | ..           | ..            | ..                | 52            | 2          |
|                      | 2018        | 36            | ..           | ..            | ..                | 36            | 1          |
|                      | 2019        | 24            | ..           | ..            | ..                | 24            | 1          |
| Benin                | 2016        | ..            | 19           | ..            | -2                | 21            | 2          |
|                      | 2017        | ..            | 19           | ..            | -1                | 20            | 2          |
|                      | 2018        | ..            | 49           | ..            | -1                | 51            | 4          |
|                      | 2019        | ..            | 23           | ..            | 0                 | 23            | 2          |
| Botswana             | 2016        | ..            | 5            | ..            | ..                | 5             | 2          |
|                      | 2017        | ..            | 4            | ..            | ..                | 4             | 2          |
|                      | 2018        | ..            | 3            | ..            | ..                | 3             | 1          |
|                      | 2019        | ..            | 3            | ..            | ..                | 3             | 1          |
| Burkina Faso         | 2016        | ..            | 8            | ..            | *2                | 6             | 0          |
|                      | 2017        | ..            | 4            | ..            | *-3               | 6             | 0          |
|                      | 2018        | ..            | 7            | ..            | *1                | 6             | 0          |
|                      | 2019        | ..            | 9            | ..            | *2                | 7             | 0          |
| Cabo Verde           | 2016        | ..            | 0            | ..            | ..                | 0             | *1         |
|                      | 2017        | ..            | 0            | ..            | ..                | 0             | *1         |
|                      | 2018        | ..            | 0            | ..            | ..                | 0             | *1         |
|                      | 2019        | ..            | 0            | ..            | ..                | 0             | *1         |
| Cameroon             | 2016        | 121           | 3            | 35            | -6                | 95            | 4          |
|                      | 2017        | 100           | 3            | 5             | ..                | 98            | 4          |
|                      | 2018        | 90            | 15           | 5             | ..                | 100           | 4          |
|                      | 2019        | 47            | 58           | 2             | ..                | 103           | 4          |
| Central African Rep. | 2016        | ..            | *2           | ..            | ..                | *2            | 0          |
|                      | 2017        | ..            | *2           | ..            | ..                | *2            | 0          |
|                      | 2018        | ..            | *2           | ..            | ..                | *2            | 0          |
|                      | 2019        | ..            | *2           | ..            | ..                | *2            | 0          |
| Chad                 | 2016        | *4            | ..           | *2            | ..                | *2            | 0          |
|                      | 2017        | *4            | ..           | *2            | ..                | *2            | 0          |
|                      | 2018        | *4            | ..           | 2             | ..                | *2            | 0          |
|                      | 2019        | *4            | ..           | *2            | ..                | *2            | 0          |
| Comoros              | 2016        | ..            | *12          | ..            | ..                | *12           | *14        |
|                      | 2017        | ..            | *17          | ..            | ..                | *17           | *21        |
|                      | 2018        | ..            | *17          | ..            | ..                | *17           | *20        |
|                      | 2019        | ..            | *16          | ..            | ..                | *16           | *19        |
| Congo                | 2016        | 10            | ..           | ..            | ..                | 10            | 2          |
|                      | 2017        | 7             | ..           | ..            | ..                | 7             | 1          |
|                      | 2018        | 7             | ..           | ..            | ..                | 7             | 1          |
|                      | 2019        | 7             | ..           | ..            | ..                | 7             | 1          |

## Production, trade and supply of other kerosene

Thousand metric tons and kilograms per capita

| Country or area        | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|------------------------|------|------------|---------|---------|-------------------|--------|------------|
|                        |      |            |         |         |                   | Total  | Per capita |
| Dem. Rep. of the Congo | 2016 | ..         | 1       | ..      | ..                | 1      | 0          |
|                        | 2017 | ..         | 1       | ..      | ..                | 1      | 0          |
|                        | 2018 | ..         | 1       | ..      | ..                | 1      | 0          |
|                        | 2019 | ..         | 0       | ..      | ..                | 0      | 0          |
| Djibouti               | 2016 | ..         | 6       | ..      | ..                | 6      | 7          |
|                        | 2017 | ..         | 6       | ..      | ..                | 6      | 7          |
|                        | 2018 | ..         | *6      | ..      | ..                | *6     | *7         |
|                        | 2019 | ..         | *6      | ..      | ..                | *6     | *6         |
| Egypt                  | 2016 | 63         | ..      | *58     | ..                | 5      | 0          |
|                        | 2017 | 65         | ..      | 59      | ..                | 6      | 0          |
|                        | 2018 | 33         | ..      | 29      | ..                | 4      | 0          |
|                        | 2019 | 41         | ..      | ..      | ..                | 41     | 0          |
| Equatorial Guinea      | 2016 | ..         | *17     | ..      | ..                | *17    | *14        |
|                        | 2017 | ..         | *18     | ..      | ..                | *18    | *14        |
|                        | 2018 | ..         | *15     | ..      | ..                | *15    | *12        |
|                        | 2019 | ..         | *12     | ..      | ..                | *12    | *9         |
| Eritrea                | 2016 | ..         | 14      | ..      | ..                | 14     | 4          |
|                        | 2017 | ..         | 15      | ..      | ..                | 15     | 4          |
|                        | 2018 | ..         | 15      | ..      | ..                | 15     | 4          |
|                        | 2019 | ..         | 15      | ..      | ..                | 15     | 4          |
| Eswatini               | 2016 | ..         | 4       | ..      | ..                | 4      | 4          |
|                        | 2017 | ..         | 4       | ..      | ..                | 4      | 4          |
|                        | 2018 | ..         | 4       | ..      | ..                | 4      | 3          |
|                        | 2019 | ..         | *4      | ..      | ..                | *4     | *3         |
| Ethiopia               | 2016 | ..         | 160     | ..      | -4                | 164    | 2          |
|                        | 2017 | ..         | 74      | ..      | ..                | 74     | 1          |
|                        | 2018 | ..         | 63      | ..      | ..                | 63     | 1          |
|                        | 2019 | ..         | 68      | ..      | ..                | 68     | 1          |
| Gabon                  | 2016 | 29         | 8       | ..      | ..                | 37     | 18         |
|                        | 2017 | 22         | 23      | 18      | ..                | 27     | 13         |
|                        | 2018 | 20         | 23      | 18      | ..                | 25     | 12         |
|                        | 2019 | 19         | 23      | 18      | ..                | 24     | 11         |
| Ghana                  | 2016 | 25         | ..      | ..      | ..                | 25     | 1          |
|                        | 2017 | 2          | ..      | ..      | -9                | 11     | 0          |
|                        | 2018 | 33         | ..      | ..      | ..                | 33     | 1          |
|                        | 2019 | 12         | ..      | ..      | 11                | 1      | 0          |
| Guinea                 | 2016 | ..         | 17      | ..      | ..                | 17     | 1          |
|                        | 2017 | ..         | 24      | ..      | ..                | 24     | 2          |
|                        | 2018 | ..         | 21      | ..      | ..                | 21     | 2          |
|                        | 2019 | ..         | 25      | ..      | ..                | 25     | 2          |
| Guinea-Bissau          | 2016 | ..         | *9      | ..      | ..                | *9     | *5         |
|                        | 2017 | ..         | *9      | ..      | ..                | *9     | *5         |
|                        | 2018 | ..         | *9      | ..      | ..                | *9     | *5         |
|                        | 2019 | ..         | *10     | ..      | ..                | *10    | *5         |
| Kenya                  | 2016 | 0          | 467     | 76      | ..                | 390    | 8          |
|                        | 2017 | 0          | 448     | 66      | ..                | 382    | 8          |
|                        | 2018 | ..         | 339     | ..      | ..                | 339    | 7          |
|                        | 2019 | ..         | 21      | ..      | ..                | 21     | 0          |
| Lesotho                | 2016 | ..         | 25      | ..      | ..                | 25     | 12         |
|                        | 2017 | ..         | 27      | ..      | ..                | 27     | 13         |
|                        | 2018 | ..         | 28      | ..      | ..                | 28     | 13         |
|                        | 2019 | ..         | 21      | ..      | ..                | 21     | 10         |

Table 19

## Production, trade and supply of other kerosene

Thousand metric tons and kilograms per capita

| Country or area       | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|-----------------------|------|------------|---------|---------|-------------------|--------|------------|
|                       |      |            |         |         |                   | Total  | Per capita |
| Libya                 | 2016 | 25         | 97      | ..      | ..                | 122    | 19         |
|                       | 2017 | 24         | 105     | ..      | ..                | 129    | 20         |
|                       | 2018 | 24         | 85      | ..      | ..                | 110    | 16         |
|                       | 2019 | 21         | 72      | ..      | ..                | 93     | 14         |
| Madagascar            | 2016 | ..         | 24      | ..      | 10                | 14     | 1          |
|                       | 2017 | ..         | 21      | ..      | -2                | 23     | 1          |
|                       | 2018 | ..         | 20      | ..      | -3                | 23     | 1          |
|                       | 2019 | ..         | 20      | ..      | -4                | 24     | 1          |
| Malawi                | 2016 | ..         | 1       | ..      | ..                | 1      | 0          |
|                       | 2017 | ..         | 1       | ..      | ..                | 1      | 0          |
|                       | 2018 | ..         | 0       | ..      | ..                | 0      | 0          |
|                       | 2019 | ..         | 0       | ..      | ..                | 0      | 0          |
| Mali                  | 2016 | ..         | *30     | ..      | ..                | *30    | *2         |
|                       | 2017 | ..         | *31     | ..      | ..                | *31    | *2         |
|                       | 2018 | ..         | *32     | ..      | ..                | *32    | *2         |
|                       | 2019 | ..         | *33     | ..      | ..                | *33    | *2         |
| Mauritius             | 2016 | ..         | 2       | ..      | 1                 | 1      | 1          |
|                       | 2017 | ..         | 2       | ..      | 1                 | 1      | 1          |
|                       | 2018 | ..         | 3       | ..      | 2                 | 1      | 1          |
|                       | 2019 | ..         | 13      | ..      | 10                | 4      | 3          |
| Namibia               | 2016 | ..         | 2       | ..      | ..                | 2      | 1          |
|                       | 2017 | ..         | 2       | ..      | ..                | 2      | 1          |
|                       | 2018 | ..         | 2       | ..      | ..                | 2      | 1          |
|                       | 2019 | ..         | 2       | ..      | ..                | 2      | 1          |
| Niger                 | 2016 | ..         | 1       | ..      | 0                 | 1      | 0          |
|                       | 2017 | ..         | 1       | ..      | ..                | 1      | 0          |
|                       | 2018 | ..         | 1       | ..      | ..                | 1      | 0          |
|                       | 2019 | ..         | 1       | ..      | ..                | 1      | 0          |
| Nigeria               | 2016 | 401        | 302     | ..      | ..                | 703    | 4          |
|                       | 2017 | 502        | 265     | ..      | ..                | 767    | 4          |
|                       | 2018 | 327        | 159     | ..      | ..                | 486    | 2          |
|                       | 2019 | 60         | 658     | ..      | ..                | 717    | 4          |
| Rwanda                | 2016 | ..         | 19      | ..      | *8                | 11     | 1          |
|                       | 2017 | ..         | 5       | ..      | *-3               | 8      | 1          |
|                       | 2018 | ..         | 5       | ..      | *-3               | 8      | 1          |
|                       | 2019 | ..         | 4       | ..      | ..                | 4      | 0          |
| Sao Tome and Principe | 2016 | ..         | *4      | ..      | ..                | *4     | *19        |
|                       | 2017 | ..         | *4      | ..      | ..                | *4     | *19        |
|                       | 2018 | ..         | *4      | ..      | ..                | *4     | *20        |
|                       | 2019 | ..         | *4      | ..      | ..                | *4     | *20        |
| Senegal               | 2016 | ..         | ..      | ..      | ..                | ..     | ..         |
|                       | 2017 | ..         | ..      | ..      | ..                | ..     | ..         |
|                       | 2018 | ..         | ..      | ..      | ..                | ..     | ..         |
|                       | 2019 | 2          | ..      | ..      | ..                | 2      | 0          |
| Seychelles            | 2016 | ..         | *1      | ..      | ..                | *1     | *10        |
|                       | 2017 | ..         | *1      | ..      | ..                | *1     | *10        |
|                       | 2018 | ..         | *1      | ..      | ..                | *1     | *9         |
|                       | 2019 | ..         | *1      | ..      | ..                | *1     | *9         |
| Sierra Leone          | 2016 | ..         | *1      | ..      | ..                | *1     | 0          |
|                       | 2017 | ..         | *1      | ..      | ..                | *1     | 0          |
|                       | 2018 | ..         | *1      | ..      | ..                | *1     | 0          |
|                       | 2019 | ..         | 0       | ..      | ..                | 0      | 0          |



## Production, trade and supply of other kerosene

Thousand metric tons and kilograms per capita

| Country or area         | Year        | Production   | Imports    | Exports    | Changes in stocks | Supply       |            |
|-------------------------|-------------|--------------|------------|------------|-------------------|--------------|------------|
|                         |             |              |            |            |                   | Total        | Per capita |
| Somalia                 | 2016        | ..           | *31        | ..         | ..                | *31          | *2         |
|                         | 2017        | ..           | *31        | ..         | ..                | *31          | *2         |
|                         | 2018        | ..           | *31        | ..         | ..                | *31          | *2         |
|                         | 2019        | ..           | *31        | ..         | ..                | *31          | *2         |
| South Africa            | 2016        | 558          | 4          | 42         | ..                | 520          | 9          |
|                         | 2017        | 619          | 2          | 40         | ..                | 581          | 10         |
|                         | 2018        | 605          | 2          | 39         | ..                | 568          | 10         |
|                         | 2019        | 596          | 2          | 39         | ..                | 559          | 10         |
| South Sudan             | 2016        | ..           | 2          | ..         | ..                | 2            | 0          |
|                         | 2017        | ..           | 1          | ..         | ..                | 1            | 0          |
|                         | 2018        | ..           | 2          | ..         | ..                | 2            | 0          |
|                         | 2019        | ..           | 2          | ..         | ..                | 2            | 0          |
| Sudan                   | 2016        | 11           | ..         | ..         | ..                | 11           | 0          |
|                         | 2017        | 4            | ..         | ..         | ..                | 4            | 0          |
|                         | 2018        | 10           | ..         | ..         | ..                | 10           | 0          |
|                         | 2019        | *10          | ..         | ..         | ..                | *10          | 0          |
| Togo                    | 2016        | ..           | 72         | ..         | ..                | 72           | 10         |
|                         | 2017        | ..           | 9          | ..         | 1                 | 8            | 1          |
|                         | 2018        | ..           | 26         | ..         | -1                | 27           | 3          |
|                         | 2019        | ..           | 26         | ..         | ..                | 26           | 3          |
| Tunisia                 | 2016        | 53           | 0          | ..         | 0                 | 53           | 5          |
|                         | 2017        | 59           | 0          | ..         | 4                 | 55           | 5          |
|                         | 2018        | 34           | ..         | ..         | ..                | 34           | 3          |
|                         | 2019        | 11           | ..         | ..         | -9                | 20           | 2          |
| Uganda                  | 2016        | ..           | 48         | ..         | ..                | 48           | 1          |
|                         | 2017        | ..           | 46         | ..         | ..                | 46           | 1          |
|                         | 2018        | ..           | 47         | ..         | ..                | 47           | 1          |
|                         | 2019        | ..           | 44         | ..         | ..                | 44           | 1          |
| United Rep. of Tanzania | 2016        | ..           | 32         | ..         | ..                | 32           | 1          |
|                         | 2017        | ..           | 21         | ..         | ..                | 21           | 0          |
|                         | 2018        | ..           | 9          | ..         | ..                | 9            | 0          |
|                         | 2019        | ..           | 16         | ..         | ..                | 16           | 0          |
| Zambia                  | 2016        | 18           | ..         | 2          | ..                | 16           | 1          |
|                         | 2017        | 18           | ..         | 1          | ..                | 17           | 1          |
|                         | 2018        | 21           | ..         | 5          | ..                | 15           | 1          |
|                         | 2019        | 13           | ..         | 2          | ..                | 11           | 1          |
| Zimbabwe                | 2016        | ..           | 51         | ..         | ..                | 51           | 4          |
|                         | 2017        | ..           | 55         | ..         | ..                | 55           | 4          |
|                         | 2018        | ..           | 59         | ..         | ..                | 59           | 4          |
|                         | 2019        | ..           | 33         | ..         | ..                | 33           | 2          |
| <b>America, North</b>   | <b>2016</b> | <b>1,467</b> | <b>585</b> | <b>521</b> | <b>-53</b>        | <b>1,585</b> | <b>3</b>   |
|                         | <b>2017</b> | <b>1,136</b> | <b>506</b> | <b>338</b> | <b>-35</b>        | <b>1,340</b> | <b>2</b>   |
|                         | <b>2018</b> | <b>1,209</b> | <b>387</b> | <b>218</b> | <b>45</b>         | <b>1,332</b> | <b>2</b>   |
|                         | <b>2019</b> | <b>600</b>   | <b>732</b> | <b>232</b> | <b>41</b>         | <b>1,060</b> | <b>2</b>   |
| Bahamas                 | 2016        | ..           | *3         | ..         | ..                | *3           | *8         |
|                         | 2017        | ..           | *3         | ..         | ..                | *3           | *8         |
|                         | 2018        | ..           | *3         | ..         | ..                | *3           | *8         |
|                         | 2019        | ..           | *3         | ..         | ..                | *3           | *8         |
| Barbados                | 2016        | ..           | *8         | ..         | 0                 | *8           | *29        |
|                         | 2017        | ..           | *9         | ..         | 0                 | *9           | *32        |
|                         | 2018        | ..           | *10        | ..         | ..                | *10          | *34        |
|                         | 2019        | ..           | *10        | ..         | ..                | *10          | *35        |

Table 19

## Production, trade and supply of other kerosene

Thousand metric tons and kilograms per capita

| Country or area        | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|------------------------|------|------------|---------|---------|-------------------|--------|------------|
|                        |      |            |         |         |                   | Total  | Per capita |
| Belize                 | 2016 | ..         | 0       | ..      | ..                | 0      | 0          |
|                        | 2017 | ..         | 0       | ..      | ..                | 0      | 0          |
|                        | 2018 | ..         | 0       | ..      | ..                | 0      | 0          |
|                        | 2019 | ..         | 0       | ..      | ..                | 0      | 1          |
| Bermuda                | 2016 | ..         | 28      | ..      | ..                | 28     | 436        |
|                        | 2017 | ..         | 15      | ..      | ..                | 15     | 244        |
|                        | 2018 | ..         | 30      | ..      | ..                | 30     | 481        |
|                        | 2019 | ..         | 26      | ..      | ..                | 26     | 414        |
| British Virgin Islands | 2016 | ..         | *4      | ..      | ..                | *4     | *136       |
|                        | 2017 | ..         | *3      | ..      | ..                | *3     | *108       |
|                        | 2018 | ..         | *3      | ..      | ..                | *3     | *101       |
|                        | 2019 | ..         | *3      | ..      | ..                | *3     | *103       |
| Canada                 | 2016 | 773        | 102     | ..      | 7                 | 868    | 24         |
|                        | 2017 | 756        | 72      | 4       | -10               | 834    | 23         |
|                        | 2018 | 728        | 67      | ..      | -19               | 814    | 22         |
|                        | 2019 | 104        | 394     | ..      | 6                 | 492    | 13         |
| Cuba                   | 2016 | 2          | *77     | ..      | ..                | *78    | *7         |
|                        | 2017 | 3          | *78     | ..      | ..                | *81    | *7         |
|                        | 2018 | 7          | *74     | ..      | ..                | *80    | *7         |
|                        | 2019 | 1          | *72     | ..      | ..                | *73    | *6         |
| Dominica               | 2016 | ..         | 0       | ..      | 0                 | 0      | *4         |
|                        | 2017 | ..         | 0       | ..      | 0                 | 0      | *6         |
|                        | 2018 | ..         | 0       | ..      | 0                 | 0      | *6         |
|                        | 2019 | ..         | 0       | ..      | 0                 | 0      | *6         |
| Dominican Republic     | 2016 | 9          | ..      | ..      | 0                 | 9      | 1          |
|                        | 2017 | 6          | ..      | ..      | 0                 | 6      | 1          |
|                        | 2018 | 8          | ..      | ..      | 0                 | 8      | 1          |
|                        | 2019 | 16         | ..      | ..      | ..                | 16     | 1          |
| El Salvador            | 2016 | ..         | 1       | ..      | ..                | 1      | 0          |
|                        | 2017 | ..         | 1       | ..      | ..                | 1      | 0          |
|                        | 2018 | ..         | 1       | ..      | ..                | 1      | 0          |
|                        | 2019 | ..         | 4       | ..      | ..                | 4      | 1          |
| Grenada                | 2016 | ..         | 0       | ..      | ..                | 0      | 1          |
|                        | 2017 | ..         | 0       | ..      | ..                | 0      | 1          |
|                        | 2018 | ..         | 0       | ..      | ..                | 0      | 1          |
|                        | 2019 | ..         | 0       | ..      | ..                | 0      | 1          |
| Guatemala              | 2016 | 0          | 114     | 94      | -7                | 27     | 2          |
|                        | 2017 | 0          | 41      | 41      | -1                | 1      | 0          |
|                        | 2018 | ..         | 17      | 17      | 0                 | 1      | 0          |
|                        | 2019 | ..         | 10      | 4       | 2                 | 4      | 0          |
| Haiti                  | 2016 | ..         | 71      | ..      | ..                | 71     | 7          |
|                        | 2017 | ..         | 72      | ..      | ..                | 72     | 7          |
|                        | 2018 | ..         | 73      | ..      | ..                | 73     | 7          |
|                        | 2019 | ..         | 73      | ..      | ..                | 73     | 6          |
| Honduras               | 2016 | ..         | 57      | ..      | 10                | 47     | 5          |
|                        | 2017 | ..         | 17      | ..      | 1                 | 17     | 2          |
|                        | 2018 | ..         | 21      | ..      | -3                | 24     | 2          |
|                        | 2019 | ..         | 22      | ..      | ..                | 22     | 2          |
| Montserrat             | 2016 | ..         | 0       | ..      | ..                | 0      | 80         |
|                        | 2017 | ..         | 0       | ..      | ..                | 0      | *80        |
|                        | 2018 | ..         | 0       | ..      | ..                | 0      | *80        |
|                        | 2019 | ..         | 0       | ..      | ..                | 0      | *80        |

## Production, trade and supply of other kerosene

Thousand metric tons and kilograms per capita

| Country or area          | Year        | Production | Imports   | Exports | Changes in stocks | Supply     |            |
|--------------------------|-------------|------------|-----------|---------|-------------------|------------|------------|
|                          |             |            |           |         |                   | Total      | Per capita |
| Nicaragua                | 2016        | 6          | ..        | ..      | ..                | 6          | 1          |
|                          | 2017        | 8          | ..        | ..      | ..                | 8          | 1          |
|                          | 2018        | 8          | ..        | ..      | ..                | 8          | 1          |
|                          | 2019        | 6          | ..        | ..      | ..                | 6          | 1          |
| Panama                   | 2016        | ..         | 1         | ..      | ..                | 1          | 0          |
|                          | 2017        | ..         | 1         | ..      | ..                | 1          | 0          |
|                          | 2018        | ..         | 1         | ..      | ..                | 1          | 0          |
|                          | 2019        | ..         | 1         | ..      | ..                | 1          | 0          |
| St. Kitts-Nevis          | 2016        | ..         | *5        | ..      | ..                | *5         | *103       |
|                          | 2017        | ..         | *5        | ..      | ..                | *5         | *104       |
|                          | 2018        | ..         | *6        | ..      | ..                | *6         | *105       |
|                          | 2019        | ..         | *6        | ..      | ..                | *6         | *107       |
| St. Lucia                | 2016        | ..         | 1         | ..      | ..                | 1          | 8          |
|                          | 2017        | ..         | 1         | ..      | ..                | 1          | 8          |
|                          | 2018        | ..         | 2         | ..      | ..                | 2          | 8          |
|                          | 2019        | ..         | *2        | ..      | ..                | *2         | *9         |
| Trinidad and Tobago      | 2016        | 32         | ..        | ..      | ..                | 32         | 23         |
|                          | 2017        | 29         | ..        | ..      | ..                | 29         | 21         |
|                          | 2018        | 24         | ..        | ..      | ..                | 24         | 18         |
|                          | 2019        | ..         | 14        | ..      | ..                | 14         | 10         |
| United States            | 2016        | 646        | 112       | 427     | -63               | 394        | 1          |
|                          | 2017        | 335        | 185       | 292     | -23               | 252        | 1          |
|                          | 2018        | 434        | 80        | 202     | 68                | 244        | 1          |
|                          | 2019        | 473        | 92        | 228     | 34                | 303        | 1          |
| <b>America, South</b>    | <b>2016</b> | <b>262</b> | <b>18</b> | ..      | <b>2</b>          | <b>279</b> | <b>1</b>   |
|                          | <b>2017</b> | <b>252</b> | <b>33</b> | ..      | <b>0</b>          | <b>285</b> | <b>1</b>   |
|                          | <b>2018</b> | <b>251</b> | <b>19</b> | ..      | <b>0</b>          | <b>269</b> | <b>1</b>   |
|                          | <b>2019</b> | <b>229</b> | <b>20</b> | ..      | <b>4</b>          | <b>245</b> | <b>1</b>   |
| Argentina                | 2016        | 14         | ..        | ..      | 0                 | 14         | 0          |
|                          | 2017        | 10         | ..        | ..      | -2                | 12         | 0          |
|                          | 2018        | 9          | ..        | ..      | -2                | 11         | 0          |
|                          | 2019        | 8          | ..        | ..      | -1                | 9          | 0          |
| Bolivia (Plur. State of) | 2016        | 18         | ..        | ..      | ..                | 18         | 2          |
|                          | 2017        | 16         | ..        | ..      | -3                | 19         | 2          |
|                          | 2018        | 18         | ..        | ..      | 0                 | 18         | 2          |
|                          | 2019        | 20         | ..        | ..      | 0                 | 20         | 2          |
| Brazil                   | 2016        | 6          | ..        | ..      | 0                 | 6          | 0          |
|                          | 2017        | 5          | ..        | ..      | ..                | 5          | 0          |
|                          | 2018        | 5          | ..        | ..      | ..                | 5          | 0          |
|                          | 2019        | 5          | ..        | ..      | ..                | 5          | 0          |
| Chile                    | 2016        | 161        | 0         | ..      | 0                 | 161        | 9          |
|                          | 2017        | 161        | 15        | ..      | 4                 | 172        | 9          |
|                          | 2018        | 162        | ..        | ..      | 1                 | 161        | 9          |
|                          | 2019        | 161        | ..        | ..      | 3                 | 159        | 8          |
| Ecuador                  | 2016        | 2          | ..        | ..      | ..                | 2          | 0          |
|                          | 2017        | 4          | ..        | ..      | ..                | 4          | 0          |
|                          | 2018        | 3          | ..        | ..      | ..                | 3          | 0          |
|                          | 2019        | 3          | ..        | ..      | ..                | 3          | 0          |
| Falkland Is. (Malvinas)  | 2016        | ..         | 3         | ..      | ..                | 3          | 1,025      |
|                          | 2017        | ..         | 3         | ..      | ..                | 3          | 888        |
|                          | 2018        | ..         | 3         | ..      | ..                | 3          | 909        |
|                          | 2019        | ..         | 3         | ..      | ..                | 3          | 938        |

Table 19

## Production, trade and supply of other kerosene

Thousand metric tons and kilograms per capita

| Country or area           | Year        | Production    | Imports      | Exports       | Changes in stocks | Supply        |            |
|---------------------------|-------------|---------------|--------------|---------------|-------------------|---------------|------------|
|                           |             |               |              |               |                   | Total         | Per capita |
| Guyana                    | 2016        | ..            | 14           | ..            | 2                 | 13            | 16         |
|                           | 2017        | ..            | 15           | ..            | 1                 | 13            | 17         |
|                           | 2018        | ..            | 15           | ..            | 2                 | 13            | 17         |
|                           | 2019        | ..            | 16           | ..            | 3                 | 13            | 16         |
| Suriname                  | 2016        | ..            | 0            | ..            | ..                | 0             | 1          |
|                           | 2017        | ..            | 0            | ..            | ..                | 0             | 1          |
|                           | 2018        | ..            | 0            | ..            | ..                | 0             | 1          |
|                           | 2019        | ..            | 0            | ..            | ..                | 0             | 1          |
| Uruguay                   | 2016        | 7             | ..           | ..            | 0                 | 7             | 2          |
|                           | 2017        | 5             | ..           | ..            | 0                 | 5             | 1          |
|                           | 2018        | 5             | ..           | ..            | 0                 | 5             | 2          |
|                           | 2019        | 4             | ..           | ..            | -1                | 5             | 1          |
| Venezuela (Bolivar. Rep.) | 2016        | 54            | ..           | ..            | ..                | 54            | 2          |
|                           | 2017        | 51            | ..           | ..            | ..                | 51            | 2          |
|                           | 2018        | 49            | ..           | ..            | ..                | 49            | 2          |
|                           | 2019        | 28            | ..           | ..            | ..                | 28            | 1          |
| <b>Asia</b>               | <b>2016</b> | <b>43,721</b> | <b>1,808</b> | <b>13,020</b> | <b>1,693</b>      | <b>30,816</b> | <b>7</b>   |
|                           | <b>2017</b> | <b>40,696</b> | <b>2,571</b> | <b>13,079</b> | <b>1,483</b>      | <b>28,705</b> | <b>6</b>   |
|                           | <b>2018</b> | <b>39,238</b> | <b>2,328</b> | <b>13,464</b> | <b>2,052</b>      | <b>26,050</b> | <b>6</b>   |
|                           | <b>2019</b> | <b>37,132</b> | <b>2,723</b> | <b>12,423</b> | <b>1,587</b>      | <b>25,845</b> | <b>6</b>   |
| Afghanistan               | 2016        | ..            | 10           | ..            | *-11              | *21           | *1         |
|                           | 2017        | ..            | 36           | ..            | *12               | 24            | 1          |
|                           | 2018        | ..            | 12           | ..            | *-11              | 23            | 1          |
|                           | 2019        | ..            | *19          | ..            | *-2               | *21           | *1         |
| Armenia                   | 2016        | ..            | 0            | ..            | ..                | 0             | 0          |
|                           | 2017        | ..            | 0            | ..            | ..                | 0             | 0          |
|                           | 2018        | ..            | 0            | ..            | ..                | 0             | 0          |
|                           | 2019        | ..            | 1            | ..            | ..                | 1             | 0          |
| Azerbaijan                | 2016        | ..            | 11           | ..            | -4                | 15            | 1          |
|                           | 2017        | ..            | 3            | ..            | ..                | 3             | 0          |
|                           | 2018        | ..            | 23           | ..            | ..                | 23            | 2          |
|                           | 2019        | ..            | 4            | ..            | ..                | 4             | 0          |
| Bahrain                   | 2016        | 0             | ..           | 0             | -20               | 20            | 14         |
|                           | 2017        | 0             | ..           | 0             | -18               | 18            | 12         |
|                           | 2018        | 0             | ..           | 0             | -16               | 16            | 10         |
|                           | 2019        | 0             | ..           | 0             | -16               | 16            | 10         |
| Bangladesh                | 2016        | 194           | ..           | ..            | ..                | 194           | 1          |
|                           | 2017        | 237           | ..           | ..            | ..                | 237           | 1          |
|                           | 2018        | 127           | ..           | ..            | ..                | 127           | 1          |
|                           | 2019        | 95            | ..           | ..            | ..                | 95            | 1          |
| Bhutan                    | 2016        | ..            | 4            | ..            | ..                | 4             | 5          |
|                           | 2017        | ..            | 4            | ..            | ..                | 4             | 5          |
|                           | 2018        | ..            | 3            | ..            | ..                | 3             | 4          |
|                           | 2019        | ..            | 2            | ..            | ..                | 2             | 3          |
| Brunei Darussalam         | 2016        | 6             | ..           | ..            | ..                | 6             | 14         |
|                           | 2017        | 6             | ..           | ..            | ..                | 6             | 14         |
|                           | 2018        | 4             | ..           | ..            | ..                | 4             | 10         |
|                           | 2019        | 3             | ..           | ..            | ..                | 3             | 7          |
| China                     | 2016        | 1,613         | 27           | 0             | 26                | 1,613         | 1          |
|                           | 2017        | 1,442         | 43           | 0             | -22               | 1,507         | 1          |
|                           | 2018        | 1,437         | 65           | 0             | -52               | 1,554         | 1          |
|                           | 2019        | 1,815         | 842          | 5             | 100               | 2,552         | 2          |

## Production, trade and supply of other kerosene

Thousand metric tons and kilograms per capita

| Country or area        | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|------------------------|------|------------|---------|---------|-------------------|--------|------------|
|                        |      |            |         |         |                   | Total  | Per capita |
| China, Macao SAR       | 2016 | ..         | 2       | ..      | ..                | 2      | 3          |
|                        | 2017 | ..         | 2       | ..      | ..                | 2      | 3          |
|                        | 2018 | ..         | 2       | ..      | ..                | 2      | 3          |
|                        | 2019 | ..         | 2       | ..      | ..                | 2      | 3          |
| Cyprus                 | 2016 | ..         | 12      | ..      | ..                | 12     | 10         |
|                        | 2017 | ..         | 16      | ..      | 2                 | 14     | 12         |
|                        | 2018 | ..         | 12      | ..      | 0                 | 12     | 10         |
|                        | 2019 | ..         | 12      | ..      | 0                 | 12     | 10         |
| India                  | 2016 | 6,041      | 0       | 15      | ..                | 6,026  | 5          |
|                        | 2017 | 4,408      | ..      | 17      | ..                | 4,391  | 3          |
|                        | 2018 | 4,072      | ..      | 19      | ..                | 4,053  | 3          |
|                        | 2019 | 3,141      | ..      | 176     | ..                | 2,965  | 2          |
| Indonesia              | 2016 | 843        | 4       | 0       | ..                | 847    | 3          |
|                        | 2017 | 788        | 0       | 0       | ..                | 788    | 3          |
|                        | 2018 | 779        | 0       | 0       | ..                | 779    | 3          |
|                        | 2019 | 896        | 37      | 0       | ..                | 933    | 3          |
| Iran (Islamic Rep. of) | 2016 | 2,523      | ..      | 4       | ..                | 2,519  | 32         |
|                        | 2017 | 2,820      | ..      | 0       | ..                | 2,820  | 35         |
|                        | 2018 | 2,895      | ..      | ..      | ..                | 2,895  | 35         |
|                        | 2019 | 2,829      | ..      | ..      | ..                | 2,829  | 34         |
| Iraq                   | 2016 | 1,148      | 206     | ..      | ..                | 1,354  | 37         |
|                        | 2017 | 1,396      | 217     | ..      | ..                | 1,613  | 43         |
|                        | 2018 | 1,447      | 213     | ..      | ..                | 1,660  | 43         |
|                        | 2019 | 1,521      | 225     | ..      | ..                | 1,747  | 44         |
| Israel                 | 2016 | 283        | 255     | 264     | 19                | 255    | 31         |
|                        | 2017 | ..         | 373     | 263     | -68               | 178    | 22         |
|                        | 2018 | ..         | 380     | 301     | -9                | 88     | 11         |
|                        | 2019 | ..         | 165     | 300     | -12               | -123   | -14        |
| Japan                  | 2016 | 12,863     | 1,063   | 466     | -105              | 13,565 | 106        |
|                        | 2017 | 12,796     | 1,569   | 421     | 386               | 13,559 | 106        |
|                        | 2018 | 10,780     | 1,457   | 568     | 84                | 11,585 | 91         |
|                        | 2019 | 10,777     | 1,271   | 811     | 11                | 11,226 | 88         |
| Jordan                 | 2016 | 97         | ..      | ..      | 11                | 86     | 9          |
|                        | 2017 | 54         | 68      | ..      | 32                | 90     | 9          |
|                        | 2018 | 11         | 40      | ..      | ..                | 51     | 5          |
|                        | 2019 | *10        | 60      | ..      | ..                | 70     | 7          |
| Kazakhstan             | 2016 | 2          | 0       | 0       | -12               | 14     | 1          |
|                        | 2017 | 0          | 0       | ..      | ..                | 0      | 0          |
|                        | 2018 | 5          | 1       | 0       | 4                 | 2      | 0          |
|                        | 2019 | 5          | ..      | 0       | -12               | 17     | 1          |
| Korea, Dem.Ppl's.Rep.  | 2016 | 37         | 1       | ..      | ..                | 38     | 2          |
|                        | 2017 | 37         | 1       | ..      | ..                | 38     | 1          |
|                        | 2018 | 37         | 1       | ..      | ..                | 38     | 1          |
|                        | 2019 | 37         | 1       | ..      | ..                | 38     | 1          |
| Korea, Republic of     | 2016 | 2,716      | 3       | 265     | -10               | 2,464  | 48         |
|                        | 2017 | 2,722      | 4       | 685     | -58               | 2,099  | 41         |
|                        | 2018 | 2,729      | ..      | 846     | 62                | 1,821  | 36         |
|                        | 2019 | 2,781      | 5       | 539     | 31                | 2,216  | 43         |
| Kuwait                 | 2016 | 5,505      | ..      | 5,406   | ..                | 99     | 25         |
|                        | 2017 | 4,362      | ..      | 4,258   | ..                | 104    | 26         |
|                        | 2018 | 4,676      | ..      | 4,539   | ..                | 137    | 33         |
|                        | 2019 | 3,965      | ..      | 3,832   | ..                | 133    | 32         |

Table 19

## Production, trade and supply of other kerosene

Thousand metric tons and kilograms per capita

| Country or area        | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|------------------------|------|------------|---------|---------|-------------------|--------|------------|
|                        |      |            |         |         |                   | Total  | Per capita |
| Lao People's Dem. Rep. | 2016 | ..         | *6      | ..      | ..                | *6     | *1         |
|                        | 2017 | ..         | *6      | ..      | ..                | *6     | *1         |
|                        | 2018 | ..         | *6      | ..      | ..                | *6     | *1         |
|                        | 2019 | ..         | *6      | ..      | ..                | *6     | *1         |
| Malaysia               | 2016 | 4          | 0       | 74      | -13               | -57    | -2         |
|                        | 2017 | 10         | ..      | 58      | -3                | -45    | -1         |
|                        | 2018 | 18         | ..      | 50      | 8                 | -40    | -1         |
|                        | 2019 | 17         | 0       | 85      | ..                | -68    | -2         |
| Maldives               | 2016 | ..         | 0       | ..      | ..                | 0      | 0          |
|                        | 2017 | ..         | 0       | ..      | ..                | 0      | 1          |
|                        | 2018 | ..         | 0       | ..      | ..                | 0      | 0          |
|                        | 2019 | ..         | 0       | ..      | ..                | 0      | 0          |
| Nepal                  | 2016 | ..         | 15      | ..      | ..                | 15     | 1          |
|                        | 2017 | ..         | 17      | ..      | ..                | 17     | 1          |
|                        | 2018 | ..         | 19      | ..      | ..                | 19     | 1          |
|                        | 2019 | ..         | 14      | ..      | ..                | 14     | 0          |
| Oman                   | 2016 | 6          | ..      | ..      | ..                | 6      | 1          |
|                        | 2017 | 4          | ..      | ..      | ..                | 4      | 1          |
|                        | 2018 | 3          | ..      | ..      | ..                | 3      | 1          |
|                        | 2019 | 2          | ..      | ..      | ..                | 2      | 0          |
| Other Asia             | 2016 | 7          | ..      | ..      | 3                 | 4      | 0          |
|                        | 2017 | 2          | ..      | ..      | -3                | 5      | 0          |
|                        | 2018 | 5          | ..      | ..      | 1                 | 4      | 0          |
|                        | 2019 | 2          | ..      | ..      | 0                 | 2      | 0          |
| Pakistan               | 2016 | 125        | 0       | ..      | 0                 | 125    | 1          |
|                        | 2017 | 115        | 0       | ..      | ..                | 115    | 1          |
|                        | 2018 | 113        | ..      | ..      | -5                | 118    | 1          |
|                        | 2019 | 107        | 0       | ..      | ..                | 107    | 0          |
| Philippines            | 2016 | 67         | 33      | 0       | 3                 | 97     | 1          |
|                        | 2017 | 53         | 41      | 0       | -3                | 97     | 1          |
|                        | 2018 | 47         | 34      | ..      | 2                 | 79     | 1          |
|                        | 2019 | 33         | 17      | ..      | -4                | 54     | 0          |
| Saudi Arabia           | 2016 | 7,247      | 86      | *6,219  | 145               | 969    | 30         |
|                        | 2017 | 7,332      | 105     | *7,145  | -218              | 510    | 15         |
|                        | 2018 | 7,758      | ..      | 6,871   | 292               | 595    | 18         |
|                        | 2019 | *6,804     | ..      | *6,410  | *-121             | *514   | *15        |
| Singapore              | 2016 | 266        | 20      | 286     | ..                | 0      | 0          |
|                        | 2017 | 205        | 18      | 223     | ..                | 0      | 0          |
|                        | 2018 | 250        | 15      | 266     | ..                | 0      | 0          |
|                        | 2019 | 256        | 7       | 263     | ..                | 0      | 0          |
| Sri Lanka              | 2016 | 104        | 0       | ..      | -68               | 172    | 8          |
|                        | 2017 | 60         | ..      | ..      | -99               | 159    | 8          |
|                        | 2018 | 35         | ..      | ..      | -7                | 42     | 2          |
|                        | 2019 | 38         | ..      | ..      | 1                 | 37     | 2          |
| State of Palestine     | 2016 | ..         | 2       | ..      | ..                | 2      | 0          |
|                        | 2017 | ..         | 1       | ..      | ..                | 1      | 0          |
|                        | 2018 | ..         | 1       | ..      | ..                | 1      | 0          |
|                        | 2019 | ..         | 1       | ..      | ..                | 1      | 0          |
| Syrian Arab Republic   | 2016 | 3          | ..      | ..      | ..                | 3      | 0          |
|                        | 2017 | 3          | ..      | ..      | ..                | 3      | 0          |
|                        | 2018 | 3          | ..      | ..      | ..                | 3      | 0          |
|                        | 2019 | 3          | ..      | ..      | ..                | 3      | 0          |

## Production, trade and supply of other kerosene

Thousand metric tons and kilograms per capita

| Country or area | Year        | Production    | Imports      | Exports      | Changes in stocks | Supply        |            |
|-----------------|-------------|---------------|--------------|--------------|-------------------|---------------|------------|
|                 |             |               |              |              |                   | Total         | Per capita |
| Thailand        | 2016        | 1,756         | ..           | 21           | 1,726             | 9             | 0          |
|                 | 2017        | 1,557         | ..           | 9            | 1,541             | 6             | 0          |
|                 | 2018        | 1,694         | ..           | 4            | 1,684             | 6             | 0          |
|                 | 2019        | 1,619         | ..           | 2            | 1,611             | 6             | 0          |
| Timor-Leste     | 2016        | ..            | ..           | ..           | ..                | ..            | ..         |
|                 | 2017        | ..            | ..           | ..           | ..                | ..            | ..         |
|                 | 2018        | ..            | 1            | ..           | ..                | 1             | 1          |
|                 | 2019        | ..            | 0            | ..           | ..                | 0             | 0          |
| Turkey          | 2016        | 18            | ..           | ..           | 3                 | 15            | 0          |
|                 | 2017        | 19            | ..           | ..           | 4                 | 15            | 0          |
|                 | 2018        | 23            | ..           | ..           | 15                | 8             | 0          |
|                 | 2019        | 10            | ..           | ..           | 1                 | 9             | 0          |
| Turkmenistan    | 2016        | 150           | ..           | ..           | ..                | 150           | 26         |
|                 | 2017        | 150           | ..           | ..           | ..                | 150           | 26         |
|                 | 2018        | 150           | ..           | ..           | ..                | 150           | 26         |
|                 | 2019        | 150           | ..           | ..           | ..                | 150           | 25         |
| Uzbekistan      | 2016        | 12            | ..           | ..           | ..                | 12            | 0          |
|                 | 2017        | 9             | ..           | ..           | ..                | 9             | 0          |
|                 | 2018        | 9             | ..           | ..           | ..                | 9             | 0          |
|                 | 2019        | 6             | ..           | ..           | 0                 | 6             | 0          |
| Viet Nam        | 2016        | ..            | 50           | ..           | ..                | 50            | 1          |
|                 | 2017        | ..            | 49           | ..           | ..                | 49            | 1          |
|                 | 2018        | ..            | 43           | 1            | ..                | 42            | 0          |
|                 | 2019        | ..            | 32           | ..           | ..                | 32            | 0          |
| Yemen           | 2016        | 84            | ..           | ..           | ..                | 84            | 3          |
|                 | 2017        | 110           | ..           | ..           | ..                | 110           | 4          |
|                 | 2018        | 131           | ..           | ..           | ..                | 131           | 5          |
|                 | 2019        | 211           | ..           | ..           | ..                | 211           | 7          |
| <b>Europe</b>   | <b>2016</b> | <b>12,441</b> | <b>2,818</b> | <b>1,979</b> | <b>-46</b>        | <b>13,326</b> | <b>18</b>  |
|                 | <b>2017</b> | <b>12,792</b> | <b>2,692</b> | <b>2,009</b> | <b>-37</b>        | <b>13,511</b> | <b>18</b>  |
|                 | <b>2018</b> | <b>13,625</b> | <b>2,713</b> | <b>1,866</b> | <b>116</b>        | <b>14,356</b> | <b>19</b>  |
|                 | <b>2019</b> | <b>13,488</b> | <b>2,492</b> | <b>1,794</b> | <b>-55</b>        | <b>14,241</b> | <b>19</b>  |
| Austria         | 2016        | 21            | 0            | ..           | ..                | 21            | 2          |
|                 | 2017        | 15            | 1            | 0            | 0                 | 16            | 2          |
|                 | 2018        | 26            | 1            | 0            | 0                 | 26            | 3          |
|                 | 2019        | 15            | 1            | 0            | 0                 | 15            | 2          |
| Belarus         | 2016        | 5             | ..           | 0            | 2                 | 3             | 0          |
|                 | 2017        | 7             | ..           | 3            | 2                 | 2             | 0          |
|                 | 2018        | 7             | ..           | 0            | 2                 | 5             | 1          |
|                 | 2019        | 14            | ..           | 5            | 7                 | 2             | 0          |
| Belgium         | 2016        | 21            | 84           | 113          | -18               | 10            | 1          |
|                 | 2017        | 31            | 58           | 166          | 5                 | -81           | -7         |
|                 | 2018        | 30            | 64           | 302          | -10               | -198          | -17        |
|                 | 2019        | 25            | 63           | 313          | -11               | -213          | -18        |
| Croatia         | 2016        | ..            | 4            | ..           | ..                | 4             | 1          |
|                 | 2017        | ..            | 3            | ..           | ..                | 3             | 1          |
|                 | 2018        | ..            | 3            | ..           | ..                | 3             | 1          |
|                 | 2019        | ..            | 2            | ..           | ..                | 2             | 0          |
| Czechia         | 2016        | ..            | 2            | ..           | ..                | 2             | 0          |
|                 | 2017        | ..            | 2            | ..           | ..                | 2             | 0          |
|                 | 2018        | ..            | 2            | ..           | ..                | 2             | 0          |
|                 | 2019        | ..            | 2            | ..           | ..                | 2             | 0          |

Table 19

## Production, trade and supply of other kerosene

Thousand metric tons and kilograms per capita

| Country or area | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|-----------------|------|------------|---------|---------|-------------------|--------|------------|
|                 |      |            |         |         |                   | Total  | Per capita |
| Finland         | 2016 | ..         | 350     | 78      | ..                | 272    | 49         |
|                 | 2017 | ..         | 140     | 120     | ..                | 20     | 4          |
|                 | 2018 | ..         | 380     | 54      | ..                | 326    | 59         |
|                 | 2019 | ..         | 493     | 110     | ..                | 383    | 69         |
| France          | 2016 | 0          | 198     | 51      | 0                 | 147    | 2          |
|                 | 2017 | ..         | 211     | 75      | ..                | 136    | 2          |
|                 | 2018 | ..         | 186     | 66      | ..                | 120    | 2          |
|                 | 2019 | ..         | 210     | 72      | ..                | 138    | 2          |
| Germany         | 2016 | 9          | 21      | ..      | 2                 | 28     | 0          |
|                 | 2017 | 9          | 22      | ..      | 5                 | 26     | 0          |
|                 | 2018 | 2          | 22      | ..      | -4                | 28     | 0          |
|                 | 2019 | 4          | 19      | ..      | -2                | 25     | 0          |
| Greece          | 2016 | 0          | 0       | 0       | 0                 | 0      | 0          |
|                 | 2017 | 0          | 1       | 0       | -1                | 1      | 0          |
|                 | 2018 | ..         | 1       | ..      | 0                 | 1      | 0          |
|                 | 2019 | ..         | 1       | ..      | 0                 | 1      | 0          |
| Ireland         | 2016 | 175        | 493     | 12      | -8                | 664    | 141        |
|                 | 2017 | 158        | 364     | 0       | -10               | 532    | 112        |
|                 | 2018 | 215        | 350     | 21      | -12               | 557    | 116        |
|                 | 2019 | 307        | 330     | 70      | -16               | 583    | 119        |
| Italy           | 2016 | 432        | 425     | 425     | -10               | 442    | 7          |
|                 | 2017 | 487        | 655     | 662     | 1                 | 479    | 8          |
|                 | 2018 | 721        | 445     | 647     | 85                | 434    | 7          |
|                 | 2019 | 471        | 265     | 312     | -11               | 434    | 7          |
| Luxembourg      | 2016 | ..         | 0       | ..      | ..                | 0      | 0          |
|                 | 2017 | ..         | 1       | ..      | 0                 | 0      | 1          |
|                 | 2018 | ..         | 0       | ..      | 0                 | 0      | 1          |
|                 | 2019 | ..         | 1       | ..      | 0                 | 1      | 1          |
| Malta           | 2016 | ..         | ..      | ..      | ..                | ..     | ..         |
|                 | 2017 | ..         | 1       | ..      | 0                 | 1      | 2          |
|                 | 2018 | ..         | 1       | ..      | 0                 | 1      | 2          |
|                 | 2019 | ..         | 1       | 0       | 0                 | 1      | 1          |
| Netherlands     | 2016 | 730        | 231     | 692     | 18                | 251    | 15         |
|                 | 2017 | 398        | 392     | 520     | 28                | 242    | 14         |
|                 | 2018 | 211        | 518     | 321     | 5                 | 403    | 24         |
|                 | 2019 | 305        | 402     | 412     | -12               | 307    | 18         |
| Norway          | 2016 | 18         | 52      | 208     | 0                 | -138   | -26        |
|                 | 2017 | 87         | 48      | 93      | 19                | 23     | 4          |
|                 | 2018 | 8          | 68      | 62      | 3                 | 11     | 2          |
|                 | 2019 | 40         | 58      | 52      | 0                 | 45     | 8          |
| Poland          | 2016 | 0          | 0       | ..      | ..                | 0      | 0          |
|                 | 2017 | 0          | 1       | 0       | 0                 | 1      | 0          |
|                 | 2018 | 0          | 1       | 0       | 0                 | 1      | 0          |
|                 | 2019 | 0          | 0       | ..      | 0                 | 0      | 0          |
| Portugal        | 2016 | 0          | 1       | ..      | 0                 | 1      | 0          |
|                 | 2017 | 0          | 1       | ..      | 0                 | 1      | 0          |
|                 | 2018 | 0          | 0       | ..      | 0                 | 1      | 0          |
|                 | 2019 | 0          | 0       | ..      | 0                 | 0      | 0          |
| Romania         | 2016 | 10         | 1       | ..      | ..                | 11     | 1          |
|                 | 2017 | 1          | 1       | 0       | 0                 | 1      | 0          |
|                 | 2018 | 1          | 1       | 0       | 0                 | 2      | 0          |
|                 | 2019 | 1          | 1       | 0       | 0                 | 1      | 0          |



## Production, trade and supply of other kerosene

Thousand metric tons and kilograms per capita

| Country or area    | Year        | Production | Imports   | Exports  | Changes in stocks | Supply    |            |
|--------------------|-------------|------------|-----------|----------|-------------------|-----------|------------|
|                    |             |            |           |          |                   | Total     | Per capita |
| Russian Federation | 2016        | *298       | ..        | 298      | ..                | 0         | 0          |
|                    | 2017        | *252       | ..        | 252      | ..                | 0         | 0          |
|                    | 2018        | *315       | ..        | 315      | ..                | 0         | 0          |
|                    | 2019        | *428       | ..        | 428      | ..                | 0         | 0          |
| Spain              | 2016        | 8,673      | ..        | ..       | 14                | 8,659     | 186        |
|                    | 2017        | 9,300      | ..        | ..       | -28               | 9,328     | 200        |
|                    | 2018        | 10,038     | ..        | ..       | 46                | 9,992     | 214        |
|                    | 2019        | 9,816      | ..        | ..       | -10               | 9,826     | 210        |
| Switzerland        | 2016        | ..         | 2         | ..       | ..                | 2         | 0          |
|                    | 2017        | ..         | 2         | ..       | ..                | 2         | 0          |
|                    | 2018        | ..         | 2         | 0        | ..                | 2         | 0          |
|                    | 2019        | ..         | 2         | 0        | 0                 | 2         | 0          |
| Ukraine            | 2016        | ..         | *123      | *16      | *-9               | *116      | *3         |
|                    | 2017        | ..         | *142      | *16      | ..                | *126      | *3         |
|                    | 2018        | ..         | ..        | ..       | ..                | ..        | ..         |
|                    | 2019        | ..         | ..        | ..       | ..                | ..        | ..         |
| United Kingdom     | 2016        | 2,049      | 831       | 86       | -37               | 2,831     | 43         |
|                    | 2017        | 2,047      | 648       | 102      | -59               | 2,651     | 40         |
|                    | 2018        | 2,053      | 667       | 78       | 2                 | 2,640     | 39         |
|                    | 2019        | 2,062      | 644       | 19       | ..                | 2,687     | 40         |
| <b>Oceania</b>     | <b>2016</b> | <b>52</b>  | <b>30</b> | <b>0</b> | <b>-1</b>         | <b>83</b> | <b>2</b>   |
|                    | <b>2017</b> | <b>52</b>  | <b>29</b> | <b>0</b> | <b>1</b>          | <b>79</b> | <b>2</b>   |
|                    | <b>2018</b> | <b>56</b>  | <b>30</b> | <b>0</b> | <b>1</b>          | <b>85</b> | <b>2</b>   |
|                    | <b>2019</b> | <b>53</b>  | <b>24</b> | <b>0</b> | <b>0</b>          | <b>77</b> | <b>2</b>   |
| Australia          | 2016        | 9          | 3         | ..       | 0                 | 12        | 0          |
|                    | 2017        | 7          | 4         | ..       | 0                 | 11        | 0          |
|                    | 2018        | 6          | 2         | ..       | 2                 | 5         | 0          |
|                    | 2019        | ..         | 2         | ..       | -2                | 4         | 0          |
| Fiji               | 2016        | ..         | 1         | ..       | ..                | 1         | 2          |
|                    | 2017        | ..         | 0         | ..       | ..                | 0         | 0          |
|                    | 2018        | ..         | *1        | ..       | ..                | *1        | *1         |
|                    | 2019        | ..         | 0         | ..       | ..                | 0         | 0          |
| French Polynesia   | 2016        | ..         | 1         | ..       | ..                | 1         | 4          |
|                    | 2017        | ..         | 1         | ..       | ..                | 1         | 3          |
|                    | 2018        | ..         | 1         | ..       | ..                | 1         | 3          |
|                    | 2019        | ..         | 1         | ..       | ..                | 1         | 3          |
| Kiribati           | 2016        | ..         | 2         | ..       | ..                | 2         | 14         |
|                    | 2017        | ..         | 2         | ..       | ..                | 2         | 19         |
|                    | 2018        | ..         | *2        | ..       | ..                | *2        | *18        |
|                    | 2019        | ..         | *2        | ..       | ..                | *2        | *17        |
| New Caledonia      | 2016        | ..         | 8         | ..       | ..                | 8         | 30         |
|                    | 2017        | ..         | 5         | ..       | ..                | 5         | 19         |
|                    | 2018        | ..         | 10        | ..       | ..                | 10        | 36         |
|                    | 2019        | ..         | 2         | ..       | ..                | 2         | 6          |
| Palau              | 2016        | ..         | *2        | ..       | ..                | *2        | *113       |
|                    | 2017        | ..         | *2        | ..       | ..                | *2        | *118       |
|                    | 2018        | ..         | *2        | ..       | ..                | *2        | *117       |
|                    | 2019        | ..         | *2        | ..       | ..                | *2        | *117       |
| Papua New Guinea   | 2016        | 43         | ..        | ..       | ..                | 43        | 5          |
|                    | 2017        | 45         | ..        | ..       | ..                | 45        | 5          |
|                    | 2018        | 51         | ..        | ..       | ..                | 51        | 6          |
|                    | 2019        | 53         | ..        | ..       | ..                | 53        | 6          |

Table 19

### Production, trade and supply of other kerosene

Thousand metric tons and kilograms per capita

| Country or area | Year | Production | Imports | Exports | Changes in stocks | Supply |            |
|-----------------|------|------------|---------|---------|-------------------|--------|------------|
|                 |      |            |         |         |                   | Total  | Per capita |
| Samoa           | 2016 | ..         | 12      | 0       | *-1               | 13     | 67         |
|                 | 2017 | ..         | 14      | 0       | *1                | 13     | 66         |
|                 | 2018 | ..         | 12      | 0       | *-1               | 13     | 66         |
|                 | 2019 | ..         | 15      | 0       | *2                | 13     | 65         |
| Tonga           | 2016 | ..         | 0       | ..      | ..                | 0      | 1          |
|                 | 2017 | ..         | 0       | ..      | ..                | 0      | 1          |
|                 | 2018 | ..         | 0       | ..      | ..                | 0      | 1          |
|                 | 2019 | ..         | 0       | ..      | ..                | 0      | 1          |
| Tuvalu          | 2016 | ..         | 0       | ..      | ..                | 0      | *3         |
|                 | 2017 | ..         | 0       | ..      | ..                | 0      | *4         |
|                 | 2018 | ..         | 0       | ..      | ..                | 0      | *3         |
|                 | 2019 | ..         | 0       | ..      | ..                | 0      | *3         |





### Production, trade and supply of jet fuels

Thousand metric tons and kilograms per capita

#### Table Notes

Data refer to aviation gasoline, gasoline-type jet fuel and kerosene-type jet fuel.

**Production** includes output from refineries and plants.

Please refer to the Definitions Section on pages ix to xv for the appropriate product description/ classification, and xvi to xvii for the descriptions of relevant flows.

Figure 54: Production of jet fuels by region, 1990-2019

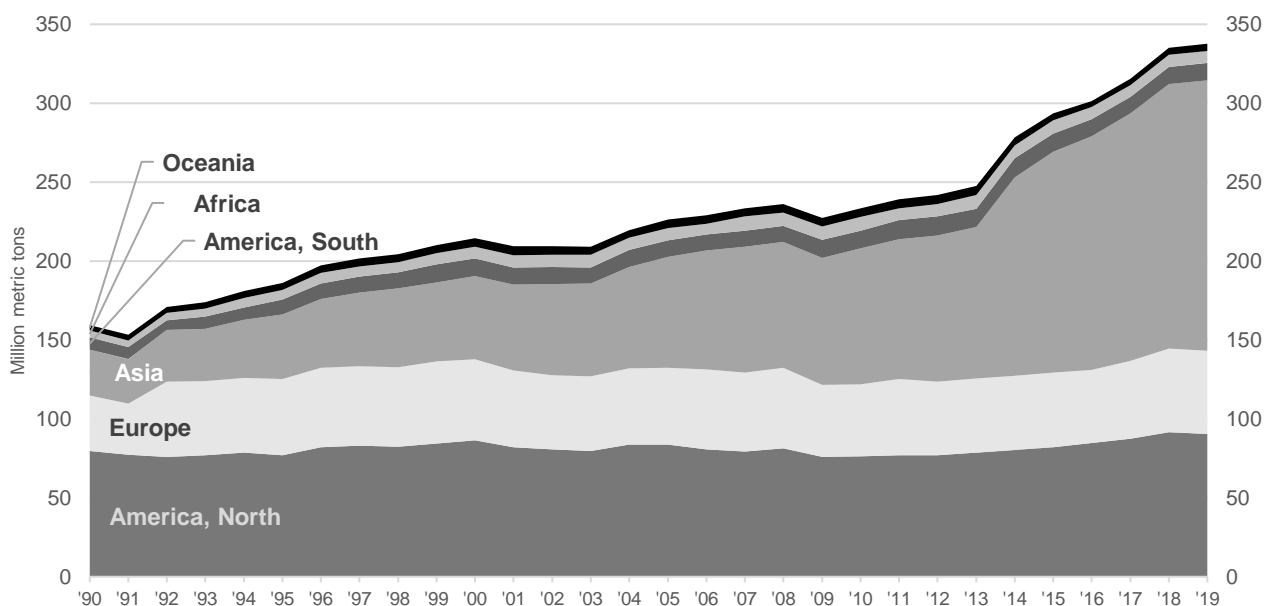


Figure 55: Major jet fuels producing countries, 2019

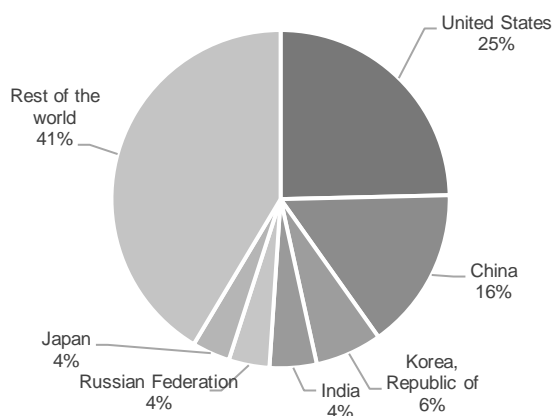
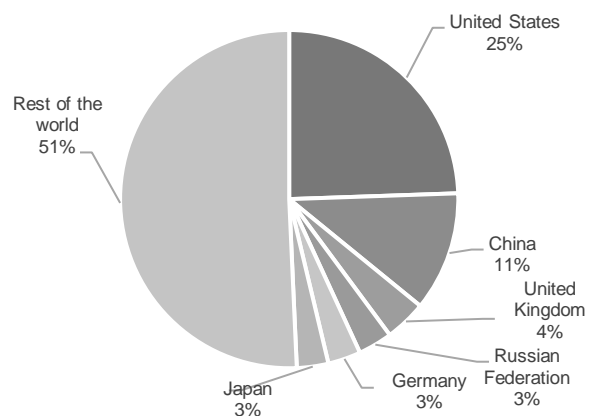


Figure 56: Major jet fuels consuming<sup>1</sup> countries, 2019



<sup>1</sup> Consumption includes bunkers

Table 20

## Production, trade and supply of jet fuels

Thousand metric tons and kilograms per capita

| Country or area      | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply  |            |
|----------------------|------|------------|---------|---------|---------|-------------------|---------|------------|
|                      |      |            |         |         |         |                   | Total   | Per capita |
| World                | 2016 | 301,482    | 88,499  | 91,797  | 174,278 | 2,029             | 121,877 | 16         |
|                      | 2017 | 315,664    | 93,146  | 95,284  | 183,590 | -116              | 130,053 | 17         |
|                      | 2018 | 335,175    | 94,653  | 101,957 | 191,435 | 2,003             | 134,433 | 18         |
|                      | 2019 | 337,721    | 91,439  | 98,371  | 193,545 | 776               | 136,468 | 18         |
| Africa               | 2016 | 7,736      | 5,032   | 3,003   | 7,552   | -1                | 2,213   | 2          |
|                      | 2017 | 7,297      | 5,741   | 2,889   | 8,410   | -48               | 1,788   | 1          |
|                      | 2018 | 7,617      | 6,019   | 3,176   | 8,419   | -12               | 2,052   | 2          |
|                      | 2019 | 7,668      | 5,749   | 3,017   | 8,023   | 33                | 2,344   | 2          |
| Algeria              | 2016 | *1,635     | ..      | 1,100   | *377    | *30               | *128    | *3         |
|                      | 2017 | *1,544     | ..      | 1,102   | *355    | *-35              | *122    | *3         |
|                      | 2018 | *1,497     | ..      | 953     | *434    | *-31              | *141    | *3         |
|                      | 2019 | 1,221      | ..      | 682     | 472     | -1                | 68      | 2          |
| Angola               | 2016 | 338        | 43      | *102    | 294     | ..                | -16     | -1         |
|                      | 2017 | 350        | 33      | *89     | 300     | ..                | -6      | 0          |
|                      | 2018 | 228        | 92      | *45     | 294     | ..                | -19     | -1         |
|                      | 2019 | 305        | ..      | *23     | 292     | ..                | -10     | 0          |
| Benin                | 2016 | ..         | 23      | ..      | 32      | -9                | 0       | 0          |
|                      | 2017 | ..         | 26      | ..      | 29      | -4                | 1       | 0          |
|                      | 2018 | ..         | 30      | ..      | 30      | 0                 | 0       | 0          |
|                      | 2019 | ..         | 27      | ..      | 21      | 6                 | 0       | 0          |
| Botswana             | 2016 | ..         | 19      | ..      | 11      | ..                | 8       | 3          |
|                      | 2017 | ..         | 19      | ..      | 11      | ..                | 8       | 3          |
|                      | 2018 | ..         | 27      | ..      | 12      | ..                | 15      | 7          |
|                      | 2019 | ..         | 28      | ..      | 12      | ..                | 16      | 7          |
| Burkina Faso         | 2016 | ..         | 22      | ..      | 22      | 0                 | 0       | 0          |
|                      | 2017 | ..         | 27      | ..      | 27      | *-1               | 0       | 0          |
|                      | 2018 | ..         | 33      | ..      | 30      | *3                | 0       | 0          |
|                      | 2019 | ..         | 27      | ..      | 30      | *-4               | 0       | 0          |
| Burundi              | 2016 | ..         | 2       | ..      | 2       | 0                 | 0       | 0          |
|                      | 2017 | ..         | 4       | ..      | 4       | ..                | 0       | 0          |
|                      | 2018 | ..         | 5       | ..      | 5       | ..                | 0       | 0          |
|                      | 2019 | ..         | 5       | ..      | 5       | ..                | 0       | 0          |
| Cabo Verde           | 2016 | ..         | *58     | ..      | *45     | ..                | *13     | *24        |
|                      | 2017 | ..         | *62     | ..      | *48     | ..                | *14     | *25        |
|                      | 2018 | ..         | *64     | ..      | *51     | ..                | *14     | *26        |
|                      | 2019 | ..         | *65     | ..      | *50     | ..                | *15     | *27        |
| Cameroon             | 2016 | 106        | 10      | 83      | 21      | ..                | 12      | 1          |
|                      | 2017 | 87         | 8       | 68      | 17      | ..                | 10      | 0          |
|                      | 2018 | 79         | 10      | 62      | 16      | ..                | 12      | 0          |
|                      | 2019 | 41         | 17      | 32      | 17      | ..                | 9       | 0          |
| Central African Rep. | 2016 | ..         | *15     | ..      | 15      | ..                | 0       | 0          |
|                      | 2017 | ..         | *16     | ..      | 16      | ..                | 0       | 0          |
|                      | 2018 | ..         | *17     | ..      | 17      | ..                | 0       | 0          |
|                      | 2019 | ..         | *17     | ..      | *17     | ..                | 0       | 0          |
| Chad                 | 2016 | *33        | *3      | *3      | *24     | ..                | *9      | *1         |
|                      | 2017 | *36        | *3      | *3      | 26      | ..                | *10     | *1         |
|                      | 2018 | *38        | *3      | *3      | 28      | ..                | *11     | *1         |
|                      | 2019 | *35        | *3      | *3      | 25      | ..                | *10     | *1         |
| Comoros              | 2016 | ..         | *5      | ..      | *1      | ..                | *4      | *4         |
|                      | 2017 | ..         | *5      | ..      | *1      | ..                | *4      | *4         |
|                      | 2018 | ..         | *7      | ..      | *2      | ..                | *5      | *6         |
|                      | 2019 | ..         | *7      | ..      | *2      | ..                | *6      | *7         |

## Production, trade and supply of jet fuels

Thousand metric tons and kilograms per capita

| Country or area        | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|------------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                        |      |            |         |         |         |                   | Total  | Per capita |
| Congo                  | 2016 | 45         | 35      | ..      | 41      | 0                 | 39     | 8          |
|                        | 2017 | 37         | 9       | ..      | 31      | ..                | 15     | 3          |
|                        | 2018 | 38         | 9       | ..      | 32      | ..                | 15     | 3          |
|                        | 2019 | 38         | 9       | ..      | 32      | ..                | 15     | 3          |
| Côte d'Ivoire          | 2016 | 634        | ..      | 468     | 159     | 0                 | 6      | 0          |
|                        | 2017 | *327       | ..      | *148    | *166    | ..                | *13    | *1         |
|                        | 2018 | 359        | ..      | 180     | 150     | ..                | 29     | 1          |
|                        | 2019 | 552        | ..      | 366     | 172     | ..                | 14     | 1          |
| Dem. Rep. of the Congo | 2016 | ..         | 115     | ..      | 115     | ..                | 0      | 0          |
|                        | 2017 | ..         | 117     | ..      | 117     | ..                | 0      | 0          |
|                        | 2018 | ..         | 134     | ..      | 134     | ..                | 0      | 0          |
|                        | 2019 | ..         | 121     | ..      | 121     | ..                | 0      | 0          |
| Djibouti               | 2016 | ..         | 81      | ..      | 81      | ..                | 0      | 0          |
|                        | 2017 | ..         | *81     | ..      | *81     | ..                | 0      | 0          |
|                        | 2018 | ..         | *81     | ..      | *81     | ..                | 0      | 0          |
|                        | 2019 | ..         | *81     | ..      | *81     | ..                | 0      | 0          |
| Egypt                  | 2016 | 1,790      | 28      | 823     | 425     | ..                | 570    | 6          |
|                        | 2017 | 1,909      | 28      | 772     | 443     | ..                | 722    | 7          |
|                        | 2018 | 2,162      | 0       | 962     | 624     | ..                | 576    | 6          |
|                        | 2019 | 2,744      | ..      | 1,205   | 787     | ..                | 752    | 7          |
| Equatorial Guinea      | 2016 | ..         | *47     | ..      | *47     | ..                | 0      | 0          |
|                        | 2017 | ..         | *49     | ..      | 49      | ..                | 0      | 0          |
|                        | 2018 | ..         | *44     | ..      | 44      | ..                | 0      | 0          |
|                        | 2019 | ..         | *42     | ..      | 42      | ..                | 0      | 0          |
| Eritrea                | 2016 | ..         | 12      | ..      | 10      | ..                | 2      | 1          |
|                        | 2017 | ..         | 10      | ..      | 8       | ..                | 2      | 0          |
|                        | 2018 | ..         | 16      | ..      | 14      | ..                | 3      | 1          |
|                        | 2019 | ..         | 12      | ..      | 9       | ..                | 3      | 1          |
| Eswatini               | 2016 | ..         | 1       | ..      | 1       | ..                | 0      | 0          |
|                        | 2017 | ..         | 2       | ..      | 2       | ..                | 0      | 0          |
|                        | 2018 | ..         | 2       | ..      | 2       | ..                | 0      | 0          |
|                        | 2019 | ..         | 2       | ..      | 2       | ..                | 0      | 0          |
| Ethiopia               | 2016 | ..         | 595     | ..      | 588     | ..                | 7      | 0          |
|                        | 2017 | ..         | 690     | ..      | 682     | ..                | 8      | 0          |
|                        | 2018 | ..         | 737     | ..      | 728     | ..                | 9      | 0          |
|                        | 2019 | ..         | 739     | ..      | 730     | ..                | 9      | 0          |
| Gabon                  | 2016 | 65         | 28      | 22      | 68      | ..                | 3      | 1          |
|                        | 2017 | 36         | 42      | 23      | 46      | ..                | 9      | 4          |
|                        | 2018 | 33         | 40      | 21      | 51      | ..                | 1      | 1          |
|                        | 2019 | 31         | 39      | 19      | 50      | ..                | 1      | 1          |
| Gambia                 | 2016 | ..         | 22      | *1      | *21     | ..                | 0      | 0          |
|                        | 2017 | ..         | 23      | *1      | *22     | ..                | 0      | 0          |
|                        | 2018 | ..         | 20      | *1      | *19     | ..                | 0      | 0          |
|                        | 2019 | ..         | 21      | *1      | *20     | ..                | 0      | 0          |
| Ghana                  | 2016 | 38         | 120     | ..      | 130     | 0                 | 28     | 1          |
|                        | 2017 | 0          | 189     | ..      | 143     | ..                | 46     | 2          |
|                        | 2018 | 22         | 191     | 10      | 174     | ..                | 28     | 1          |
|                        | 2019 | 80         | 188     | ..      | 212     | 34                | 21     | 1          |
| Guinea                 | 2016 | ..         | *31     | ..      | *26     | ..                | *5     | 0          |
|                        | 2017 | ..         | 37      | ..      | *32     | ..                | 5      | 0          |
|                        | 2018 | ..         | *35     | ..      | *30     | ..                | *5     | 0          |
|                        | 2019 | ..         | 47      | ..      | *42     | ..                | 5      | 0          |

Table 20

## Production, trade and supply of jet fuels

Thousand metric tons and kilograms per capita

| Country or area | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|-----------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                 |      |            |         |         |         |                   | Total  | Per capita |
| Guinea-Bissau   | 2016 | ..         | *13     | ..      | *13     | ..                | 0      | 0          |
|                 | 2017 | ..         | *13     | ..      | *13     | ..                | 0      | 0          |
|                 | 2018 | ..         | *13     | ..      | *13     | ..                | 0      | 0          |
|                 | 2019 | ..         | *13     | ..      | *13     | ..                | 0      | 0          |
| Kenya           | 2016 | 0          | 709     | 0       | 705     | ..                | 4      | 0          |
|                 | 2017 | 0          | 763     | 0       | 762     | ..                | 1      | 0          |
|                 | 2018 | ..         | 675     | ..      | 674     | ..                | 1      | 0          |
|                 | 2019 | ..         | 487     | 0       | 705     | ..                | -218   | -4         |
| Liberia         | 2016 | ..         | *13     | ..      | *6      | ..                | *8     | *2         |
|                 | 2017 | ..         | *13     | ..      | *6      | ..                | *7     | *2         |
|                 | 2018 | ..         | *13     | ..      | *6      | ..                | *8     | *2         |
|                 | 2019 | ..         | *13     | ..      | *6      | ..                | *8     | *2         |
| Libya           | 2016 | 182        | ..      | 127     | 53      | ..                | 2      | 0          |
|                 | 2017 | 455        | ..      | *384    | 56      | ..                | 15     | 2          |
|                 | 2018 | 639        | ..      | *578    | 46      | ..                | 15     | 2          |
|                 | 2019 | 476        | ..      | *416    | 49      | ..                | 12     | 2          |
| Madagascar      | 2016 | ..         | 47      | ..      | 34      | 0                 | 14     | 1          |
|                 | 2017 | ..         | 47      | ..      | 39      | *-1               | 9      | 0          |
|                 | 2018 | ..         | 55      | ..      | 45      | -1                | 11     | 0          |
|                 | 2019 | ..         | 57      | ..      | 48      | -4                | 12     | 0          |
| Malawi          | 2016 | ..         | 7       | ..      | *6      | ..                | 1      | 0          |
|                 | 2017 | ..         | 8       | ..      | *7      | ..                | 1      | 0          |
|                 | 2018 | ..         | 9       | ..      | *8      | ..                | 1      | 0          |
|                 | 2019 | ..         | 5       | ..      | *4      | ..                | 1      | 0          |
| Mali            | 2016 | ..         | *58     | ..      | *58     | ..                | 0      | 0          |
|                 | 2017 | ..         | *60     | ..      | *60     | ..                | 0      | 0          |
|                 | 2018 | ..         | *61     | ..      | *61     | ..                | 0      | 0          |
|                 | 2019 | ..         | *62     | ..      | *62     | ..                | 0      | 0          |
| Mauritania      | 2016 | ..         | *21     | ..      | 20      | ..                | *1     | 0          |
|                 | 2017 | ..         | 10      | ..      | 20      | *-11              | 1      | 0          |
|                 | 2018 | ..         | 57      | ..      | 22      | *33               | 1      | 0          |
|                 | 2019 | ..         | 39      | ..      | 20      | *17               | 1      | 0          |
| Mauritius       | 2016 | ..         | 285     | ..      | 142     | 2                 | 142    | 112        |
|                 | 2017 | ..         | 310     | ..      | 154     | 2                 | 154    | 122        |
|                 | 2018 | ..         | 304     | ..      | 156     | -9                | 157    | 124        |
|                 | 2019 | ..         | 287     | ..      | 147     | -6                | 147    | 116        |
| Morocco         | 2016 | 0          | 640     | 9       | 642     | -36               | 25     | 1          |
|                 | 2017 | ..         | 717     | ..      | 678     | 14                | 25     | 1          |
|                 | 2018 | ..         | 743     | ..      | 734     | -18               | 27     | 1          |
|                 | 2019 | ..         | 818     | ..      | 775     | 11                | 32     | 1          |
| Mozambique      | 2016 | ..         | 138     | ..      | *46     | ..                | 92     | 3          |
|                 | 2017 | ..         | 58      | ..      | 13      | ..                | 45     | 2          |
|                 | 2018 | ..         | 55      | ..      | 3       | ..                | 52     | 2          |
|                 | 2019 | ..         | 62      | ..      | 0       | ..                | 61     | 2          |
| Namibia         | 2016 | ..         | 44      | ..      | 38      | ..                | 6      | 3          |
|                 | 2017 | ..         | 43      | ..      | 37      | ..                | 6      | 2          |
|                 | 2018 | ..         | 42      | ..      | 37      | ..                | 5      | 2          |
|                 | 2019 | ..         | 42      | ..      | 36      | ..                | 6      | 2          |
| Niger           | 2016 | 25         | 45      | ..      | 45      | ..                | 25     | 1          |
|                 | 2017 | 0          | 57      | ..      | *57     | ..                | 0      | 0          |
|                 | 2018 | 3          | 45      | ..      | *45     | ..                | 3      | 0          |
|                 | 2019 | 0          | 49      | ..      | *49     | ..                | 0      | 0          |



## Production, trade and supply of jet fuels

Thousand metric tons and kilograms per capita

| Country or area       | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|-----------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                       |      |            |         |         |         |                   | Total  | Per capita |
| Nigeria               | 2016 | 41         | 539     | ..      | 424     | ..                | 156    | 1          |
|                       | 2017 | 54         | 636     | ..      | 505     | ..                | 186    | 1          |
|                       | 2018 | 27         | 820     | ..      | 650     | ..                | 197    | 1          |
|                       | 2019 | 5          | 704     | ..      | 460     | ..                | 250    | 1          |
| Rwanda                | 2016 | ..         | 44      | ..      | *22     | ..                | 22     | 2          |
|                       | 2017 | ..         | 51      | ..      | *30     | ..                | 21     | 2          |
|                       | 2018 | ..         | 54      | ..      | *30     | ..                | 24     | 2          |
|                       | 2019 | ..         | 46      | ..      | *24     | ..                | 22     | 2          |
| Sao Tome and Principe | 2016 | ..         | *12     | ..      | *11     | ..                | *1     | *5         |
|                       | 2017 | ..         | *12     | ..      | *11     | ..                | *1     | *5         |
|                       | 2018 | ..         | *13     | ..      | *12     | ..                | *1     | *5         |
|                       | 2019 | ..         | *13     | ..      | *12     | ..                | *1     | *6         |
| Senegal               | 2016 | 0          | 224     | ..      | 214     | 9                 | 1      | 0          |
|                       | 2017 | 0          | 227     | ..      | 222     | 0                 | 5      | 0          |
|                       | 2018 | ..         | 212     | ..      | 202     | *6                | 4      | 0          |
|                       | 2019 | ..         | 192     | ..      | 192     | *-8               | 8      | 1          |
| Seychelles            | 2016 | ..         | 46      | ..      | *40     | ..                | 6      | 61         |
|                       | 2017 | ..         | 60      | ..      | *52     | ..                | 8      | 79         |
|                       | 2018 | ..         | 32      | ..      | *28     | ..                | 4      | 41         |
|                       | 2019 | ..         | 50      | ..      | *43     | ..                | 6      | 65         |
| Sierra Leone          | 2016 | ..         | *5      | ..      | 4       | ..                | *1     | 0          |
|                       | 2017 | ..         | *3      | ..      | 13      | ..                | -10    | -1         |
|                       | 2018 | ..         | *5      | ..      | 5       | ..                | 0      | 0          |
|                       | 2019 | ..         | *3      | ..      | 4       | ..                | -1     | 0          |
| Somalia               | 2016 | ..         | *43     | ..      | 43      | ..                | 0      | 0          |
|                       | 2017 | ..         | *43     | ..      | 43      | ..                | 0      | 0          |
|                       | 2018 | ..         | *43     | ..      | 43      | ..                | 0      | 0          |
|                       | 2019 | ..         | *43     | ..      | 43      | ..                | 0      | 0          |
| South Africa          | 2016 | 2,640      | 93      | 265     | 1,661   | ..                | 807    | 14         |
|                       | 2017 | 2,379      | 372     | 299     | 2,152   | ..                | 299    | 5          |
|                       | 2018 | 2,444      | 334     | 363     | 1,734   | ..                | 680    | 12         |
|                       | 2019 | 2,100      | 387     | 270     | 1,189   | ..                | 1,028  | 18         |
| South Sudan           | 2016 | ..         | 80      | ..      | 68      | ..                | 12     | 1          |
|                       | 2017 | ..         | 78      | ..      | 74      | ..                | 5      | 0          |
|                       | 2018 | ..         | 79      | ..      | 74      | ..                | 5      | 0          |
|                       | 2019 | ..         | 89      | ..      | 83      | ..                | 5      | 0          |
| Sudan                 | 2016 | 156        | 0       | ..      | *156    | 0                 | 0      | 0          |
|                       | 2017 | 82         | 52      | ..      | *134    | ..                | 0      | 0          |
|                       | 2018 | 38         | 80      | ..      | *118    | ..                | 0      | 0          |
|                       | 2019 | *39        | *81     | ..      | *120    | ..                | 0      | 0          |
| Togo                  | 2016 | ..         | 50      | ..      | 53      | -3                | 0      | 0          |
|                       | 2017 | ..         | 52      | ..      | 54      | -2                | 0      | 0          |
|                       | 2018 | ..         | 59      | ..      | 62      | -3                | 0      | 0          |
|                       | 2019 | ..         | 59      | ..      | 65      | ..                | -6     | -1         |
| Tunisia               | 2016 | ..         | 225     | ..      | 215     | 7                 | 3      | 0          |
|                       | 2017 | ..         | 250     | ..      | 251     | -10               | 9      | 1          |
|                       | 2018 | ..         | 284     | ..      | 284     | 8                 | -8     | -1         |
|                       | 2019 | ..         | 302     | ..      | 300     | -12               | 15     | 1          |
| Uganda                | 2016 | ..         | 98      | ..      | 98      | ..                | 0      | 0          |
|                       | 2017 | ..         | 102     | ..      | 102     | ..                | 0      | 0          |
|                       | 2018 | ..         | 108     | ..      | 108     | ..                | 0      | 0          |
|                       | 2019 | ..         | 111     | ..      | 111     | ..                | 0      | 0          |

Table 20

## Production, trade and supply of jet fuels

Thousand metric tons and kilograms per capita

| Country or area             | Year        | Production    | Imports       | Exports       | Bunkers       | Changes in stocks | Supply        |            |
|-----------------------------|-------------|---------------|---------------|---------------|---------------|-------------------|---------------|------------|
|                             |             |               |               |               |               |                   | Total         | Per capita |
| United Rep. of Tanzania     | 2016        | ..            | 185           | ..            | 115           | ..                | 70            | 1          |
|                             | 2017        | ..            | 154           | ..            | 133           | ..                | 21            | 0          |
|                             | 2018        | ..            | 152           | ..            | 131           | ..                | 21            | 0          |
|                             | 2019        | ..            | 163           | ..            | 139           | ..                | 24            | 0          |
| Zambia                      | 2016        | 9             | 17            | ..            | 27            | ..                | 0             | 0          |
|                             | 2017        | 0             | 23            | ..            | 26            | ..                | -2            | 0          |
|                             | 2018        | 11            | 18            | ..            | 29            | ..                | 0             | 0          |
|                             | 2019        | 2             | 26            | ..            | 29            | ..                | -2            | 0          |
| Zimbabwe                    | 2016        | ..            | 39            | ..            | 39            | ..                | 0             | 0          |
|                             | 2017        | ..            | 49            | ..            | 49            | ..                | 0             | 0          |
|                             | 2018        | ..            | 60            | ..            | 60            | ..                | 0             | 0          |
|                             | 2019        | ..            | 51            | ..            | 51            | ..                | 0             | 0          |
| <b>America, North</b>       | <b>2016</b> | <b>84,701</b> | <b>13,925</b> | <b>9,491</b>  | <b>30,046</b> | <b>621</b>        | <b>58,468</b> | <b>102</b> |
|                             | <b>2017</b> | <b>87,405</b> | <b>15,323</b> | <b>10,548</b> | <b>30,442</b> | <b>34</b>         | <b>61,705</b> | <b>107</b> |
|                             | <b>2018</b> | <b>91,630</b> | <b>14,793</b> | <b>12,391</b> | <b>31,194</b> | <b>529</b>        | <b>62,309</b> | <b>107</b> |
|                             | <b>2019</b> | <b>90,338</b> | <b>17,052</b> | <b>12,004</b> | <b>31,558</b> | <b>-492</b>       | <b>64,320</b> | <b>110</b> |
| Antigua and Barbuda         | 2016        | ..            | *77           | ..            | *65           | ..                | *12           | *124       |
|                             | 2017        | ..            | *77           | ..            | *65           | ..                | *12           | *123       |
|                             | 2018        | ..            | *78           | ..            | *66           | ..                | *12           | *123       |
|                             | 2019        | ..            | *78           | ..            | *66           | ..                | *12           | *122       |
| Aruba                       | 2016        | ..            | *85           | ..            | *85           | ..                | 0             | 0          |
|                             | 2017        | ..            | *88           | ..            | *88           | ..                | 0             | 0          |
|                             | 2018        | ..            | *89           | ..            | *89           | ..                | 0             | 0          |
|                             | 2019        | ..            | *90           | ..            | *90           | ..                | 0             | 0          |
| Bahamas                     | 2016        | ..            | 27            | ..            | *26           | ..                | 1             | 3          |
|                             | 2017        | ..            | 30            | ..            | *29           | ..                | 1             | 3          |
|                             | 2018        | ..            | 42            | ..            | *39           | ..                | 3             | 7          |
|                             | 2019        | ..            | 54            | ..            | *51           | ..                | 3             | 8          |
| Barbados                    | 2016        | ..            | *121          | ..            | *121          | ..                | 0             | 0          |
|                             | 2017        | ..            | *133          | ..            | *133          | ..                | 0             | 0          |
|                             | 2018        | ..            | *110          | ..            | *110          | ..                | 0             | 0          |
|                             | 2019        | ..            | *149          | ..            | *149          | ..                | 0             | 0          |
| Belize                      | 2016        | ..            | 16            | ..            | 15            | ..                | 0             | 1          |
|                             | 2017        | ..            | 15            | ..            | 15            | ..                | 0             | 1          |
|                             | 2018        | ..            | 15            | ..            | 14            | ..                | 0             | 1          |
|                             | 2019        | ..            | 26            | ..            | 25            | ..                | 0             | 1          |
| Bermuda                     | 2016        | ..            | *14           | ..            | *14           | ..                | 0             | 0          |
|                             | 2017        | ..            | *15           | ..            | *15           | ..                | 0             | 0          |
|                             | 2018        | ..            | *16           | ..            | *16           | ..                | 0             | 0          |
|                             | 2019        | ..            | *16           | ..            | *16           | ..                | 0             | 0          |
| Bonaire, St Eustatius, Saba | 2016        | ..            | *3            | ..            | *3            | ..                | 0             | 0          |
|                             | 2017        | ..            | *3            | ..            | *3            | ..                | 0             | 0          |
|                             | 2018        | ..            | *3            | ..            | *3            | ..                | 0             | 0          |
|                             | 2019        | ..            | *3            | ..            | *3            | ..                | 0             | 0          |
| Canada                      | 2016        | 4,578         | 2,675         | 497           | 595           | -1                | 6,162         | 169        |
|                             | 2017        | 5,661         | 2,355         | 1,102         | 598           | 25                | 6,291         | 171        |
|                             | 2018        | 5,540         | 2,895         | 1,144         | 838           | 64                | 6,389         | 172        |
|                             | 2019        | 5,575         | 3,149         | 1,060         | 806           | -166              | 7,024         | 188        |
| Cayman Islands              | 2016        | ..            | 37            | ..            | 36            | ..                | 2             | 30         |
|                             | 2017        | ..            | 40            | ..            | 38            | ..                | 2             | 32         |
|                             | 2018        | ..            | 39            | ..            | 37            | ..                | 2             | 30         |
|                             | 2019        | ..            | 35            | ..            | 34            | ..                | 2             | 26         |

## Production, trade and supply of jet fuels

Thousand metric tons and kilograms per capita

| Country or area    | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|--------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                    |      |            |         |         |         |                   | Total  | Per capita |
| Costa Rica         | 2016 | ..         | 195     | ..      | 189     | -9                | 15     | 3          |
|                    | 2017 | ..         | 224     | ..      | 187     | 21                | 16     | 3          |
|                    | 2018 | ..         | 217     | ..      | 209     | -7                | 15     | 3          |
|                    | 2019 | ..         | 248     | ..      | 223     | 11                | 14     | 3          |
| Cuba               | 2016 | 42         | 273     | *3      | 180     | ..                | 132    | 12         |
|                    | 2017 | 68         | 508     | *299    | 159     | ..                | 117    | 10         |
|                    | 2018 | 66         | 474     | *421    | 75      | ..                | 44     | 4          |
|                    | 2019 | 83         | 369     | *365    | *58     | ..                | 28     | 2          |
| Curaçao            | 2016 | 574        | 57      | 573     | 58      | ..                | 0      | 0          |
|                    | 2017 | 286        | 58      | 285     | 59      | ..                | 0      | 0          |
|                    | 2018 | 215        | 57      | 214     | 58      | ..                | 0      | 0          |
|                    | 2019 | 0          | 59      | 0       | 59      | ..                | 0      | 0          |
| Dominica           | 2016 | ..         | *1      | ..      | *1      | ..                | 0      | 0          |
|                    | 2017 | ..         | *1      | ..      | *1      | ..                | 0      | 0          |
|                    | 2018 | ..         | *1      | ..      | *1      | ..                | 0      | 0          |
|                    | 2019 | ..         | *1      | ..      | *1      | ..                | 0      | 0          |
| Dominican Republic | 2016 | 204        | 305     | ..      | 496     | -1                | 14     | 1          |
|                    | 2017 | 154        | 392     | ..      | 539     | -1                | 8      | 1          |
|                    | 2018 | 189        | 376     | ..      | 544     | -1                | 23     | 2          |
|                    | 2019 | 193        | 316     | ..      | 457     | -1                | 54     | 5          |
| El Salvador        | 2016 | ..         | 167     | 1       | 166     | ..                | 0      | 0          |
|                    | 2017 | ..         | 171     | 6       | 165     | ..                | 0      | 0          |
|                    | 2018 | ..         | 181     | 7       | 174     | ..                | 0      | 0          |
|                    | 2019 | ..         | 187     | 3       | 183     | ..                | 0      | 0          |
| Greenland          | 2016 | ..         | 17      | ..      | ..      | 1                 | 17     | 293        |
|                    | 2017 | ..         | 28      | ..      | ..      | 9                 | 19     | 333        |
|                    | 2018 | ..         | *16     | ..      | ..      | ..                | *16    | *276       |
|                    | 2019 | ..         | *16     | ..      | ..      | ..                | *16    | *283       |
| Grenada            | 2016 | ..         | 7       | ..      | 7       | ..                | 0      | 1          |
|                    | 2017 | ..         | 8       | ..      | 7       | ..                | 0      | 1          |
|                    | 2018 | ..         | 8       | ..      | 8       | ..                | 0      | 0          |
|                    | 2019 | ..         | 9       | ..      | 9       | ..                | 0      | 0          |
| Guatemala          | 2016 | ..         | 62      | 2       | 59      | ..                | 1      | 0          |
|                    | 2017 | ..         | 101     | 3       | 97      | ..                | 1      | 0          |
|                    | 2018 | ..         | 90      | 6       | 105     | -23               | 2      | 0          |
|                    | 2019 | ..         | 105     | 4       | 101     | ..                | 0      | 0          |
| Haiti              | 2016 | ..         | 27      | ..      | 22      | ..                | 5      | 0          |
|                    | 2017 | ..         | 27      | ..      | 22      | ..                | 5      | 0          |
|                    | 2018 | ..         | 28      | ..      | 22      | ..                | 5      | 0          |
|                    | 2019 | ..         | 27      | ..      | 22      | ..                | 5      | 0          |
| Honduras           | 2016 | ..         | 20      | ..      | ..      | ..                | 20     | 2          |
|                    | 2017 | ..         | 57      | ..      | ..      | ..                | 57     | 6          |
|                    | 2018 | ..         | 56      | ..      | ..      | ..                | 56     | 6          |
|                    | 2019 | ..         | 61      | ..      | ..      | ..                | 61     | 6          |
| Jamaica            | 2016 | 74         | 125     | ..      | 202     | -4                | 1      | 0          |
|                    | 2017 | 50         | 172     | ..      | 172     | 8                 | 42     | 14         |
|                    | 2018 | 61         | 148     | ..      | 210     | -4                | 3      | 1          |
|                    | 2019 | 60         | 150     | ..      | 211     | -5                | 4      | 1          |
| Mexico             | 2016 | 1,958      | 1,547   | 0       | 3,487   | 33                | -15    | 0          |
|                    | 2017 | 1,884      | 1,987   | 0       | 3,733   | 12                | 126    | 1          |
|                    | 2018 | 1,589      | 2,534   | 2       | 3,917   | 259               | -55    | 0          |
|                    | 2019 | 1,234      | 2,649   | ..      | 3,905   | -323              | 301    | 2          |

Table 20

## Production, trade and supply of jet fuels

Thousand metric tons and kilograms per capita

| Country or area           | Year        | Production    | Imports      | Exports      | Bunkers      | Changes in stocks | Supply       |            |
|---------------------------|-------------|---------------|--------------|--------------|--------------|-------------------|--------------|------------|
|                           |             |               |              |              |              |                   | Total        | Per capita |
| Nicaragua                 | 2016        | 28            | 2            | ..           | 22           | 1                 | 7            | 1          |
|                           | 2017        | 29            | 2            | ..           | 25           | 0                 | 6            | 1          |
|                           | 2018        | 18            | 1            | ..           | 16           | -1                | 3            | 0          |
|                           | 2019        | 17            | 1            | ..           | 16           | 0                 | 2            | 0          |
| Panama                    | 2016        | ..            | 791          | ..           | 676          | 44                | 71           | 17         |
|                           | 2017        | ..            | 883          | ..           | 687          | 103               | 94           | 23         |
|                           | 2018        | ..            | 960          | ..           | 724          | 180               | 55           | 13         |
|                           | 2019        | ..            | 835          | ..           | 761          | 51                | 23           | 5          |
| Sint Maarten (Dutch part) | 2016        | ..            | *51          | ..           | *51          | ..                | 0            | 0          |
|                           | 2017        | ..            | *49          | ..           | *49          | ..                | 0            | 0          |
|                           | 2018        | ..            | *48          | ..           | *48          | ..                | 0            | 0          |
|                           | 2019        | ..            | *48          | ..           | *48          | ..                | 0            | 0          |
| St. Lucia                 | 2016        | ..            | *28          | ..           | 26           | ..                | *1           | *8         |
|                           | 2017        | ..            | *30          | ..           | 29           | ..                | *2           | *8         |
|                           | 2018        | ..            | *30          | ..           | 29           | ..                | *2           | *8         |
|                           | 2019        | ..            | *30          | ..           | *29          | ..                | *2           | *8         |
| Trinidad and Tobago       | 2016        | 669           | 0            | 253          | 309          | 0                 | 107          | 78         |
|                           | 2017        | 509           | 2            | 183          | 224          | 7                 | 97           | 70         |
|                           | 2018        | 397           | ..           | 148          | 181          | -14               | 82           | 59         |
|                           | 2019        | ..            | 358          | 101          | 170          | -27               | 113          | 81         |
| Turks and Caicos Islands  | 2016        | ..            | *22          | ..           | *22          | ..                | 0            | 0          |
|                           | 2017        | ..            | *24          | ..           | *24          | ..                | 0            | 0          |
|                           | 2018        | ..            | *25          | ..           | *25          | ..                | 0            | 0          |
|                           | 2019        | ..            | *25          | ..           | *25          | ..                | 0            | 0          |
| United States             | 2016        | 76,575        | 7,174        | 8,162        | 23,114       | 557               | 51,916       | 161        |
|                           | 2017        | 78,766        | 7,843        | 8,670        | 23,279       | -150              | 54,811       | 169        |
|                           | 2018        | 83,556        | 6,258        | 10,449       | 23,638       | 75                | 55,652       | 170        |
|                           | 2019        | 83,176        | 7,958        | 10,470       | 24,040       | -32               | 56,655       | 172        |
| <b>America, South</b>     | <b>2016</b> | <b>10,640</b> | <b>2,028</b> | <b>2,002</b> | <b>5,334</b> | <b>-700</b>       | <b>6,033</b> | <b>15</b>  |
|                           | <b>2017</b> | <b>10,629</b> | <b>1,959</b> | <b>1,678</b> | <b>5,154</b> | <b>-547</b>       | <b>6,303</b> | <b>15</b>  |
|                           | <b>2018</b> | <b>10,915</b> | <b>2,110</b> | <b>1,199</b> | <b>5,388</b> | <b>-246</b>       | <b>6,683</b> | <b>16</b>  |
|                           | <b>2019</b> | <b>10,873</b> | <b>2,178</b> | <b>881</b>   | <b>5,345</b> | <b>77</b>         | <b>6,748</b> | <b>16</b>  |
| Argentina                 | 2016        | 1,298         | 129          | 2            | 925          | -8                | 508          | 12         |
|                           | 2017        | 1,434         | 97           | 5            | 982          | 5                 | 539          | 12         |
|                           | 2018        | 1,461         | 167          | 3            | 893          | -8                | 740          | 17         |
|                           | 2019        | 1,466         | 221          | 5            | 882          | -11               | 811          | 18         |
| Bolivia (Plur. State of)  | 2016        | 189           | ..           | ..           | 81           | 6                 | 102          | 9          |
|                           | 2017        | 190           | ..           | ..           | 79           | 7                 | 104          | 9          |
|                           | 2018        | 179           | ..           | ..           | 77           | 2                 | 100          | 9          |
|                           | 2019        | 177           | ..           | ..           | 72           | 5                 | 100          | 9          |
| Brazil                    | 2016        | 4,729         | 775          | 96           | 2,158        | -54               | 3,304        | 16         |
|                           | 2017        | 5,041         | 467          | 97           | 2,110        | 63                | 3,238        | 16         |
|                           | 2018        | 5,200         | 730          | 366          | 2,392        | -205              | 3,377        | 16         |
|                           | 2019        | 4,916         | 883          | 88           | 2,317        | 90                | 3,304        | 16         |
| Chile                     | 2016        | 556           | 605          | 0            | 548          | 38                | 575          | 32         |
|                           | 2017        | 592           | 627          | 0            | 579          | 13                | 628          | 34         |
|                           | 2018        | 635           | 610          | ..           | 636          | -21               | 630          | 34         |
|                           | 2019        | 880           | 472          | ..           | 721          | 10                | 619          | 33         |
| Colombia                  | 2016        | 1,033         | 109          | 0            | ..           | ..                | 1,142        | 24         |
|                           | 2017        | 1,124         | 136          | 33           | ..           | ..                | 1,227        | 25         |
|                           | 2018        | 1,227         | 48           | 11           | ..           | ..                | 1,263        | 25         |
|                           | 2019        | 1,224         | 65           | 9            | ..           | ..                | 1,279        | 25         |

## Production, trade and supply of jet fuels

Thousand metric tons and kilograms per capita

| Country or area           | Year        | Production     | Imports       | Exports       | Bunkers       | Changes in stocks | Supply        |            |
|---------------------------|-------------|----------------|---------------|---------------|---------------|-------------------|---------------|------------|
|                           |             |                |               |               |               |                   | Total         | Per capita |
| Ecuador                   | 2016        | 342            | 4             | ..            | 229           | -2                | 118           | 7          |
|                           | 2017        | 393            | 4             | ..            | 248           | -4                | 154           | 9          |
|                           | 2018        | 365            | 4             | ..            | 251           | -3                | 122           | 7          |
|                           | 2019        | 360            | 4             | ..            | 258           | -10               | 116           | 7          |
| Falkland Is. (Malvinas)   | 2016        | ..             | 0             | ..            | ..            | ..                | 0             | 61         |
|                           | 2017        | ..             | 0             | ..            | ..            | ..                | 0             | 61         |
|                           | 2018        | ..             | 0             | ..            | ..            | ..                | 0             | 62         |
|                           | 2019        | ..             | 0             | ..            | ..            | ..                | 0             | 58         |
| Guyana                    | 2016        | ..             | 17            | ..            | 16            | ..                | 1             | 1          |
|                           | 2017        | ..             | 18            | ..            | 18            | ..                | 1             | 1          |
|                           | 2018        | ..             | 18            | ..            | 17            | ..                | 1             | 1          |
|                           | 2019        | ..             | 17            | ..            | 17            | ..                | 1             | 1          |
| Paraguay                  | 2016        | ..             | 49            | ..            | 45            | ..                | 3             | 0          |
|                           | 2017        | ..             | 64            | ..            | 60            | ..                | 3             | 1          |
|                           | 2018        | ..             | 74            | ..            | 72            | -1                | 3             | 0          |
|                           | 2019        | ..             | 74            | ..            | 71            | 0                 | 4             | 1          |
| Peru                      | 2016        | 639            | 295           | 630           | 950           | -695              | 49            | 2          |
|                           | 2017        | 620            | 442           | 662           | 678           | -617              | 338           | 11         |
|                           | 2018        | 625            | 412           | 0             | 677           | -6                | 366           | 11         |
|                           | 2019        | 686            | 396           | ..            | 706           | -7                | 382           | 12         |
| Suriname                  | 2016        | ..             | 44            | ..            | *39           | ..                | 4             | 8          |
|                           | 2017        | ..             | 45            | ..            | *41           | ..                | 5             | 8          |
|                           | 2018        | ..             | *45           | ..            | *41           | ..                | *5            | *8         |
|                           | 2019        | ..             | 44            | ..            | *39           | ..                | 5             | 8          |
| Uruguay                   | 2016        | 114            | 1             | ..            | 96            | 15                | 5             | 1          |
|                           | 2017        | 31             | 59            | ..            | 98            | -14               | 6             | 2          |
|                           | 2018        | 105            | 2             | ..            | 105           | -3                | 5             | 1          |
|                           | 2019        | 100            | 1             | ..            | 97            | -1                | 5             | 2          |
| Venezuela (Bolivar. Rep.) | 2016        | 1,741          | ..            | 1,274         | 246           | 0                 | 221           | 7          |
|                           | 2017        | 1,204          | ..            | 881           | 263           | 0                 | 60            | 2          |
|                           | 2018        | 1,119          | ..            | 819           | 229           | ..                | 71            | 2          |
|                           | 2019        | 1,064          | ..            | 779           | 164           | ..                | 122           | 4          |
| <b>Asia</b>               | <b>2016</b> | <b>148,004</b> | <b>27,166</b> | <b>58,910</b> | <b>73,304</b> | <b>2,085</b>      | <b>40,872</b> | <b>9</b>   |
|                           | <b>2017</b> | <b>156,880</b> | <b>28,019</b> | <b>60,763</b> | <b>76,777</b> | <b>1,062</b>      | <b>46,296</b> | <b>10</b>  |
|                           | <b>2018</b> | <b>167,753</b> | <b>27,124</b> | <b>63,177</b> | <b>81,111</b> | <b>1,308</b>      | <b>49,279</b> | <b>11</b>  |
|                           | <b>2019</b> | <b>171,506</b> | <b>20,988</b> | <b>60,806</b> | <b>82,094</b> | <b>343</b>        | <b>49,251</b> | <b>11</b>  |
| Afghanistan               | 2016        | ..             | 111           | ..            | *22           | ..                | 89            | 3          |
|                           | 2017        | ..             | 338           | ..            | *61           | ..                | 277           | 8          |
|                           | 2018        | ..             | 299           | ..            | *54           | ..                | 245           | 7          |
|                           | 2019        | ..             | 53            | ..            | *10           | ..                | 44            | 1          |
| Armenia                   | 2016        | ..             | 44            | ..            | 44            | ..                | 0             | 0          |
|                           | 2017        | ..             | 54            | ..            | 54            | ..                | 0             | 0          |
|                           | 2018        | ..             | 62            | ..            | 62            | ..                | 0             | 0          |
|                           | 2019        | ..             | 69            | ..            | 69            | ..                | 0             | 0          |
| Azerbaijan                | 2016        | 627            | ..            | 236           | 175           | -15               | 231           | 24         |
|                           | 2017        | 588            | 82            | 181           | 159           | -1                | 331           | 34         |
|                           | 2018        | 708            | 96            | 305           | 109           | 30                | 361           | 36         |
|                           | 2019        | 667            | 67            | 120           | 313           | 1                 | 300           | 30         |
| Bahrain                   | 2016        | 3,175          | ..            | 2,636         | 435           | 72                | 32            | 22         |
|                           | 2017        | 3,116          | ..            | 2,678         | 447           | -36               | 27            | 18         |
|                           | 2018        | 3,116          | ..            | 2,559         | 483           | 38                | 36            | 23         |
|                           | 2019        | 3,097          | ..            | 2,533         | 508           | 33                | 23            | 14         |

Table 20

## Production, trade and supply of jet fuels

Thousand metric tons and kilograms per capita

| Country or area        | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|------------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                        |      |            |         |         |         |                   | Total  | Per capita |
| Bangladesh             | 2016 | 1          | 354     | ..      | 347     | ..                | 8      | 0          |
|                        | 2017 | 1          | 394     | ..      | 377     | ..                | 18     | 0          |
|                        | 2018 | 1          | 407     | ..      | 408     | ..                | 0      | 0          |
|                        | 2019 | ..         | 427     | ..      | 430     | ..                | -4     | 0          |
| Bhutan                 | 2016 | ..         | 3       | ..      | *3      | ..                | 0      | 0          |
|                        | 2017 | ..         | 3       | ..      | *3      | ..                | 0      | 0          |
|                        | 2018 | ..         | 4       | ..      | *4      | ..                | 0      | 0          |
|                        | 2019 | ..         | 4       | ..      | *4      | ..                | 0      | 0          |
| Brunei Darussalam      | 2016 | 45         | 26      | 0       | 74      | -2                | -1     | -2         |
|                        | 2017 | 46         | 30      | 0       | 71      | 2                 | 3      | 7          |
|                        | 2018 | 56         | 26      | 0       | 81      | 0                 | 1      | 2          |
|                        | 2019 | 248        | 55      | 144     | 108     | 51                | 0      | 0          |
| Cambodia               | 2016 | ..         | 103     | ..      | 72      | ..                | 31     | 2          |
|                        | 2017 | ..         | 149     | ..      | 103     | ..                | 46     | 3          |
|                        | 2018 | ..         | 197     | ..      | 136     | ..                | 60     | 4          |
|                        | 2019 | ..         | 245     | ..      | 169     | ..                | 75     | 5          |
| China                  | 2016 | 39,081     | 3,494   | 13,099  | 8,363   | 156               | 20,957 | 15         |
|                        | 2017 | 41,797     | 3,714   | 13,132  | 9,285   | -127              | 23,221 | 16         |
|                        | 2018 | 47,216     | 4,062   | 14,670  | 10,097  | 565               | 25,946 | 18         |
|                        | 2019 | 52,502     | 2,826   | 17,610  | 10,590  | ..                | 27,128 | 19         |
| China, Hong Kong SAR   | 2016 | ..         | 6,379   | 0       | 6,262   | 108               | 10     | 1          |
|                        | 2017 | ..         | 6,305   | 0       | 6,620   | -326              | 11     | 1          |
|                        | 2018 | ..         | 6,691   | 0       | 6,838   | -156              | 8      | 1          |
|                        | 2019 | ..         | 6,080   | ..      | 6,187   | -113              | 6      | 1          |
| Cyprus                 | 2016 | ..         | 290     | 16      | 263     | 11                | 0      | 0          |
|                        | 2017 | ..         | 290     | 0       | 298     | -8                | 0      | 0          |
|                        | 2018 | ..         | 306     | ..      | 308     | 2                 | -4     | -3         |
|                        | 2019 | ..         | 298     | ..      | 295     | -5                | 9      | 7          |
| Georgia                | 2016 | ..         | 71      | ..      | 71      | -1                | 1      | 0          |
|                        | 2017 | ..         | 101     | ..      | 95      | 5                 | 1      | 0          |
|                        | 2018 | ..         | 102     | ..      | 103     | -1                | 0      | 0          |
|                        | 2019 | ..         | 102     | ..      | 101     | 0                 | 1      | 0          |
| India                  | 2016 | *13,828    | *338    | *7,270  | *4,899  | *57               | *1,940 | *1         |
|                        | 2017 | 14,594     | 291     | 7,183   | *3,792  | *10               | 3,900  | 3          |
|                        | 2018 | *15,461    | *259    | *7,389  | *4,129  | *98               | *4,104 | *3         |
|                        | 2019 | *15,212    | *65     | *6,906  | *3,979  | 71                | *4,321 | *3         |
| Indonesia              | 2016 | 2,599      | 890     | 2       | 775     | ..                | 2,712  | 10         |
|                        | 2017 | 2,613      | 1,673   | 2       | 964     | ..                | 3,320  | 13         |
|                        | 2018 | 2,993      | 1,231   | 2       | 1,033   | ..                | 3,188  | 12         |
|                        | 2019 | 3,389      | 227     | 102     | 916     | 0                 | 2,598  | 10         |
| Iran (Islamic Rep. of) | 2016 | 1,505      | *1      | ..      | *690    | ..                | 816    | 10         |
|                        | 2017 | 1,592      | *1      | ..      | *689    | ..                | 904    | 11         |
|                        | 2018 | 1,633      | *1      | ..      | *795    | ..                | 839    | 10         |
|                        | 2019 | 1,597      | *1      | ..      | 844     | ..                | 753    | 9          |
| Iraq                   | 2016 | 211        | 448     | ..      | 659     | ..                | 0      | 0          |
|                        | 2017 | 247        | 392     | ..      | 639     | ..                | 0      | 0          |
|                        | 2018 | 212        | 407     | ..      | 619     | ..                | 0      | 0          |
|                        | 2019 | 236        | 408     | ..      | 644     | ..                | 0      | 0          |
| Israel                 | 2016 | 934        | ..      | ..      | 911     | ..                | 23     | 3          |
|                        | 2017 | 1,127      | ..      | ..      | 1,021   | ..                | 107    | 13         |
|                        | 2018 | 1,325      | ..      | ..      | 1,087   | ..                | 238    | 28         |
|                        | 2019 | 1,420      | ..      | ..      | 1,122   | ..                | 298    | 35         |

## Production, trade and supply of jet fuels

Thousand metric tons and kilograms per capita

| Country or area        | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|------------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                        |      |            |         |         |         |                   | Total  | Per capita |
| Japan                  | 2016 | 12,461     | 653     | 2,697   | 6,353   | -3                | 4,067  | 32         |
|                        | 2017 | 11,501     | 1,262   | 2,071   | 6,652   | 61                | 3,979  | 31         |
|                        | 2018 | 12,194     | 1,184   | 2,495   | 6,840   | -111              | 4,153  | 33         |
|                        | 2019 | 12,238     | 164     | 2,449   | 5,860   | 7                 | 4,086  | 32         |
| Jordan                 | 2016 | 291        | 64      | ..      | 87      | 22                | 245    | 26         |
|                        | 2017 | 287        | 125     | ..      | 63      | 20                | 329    | 34         |
|                        | 2018 | 336        | 67      | ..      | 57      | -13               | 358    | 36         |
|                        | 2019 | 330        | 74      | ..      | *58     | ..                | 346    | 34         |
| Kazakhstan             | 2016 | *264       | *151    | *15     | *330    | 3                 | *67    | *4         |
|                        | 2017 | 302        | 263     | 17      | *477    | 7                 | 64     | 4          |
|                        | 2018 | 387        | 232     | 21      | 615     | -1                | -16    | -1         |
|                        | 2019 | 629        | 40      | 26      | 619     | 24                | -1     | 0          |
| Korea, Republic of     | 2016 | 20,277     | ..      | 14,042  | 4,632   | 248               | 1,355  | 27         |
|                        | 2017 | 21,944     | ..      | 15,160  | 4,742   | 179               | 1,863  | 36         |
|                        | 2018 | 21,571     | ..      | 14,560  | 4,996   | 79                | 1,936  | 38         |
|                        | 2019 | 21,544     | 0       | 14,480  | 5,300   | 104               | 1,660  | 32         |
| Kuwait                 | 2016 | 2,184      | ..      | 1,459   | 725     | ..                | 0      | 0          |
|                        | 2017 | 1,731      | ..      | 821     | 909     | ..                | 1      | 0          |
|                        | 2018 | 1,855      | ..      | 941     | 914     | ..                | 0      | 0          |
|                        | 2019 | 1,573      | ..      | 635     | 938     | ..                | 0      | 0          |
| Kyrgyzstan             | 2016 | ..         | 181     | 55      | 103     | -3                | 26     | 4          |
|                        | 2017 | ..         | 80      | 57      | 19      | 1                 | 3      | 0          |
|                        | 2018 | ..         | 75      | 67      | 4       | -2                | 6      | 1          |
|                        | 2019 | ..         | 63      | 55      | *5      | -3                | 6      | 1          |
| Lao People's Dem. Rep. | 2016 | ..         | 52      | ..      | 41      | ..                | 11     | 2          |
|                        | 2017 | ..         | 46      | ..      | 36      | ..                | 10     | 1          |
|                        | 2018 | ..         | 69      | ..      | 58      | ..                | 11     | 2          |
|                        | 2019 | ..         | *49     | ..      | *36     | ..                | *13    | *2         |
| Lebanon                | 2016 | ..         | 244     | ..      | *244    | ..                | 0      | 0          |
|                        | 2017 | ..         | 270     | ..      | *270    | ..                | 0      | 0          |
|                        | 2018 | ..         | 264     | ..      | *264    | ..                | 0      | 0          |
|                        | 2019 | ..         | 270     | ..      | *270    | ..                | 0      | 0          |
| Malaysia               | 2016 | 2,469      | 1,404   | 1,035   | 2,339   | -97               | 596    | 19         |
|                        | 2017 | 3,152      | 1,167   | 1,288   | 2,494   | -3                | 540    | 17         |
|                        | 2018 | 3,342      | 517     | 801     | 2,418   | 1                 | 639    | 20         |
|                        | 2019 | 3,165      | 818     | 835     | 2,620   | ..                | 529    | 17         |
| Maldives               | 2016 | ..         | *31     | ..      | *15     | ..                | *16    | *33        |
|                        | 2017 | ..         | 42      | ..      | *20     | ..                | 22     | 44         |
|                        | 2018 | ..         | 39      | ..      | *20     | ..                | 19     | 37         |
|                        | 2019 | ..         | 43      | ..      | *21     | ..                | 22     | 41         |
| Mongolia               | 2016 | ..         | 25      | ..      | 19      | ..                | 6      | 2          |
|                        | 2017 | ..         | 34      | ..      | 27      | ..                | 7      | 2          |
|                        | 2018 | ..         | 40      | ..      | 37      | ..                | 3      | 1          |
|                        | 2019 | ..         | 47      | ..      | *40     | ..                | 7      | 2          |
| Myanmar                | 2016 | 16         | 201     | ..      | 89      | -14               | 142    | 3          |
|                        | 2017 | 15         | 191     | ..      | 71      | -2                | 137    | 3          |
|                        | 2018 | 11         | 172     | ..      | 70      | 1                 | 112    | 2          |
|                        | 2019 | 12         | 201     | ..      | 72      | ..                | 141    | 3          |
| Nepal                  | 2016 | ..         | 128     | ..      | 128     | ..                | 0      | 0          |
|                        | 2017 | ..         | 153     | ..      | 127     | ..                | 26     | 1          |
|                        | 2018 | ..         | 155     | ..      | 124     | ..                | 31     | 1          |
|                        | 2019 | ..         | 106     | ..      | 90      | ..                | 16     | 1          |

Table 20

## Production, trade and supply of jet fuels

Thousand metric tons and kilograms per capita

| Country or area      | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|----------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                      |      |            |         |         |         |                   | Total  | Per capita |
| Oman                 | 2016 | 666        | ..      | 136     | 520     | ..                | 10     | 2          |
|                      | 2017 | 923        | ..      | 282     | 557     | ..                | 84     | 18         |
|                      | 2018 | 1,715      | ..      | 1,111   | 418     | ..                | 186    | 39         |
|                      | 2019 | 1,804      | ..      | 1,053   | 605     | ..                | 146    | 29         |
| Other Asia           | 2016 | 3,729      | 211     | 912     | 2,745   | 36                | 247    | 10         |
|                      | 2017 | 3,780      | 106     | 829     | 2,845   | -11               | 223    | 9          |
|                      | 2018 | 4,087      | 148     | 959     | 2,908   | 1                 | 367    | 15         |
|                      | 2019 | 4,111      | 36      | 932     | 3,006   | -84               | 294    | 12         |
| Pakistan             | 2016 | 879        | 158     | 127     | 240     | 0                 | 670    | 3          |
|                      | 2017 | 914        | 250     | 220     | *250    | ..                | 693    | 3          |
|                      | 2018 | 783        | 222     | 171     | *209    | ..                | 625    | 3          |
|                      | 2019 | 799        | 184     | 41      | *250    | ..                | 692    | 3          |
| Philippines          | 2016 | 1,020      | 880     | ..      | 1,313   | 8                 | 578    | 6          |
|                      | 2017 | 913        | 1,149   | ..      | 1,601   | -2                | 463    | 4          |
|                      | 2018 | 1,040      | 1,201   | ..      | 1,647   | 38                | 556    | 5          |
|                      | 2019 | 810        | 1,506   | ..      | 1,640   | -20               | 695    | 6          |
| Qatar                | 2016 | 3,447      | ..      | 154     | 1,719   | 1,574             | 0      | 0          |
|                      | 2017 | 5,230      | ..      | 1,249   | 3,294   | 687               | 0      | 0          |
|                      | 2018 | 5,858      | ..      | 1,248   | 4,332   | 278               | 0      | 0          |
|                      | 2019 | 5,532      | ..      | 929     | 4,603   | 0                 | 0      | 0          |
| Saudi Arabia         | 2016 | 4,271      | ..      | 679     | 2,803   | ..                | 789    | 24         |
|                      | 2017 | 4,321      | ..      | 270     | 3,070   | ..                | 981    | 30         |
|                      | 2018 | 4,572      | ..      | 325     | 3,446   | ..                | 801    | 24         |
|                      | 2019 | *4,043     | ..      | *288    | *3,433  | ..                | *322   | *9         |
| Singapore            | 2016 | 10,175     | 2,974   | 5,843   | *7,305  | ..                | 0      | 0          |
|                      | 2017 | 11,864     | 3,086   | 7,413   | *7,537  | ..                | 0      | 0          |
|                      | 2018 | 11,862     | 1,300   | 5,018   | *8,144  | ..                | 0      | 0          |
|                      | 2019 | 11,347     | 1,278   | 4,731   | *7,893  | ..                | 0      | 0          |
| Sri Lanka            | 2016 | 148        | 337     | ..      | 523     | -42               | 3      | 0          |
|                      | 2017 | 236        | 282     | ..      | 540     | -31               | 9      | 0          |
|                      | 2018 | 237        | 461     | ..      | 501     | -28               | 225    | 11         |
|                      | 2019 | 259        | 398     | ..      | 501     | -4                | 159    | 7          |
| Syrian Arab Republic | 2016 | 211        | ..      | 138     | 7       | ..                | 66     | 4          |
|                      | 2017 | 234        | ..      | 147     | 8       | ..                | 79     | 5          |
|                      | 2018 | 219        | ..      | 139     | 8       | ..                | 72     | 4          |
|                      | 2019 | 190        | ..      | 124     | 6       | ..                | 59     | 3          |
| Tajikistan           | 2016 | ..         | 35      | ..      | 35      | ..                | 0      | 0          |
|                      | 2017 | ..         | 18      | ..      | 18      | ..                | 0      | 0          |
|                      | 2018 | ..         | 29      | ..      | 29      | ..                | 0      | 0          |
|                      | 2019 | ..         | 40      | ..      | 40      | ..                | 0      | 0          |
| Thailand             | 2016 | 5,262      | 66      | 417     | 3,971   | 62                | 878    | 13         |
|                      | 2017 | 5,573      | 37      | 568     | 4,149   | -13               | 905    | 13         |
|                      | 2018 | 6,097      | 42      | 756     | 4,484   | 64                | 835    | 12         |
|                      | 2019 | 5,710      | 286     | 625     | 4,612   | 8                 | 750    | 11         |
| Timor-Leste          | 2016 | ..         | 3       | ..      | *3      | ..                | 0      | 0          |
|                      | 2017 | ..         | 4       | ..      | *4      | ..                | 0      | 0          |
|                      | 2018 | ..         | 3       | ..      | *3      | ..                | 0      | 0          |
|                      | 2019 | ..         | 3       | ..      | *3      | ..                | 0      | 0          |
| Turkey               | 2016 | 4,504      | 337     | 196     | 3,334   | -32               | 1,343  | 17         |
|                      | 2017 | 4,837      | 194     | 314     | 3,454   | 69                | 1,194  | 15         |
|                      | 2018 | 4,787      | 482     | 110     | 3,698   | 222               | 1,239  | 15         |
|                      | 2019 | 5,964      | 353     | 706     | 4,289   | 149               | 1,173  | 14         |



## Production, trade and supply of jet fuels

Thousand metric tons and kilograms per capita

| Country or area        | Year        | Production    | Imports       | Exports       | Bunkers       | Changes in stocks | Supply        |            |
|------------------------|-------------|---------------|---------------|---------------|---------------|-------------------|---------------|------------|
|                        |             |               |               |               |               |                   | Total         | Per capita |
| Turkmenistan           | 2016        | 470           | ..            | ..            | 470           | ..                | 0             | 0          |
|                        | 2017        | 470           | ..            | ..            | 470           | ..                | 0             | 0          |
|                        | 2018        | 470           | ..            | ..            | 470           | ..                | 0             | 0          |
|                        | 2019        | 470           | ..            | ..            | 470           | ..                | 0             | 0          |
| United Arab Emirates   | 2016        | 12,664        | 3,017         | 6,765         | 8,269         | ..                | 647           | 69         |
|                        | 2017        | 12,398        | 1,521         | 5,992         | 7,391         | 451               | 85            | 9          |
|                        | 2018        | 12,931        | 1,684         | 8,476         | 6,827         | ..                | -689          | -71        |
|                        | 2019        | 11,829        | ..            | 4,292         | 7,173         | ..                | 364           | 37         |
| Uzbekistan             | 2016        | 183           | 2             | ..            | *91           | ..                | 93            | 3          |
|                        | 2017        | 146           | 0             | ..            | *73           | ..                | 74            | 2          |
|                        | 2018        | 193           | 0             | ..            | *90           | ..                | 103           | 3          |
|                        | 2019        | 157           | 3             | 51            | *69           | -4                | 45            | 1          |
| Viet Nam               | 2016        | 383           | 3,463         | 960           | 781           | -64               | 2,169         | 23         |
|                        | 2017        | 352           | 3,923         | 859           | 926           | 130               | 2,360         | 25         |
|                        | 2018        | 444           | 4,588         | 1,016         | 1,129         | 205               | 2,682         | 28         |
|                        | 2019        | 559           | 4,101         | 1,080         | 1,277         | 127               | 2,176         | 23         |
| Yemen                  | 2016        | 26            | ..            | *20           | 6             | ..                | 0             | 0          |
|                        | 2017        | 34            | ..            | *28           | 6             | ..                | 0             | 0          |
|                        | 2018        | 41            | ..            | *36           | 6             | -1                | 0             | 0          |
|                        | 2019        | 65            | ..            | *59           | 7             | ..                | 0             | 0          |
| <b>Europe</b>          | <b>2016</b> | <b>46,376</b> | <b>35,386</b> | <b>18,228</b> | <b>52,971</b> | <b>25</b>         | <b>10,537</b> | <b>14</b>  |
|                        | <b>2017</b> | <b>49,291</b> | <b>36,884</b> | <b>19,220</b> | <b>57,259</b> | <b>-598</b>       | <b>10,293</b> | <b>14</b>  |
|                        | <b>2018</b> | <b>52,839</b> | <b>39,077</b> | <b>21,764</b> | <b>59,439</b> | <b>251</b>        | <b>10,461</b> | <b>14</b>  |
|                        | <b>2019</b> | <b>52,785</b> | <b>40,254</b> | <b>21,503</b> | <b>60,375</b> | <b>622</b>        | <b>10,540</b> | <b>14</b>  |
| Albania                | 2016        | ..            | 10            | ..            | 6             | 3                 | 1             | 0          |
|                        | 2017        | ..            | 17            | ..            | *6            | 10                | 1             | 0          |
|                        | 2018        | ..            | 16            | ..            | 6             | 9                 | 1             | 0          |
|                        | 2019        | ..            | 32            | ..            | 18            | 11                | 3             | 1          |
| Austria                | 2016        | 652           | 140           | 25            | 738           | -2                | 31            | 4          |
|                        | 2017        | 613           | 148           | 30            | 713           | -11               | 29            | 3          |
|                        | 2018        | 761           | 84            | 20            | 803           | -8                | 30            | 3          |
|                        | 2019        | 894           | 52            | 29            | 923           | -37               | 30            | 3          |
| Belarus                | 2016        | 329           | 21            | 199           | 119           | 10                | 22            | 2          |
|                        | 2017        | 401           | 15            | 260           | 126           | 8                 | 22            | 2          |
|                        | 2018        | 370           | 18            | 210           | 144           | 16                | 18            | 2          |
|                        | 2019        | 463           | 23            | 297           | 186           | -12               | 15            | 2          |
| Belgium                | 2016        | 1,666         | 490           | 770           | 1,401         | -39               | 24            | 2          |
|                        | 2017        | 1,942         | 1,476         | 1,787         | 1,540         | -11               | 102           | 9          |
|                        | 2018        | 1,842         | 1,627         | 1,591         | 1,642         | 144               | 92            | 8          |
|                        | 2019        | 2,195         | 1,427         | 2,126         | 1,660         | 58                | -221          | -19        |
| Bosnia and Herzegovina | 2016        | ..            | 10            | ..            | 10            | ..                | 0             | 0          |
|                        | 2017        | ..            | 10            | ..            | 10            | ..                | 0             | 0          |
|                        | 2018        | ..            | 7             | ..            | 7             | ..                | 0             | 0          |
|                        | 2019        | ..            | 9             | ..            | 9             | ..                | 0             | 0          |
| Bulgaria               | 2016        | 207           | 33            | 20            | 207           | -3                | 16            | 2          |
|                        | 2017        | 265           | 15            | 25            | 232           | 2                 | 20            | 3          |
|                        | 2018        | 259           | 24            | 18            | 249           | -3                | 20            | 3          |
|                        | 2019        | 232           | 34            | 8             | 236           | 7                 | 15            | 2          |
| Croatia                | 2016        | 116           | 22            | 10            | 118           | ..                | 10            | 2          |
|                        | 2017        | 131           | 31            | 15            | 141           | -5                | 10            | 2          |
|                        | 2018        | 192           | 26            | 10            | 176           | 22                | 10            | 2          |
|                        | 2019        | 158           | 48            | 16            | 190           | -10               | 10            | 2          |

Table 20

## Production, trade and supply of jet fuels

Thousand metric tons and kilograms per capita

| Country or area | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|-----------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                 |      |            |         |         |         |                   | Total  | Per capita |
| Czechia         | 2016 | 60         | 276     | ..      | 306     | -11               | 41     | 4          |
|                 | 2017 | 180        | 210     | 1       | 343     | -10               | 56     | 5          |
|                 | 2018 | 181        | 257     | 4       | 396     | ..                | 38     | 4          |
|                 | 2019 | 216        | 257     | 8       | 405     | 14                | 46     | 4          |
| Denmark         | 2016 | 130        | 1,063   | 84      | 910     | 114               | 85     | 15         |
|                 | 2017 | 122        | 927     | 179     | 939     | -134              | 64     | 11         |
|                 | 2018 | 113        | 944     | 57      | 984     | -34               | 49     | 9          |
|                 | 2019 | 121        | 1,012   | 12      | 1,006   | 64                | 50     | 9          |
| Estonia         | 2016 | ..         | 64      | 19      | 45      | 0                 | 0      | 0          |
|                 | 2017 | ..         | 78      | 19      | 58      | ..                | 1      | 1          |
|                 | 2018 | ..         | 71      | 2       | 68      | ..                | 1      | 1          |
|                 | 2019 | ..         | 68      | ..      | 67      | ..                | 1      | 1          |
| Finland         | 2016 | 572        | 308     | 6       | 621     | -2                | 255    | 46         |
|                 | 2017 | 755        | 160     | 7       | 658     | -4                | 254    | 46         |
|                 | 2018 | 794        | 166     | 2       | 753     | 16                | 189    | 34         |
|                 | 2019 | 750        | 259     | 1       | 812     | -8                | 204    | 37         |
| France          | 2016 | 3,790      | 4,600   | 1,031   | 5,364   | 41                | 1,954  | 29         |
|                 | 2017 | 4,257      | 4,413   | 1,216   | 5,452   | 137               | 1,865  | 28         |
|                 | 2018 | 4,186      | 5,761   | 1,944   | 5,642   | 138               | 2,223  | 33         |
|                 | 2019 | 3,889      | 6,053   | 1,745   | 5,931   | -92               | 2,358  | 35         |
| Germany         | 2016 | 5,317      | 5,014   | 864     | 8,429   | 36                | 1,002  | 12         |
|                 | 2017 | 5,347      | 5,935   | 1,296   | 9,319   | -81               | 748    | 9          |
|                 | 2018 | 5,101      | 6,547   | 1,356   | 9,611   | -70               | 751    | 9          |
|                 | 2019 | 5,077      | 6,797   | 1,401   | 9,532   | 120               | 821    | 10         |
| Gibraltar       | 2016 | ..         | 8       | ..      | 8       | ..                | 0      | 0          |
|                 | 2017 | ..         | 8       | ..      | 8       | ..                | 0      | 0          |
|                 | 2018 | ..         | 6       | ..      | 6       | ..                | 0      | 0          |
|                 | 2019 | ..         | 8       | ..      | 8       | ..                | 0      | 0          |
| Greece          | 2016 | 2,328      | 166     | 1,229   | 856     | 65                | 344    | 32         |
|                 | 2017 | 2,431      | 221     | 1,384   | 961     | -33               | 340    | 32         |
|                 | 2018 | 3,136      | 51      | 1,694   | 1,061   | 86                | 347    | 33         |
|                 | 2019 | 2,813      | 150     | 1,559   | 1,101   | -63               | 367    | 35         |
| Hungary         | 2016 | 199        | 15      | 11      | 186     | 9                 | 8      | 1          |
|                 | 2017 | 236        | 1       | 8       | 216     | 4                 | 9      | 1          |
|                 | 2018 | 297        | 1       | 22      | 267     | -1                | 10     | 1          |
|                 | 2019 | 300        | 18      | 39      | 270     | -1                | 10     | 1          |
| Iceland         | 2016 | ..         | 321     | ..      | 291     | 12                | 18     | 54         |
|                 | 2017 | ..         | 346     | ..      | 364     | -7                | -11    | -34        |
|                 | 2018 | ..         | 423     | ..      | 408     | 24                | -8     | -23        |
|                 | 2019 | ..         | 278     | ..      | 303     | -20               | -5     | -16        |
| Ireland         | 2016 | ..         | 1,066   | 0       | 822     | 1                 | 243    | 52         |
|                 | 2017 | ..         | 1,230   | 0       | 965     | 7                 | 258    | 54         |
|                 | 2018 | ..         | 1,465   | 148     | 1,042   | -78               | 353    | 73         |
|                 | 2019 | ..         | 1,491   | 60      | 1,054   | 76                | 300    | 62         |
| Italy           | 2016 | 2,047      | 2,088   | 66      | 3,209   | 14                | 846    | 14         |
|                 | 2017 | 2,218      | 2,273   | 226     | 3,329   | 34                | 902    | 15         |
|                 | 2018 | 2,770      | 2,336   | 337     | 3,734   | 75                | 961    | 16         |
|                 | 2019 | 2,706      | 2,563   | 333     | 3,864   | 62                | 1,010  | 17         |
| Kosovo          | 2016 | ..         | 4       | ..      | 4       | ..                | 0      | 0          |
|                 | 2017 | ..         | 6       | ..      | 6       | ..                | 0      | 0          |
|                 | 2018 | ..         | 3       | ..      | 3       | ..                | 0      | 0          |
|                 | 2019 | ..         | 2       | ..      | 2       | ..                | 0      | 0          |

## Production, trade and supply of jet fuels

Thousand metric tons and kilograms per capita

| Country or area     | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|---------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                     |      |            |         |         |         |                   | Total  | Per capita |
| Latvia              | 2016 | ..         | 122     | 2       | 119     | 0                 | 1      | 1          |
|                     | 2017 | ..         | 137     | 0       | 136     | 0                 | 2      | 1          |
|                     | 2018 | ..         | 150     | 0       | 149     | 0                 | 1      | 1          |
|                     | 2019 | ..         | 154     | ..      | 152     | 0                 | 2      | 1          |
| Lithuania           | 2016 | 1,082      | 68      | 200     | 93      | -1                | 858    | 297        |
|                     | 2017 | 1,059      | 52      | 213     | 103     | 11                | 784    | 276        |
|                     | 2018 | 955        | 38      | 253     | 122     | -8                | 625    | 223        |
|                     | 2019 | 996        | 45      | 264     | 119     | 3                 | 655    | 237        |
| Luxembourg          | 2016 | ..         | 498     | 4       | 493     | ..                | 1      | 2          |
|                     | 2017 | ..         | 580     | 22      | 558     | 0                 | 0      | 0          |
|                     | 2018 | ..         | 599     | ..      | 597     | 1                 | 0      | 0          |
|                     | 2019 | ..         | 582     | ..      | 583     | -2                | 0      | 0          |
| Malta               | 2016 | ..         | 121     | ..      | 121     | -2                | 2      | 5          |
|                     | 2017 | ..         | 152     | ..      | 136     | 16                | 1      | 1          |
|                     | 2018 | ..         | 143     | ..      | 153     | -10               | 1      | 2          |
|                     | 2019 | ..         | 174     | ..      | 160     | 13                | 1      | 1          |
| Montenegro          | 2016 | ..         | 25      | 6       | 19      | 0                 | 0      | 0          |
|                     | 2017 | ..         | 46      | 26      | 20      | ..                | 0      | 0          |
|                     | 2018 | ..         | 47      | 21      | 26      | ..                | 0      | 0          |
|                     | 2019 | ..         | 49      | 28      | 21      | ..                | 0      | 0          |
| Netherlands         | 2016 | 7,556      | 4,469   | 8,256   | 3,754   | -82               | 97     | 6          |
|                     | 2017 | 7,654      | 3,626   | 7,550   | 3,863   | -210              | 77     | 5          |
|                     | 2018 | 8,929      | 3,342   | 8,202   | 3,909   | 29                | 130    | 8          |
|                     | 2019 | 8,810      | 3,445   | 8,159   | 3,823   | 197               | 76     | 4          |
| North Macedonia     | 2016 | 0          | 28      | 13      | ..      | 0                 | 15     | 7          |
|                     | 2017 | ..         | 33      | 13      | ..      | 0                 | 20     | 10         |
|                     | 2018 | ..         | 38      | 15      | ..      | 0                 | 23     | 11         |
|                     | 2019 | ..         | 57      | 30      | ..      | 1                 | 27     | 13         |
| Norway              | 2016 | 533        | 381     | 20      | 502     | -5                | 397    | 76         |
|                     | 2017 | 763        | 206     | 5       | 524     | -31               | 471    | 89         |
|                     | 2018 | 778        | 230     | 1       | 547     | 38                | 422    | 79         |
|                     | 2019 | 655        | 250     | 11      | 534     | 5                 | 355    | 66         |
| Poland              | 2016 | 1,183      | 22      | 535     | 665     | -20               | 25     | 1          |
|                     | 2017 | 1,119      | 3       | 265     | 828     | 1                 | 27     | 1          |
|                     | 2018 | 1,339      | 31      | 343     | 980     | 15                | 32     | 1          |
|                     | 2019 | 1,355      | 24      | 284     | 1,048   | 14                | 33     | 1          |
| Portugal            | 2016 | 1,237      | 17      | 1       | 1,119   | 1                 | 133    | 13         |
|                     | 2017 | 1,361      | 67      | 3       | 1,247   | 17                | 161    | 16         |
|                     | 2018 | 1,432      | 133     | 22      | 1,328   | 36                | 180    | 18         |
|                     | 2019 | 1,346      | 253     | 16      | 1,420   | -37               | 200    | 20         |
| Republic of Moldova | 2016 | ..         | 33      | ..      | 32      | 1                 | 0      | 0          |
|                     | 2017 | ..         | 46      | ..      | 47      | -1                | 0      | 0          |
|                     | 2018 | ..         | 55      | ..      | 54      | 1                 | 0      | 0          |
|                     | 2019 | ..         | 49      | ..      | 48      | 1                 | 0      | 0          |
| Romania             | 2016 | 398        | 22      | 255     | 248     | -8                | -75    | -4         |
|                     | 2017 | 381        | 86      | 269     | 292     | 9                 | -102   | -5         |
|                     | 2018 | 418        | 78      | 326     | 119     | 3                 | 49     | 2          |
|                     | 2019 | 512        | 39      | 370     | 131     | -6                | 56     | 3          |
| Russian Federation  | 2016 | *12,030    | 30      | 2,432   | *4,857  | ..                | *4,771 | *33        |
|                     | 2017 | 12,577     | 68      | 2,272   | 5,399   | ..                | 4,974  | 34         |
|                     | 2018 | 12,982     | 15      | 2,670   | 5,578   | ..                | 4,749  | 33         |
|                     | 2019 | 13,176     | 30      | 2,405   | 5,702   | ..                | 5,099  | 35         |

Table 20

## Production, trade and supply of jet fuels

Thousand metric tons and kilograms per capita

| Country or area | Year        | Production   | Imports      | Exports    | Bunkers      | Changes in stocks | Supply       |            |
|-----------------|-------------|--------------|--------------|------------|--------------|-------------------|--------------|------------|
|                 |             |              |              |            |              |                   | Total        | Per capita |
| Serbia          | 2016        | 123          | 5            | 15         | 115          | -2                | 0            | 0          |
|                 | 2017        | 155          | 1            | 27         | 128          | 1                 | 0            | 0          |
|                 | 2018        | 190          | 3            | 52         | 135          | 6                 | 0            | 0          |
|                 | 2019        | 155          | 20           | 39         | 137          | -1                | 0            | 0          |
| Slovakia        | 2016        | 99           | 3            | 60         | 48           | -6                | 0            | 0          |
|                 | 2017        | 76           | ..           | 33         | 39           | 4                 | 0            | 0          |
|                 | 2018        | 95           | 2            | 52         | 46           | -1                | 0            | 0          |
|                 | 2019        | 72           | 5            | 33         | 44           | ..                | 0            | 0          |
| Slovenia        | 2016        | ..           | 231          | 180        | 21           | 29                | 1            | 0          |
|                 | 2017        | ..           | 240          | 216        | 25           | -2                | 0            | 0          |
|                 | 2018        | ..           | 232          | 203        | 34           | -5                | 0            | 0          |
|                 | 2019        | ..           | 310          | 265        | 26           | 18                | 0            | 0          |
| Spain           | 2016        | 214          | 2,191        | 619        | 3,984        | -156              | -2,042       | -44        |
|                 | 2017        | 189          | 2,244        | 578        | 4,349        | -271              | -2,223       | -48        |
|                 | 2018        | 381          | 1,802        | 528        | 4,531        | 8                 | -2,884       | -62        |
|                 | 2019        | 454          | 1,680        | 401        | 4,643        | -45               | -2,865       | -61        |
| Sweden          | 2016        | 73           | 954          | 70         | 800          | 74                | 83           | 8          |
|                 | 2017        | 22           | 947          | 16         | 867          | -57               | 143          | 14         |
|                 | 2018        | 204          | 1,042        | 92         | 913          | 14                | 227          | 23         |
|                 | 2019        | 259          | 985          | 147        | 867          | 26                | 204          | 20         |
| Switzerland     | 2016        | 43           | 1,668        | ..         | 1,653        | -1                | 59           | 7          |
|                 | 2017        | 7            | 1,725        | ..         | 1,710        | -7                | 29           | 3          |
|                 | 2018        | 5            | 1,858        | ..         | 1,795        | -7                | 75           | 9          |
|                 | 2019        | 3            | 1,937        | ..         | 1,813        | 45                | 83           | 10         |
| Ukraine         | 2016        | ..           | ..           | ..         | *121         | ..                | *-121        | *-3        |
|                 | 2017        | ..           | ..           | ..         | 263          | ..                | -263         | -6         |
|                 | 2018        | ..           | ..           | ..         | ..           | ..                | ..           | ..         |
|                 | 2019        | ..           | ..           | ..         | ..           | ..                | ..           | ..         |
| United Kingdom  | 2016        | 4,392        | 8,778        | 1,226      | 10,557       | -45               | 1,432        | 22         |
|                 | 2017        | 5,031        | 9,106        | 1,258      | 11,342       | 16                | 1,521        | 23         |
|                 | 2018        | 5,129        | 9,405        | 1,572      | 11,424       | -206              | 1,744        | 26         |
|                 | 2019        | 5,178        | 9,586        | 1,419      | 11,526       | 220               | 1,599        | 24         |
| <b>Oceania</b>  | <b>2016</b> | <b>4,024</b> | <b>4,962</b> | <b>163</b> | <b>5,071</b> | <b>-2</b>         | <b>3,754</b> | <b>93</b>  |
|                 | <b>2017</b> | <b>4,162</b> | <b>5,220</b> | <b>186</b> | <b>5,548</b> | <b>-20</b>        | <b>3,668</b> | <b>89</b>  |
|                 | <b>2018</b> | <b>4,422</b> | <b>5,532</b> | <b>249</b> | <b>5,883</b> | <b>172</b>        | <b>3,648</b> | <b>88</b>  |
|                 | <b>2019</b> | <b>4,551</b> | <b>5,217</b> | <b>160</b> | <b>6,151</b> | <b>193</b>        | <b>3,265</b> | <b>77</b>  |
| American Samoa  | 2016        | ..           | *8           | ..         | *6           | ..                | *3           | *45        |
|                 | 2017        | ..           | *8           | ..         | *6           | ..                | *3           | *45        |
|                 | 2018        | ..           | *8           | ..         | *6           | ..                | *3           | *45        |
|                 | 2019        | ..           | *8           | ..         | *6           | ..                | *3           | *45        |
| Australia       | 2016        | 2,759        | 4,428        | 4          | 3,852        | 41                | 3,290        | 136        |
|                 | 2017        | 2,841        | 4,640        | 56         | 4,212        | 6                 | 3,207        | 130        |
|                 | 2018        | 3,041        | 4,857        | 114        | 4,483        | 25                | 3,275        | 132        |
|                 | 2019        | 3,162        | 4,618        | 16         | 4,750        | 183               | 2,832        | 112        |
| Cook Islands    | 2016        | ..           | *9           | ..         | *8           | ..                | *2           | *107       |
|                 | 2017        | ..           | *9           | ..         | *8           | ..                | *2           | *108       |
|                 | 2018        | ..           | *9           | ..         | *8           | ..                | *2           | *108       |
|                 | 2019        | ..           | *10          | ..         | *8           | ..                | *2           | *109       |
| Fiji            | 2016        | ..           | 148          | 159        | *24          | *-48              | 12           | 14         |
|                 | 2017        | ..           | 158          | 129        | *30          | *-14              | 12           | 14         |
|                 | 2018        | ..           | *203         | *135       | *31          | *25               | *13          | *14        |
|                 | 2019        | ..           | *197         | *144       | *31          | *10               | *13          | *14        |

## Production, trade and supply of jet fuels

Thousand metric tons and kilograms per capita

| Country or area             | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|-----------------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                             |      |            |         |         |         |                   | Total  | Per capita |
| French Polynesia            | 2016 | ..         | *15     | ..      | ..      | *2                | *13    | *47        |
|                             | 2017 | ..         | 16      | ..      | ..      | *3                | 13     | 48         |
|                             | 2018 | ..         | 19      | ..      | ..      | *5                | 13     | 48         |
|                             | 2019 | ..         | 21      | ..      | ..      | *8                | 14     | 49         |
| Kiribati                    | 2016 | ..         | 1       | ..      | 0       | ..                | 1      | 6          |
|                             | 2017 | ..         | 1       | ..      | *1      | ..                | 1      | 7          |
|                             | 2018 | ..         | *1      | ..      | *1      | ..                | *1     | *7         |
|                             | 2019 | ..         | *1      | ..      | *1      | ..                | *1     | *7         |
| Marshall Islands            | 2016 | ..         | *2      | ..      | *2      | ..                | 0      | 0          |
|                             | 2017 | ..         | *2      | ..      | *2      | ..                | 0      | 0          |
|                             | 2018 | ..         | *2      | ..      | *2      | ..                | 0      | 0          |
|                             | 2019 | ..         | *2      | ..      | *2      | ..                | 0      | 0          |
| Micronesia (Fed. States of) | 2016 | ..         | *8      | ..      | *6      | ..                | *1     | *12        |
|                             | 2017 | ..         | *8      | ..      | *7      | ..                | *1     | *10        |
|                             | 2018 | ..         | *8      | ..      | *7      | ..                | *1     | *10        |
|                             | 2019 | ..         | *8      | ..      | *7      | ..                | *1     | *10        |
| Nauru                       | 2016 | ..         | 5       | ..      | *5      | ..                | 0      | 0          |
|                             | 2017 | ..         | 4       | ..      | *4      | ..                | 0      | 0          |
|                             | 2018 | ..         | *4      | ..      | *4      | ..                | 0      | 0          |
|                             | 2019 | ..         | *4      | ..      | *4      | ..                | 0      | 0          |
| New Caledonia               | 2016 | ..         | 31      | ..      | 25      | 1                 | 5      | 17         |
|                             | 2017 | ..         | 31      | ..      | 26      | -1                | 6      | 22         |
|                             | 2018 | ..         | 32      | ..      | 26      | ..                | 6      | 20         |
|                             | 2019 | ..         | 33      | ..      | 27      | ..                | 6      | 21         |
| New Zealand                 | 2016 | 1,159      | 211     | 0       | 1,049   | 2                 | 319    | 68         |
|                             | 2017 | 1,221      | 275     | ..      | 1,161   | -15               | 350    | 74         |
|                             | 2018 | 1,325      | 279     | ..      | 1,223   | 118               | 263    | 56         |
|                             | 2019 | 1,330      | 201     | ..      | 1,222   | -8                | 317    | 66         |
| Niue                        | 2016 | ..         | *1      | ..      | *1      | ..                | 0      | *20        |
|                             | 2017 | ..         | *1      | ..      | 0       | ..                | 0      | *15        |
|                             | 2018 | ..         | *1      | ..      | 0       | ..                | 0      | *27        |
|                             | 2019 | ..         | *1      | ..      | 0       | ..                | 0      | *27        |
| Northern Mariana Islands    | 2016 | ..         | *6      | ..      | *4      | ..                | *2     | *36        |
|                             | 2017 | ..         | *7      | ..      | *5      | ..                | *2     | *35        |
|                             | 2018 | ..         | *7      | ..      | *5      | ..                | *2     | *35        |
|                             | 2019 | ..         | *7      | ..      | *5      | ..                | *2     | *35        |
| Palau                       | 2016 | ..         | *11     | ..      | *11     | ..                | 0      | 0          |
|                             | 2017 | ..         | *12     | ..      | *12     | ..                | 0      | 0          |
|                             | 2018 | ..         | *13     | ..      | *13     | ..                | 0      | 0          |
|                             | 2019 | ..         | *14     | ..      | *14     | ..                | 0      | 0          |
| Papua New Guinea            | 2016 | 106        | 63      | 0       | *63     | 0                 | 106    | 13         |
|                             | 2017 | 100        | 30      | ..      | *58     | 1                 | 71     | 8          |
|                             | 2018 | 56         | 71      | ..      | 59      | -1                | 69     | 8          |
|                             | 2019 | *59        | *75     | ..      | *59     | 0                 | *75    | *8         |
| Solomon Islands             | 2016 | ..         | *5      | ..      | *4      | ..                | *1     | *1         |
|                             | 2017 | ..         | *5      | ..      | *4      | ..                | *1     | *1         |
|                             | 2018 | ..         | *5      | ..      | *4      | ..                | *1     | *1         |
|                             | 2019 | ..         | *5      | ..      | *4      | ..                | *1     | *1         |
| Tonga                       | 2016 | ..         | 3       | ..      | *3      | 0                 | 0      | 1          |
|                             | 2017 | ..         | 5       | ..      | *5      | 0                 | 0      | 1          |
|                             | 2018 | ..         | 4       | ..      | *4      | ..                | 0      | 2          |
|                             | 2019 | ..         | 4       | ..      | *4      | ..                | 0      | 1          |

Table 20

### Production, trade and supply of jet fuels

Thousand metric tons and kilograms per capita

| Country or area       | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|-----------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                       |      |            |         |         |         |                   | Total  | Per capita |
| Vanuatu               | 2016 | ..         | *7      | ..      | *7      | ..                | 0      | 0          |
|                       | 2017 | ..         | *7      | ..      | *7      | ..                | 0      | 0          |
|                       | 2018 | ..         | *8      | ..      | *8      | ..                | 0      | 0          |
|                       | 2019 | ..         | *8      | ..      | *8      | ..                | 0      | 0          |
| Wallis and Futuna Is. | 2016 | ..         | *1      | ..      | 1       | ..                | 0      | 0          |
|                       | 2017 | ..         | *1      | ..      | 1       | ..                | 0      | 0          |
|                       | 2018 | ..         | *1      | ..      | 1       | ..                | 0      | 0          |
|                       | 2019 | ..         | *1      | ..      | 1       | ..                | 0      | 0          |

### Production, trade and supply of gas oil/diesel oil

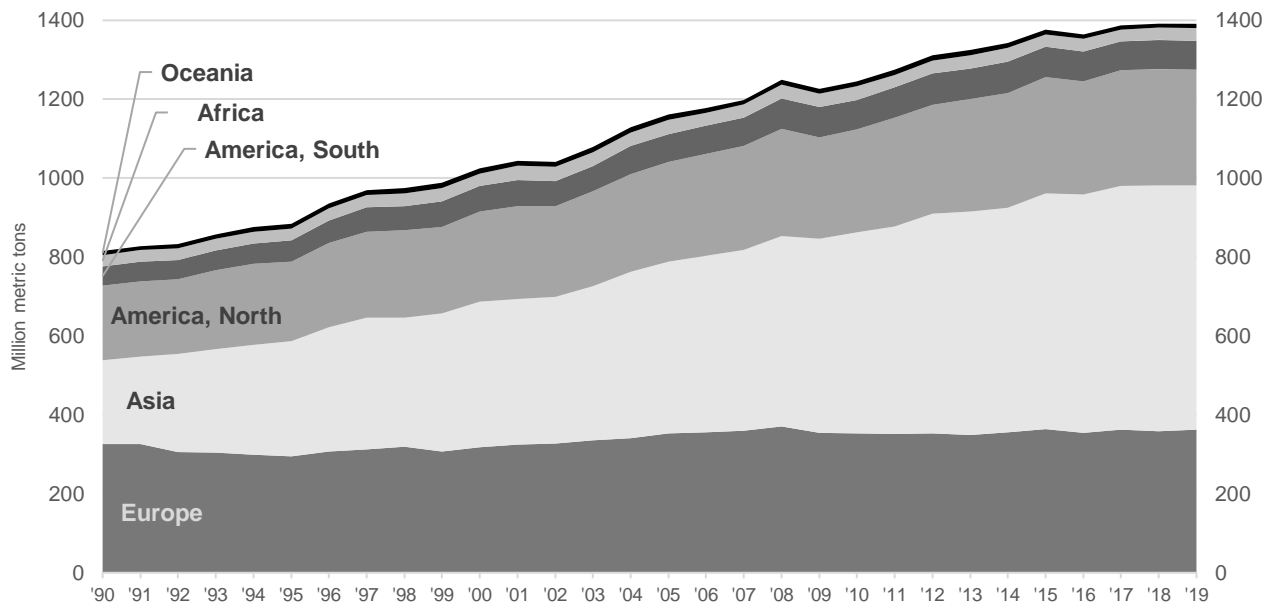
Thousand metric tons and kilograms per capita

#### Table Notes

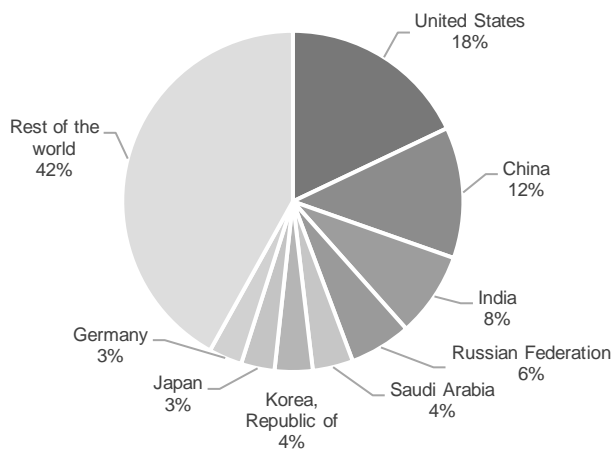
**Production** includes output from refineries and plants, together with quantities from other sources which include any blended biodiesel.

Please refer to the Definitions Section on pages ix to xv for the appropriate product description/ classification, and xvi to xvii for the descriptions of relevant flows.

**Figure 57: Production of gas oil/diesel oil by region, 1990-2019**



**Figure 58: Major gas oil/diesel oil producing countries, 2019**



**Figure 59: Major gas oil/diesel oil consuming countries, 2019**

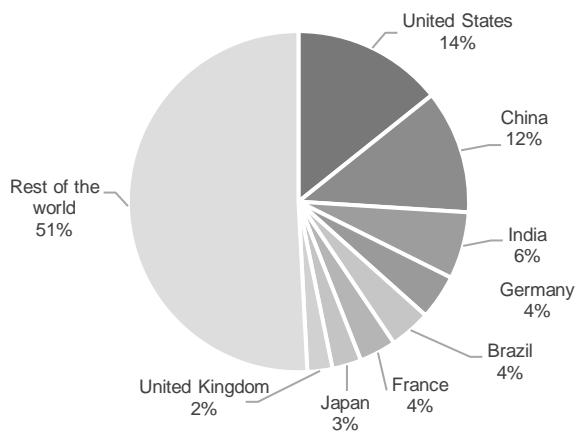


Table 21

## Production, trade and supply of gas oil/diesel oil

Thousand metric tons and kilograms per capita

| Country or area      | Year        | Production       | Imports        | Exports        | Bunkers       | Changes in stocks | Supply           |            |
|----------------------|-------------|------------------|----------------|----------------|---------------|-------------------|------------------|------------|
|                      |             |                  |                |                |               |                   | Total            | Per capita |
| <b>World</b>         | <b>2016</b> | <b>1,364,032</b> | <b>392,435</b> | <b>406,261</b> | <b>43,635</b> | <b>3,151</b>      | <b>1,303,421</b> | <b>175</b> |
|                      | <b>2017</b> | <b>1,386,742</b> | <b>394,557</b> | <b>417,020</b> | <b>46,157</b> | <b>-8,327</b>     | <b>1,326,450</b> | <b>176</b> |
|                      | <b>2018</b> | <b>1,391,497</b> | <b>391,437</b> | <b>416,065</b> | <b>41,591</b> | <b>-3,406</b>     | <b>1,328,684</b> | <b>174</b> |
|                      | <b>2019</b> | <b>1,391,054</b> | <b>378,794</b> | <b>426,433</b> | <b>38,507</b> | <b>-250</b>       | <b>1,305,158</b> | <b>169</b> |
| <b>Africa</b>        | <b>2016</b> | <b>32,454</b>    | <b>51,286</b>  | <b>4,197</b>   | <b>2,425</b>  | <b>-275</b>       | <b>77,393</b>    | <b>64</b>  |
|                      | <b>2017</b> | <b>30,608</b>    | <b>52,396</b>  | <b>3,262</b>   | <b>1,686</b>  | <b>-455</b>       | <b>78,510</b>    | <b>63</b>  |
|                      | <b>2018</b> | <b>31,534</b>    | <b>49,795</b>  | <b>3,324</b>   | <b>2,206</b>  | <b>-157</b>       | <b>75,957</b>    | <b>60</b>  |
|                      | <b>2019</b> | <b>33,639</b>    | <b>52,936</b>  | <b>2,770</b>   | <b>2,195</b>  | <b>-129</b>       | <b>81,740</b>    | <b>63</b>  |
| Algeria              | 2016        | 8,892            | 1,459          | ..             | 57            | 100               | 10,194           | 251        |
|                      | 2017        | 8,537            | 1,413          | ..             | 64            | -186              | 10,072           | 243        |
|                      | 2018        | 10,189           | 247            | ..             | 58            | 188               | 10,190           | 241        |
|                      | 2019        | 9,590            | 913            | ..             | 10            | -23               | 10,516           | 244        |
| Angola               | 2016        | 599              | 2,353          | 30             | ..            | ..                | 2,922            | 101        |
|                      | 2017        | 607              | 2,092          | 28             | ..            | ..                | 2,671            | 90         |
|                      | 2018        | 436              | 1,096          | 26             | ..            | *-518             | 2,024            | 66         |
|                      | 2019        | 615              | 1,326          | 11             | ..            | ..                | 1,930            | 61         |
| Benin                | 2016        | ..               | 691            | ..             | ..            | -34               | 725              | 67         |
|                      | 2017        | ..               | 760            | ..             | 0             | -1                | 761              | 68         |
|                      | 2018        | ..               | 862            | ..             | ..            | -7                | 869              | 76         |
|                      | 2019        | ..               | 864            | ..             | 0             | -10               | 873              | 74         |
| Botswana             | 2016        | ..               | 459            | ..             | ..            | ..                | 459              | 212        |
|                      | 2017        | ..               | 444            | ..             | ..            | ..                | 444              | 201        |
|                      | 2018        | ..               | 450            | ..             | ..            | ..                | 450              | 200        |
|                      | 2019        | ..               | 456            | ..             | ..            | ..                | 456              | 198        |
| Burkina Faso         | 2016        | ..               | 418            | ..             | ..            | -145              | 564              | 30         |
|                      | 2017        | ..               | 522            | ..             | ..            | -68               | 590              | 31         |
|                      | 2018        | ..               | 664            | ..             | ..            | *35               | 629              | 32         |
|                      | 2019        | ..               | 610            | ..             | ..            | *-76              | 686              | 34         |
| Burundi              | 2016        | ..               | *56            | ..             | ..            | 0                 | *56              | *5         |
|                      | 2017        | ..               | *66            | ..             | ..            | ..                | *66              | *6         |
|                      | 2018        | ..               | *78            | ..             | ..            | ..                | *78              | *7         |
|                      | 2019        | ..               | *81            | ..             | ..            | ..                | *81              | *7         |
| Cabo Verde           | 2016        | ..               | *111           | ..             | *35           | ..                | *76              | *143       |
|                      | 2017        | ..               | *119           | ..             | 37            | ..                | *82              | *152       |
|                      | 2018        | ..               | *124           | ..             | *39           | ..                | *85              | *157       |
|                      | 2019        | ..               | *125           | ..             | *40           | ..                | *85              | *155       |
| Cameroon             | 2016        | 572              | 339            | 133            | ..            | ..                | 778              | 33         |
|                      | 2017        | 471              | 442            | 109            | ..            | ..                | 804              | 33         |
|                      | 2018        | 427              | 505            | 99             | ..            | ..                | 833              | 33         |
|                      | 2019        | 221              | 651            | 51             | ..            | ..                | 821              | 32         |
| Central African Rep. | 2016        | ..               | *40            | ..             | ..            | ..                | *40              | *9         |
|                      | 2017        | ..               | *41            | ..             | ..            | ..                | *41              | *9         |
|                      | 2018        | ..               | *42            | ..             | ..            | ..                | *42              | *9         |
|                      | 2019        | ..               | *43            | ..             | ..            | ..                | *43              | *9         |
| Chad                 | 2016        | *275             | *159           | 84             | ..            | ..                | *350             | *24        |
|                      | 2017        | *272             | *152           | 84             | ..            | ..                | *340             | *23        |
|                      | 2018        | *265             | *169           | 86             | ..            | ..                | *348             | *22        |
|                      | 2019        | *270             | *170           | 87             | ..            | ..                | *353             | *22        |
| Comoros              | 2016        | ..               | *40            | ..             | ..            | ..                | *40              | *50        |
|                      | 2017        | ..               | *46            | ..             | ..            | ..                | *46              | *57        |
|                      | 2018        | ..               | *50            | ..             | ..            | ..                | *50              | *60        |
|                      | 2019        | ..               | *55            | ..             | ..            | ..                | *55              | *65        |



## Production, trade and supply of gas oil/diesel oil

Thousand metric tons and kilograms per capita

| Country or area        | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|------------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                        |      |            |         |         |         |                   | Total  | Per capita |
| Congo                  | 2016 | 168        | 176     | ..      | ..      | ..                | 344    | 69         |
|                        | 2017 | 214        | 76      | ..      | ..      | ..                | 290    | 57         |
|                        | 2018 | 217        | 79      | ..      | ..      | ..                | 296    | 56         |
|                        | 2019 | 221        | 80      | ..      | ..      | ..                | 301    | 56         |
| Côte d'Ivoire          | 2016 | 1,237      | ..      | 226     | 72      | 0                 | 939    | 39         |
|                        | 2017 | *1,222     | ..      | 180     | 69      | ..                | *973   | *40        |
|                        | 2018 | 1,241      | ..      | 184     | 74      | ..                | 983    | 39         |
|                        | 2019 | 1,411      | ..      | 256     | 79      | ..                | 1,076  | 42         |
| Dem. Rep. of the Congo | 2016 | ..         | 362     | ..      | ..      | ..                | 362    | 5          |
|                        | 2017 | ..         | 419     | ..      | ..      | ..                | 419    | 5          |
|                        | 2018 | ..         | 394     | ..      | ..      | ..                | 394    | 5          |
|                        | 2019 | ..         | 383     | ..      | ..      | ..                | 383    | 4          |
| Djibouti               | 2016 | ..         | 85      | ..      | *10     | *9                | 66     | 71         |
|                        | 2017 | ..         | 80      | ..      | *10     | *6                | 64     | 67         |
|                        | 2018 | ..         | *80     | ..      | *10     | *10               | *60    | *63        |
|                        | 2019 | ..         | *80     | ..      | *10     | *10               | *60    | *62        |
| Egypt                  | 2016 | 7,183      | 7,591   | ..      | 31      | ..                | 14,743 | 156        |
|                        | 2017 | 7,403      | 7,468   | ..      | 30      | ..                | 14,841 | 154        |
|                        | 2018 | 7,640      | 6,533   | 713     | 62      | ..                | 13,398 | 136        |
|                        | 2019 | 8,046      | 5,751   | ..      | 58      | ..                | 13,740 | 137        |
| Equatorial Guinea      | 2016 | ..         | *160    | ..      | ..      | ..                | *160   | *132       |
|                        | 2017 | ..         | *167    | ..      | ..      | ..                | *167   | *132       |
|                        | 2018 | ..         | *149    | ..      | ..      | ..                | *149   | *114       |
|                        | 2019 | ..         | *165    | ..      | ..      | ..                | *165   | *122       |
| Eritrea                | 2016 | ..         | 85      | ..      | ..      | ..                | 85     | 25         |
|                        | 2017 | ..         | 107     | ..      | ..      | ..                | 107    | 31         |
|                        | 2018 | ..         | 119     | ..      | ..      | ..                | 119    | 35         |
|                        | 2019 | ..         | 123     | ..      | ..      | ..                | 123    | 35         |
| Eswatini               | 2016 | ..         | 141     | ..      | ..      | ..                | 141    | 127        |
|                        | 2017 | ..         | 142     | ..      | ..      | ..                | 142    | 127        |
|                        | 2018 | ..         | 148     | ..      | ..      | ..                | 148    | 130        |
|                        | 2019 | ..         | *157    | ..      | ..      | ..                | *157   | *137       |
| Ethiopia               | 2016 | ..         | 2,235   | ..      | ..      | -4                | 2,239  | 22         |
|                        | 2017 | ..         | 2,513   | ..      | ..      | -101              | 2,614  | 25         |
|                        | 2018 | ..         | 2,729   | ..      | ..      | -30               | 2,759  | 25         |
|                        | 2019 | ..         | 3,307   | ..      | ..      | ..                | 3,307  | 30         |
| Gabon                  | 2016 | 234        | 450     | 6       | 74      | ..                | 604    | 301        |
|                        | 2017 | 254        | *237    | 13      | 32      | ..                | 446    | 216        |
|                        | 2018 | 233        | 205     | ..      | 30      | ..                | 408    | 193        |
|                        | 2019 | 189        | *301    | 10      | 35      | ..                | *445   | *205       |
| Gambia                 | 2016 | ..         | 94      | *1      | ..      | ..                | 93     | 43         |
|                        | 2017 | ..         | 95      | *1      | ..      | ..                | 94     | 43         |
|                        | 2018 | ..         | 99      | *1      | ..      | ..                | 98     | 43         |
|                        | 2019 | ..         | *100    | *1      | ..      | ..                | *99    | *42        |
| Ghana                  | 2016 | 255        | 1,720   | 170     | 2       | 0                 | 1,802  | 63         |
|                        | 2017 | 6          | 1,781   | 190     | 89      | -14               | 1,522  | 52         |
|                        | 2018 | 114        | 1,753   | 35      | 10      | ..                | 1,821  | 61         |
|                        | 2019 | 198        | 1,742   | 117     | 7       | 31                | 1,784  | 59         |
| Guinea                 | 2016 | ..         | 404     | ..      | ..      | ..                | 404    | 34         |
|                        | 2017 | ..         | 507     | ..      | ..      | ..                | 507    | 42         |
|                        | 2018 | ..         | 522     | ..      | ..      | ..                | 522    | 42         |
|                        | 2019 | ..         | 597     | ..      | ..      | ..                | 597    | 47         |

Table 21

## Production, trade and supply of gas oil/diesel oil

Thousand metric tons and kilograms per capita

| Country or area | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|-----------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                 |      |            |         |         |         |                   | Total  | Per capita |
| Guinea-Bissau   | 2016 | ..         | *51     | ..      | ..      | ..                | *51    | *29        |
|                 | 2017 | ..         | *51     | ..      | ..      | ..                | *51    | *28        |
|                 | 2018 | ..         | *54     | ..      | ..      | ..                | *54    | *29        |
|                 | 2019 | ..         | *55     | ..      | ..      | ..                | *55    | *29        |
| Kenya           | 2016 | 0          | 3,255   | 1,025   | 0       | ..                | 2,229  | 45         |
|                 | 2017 | 0          | 2,853   | 767     | ..      | ..                | 2,086  | 42         |
|                 | 2018 | ..         | 2,324   | ..      | 3       | ..                | 2,321  | 45         |
|                 | 2019 | ..         | 2,548   | ..      | ..      | ..                | 2,548  | 48         |
| Lesotho         | 2016 | ..         | 88      | ..      | ..      | ..                | 88     | 43         |
|                 | 2017 | ..         | 82      | ..      | ..      | ..                | 82     | 39         |
|                 | 2018 | ..         | 87      | ..      | ..      | ..                | 87     | 41         |
|                 | 2019 | ..         | 99      | ..      | ..      | ..                | 99     | 47         |
| Liberia         | 2016 | ..         | *263    | ..      | *9      | ..                | *254   | *55        |
|                 | 2017 | ..         | *230    | ..      | *5      | ..                | *225   | *48        |
|                 | 2018 | ..         | *197    | ..      | *4      | ..                | *193   | *40        |
|                 | 2019 | ..         | *200    | ..      | *4      | ..                | *196   | *40        |
| Libya           | 2016 | 917        | 2,161   | ..      | ..      | ..                | 3,078  | 474        |
|                 | 2017 | 1,332      | 2,044   | ..      | ..      | ..                | 3,376  | 513        |
|                 | 2018 | 1,563      | 1,816   | ..      | ..      | ..                | 3,378  | 506        |
|                 | 2019 | 1,302      | 2,061   | ..      | ..      | ..                | 3,363  | 496        |
| Madagascar      | 2016 | ..         | 544     | ..      | 1       | 35                | 508    | 20         |
|                 | 2017 | ..         | 502     | ..      | 5       | -46               | 544    | 21         |
|                 | 2018 | ..         | 456     | ..      | 2       | -42               | 496    | 19         |
|                 | 2019 | ..         | 550     | ..      | 2       | 14                | 534    | 20         |
| Malawi          | 2016 | ..         | 166     | ..      | ..      | ..                | 166    | 10         |
|                 | 2017 | ..         | 197     | ..      | ..      | ..                | 197    | 11         |
|                 | 2018 | ..         | 238     | ..      | ..      | ..                | 238    | 13         |
|                 | 2019 | ..         | 223     | ..      | ..      | ..                | 223    | 12         |
| Mali            | 2016 | ..         | *780    | ..      | ..      | *30               | *750   | *42        |
|                 | 2017 | ..         | *820    | ..      | ..      | *10               | *810   | *44        |
|                 | 2018 | ..         | *850    | ..      | ..      | *10               | *840   | *44        |
|                 | 2019 | ..         | *864    | ..      | ..      | *10               | *854   | *43        |
| Mauritania      | 2016 | ..         | 553     | ..      | ..      | ..                | 553    | 133        |
|                 | 2017 | ..         | 784     | ..      | ..      | *52               | 732    | 171        |
|                 | 2018 | ..         | 1,033   | ..      | ..      | *256              | 777    | 176        |
|                 | 2019 | ..         | 1,097   | ..      | ..      | *276              | 821    | 181        |
| Mauritius       | 2016 | ..         | 339     | ..      | 120     | 11                | 208    | 165        |
|                 | 2017 | ..         | 347     | ..      | 129     | 6                 | 212    | 168        |
|                 | 2018 | ..         | 330     | ..      | 146     | -31               | 215    | 169        |
|                 | 2019 | ..         | 334     | ..      | 141     | -29               | 222    | 174        |
| Morocco         | 2016 | 0          | 5,536   | 1       | 23      | -131              | 5,643  | 158        |
|                 | 2017 | ..         | 5,771   | ..      | 23      | -118              | 5,866  | 162        |
|                 | 2018 | ..         | 5,907   | ..      | 23      | -149              | 6,033  | 165        |
|                 | 2019 | ..         | 6,056   | ..      | 23      | -280              | 6,313  | 170        |
| Mozambique      | 2016 | ..         | 1,282   | ..      | ..      | 18                | 1,264  | 45         |
|                 | 2017 | ..         | 967     | ..      | 2       | ..                | 965    | 34         |
|                 | 2018 | ..         | 1,014   | ..      | 8       | ..                | 1,006  | 34         |
|                 | 2019 | ..         | 1,011   | ..      | 9       | ..                | 1,002  | 33         |
| Namibia         | 2016 | ..         | 807     | ..      | ..      | ..                | 807    | 342        |
|                 | 2017 | ..         | 819     | ..      | ..      | ..                | 819    | 341        |
|                 | 2018 | ..         | 776     | ..      | ..      | ..                | 776    | 317        |
|                 | 2019 | ..         | 760     | ..      | ..      | ..                | 760    | 305        |

Table 21

## Production, trade and supply of gas oil/diesel oil

Thousand metric tons and kilograms per capita

| Country or area        | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|------------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                        |      |            |         |         |         |                   | Total  | Per capita |
| Niger                  | 2016 | 352        | 11      | 202     | ..      | *-92              | 252    | 12         |
|                        | 2017 | 520        | 20      | *253    | ..      | *21               | 265    | 12         |
|                        | 2018 | 492        | 3       | *221    | ..      | *36               | 238    | 11         |
|                        | 2019 | 382        | 5       | *91     | ..      | ..                | 296    | 13         |
| Nigeria                | 2016 | 685        | 3,833   | ..      | 97      | ..                | 4,421  | 24         |
|                        | 2017 | 900        | 3,651   | ..      | 98      | ..                | 4,453  | 23         |
|                        | 2018 | 347        | 3,427   | ..      | 103     | ..                | 3,672  | 19         |
|                        | 2019 | 81         | 4,186   | ..      | 106     | ..                | 4,160  | 21         |
| Rwanda                 | 2016 | ..         | 137     | ..      | ..      | ..                | 137    | 12         |
|                        | 2017 | ..         | 149     | ..      | ..      | ..                | 149    | 12         |
|                        | 2018 | ..         | 155     | ..      | ..      | ..                | 155    | 13         |
|                        | 2019 | ..         | 227     | ..      | ..      | ..                | 227    | 18         |
| Sao Tome and Principe  | 2016 | ..         | *27     | ..      | ..      | ..                | *27    | *133       |
|                        | 2017 | ..         | *28     | ..      | ..      | ..                | *28    | *136       |
|                        | 2018 | ..         | *29     | ..      | ..      | ..                | *29    | *136       |
|                        | 2019 | ..         | *29     | ..      | ..      | ..                | *29    | *136       |
| Senegal                | 2016 | 629        | 1,056   | 676     | 134     | -63               | 938    | 63         |
|                        | 2017 | 679        | *489    | 84      | 113     | 0                 | 971    | 63         |
|                        | 2018 | 576        | 1,002   | *356    | *130    | *124              | 968    | 61         |
|                        | 2019 | 522        | 1,279   | *590    | 194     | -21               | 1,038  | 64         |
| Seychelles             | 2016 | ..         | 237     | ..      | *153    | *20               | 64     | 667        |
|                        | 2017 | ..         | 223     | ..      | 161     | *10               | 53     | 546        |
|                        | 2018 | ..         | 202     | ..      | *141    | 0                 | 61     | 629        |
|                        | 2019 | ..         | 183     | ..      | *110    | 0                 | 73     | 748        |
| Sierra Leone           | 2016 | ..         | 187     | ..      | ..      | ..                | 187    | 25         |
|                        | 2017 | ..         | 171     | ..      | ..      | ..                | 171    | 23         |
|                        | 2018 | ..         | 146     | ..      | ..      | ..                | 146    | 19         |
|                        | 2019 | ..         | 155     | ..      | ..      | ..                | 155    | 20         |
| Somalia                | 2016 | ..         | *126    | ..      | 16      | ..                | *110   | *8         |
|                        | 2017 | ..         | *126    | ..      | *16     | ..                | *110   | *8         |
|                        | 2018 | ..         | *126    | ..      | *16     | ..                | *110   | *7         |
|                        | 2019 | ..         | *126    | ..      | *16     | ..                | *110   | *7         |
| South Africa           | 2016 | 7,845      | 3,851   | 1,642   | 1,563   | ..                | 8,491  | 151        |
|                        | 2017 | *5,861     | 5,253   | 1,553   | 751     | ..                | 8,811  | 155        |
|                        | 2018 | 5,417      | 5,311   | 1,603   | 1,310   | ..                | 7,815  | 135        |
|                        | 2019 | 8,539      | 5,096   | 1,554   | 1,312   | ..                | 10,769 | 184        |
| South Sudan            | 2016 | ..         | 417     | ..      | ..      | ..                | 417    | 38         |
|                        | 2017 | ..         | 350     | ..      | ..      | ..                | 350    | 32         |
|                        | 2018 | ..         | 363     | ..      | ..      | ..                | 363    | 33         |
|                        | 2019 | ..         | 393     | ..      | ..      | ..                | 393    | 36         |
| St. Helena and Depend. | 2016 | ..         | 4       | ..      | ..      | ..                | 4      | 636        |
|                        | 2017 | ..         | 3       | ..      | ..      | ..                | 3      | 419        |
|                        | 2018 | ..         | 3       | ..      | ..      | ..                | 3      | 539        |
|                        | 2019 | ..         | 4       | ..      | ..      | ..                | 4      | 602        |
| Sudan                  | 2016 | 1,960      | 1,199   | ..      | 26      | ..                | 3,134  | 79         |
|                        | 2017 | 1,797      | 1,612   | ..      | 27      | ..                | 3,382  | 83         |
|                        | 2018 | 1,696      | 1,609   | ..      | *28     | ..                | 3,276  | 78         |
|                        | 2019 | *1,717     | *1,629  | ..      | *28     | ..                | *3,318 | *77        |
| Togo                   | 2016 | ..         | 83      | ..      | ..      | -10               | 93     | 12         |
|                        | 2017 | ..         | 161     | ..      | 19      | -15               | 157    | 20         |
|                        | 2018 | ..         | 173     | ..      | ..      | -4                | 177    | 22         |
|                        | 2019 | ..         | 173     | ..      | ..      | ..                | 173    | 21         |

Table 21

## Production, trade and supply of gas oil/diesel oil

Thousand metric tons and kilograms per capita

| Country or area         | Year        | Production     | Imports       | Exports       | Bunkers       | Changes in stocks | Supply         |            |
|-------------------------|-------------|----------------|---------------|---------------|---------------|-------------------|----------------|------------|
|                         |             |                |               |               |               |                   | Total          | Per capita |
| Tunisia                 | 2016        | 439            | 1,505         | ..            | 2             | -19               | 1,961          | 173        |
|                         | 2017        | 314            | 1,731         | ..            | 7             | -11               | 2,049          | 179        |
|                         | 2018        | 407            | 1,675         | ..            | 10            | -36               | 2,108          | 182        |
|                         | 2019        | 41             | 1,914         | ..            | 10            | -31               | 1,976          | 169        |
| Uganda                  | 2016        | ..             | 746           | ..            | ..            | ..                | 746            | 19         |
|                         | 2017        | ..             | 823           | ..            | ..            | ..                | 823            | 20         |
|                         | 2018        | ..             | 855           | ..            | ..            | ..                | 855            | 20         |
|                         | 2019        | ..             | 881           | ..            | ..            | ..                | 881            | 20         |
| United Rep. of Tanzania | 2016        | ..             | 1,185         | ..            | ..            | ..                | 1,185          | 22         |
|                         | 2017        | ..             | 1,271         | ..            | ..            | ..                | 1,271          | 23         |
|                         | 2018        | ..             | 1,343         | ..            | ..            | ..                | 1,343          | 24         |
|                         | 2019        | ..             | 1,351         | ..            | ..            | ..                | 1,351          | 23         |
| Zambia                  | 2016        | 213            | 611           | ..            | ..            | ..                | 824            | 50         |
|                         | 2017        | 217            | 540           | ..            | ..            | ..                | 756            | 45         |
|                         | 2018        | 274            | 421           | ..            | ..            | ..                | 695            | 40         |
|                         | 2019        | 294            | 575           | ..            | ..            | ..                | 869            | 49         |
| Zimbabwe                | 2016        | ..             | 619           | ..            | ..            | ..                | 619            | 44         |
|                         | 2017        | ..             | 642           | ..            | ..            | ..                | 642            | 45         |
|                         | 2018        | ..             | 777           | ..            | ..            | ..                | 777            | 54         |
|                         | 2019        | ..             | 790           | ..            | ..            | ..                | 790            | 54         |
| <b>America, North</b>   | <b>2016</b> | <b>286,198</b> | <b>30,853</b> | <b>68,337</b> | <b>8,172</b>  | <b>79</b>         | <b>240,464</b> | <b>420</b> |
|                         | <b>2017</b> | <b>292,618</b> | <b>33,647</b> | <b>77,529</b> | <b>10,044</b> | <b>-3,267</b>     | <b>241,959</b> | <b>419</b> |
|                         | <b>2018</b> | <b>294,167</b> | <b>37,008</b> | <b>71,305</b> | <b>8,875</b>  | <b>-816</b>       | <b>251,812</b> | <b>433</b> |
|                         | <b>2019</b> | <b>293,271</b> | <b>36,787</b> | <b>73,192</b> | <b>11,913</b> | <b>-1,450</b>     | <b>246,403</b> | <b>420</b> |
| Anguilla                | 2016        | ..             | *34           | ..            | ..            | ..                | *34            | *2,383     |
|                         | 2017        | ..             | *31           | ..            | ..            | ..                | *31            | *2,125     |
|                         | 2018        | ..             | *32           | ..            | ..            | ..                | *32            | *2,171     |
|                         | 2019        | ..             | *35           | ..            | ..            | ..                | *35            | *2,320     |
| Antigua and Barbuda     | 2016        | ..             | *67           | *1            | ..            | ..                | *66            | *698       |
|                         | 2017        | ..             | *67           | *1            | ..            | ..                | *66            | *692       |
|                         | 2018        | ..             | *68           | *1            | ..            | ..                | *67            | *696       |
|                         | 2019        | ..             | *68           | *1            | ..            | ..                | *67            | *690       |
| Aruba                   | 2016        | ..             | *23           | ..            | ..            | ..                | *23            | *216       |
|                         | 2017        | ..             | *24           | ..            | ..            | ..                | *24            | *223       |
|                         | 2018        | ..             | *24           | ..            | ..            | ..                | *24            | *224       |
|                         | 2019        | ..             | *24           | ..            | ..            | ..                | *24            | *225       |
| Bahamas                 | 2016        | ..             | 310           | ..            | ..            | -193              | 503            | 1,331      |
|                         | 2017        | ..             | 334           | ..            | ..            | *-144             | 478            | 1,252      |
|                         | 2018        | ..             | 403           | ..            | ..            | *-117             | 520            | 1,348      |
|                         | 2019        | ..             | 585           | ..            | ..            | *46               | 539            | 1,384      |
| Barbados                | 2016        | ..             | 68            | ..            | ..            | 0                 | 68             | 237        |
|                         | 2017        | ..             | 73            | ..            | ..            | -1                | 74             | 257        |
|                         | 2018        | ..             | 68            | ..            | ..            | -6                | 74             | 260        |
|                         | 2019        | ..             | 78            | ..            | ..            | 0                 | 78             | 273        |
| Belize                  | 2016        | ..             | 84            | ..            | ..            | ..                | 84             | 229        |
|                         | 2017        | ..             | 78            | ..            | ..            | ..                | 78             | 207        |
|                         | 2018        | ..             | 69            | ..            | ..            | ..                | 69             | 180        |
|                         | 2019        | ..             | 88            | ..            | ..            | ..                | 88             | 227        |
| Bermuda                 | 2016        | ..             | 24            | ..            | ..            | -10               | 34             | 534        |
|                         | 2017        | ..             | 70            | ..            | ..            | *15               | 55             | 872        |
|                         | 2018        | ..             | 37            | ..            | ..            | 0                 | 37             | 591        |
|                         | 2019        | ..             | 29            | ..            | ..            | 0                 | 29             | 461        |

Table 21

## Production, trade and supply of gas oil/diesel oil

Thousand metric tons and kilograms per capita

| Country or area             | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|-----------------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                             |      |            |         |         |         |                   | Total  | Per capita |
| Bonaire, St Eustatius, Saba | 2016 | ..         | *22     | ..      | *11     | *4                | *6     | *253       |
|                             | 2017 | ..         | *25     | ..      | *12     | *7                | *7     | *257       |
|                             | 2018 | ..         | *14     | ..      | *11     | *-3               | *7     | *264       |
|                             | 2019 | ..         | *14     | ..      | *11     | *-4               | *7     | *266       |
| British Virgin Islands      | 2016 | ..         | *50     | ..      | ..      | ..                | *50    | *1,703     |
|                             | 2017 | ..         | *40     | ..      | ..      | ..                | *40    | *1,363     |
|                             | 2018 | ..         | *38     | ..      | ..      | ..                | *38    | *1,275     |
|                             | 2019 | ..         | *40     | ..      | ..      | ..                | *40    | *1,332     |
| Canada                      | 2016 | 30,317     | 2,086   | 6,728   | 88      | -273              | 25,860 | 711        |
|                             | 2017 | 32,905     | 1,079   | 8,027   | 87      | 156               | 25,714 | 700        |
|                             | 2018 | 30,618     | 2,164   | 6,397   | 85      | 121               | 26,179 | 706        |
|                             | 2019 | 33,325     | 1,194   | 7,627   | 110     | -751              | 27,533 | 736        |
| Cayman Islands              | 2016 | ..         | 135     | ..      | ..      | ..                | 135    | 2,158      |
|                             | 2017 | ..         | 142     | ..      | ..      | ..                | 142    | 2,240      |
|                             | 2018 | ..         | 144     | ..      | ..      | ..                | 144    | 2,242      |
|                             | 2019 | ..         | 164     | ..      | ..      | ..                | 164    | 2,524      |
| Costa Rica                  | 2016 | ..         | 992     | ..      | ..      | -20               | 1,012  | 207        |
|                             | 2017 | ..         | 1,045   | ..      | ..      | 9                 | 1,037  | 209        |
|                             | 2018 | ..         | 1,014   | ..      | ..      | -12               | 1,026  | 205        |
|                             | 2019 | ..         | 1,017   | ..      | ..      | -14               | 1,032  | 204        |
| Cuba                        | 2016 | 558        | 1,277   | *176    | *31     | ..                | 1,629  | 144        |
|                             | 2017 | 714        | 1,378   | *356    | *29     | ..                | 1,707  | 151        |
|                             | 2018 | 703        | 1,178   | *257    | *30     | ..                | 1,595  | 141        |
|                             | 2019 | *632       | *1,130  | *304    | *32     | ..                | *1,426 | *126       |
| Curaçao                     | 2016 | 1,611      | 524     | 1,598   | 199     | ..                | 338    | 2,099      |
|                             | 2017 | 845        | 517     | 838     | 199     | ..                | 325    | 2,006      |
|                             | 2018 | 641        | 535     | 636     | 199     | ..                | 341    | 2,097      |
|                             | 2019 | 0          | 592     | 0       | 200     | ..                | 392    | 2,400      |
| Dominica                    | 2016 | ..         | *30     | ..      | ..      | *-1               | *31    | *431       |
|                             | 2017 | ..         | *29     | ..      | ..      | *2                | *27    | *380       |
|                             | 2018 | ..         | *29     | ..      | ..      | *2                | *27    | *374       |
|                             | 2019 | ..         | *31     | ..      | ..      | *2                | *29    | *403       |
| Dominican Republic          | 2016 | 316        | 1,193   | ..      | ..      | -22               | 1,532  | 147        |
|                             | 2017 | 274        | 1,072   | ..      | ..      | 28                | 1,318  | 125        |
|                             | 2018 | 356        | 1,094   | ..      | ..      | 0                 | 1,450  | 136        |
|                             | 2019 | 328        | 1,215   | ..      | ..      | 0                 | 1,543  | 144        |
| El Salvador                 | 2016 | ..         | 678     | 24      | ..      | ..                | 654    | 103        |
|                             | 2017 | ..         | 687     | 19      | ..      | ..                | 668    | 105        |
|                             | 2018 | ..         | 702     | 8       | ..      | ..                | 694    | 108        |
|                             | 2019 | ..         | 722     | 3       | ..      | ..                | 719    | 111        |
| Greenland                   | 2016 | ..         | 136     | ..      | 16      | 1                 | 118    | 2,100      |
|                             | 2017 | ..         | 135     | ..      | 18      | -2                | 120    | 2,122      |
|                             | 2018 | ..         | *122    | ..      | *17     | ..                | *105   | *1,852     |
|                             | 2019 | ..         | *124    | ..      | *17     | ..                | *107   | *1,897     |
| Grenada                     | 2016 | ..         | 63      | ..      | ..      | 4                 | 59     | 535        |
|                             | 2017 | ..         | 66      | ..      | ..      | 4                 | 61     | 552        |
|                             | 2018 | ..         | 68      | ..      | ..      | 0                 | 68     | 610        |
|                             | 2019 | ..         | 76      | ..      | ..      | ..                | 76     | 678        |
| Guatemala                   | 2016 | 43         | 1,750   | 67      | 393     | 25                | 1,307  | 79         |
|                             | 2017 | 47         | 1,685   | 18      | 412     | -18               | 1,321  | 78         |
|                             | 2018 | 50         | 1,642   | 6       | 423     | -93               | 1,357  | 79         |
|                             | 2019 | 57         | 1,883   | 9       | 423     | 33                | 1,475  | 84         |

Table 21

## Production, trade and supply of gas oil/diesel oil

Thousand metric tons and kilograms per capita

| Country or area           | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|---------------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                           |      |            |         |         |         |                   | Total  | Per capita |
| Haiti                     | 2016 | ..         | 520     | ..      | ..      | ..                | 520    | 48         |
|                           | 2017 | ..         | 510     | ..      | ..      | ..                | 510    | 46         |
|                           | 2018 | ..         | 539     | ..      | ..      | ..                | 539    | 48         |
|                           | 2019 | ..         | 481     | ..      | ..      | ..                | 481    | 43         |
| Honduras                  | 2016 | ..         | 946     | 3       | ..      | 38                | 905    | 98         |
|                           | 2017 | ..         | 935     | ..      | ..      | 76                | 859    | 91         |
|                           | 2018 | ..         | 915     | 2       | ..      | 35                | 878    | 92         |
|                           | 2019 | ..         | 933     | 20      | ..      | ..                | 912    | 94         |
| Jamaica                   | 2016 | 130        | 263     | ..      | 30      | -17               | 380    | 131        |
|                           | 2017 | 108        | 250     | ..      | 51      | 12                | 295    | 101        |
|                           | 2018 | 102        | 316     | 39      | 44      | -3                | 338    | 115        |
|                           | 2019 | 125        | 338     | ..      | 61      | -2                | 404    | 137        |
| Mexico                    | 2016 | 11,580     | 9,291   | 749     | 798     | -301              | 19,625 | 159        |
|                           | 2017 | 11,165     | 12,680  | 192     | 712     | -185              | 23,126 | 185        |
|                           | 2018 | 8,485      | 13,804  | 195     | 729     | 78                | 21,287 | 169        |
|                           | 2019 | 8,964      | 12,167  | 601     | 705     | -422              | 20,247 | 159        |
| Montserrat                | 2016 | ..         | 7       | ..      | *1      | ..                | 6      | 1,185      |
|                           | 2017 | ..         | 6       | ..      | *1      | ..                | 5      | 902        |
|                           | 2018 | ..         | 6       | ..      | *1      | ..                | 5      | 981        |
|                           | 2019 | ..         | 5       | ..      | *1      | ..                | 4      | 862        |
| Nicaragua                 | 2016 | 137        | 476     | 0       | ..      | 8                 | 605    | 96         |
|                           | 2017 | 169        | 461     | 0       | ..      | -12               | 642    | 101        |
|                           | 2018 | 210        | 379     | ..      | ..      | -2                | 592    | 92         |
|                           | 2019 | 233        | 351     | 0       | ..      | 7                 | 576    | 88         |
| Panama                    | 2016 | ..         | 1,100   | ..      | ..      | -59               | 1,159  | 287        |
|                           | 2017 | ..         | 1,162   | ..      | ..      | -204              | 1,366  | 333        |
|                           | 2018 | ..         | 1,171   | ..      | ..      | -125              | 1,295  | 310        |
|                           | 2019 | ..         | 1,211   | ..      | ..      | -18               | 1,229  | 289        |
| Sint Maarten (Dutch part) | 2016 | ..         | *166    | ..      | *66     | ..                | *101   | *2,465     |
|                           | 2017 | ..         | *162    | ..      | *63     | ..                | *99    | *2,379     |
|                           | 2018 | ..         | *158    | ..      | *61     | ..                | *96    | *2,294     |
|                           | 2019 | ..         | *159    | ..      | *62     | ..                | *97    | *2,291     |
| St. Kitts-Nevis           | 2016 | ..         | *58     | ..      | ..      | ..                | *58    | *1,125     |
|                           | 2017 | ..         | *59     | ..      | ..      | ..                | *59    | *1,124     |
|                           | 2018 | ..         | *59     | ..      | ..      | ..                | *59    | *1,129     |
|                           | 2019 | ..         | *60     | ..      | ..      | ..                | *60    | *1,136     |
| St. Lucia                 | 2016 | ..         | *110    | ..      | 1       | ..                | *109   | *607       |
|                           | 2017 | ..         | *114    | ..      | 1       | ..                | *113   | *625       |
|                           | 2018 | ..         | *116    | ..      | 1       | ..                | *114   | *629       |
|                           | 2019 | ..         | *118    | ..      | *1      | ..                | *116   | *637       |
| St. Pierre-Miquelon       | 2016 | ..         | *24     | ..      | *6      | ..                | *17    | *2,921     |
|                           | 2017 | ..         | *24     | ..      | *6      | ..                | *17    | *2,957     |
|                           | 2018 | ..         | *21     | ..      | *5      | ..                | *16    | *2,772     |
|                           | 2019 | ..         | *23     | ..      | *5      | ..                | *18    | *3,024     |
| St. Vincent-Grenadines    | 2016 | ..         | 48      | ..      | ..      | *4                | 44     | 405        |
|                           | 2017 | ..         | 25      | ..      | ..      | *-11              | 36     | 328        |
|                           | 2018 | ..         | 46      | ..      | ..      | *5                | 41     | 370        |
|                           | 2019 | ..         | 30      | ..      | ..      | *-9               | 39     | 354        |
| Trinidad and Tobago       | 2016 | 2,113      | ..      | 1,279   | 334     | 7                 | 493    | 358        |
|                           | 2017 | 1,468      | ..      | 771     | 201     | -7                | 503    | 364        |
|                           | 2018 | 1,178      | ..      | 638     | 166     | -4                | 377    | 272        |
|                           | 2019 | ..         | 783     | 223     | 58      | ..                | 502    | 360        |

Table 21

## Production, trade and supply of gas oil/diesel oil

Thousand metric tons and kilograms per capita

| Country or area          | Year        | Production    | Imports       | Exports      | Bunkers    | Changes in stocks | Supply         |            |
|--------------------------|-------------|---------------|---------------|--------------|------------|-------------------|----------------|------------|
|                          |             |               |               |              |            |                   | Total          | Per capita |
| Turks and Caicos Islands | 2016        | ..            | *70           | ..           | ..         | ..                | *70            | *1,901     |
|                          | 2017        | ..            | *75           | ..           | ..         | ..                | *75            | *2,021     |
|                          | 2018        | ..            | *77           | ..           | ..         | ..                | *77            | *2,031     |
|                          | 2019        | ..            | *77           | ..           | ..         | ..                | *77            | *2,024     |
| United States            | 2016        | 239,393       | 8,229         | 57,712       | 6,198      | 883               | 182,829        | 566        |
|                          | 2017        | 244,922       | 8,607         | 67,307       | 8,252      | -2,993            | 180,963        | 557        |
|                          | 2018        | 251,824       | 9,958         | 63,127       | 7,102      | -692              | 192,244        | 588        |
|                          | 2019        | 249,607       | 10,942        | 64,404       | 10,227     | -318              | 186,236        | 566        |
| <b>America, South</b>    | <b>2016</b> | <b>76,862</b> | <b>29,816</b> | <b>1,630</b> | <b>527</b> | <b>1,373</b>      | <b>103,146</b> | <b>248</b> |
|                          | <b>2017</b> | <b>72,882</b> | <b>31,446</b> | <b>1,984</b> | <b>441</b> | <b>371</b>        | <b>101,532</b> | <b>242</b> |
|                          | <b>2018</b> | <b>74,047</b> | <b>30,758</b> | <b>2,992</b> | <b>740</b> | <b>-176</b>       | <b>101,249</b> | <b>239</b> |
|                          | <b>2019</b> | <b>72,661</b> | <b>29,984</b> | <b>2,564</b> | <b>743</b> | <b>-191</b>       | <b>99,530</b>  | <b>233</b> |
| Argentina                | 2016        | 10,749        | 3,555         | 5            | 69         | 65                | 14,165         | 326        |
|                          | 2017        | 11,024        | 3,029         | 4            | 115        | -9                | 13,943         | 317        |
|                          | 2018        | 10,424        | 2,685         | 33           | 134        | 11                | 12,931         | 291        |
|                          | 2019        | 10,616        | 1,951         | 29           | 80         | -157              | 12,615         | 282        |
| Bolivia (Plur. State of) | 2016        | 814           | 804           | ..           | ..         | -38               | 1,656          | 150        |
|                          | 2017        | 745           | 943           | ..           | ..         | -61               | 1,749          | 156        |
|                          | 2018        | 724           | 1,059         | ..           | ..         | -24               | 1,806          | 159        |
|                          | 2019        | 584           | 1,261         | ..           | ..         | 9                 | 1,835          | 159        |
| Brazil                   | 2016        | 42,840        | 7,360         | 420          | 303        | 217               | 49,260         | 239        |
|                          | 2017        | 39,056        | 11,259        | 439          | 158        | 97                | 49,621         | 239        |
|                          | 2018        | 41,052        | 10,124        | 830          | 412        | -155              | 50,089         | 239        |
|                          | 2019        | 40,713        | 11,304        | 48           | 473        | 196               | 51,300         | 243        |
| Chile                    | 2016        | 2,907         | 5,573         | 57           | 0          | 67                | 8,356          | 459        |
|                          | 2017        | 3,073         | 5,245         | 23           | 0          | 45                | 8,249          | 447        |
|                          | 2018        | 3,052         | 5,497         | 7            | ..         | 0                 | 8,542          | 456        |
|                          | 2019        | 3,077         | 5,506         | 17           | ..         | 0                 | 8,566          | 452        |
| Colombia                 | 2016        | 4,961         | 3,051         | 706          | ..         | ..                | 7,305          | 152        |
|                          | 2017        | 6,163         | 1,026         | 882          | ..         | ..                | 6,307          | 129        |
|                          | 2018        | 7,190         | 621           | 1,599        | ..         | ..                | 6,212          | 125        |
|                          | 2019        | 6,679         | 1,270         | 2,132        | ..         | ..                | 5,816          | 116        |
| Ecuador                  | 2016        | 1,907         | 2,443         | ..           | 16         | -13               | 4,346          | 264        |
|                          | 2017        | 1,902         | 2,417         | ..           | 41         | -11               | 4,289          | 255        |
|                          | 2018        | 1,820         | 2,703         | ..           | 56         | 7                 | 4,460          | 261        |
|                          | 2019        | 1,741         | 2,856         | ..           | 50         | 26                | 4,521          | 260        |
| Falkland Is. (Malvinas)  | 2016        | ..            | 7             | ..           | ..         | ..                | 7              | 2,540      |
|                          | 2017        | ..            | 7             | ..           | ..         | ..                | 7              | 2,393      |
|                          | 2018        | ..            | 8             | ..           | ..         | ..                | 8              | 2,407      |
|                          | 2019        | ..            | 8             | ..           | ..         | ..                | 8              | 2,385      |
| Guyana                   | 2016        | ..            | 323           | ..           | ..         | 0                 | 323            | 419        |
|                          | 2017        | ..            | 323           | ..           | ..         | -6                | 329            | 424        |
|                          | 2018        | ..            | 348           | ..           | ..         | -1                | 349            | 448        |
|                          | 2019        | ..            | 408           | 5            | ..         | -4                | 407            | 519        |
| Paraguay                 | 2016        | ..            | 1,519         | ..           | ..         | 61                | 1,458          | 215        |
|                          | 2017        | ..            | 1,551         | ..           | ..         | -59               | 1,610          | 234        |
|                          | 2018        | ..            | 1,689         | ..           | ..         | 31                | 1,658          | 238        |
|                          | 2019        | ..            | 1,646         | ..           | ..         | 27                | 1,618          | 230        |
| Peru                     | 2016        | 3,786         | 3,596         | 370          | ..         | 1,054             | 5,958          | 193        |
|                          | 2017        | 3,569         | 3,793         | 536          | ..         | 354               | 6,472          | 206        |
|                          | 2018        | 3,236         | 3,574         | 444          | 11         | -42               | 6,398          | 200        |
|                          | 2019        | 3,037         | 3,497         | 265          | 19         | -255              | 6,505          | 200        |

Table 21

## Production, trade and supply of gas oil/diesel oil

Thousand metric tons and kilograms per capita

| Country or area           | Year        | Production     | Imports        | Exports        | Bunkers       | Changes in stocks | Supply         |            |
|---------------------------|-------------|----------------|----------------|----------------|---------------|-------------------|----------------|------------|
|                           |             |                |                |                |               |                   | Total          | Per capita |
| Suriname                  | 2016        | 206            | 196            | 72             | 16            | ..                | 314            | 555        |
|                           | 2017        | 293            | 109            | 100            | 7             | ..                | 295            | 517        |
|                           | 2018        | 301            | 44             | 80             | 6             | ..                | 259            | 449        |
|                           | 2019        | 311            | 108            | 67             | *6            | ..                | 346            | 596        |
| Uruguay                   | 2016        | 814            | 76             | ..             | 62            | -40               | 867            | 253        |
|                           | 2017        | 237            | 698            | ..             | 69            | 21                | 846            | 246        |
|                           | 2018        | 923            | 14             | ..             | 80            | -4                | 861            | 250        |
|                           | 2019        | 892            | 0              | ..             | 88            | -34               | 838            | 242        |
| Venezuela (Bolivar. Rep.) | 2016        | 7,878          | 1,313          | 0              | 61            | 0                 | 9,130          | 306        |
|                           | 2017        | 6,821          | 1,047          | 0              | 51            | 0                 | 7,817          | 266        |
|                           | 2018        | 5,325          | 2,392          | ..             | 41            | ..                | 7,676          | 266        |
|                           | 2019        | 5,011          | 170            | ..             | 27            | ..                | 5,154          | 181        |
| <b>Asia</b>               | <b>2016</b> | <b>603,863</b> | <b>108,657</b> | <b>179,857</b> | <b>7,910</b>  | <b>-272</b>       | <b>525,025</b> | <b>117</b> |
|                           | <b>2017</b> | <b>617,809</b> | <b>106,953</b> | <b>180,044</b> | <b>8,577</b>  | <b>332</b>        | <b>535,809</b> | <b>119</b> |
|                           | <b>2018</b> | <b>623,689</b> | <b>109,562</b> | <b>197,097</b> | <b>9,145</b>  | <b>231</b>        | <b>526,778</b> | <b>116</b> |
|                           | <b>2019</b> | <b>618,094</b> | <b>88,646</b>  | <b>190,786</b> | <b>11,435</b> | <b>-1,479</b>     | <b>505,999</b> | <b>110</b> |
| Afghanistan               | 2016        | *43            | 485            | ..             | ..            | *7                | 521            | 15         |
|                           | 2017        | *44            | *304           | ..             | ..            | -107              | *455           | *13        |
|                           | 2018        | *68            | 373            | ..             | ..            | *-30              | 471            | 13         |
|                           | 2019        | *44            | 761            | ..             | ..            | *177              | 628            | 16         |
| Armenia                   | 2016        | ..             | 119            | 0              | ..            | ..                | 119            | 41         |
|                           | 2017        | ..             | 135            | 0              | ..            | ..                | 135            | 46         |
|                           | 2018        | ..             | 115            | ..             | ..            | ..                | 115            | 39         |
|                           | 2019        | ..             | 134            | 0              | ..            | ..                | 134            | 45         |
| Azerbaijan                | 2016        | 2,247          | 4              | 1,228          | 48            | 6                 | 968            | 99         |
|                           | 2017        | 1,849          | 1              | 603            | 44            | -29               | 1,232          | 125        |
|                           | 2018        | 2,148          | 37             | 661            | 43            | 41                | 1,440          | 145        |
|                           | 2019        | 2,243          | 1              | 761            | 31            | -4                | 1,456          | 145        |
| Bahrain                   | 2016        | 3,997          | ..             | 3,484          | ..            | 157               | 356            | 250        |
|                           | 2017        | 4,184          | ..             | 3,945          | ..            | -141              | 380            | 254        |
|                           | 2018        | 4,083          | ..             | 3,599          | ..            | 123               | 361            | 230        |
|                           | 2019        | 4,210          | ..             | 3,872          | ..            | 17                | 321            | 196        |
| Bangladesh                | 2016        | 380            | 3,130          | ..             | ..            | -96               | 3,606          | 23         |
|                           | 2017        | 452            | 3,716          | ..             | ..            | ..                | 4,168          | 26         |
|                           | 2018        | 546            | 3,458          | ..             | ..            | -831              | 4,836          | 30         |
|                           | 2019        | 682            | 3,411          | ..             | ..            | ..                | 4,093          | 25         |
| Bhutan                    | 2016        | ..             | 117            | ..             | ..            | ..                | 117            | 158        |
|                           | 2017        | ..             | 126            | ..             | ..            | ..                | 126            | 169        |
|                           | 2018        | ..             | 139            | ..             | ..            | ..                | 139            | 184        |
|                           | 2019        | ..             | 135            | ..             | ..            | ..                | 135            | 176        |
| Brunei Darussalam         | 2016        | 114            | 156            | 0              | 0             | -5                | 275            | 655        |
|                           | 2017        | 104            | 189            | ..             | ..            | 2                 | 291            | 686        |
|                           | 2018        | 110            | 182            | ..             | ..            | -1                | 293            | 683        |
|                           | 2019        | 422            | 196            | 235            | ..            | 89                | 294            | 677        |
| Cambodia                  | 2016        | ..             | 1,217          | ..             | ..            | ..                | 1,217          | 77         |
|                           | 2017        | ..             | 1,224          | ..             | ..            | ..                | 1,224          | 76         |
|                           | 2018        | ..             | 1,318          | ..             | ..            | ..                | 1,318          | 81         |
|                           | 2019        | ..             | 1,366          | ..             | ..            | ..                | 1,366          | 83         |
| China                     | 2016        | 179,177        | 916            | 15,403         | 412           | -2,883            | 167,161        | 118        |
|                           | 2017        | 186,679        | 747            | 17,193         | 504           | 442               | 169,288        | 119        |
|                           | 2018        | 183,601        | 711            | 18,532         | 375           | 90                | 165,316        | 116        |
|                           | 2019        | 173,083        | 1,190          | 21,383         | 763           | -959              | 153,087        | 107        |



## Production, trade and supply of gas oil/diesel oil

Thousand metric tons and kilograms per capita

| Country or area        | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|------------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                        |      |            |         |         |         |                   | Total  | Per capita |
| China, Hong Kong SAR   | 2016 | ..         | 5,540   | 95      | 2,593   | 411               | 2,441  | 337        |
|                        | 2017 | ..         | 5,970   | 110     | 2,916   | 178               | 2,766  | 379        |
|                        | 2018 | ..         | 6,420   | 115     | 3,529   | 179               | 2,597  | 352        |
|                        | 2019 | ..         | 6,461   | 88      | 3,356   | 354               | 2,663  | 358        |
| China, Macao SAR       | 2016 | ..         | 182     | ..      | 73      | 3                 | 106    | 173        |
|                        | 2017 | ..         | 172     | ..      | 66      | 4                 | 102    | 164        |
|                        | 2018 | ..         | 160     | ..      | 64      | -2                | 98     | 155        |
|                        | 2019 | ..         | 140     | ..      | 44      | 1                 | 95     | 148        |
| Cyprus                 | 2016 | ..         | 616     | ..      | 95      | -10               | 531    | 454        |
|                        | 2017 | ..         | 786     | ..      | 101     | 9                 | 675    | 572        |
|                        | 2018 | ..         | 769     | ..      | 118     | -14               | 665    | 559        |
|                        | 2019 | ..         | 810     | ..      | 124     | -6                | 692    | 577        |
| Georgia                | 2016 | 9          | 658     | 0       | ..      | 16                | 651    | 162        |
|                        | 2017 | 10         | 575     | 11      | ..      | -14               | 588    | 147        |
|                        | 2018 | 10         | 563     | 4       | 2       | 18                | 549    | 137        |
|                        | 2019 | 15         | 553     | 0       | 2       | -21               | 586    | 147        |
| India                  | 2016 | 103,147    | 996     | 27,452  | ..      | ..                | 76,691 | 58         |
|                        | 2017 | 108,466    | 1,353   | 29,676  | ..      | ..                | 80,143 | 60         |
|                        | 2018 | 111,236    | 555     | 27,931  | ..      | ..                | 83,860 | 62         |
|                        | 2019 | 111,841    | 2,796   | 31,653  | ..      | ..                | 82,984 | 61         |
| Indonesia              | 2016 | 16,186     | 4,807   | 94      | 192     | ..                | 20,707 | 79         |
|                        | 2017 | 16,723     | 5,681   | 127     | 186     | ..                | 22,091 | 83         |
|                        | 2018 | 17,614     | 5,735   | 88      | 199     | 125               | 22,937 | 86         |
|                        | 2019 | 17,307     | 3,818   | 223     | 216     | 127               | 20,559 | 76         |
| Iran (Islamic Rep. of) | 2016 | 28,509     | 0       | 3,514   | 234     | ..                | 24,761 | 311        |
|                        | 2017 | 26,937     | 0       | 2,019   | 251     | ..                | 24,667 | 306        |
|                        | 2018 | 28,608     | ..      | 2,033   | 251     | ..                | 26,324 | 322        |
|                        | 2019 | 28,566     | ..      | 2,126   | 251     | ..                | 26,188 | 316        |
| Iraq                   | 2016 | 3,287      | 13,328  | ..      | ..      | ..                | 16,615 | 454        |
|                        | 2017 | 4,012      | 13,189  | ..      | ..      | ..                | 17,201 | 458        |
|                        | 2018 | 5,291      | 10,625  | ..      | ..      | ..                | 15,916 | 414        |
|                        | 2019 | 5,824      | 1,514   | ..      | ..      | ..                | 7,338  | 187        |
| Israel                 | 2016 | 4,411      | 279     | 1,943   | 28      | -21               | 2,740  | 338        |
|                        | 2017 | 4,628      | 321     | 2,014   | 42      | 105               | 2,789  | 338        |
|                        | 2018 | 4,789      | 248     | 2,166   | 51      | 26                | 2,795  | 333        |
|                        | 2019 | 5,389      | 204     | 2,586   | 61      | 205               | 2,742  | 322        |
| Japan                  | 2016 | 45,595     | 399     | 8,138   | 188     | 197               | 37,471 | 293        |
|                        | 2017 | 45,633     | 516     | 8,502   | 169     | -136              | 37,614 | 295        |
|                        | 2018 | 44,587     | 634     | 7,901   | 144     | 187               | 36,989 | 291        |
|                        | 2019 | 44,300     | 780     | 9,033   | 124     | -67               | 35,991 | 284        |
| Jordan                 | 2016 | 909        | 967     | ..      | 2       | 6                 | 1,868  | 196        |
|                        | 2017 | 845        | 1,029   | ..      | 4       | ..                | 1,870  | 191        |
|                        | 2018 | 738        | 1,145   | ..      | 4       | -31               | 1,910  | 192        |
|                        | 2019 | 765        | 1,240   | ..      | 4       | ..                | 2,001  | 198        |
| Kazakhstan             | 2016 | 4,652      | 434     | 55      | 1       | -46               | 5,076  | 285        |
|                        | 2017 | 4,352      | 474     | 112     | 0       | -183              | 4,897  | 271        |
|                        | 2018 | 4,664      | 472     | 237     | 2       | 2                 | 4,895  | 267        |
|                        | 2019 | 5,033      | 249     | 45      | 3       | 64                | 5,170  | 279        |
| Korea, Dem.Ppl's.Rep.  | 2016 | 191        | 71      | ..      | ..      | ..                | 262    | 10         |
|                        | 2017 | 191        | 59      | ..      | ..      | ..                | 250    | 10         |
|                        | 2018 | 191        | 58      | ..      | ..      | ..                | 249    | 10         |
|                        | 2019 | 191        | 70      | ..      | ..      | ..                | 261    | 10         |

Table 21

## Production, trade and supply of gas oil/diesel oil

Thousand metric tons and kilograms per capita

| Country or area        | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|------------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                        |      |            |         |         |         |                   | Total  | Per capita |
| Korea, Republic of     | 2016 | 46,320     | 267     | 23,482  | 1,204   | -287              | 22,188 | 435        |
|                        | 2017 | 47,108     | 271     | 23,561  | 1,288   | -111              | 22,641 | 443        |
|                        | 2018 | 49,006     | 241     | 25,585  | 1,104   | 199               | 22,359 | 437        |
|                        | 2019 | 50,065     | 235     | 26,201  | 1,461   | -91               | 22,729 | 444        |
| Kuwait                 | 2016 | 9,425      | ..      | 7,025   | 92      | ..                | 2,308  | 583        |
|                        | 2017 | 8,476      | ..      | 5,924   | 83      | ..                | 2,469  | 609        |
|                        | 2018 | 8,397      | ..      | 5,787   | 82      | ..                | 2,528  | 611        |
|                        | 2019 | 8,168      | ..      | 5,742   | 80      | ..                | 2,346  | 558        |
| Kyrgyzstan             | 2016 | 106        | 347     | 0       | ..      | -28               | 481    | 79         |
|                        | 2017 | 89         | 541     | 2       | ..      | 9                 | 619    | 100        |
|                        | 2018 | 79         | 706     | 1       | ..      | 34                | 750    | 119        |
|                        | 2019 | 83         | 535     | 17      | ..      | -40               | 641    | 100        |
| Lao People's Dem. Rep. | 2016 | ..         | 799     | ..      | ..      | ..                | 799    | 117        |
|                        | 2017 | ..         | 816     | ..      | ..      | ..                | 816    | 117        |
|                        | 2018 | ..         | 850     | ..      | ..      | ..                | 850    | 120        |
|                        | 2019 | ..         | *860    | ..      | ..      | ..                | *860   | *120       |
| Lebanon                | 2016 | ..         | 3,701   | ..      | ..      | ..                | 3,701  | 551        |
|                        | 2017 | ..         | 3,738   | ..      | ..      | ..                | 3,738  | 548        |
|                        | 2018 | ..         | 3,426   | ..      | ..      | ..                | 3,426  | 499        |
|                        | 2019 | ..         | 3,590   | ..      | ..      | ..                | 3,590  | 524        |
| Malaysia               | 2016 | 9,833      | 3,836   | 4,731   | 1       | -100              | 9,037  | 295        |
|                        | 2017 | 9,725      | 5,087   | 5,054   | 91      | -64               | 9,731  | 313        |
|                        | 2018 | 9,515      | 6,751   | 7,128   | 99      | -802              | 9,841  | 312        |
|                        | 2019 | 9,011      | 5,256   | 5,485   | 103     | *-700             | 9,379  | 294        |
| Maldives               | 2016 | ..         | 445     | ..      | *47     | ..                | 398    | 837        |
|                        | 2017 | ..         | 448     | ..      | *41     | ..                | 407    | 819        |
|                        | 2018 | ..         | 522     | ..      | *50     | ..                | 472    | 914        |
|                        | 2019 | ..         | 579     | ..      | *55     | ..                | 524    | 987        |
| Mongolia               | 2016 | ..         | 548     | ..      | ..      | ..                | 548    | 179        |
|                        | 2017 | ..         | 805     | ..      | ..      | ..                | 805    | 259        |
|                        | 2018 | ..         | 849     | ..      | ..      | ..                | 849    | 268        |
|                        | 2019 | ..         | 1,080   | ..      | ..      | ..                | 1,080  | 335        |
| Myanmar                | 2016 | 150        | 2,151   | 173     | ..      | 178               | 1,949  | 37         |
|                        | 2017 | 151        | 2,095   | ..      | ..      | 82                | 2,164  | 41         |
|                        | 2018 | 115        | 4,035   | ..      | 1       | ..                | 4,149  | 77         |
|                        | 2019 | 103        | 4,184   | ..      | 1       | ..                | 4,286  | 79         |
| Nepal                  | 2016 | ..         | 1,091   | ..      | ..      | ..                | 1,091  | 40         |
|                        | 2017 | ..         | 1,313   | ..      | ..      | ..                | 1,313  | 48         |
|                        | 2018 | ..         | 1,421   | ..      | ..      | ..                | 1,421  | 51         |
|                        | 2019 | ..         | 1,240   | ..      | ..      | ..                | 1,240  | 43         |
| Oman                   | 2016 | 2,922      | 10      | 603     | ..      | ..                | 2,329  | 520        |
|                        | 2017 | 3,437      | 235     | 718     | ..      | ..                | 2,954  | 633        |
|                        | 2018 | 3,769      | 236     | 1,629   | ..      | ..                | 2,375  | 492        |
|                        | 2019 | 3,463      | 243     | 1,278   | ..      | ..                | 2,429  | 488        |
| Other Asia             | 2016 | 13,653     | 0       | 8,903   | 92      | -78               | 4,736  | 201        |
|                        | 2017 | 13,343     | 39      | 8,256   | 98      | 141               | 4,887  | 206        |
|                        | 2018 | 14,379     | ..      | 9,403   | 123     | 111               | 4,741  | 200        |
|                        | 2019 | 14,847     | ..      | 9,932   | 209     | -128              | 4,835  | 203        |
| Pakistan               | 2016 | 4,783      | 4,739   | ..      | 9       | 207               | 9,306  | 46         |
|                        | 2017 | 5,501      | 4,486   | ..      | 6       | 72                | 9,909  | 48         |
|                        | 2018 | 5,232      | 3,097   | 0       | 6       | ..                | 8,323  | 39         |
|                        | 2019 | 4,715      | 3,086   | 0       | ..      | ..                | 7,801  | 36         |

## Production, trade and supply of gas oil/diesel oil

Thousand metric tons and kilograms per capita

| Country or area      | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|----------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                      |      |            |         |         |         |                   | Total  | Per capita |
| Philippines          | 2016 | 4,030      | 4,889   | 0       | 6       | 152               | 8,760  | 85         |
|                      | 2017 | 3,840      | 5,547   | 0       | 11      | 105               | 9,271  | 88         |
|                      | 2018 | 4,589      | 5,364   | 123     | 20      | 183               | 9,628  | 90         |
|                      | 2019 | 3,227      | 6,841   | 75      | 14      | 136               | 9,844  | 91         |
| Qatar                | 2016 | 2,081      | 540     | 3,720   | ..      | 1,185             | -2,284 | -860       |
|                      | 2017 | 1,973      | 115     | 3,271   | ..      | -949              | -234   | -86        |
|                      | 2018 | 2,059      | 75      | 3,877   | ..      | -39               | -1,703 | -612       |
|                      | 2019 | 1,948      | 78      | 2,885   | ..      | 0                 | -859   | -303       |
| Saudi Arabia         | 2016 | 53,198     | 11,101  | 29,046  | ..      | 208               | 35,044 | 1,080      |
|                      | 2017 | 54,486     | 4,510   | 30,545  | ..      | -189              | 28,640 | 865        |
|                      | 2018 | 54,156     | 9,894   | 41,760  | ..      | ..                | 22,290 | 661        |
|                      | 2019 | 53,355     | *987    | *29,851 | ..      | *-329             | 24,820 | 724        |
| Singapore            | 2016 | 12,199     | 15,478  | 24,855  | 1,991   | 233               | 597    | 106        |
|                      | 2017 | 10,967     | 14,321  | 25,422  | 2,021   | 141               | -2,296 | -402       |
|                      | 2018 | 9,185      | 13,054  | 23,972  | 2,286   | ..                | -4,019 | -698       |
|                      | 2019 | 10,734     | 12,096  | 21,763  | 3,883   | ..                | -2,817 | -485       |
| Sri Lanka            | 2016 | 583        | 1,574   | ..      | 0       | -243              | 2,401  | 114        |
|                      | 2017 | 506        | 1,763   | ..      | ..      | -95               | 2,364  | 112        |
|                      | 2018 | 568        | 1,483   | ..      | 13      | -5                | 2,043  | 96         |
|                      | 2019 | 624        | 1,587   | ..      | 13      | 18                | 2,181  | 102        |
| State of Palestine   | 2016 | ..         | 639     | ..      | ..      | 0                 | 639    | 138        |
|                      | 2017 | ..         | 636     | ..      | ..      | ..                | 636    | 134        |
|                      | 2018 | ..         | 563     | ..      | ..      | 0                 | 563    | 116        |
|                      | 2019 | ..         | 655     | ..      | ..      | ..                | 655    | 131        |
| Syrian Arab Republic | 2016 | 2,207      | 249     | ..      | 384     | ..                | 2,072  | 119        |
|                      | 2017 | 2,451      | 216     | ..      | 361     | ..                | 2,306  | 135        |
|                      | 2018 | 2,295      | 215     | ..      | 351     | ..                | 2,159  | 127        |
|                      | 2019 | 1,982      | 243     | ..      | 359     | ..                | 1,867  | 109        |
| Tajikistan           | 2016 | 5          | 205     | ..      | ..      | ..                | 210    | 24         |
|                      | 2017 | 10         | 183     | ..      | ..      | ..                | 193    | 22         |
|                      | 2018 | 17         | 203     | ..      | ..      | ..                | 220    | 24         |
|                      | 2019 | 13         | 250     | ..      | ..      | ..                | 262    | 28         |
| Thailand             | 2016 | 22,103     | 713     | 4,138   | ..      | 236               | 18,442 | 267        |
|                      | 2017 | 23,150     | 700     | 4,513   | ..      | 515               | 18,821 | 272        |
|                      | 2018 | 23,152     | 501     | 4,761   | ..      | 551               | 18,341 | 264        |
|                      | 2019 | 20,637     | 2,042   | 3,249   | ..      | -212              | 19,642 | 282        |
| Timor-Leste          | 2016 | ..         | 139     | ..      | ..      | ..                | 139    | 114        |
|                      | 2017 | ..         | 149     | ..      | ..      | ..                | 149    | 120        |
|                      | 2018 | ..         | 130     | ..      | ..      | ..                | 130    | 103        |
|                      | 2019 | ..         | 161     | ..      | ..      | ..                | 161    | 125        |
| Turkey               | 2016 | 9,725      | 12,861  | 72      | 81      | 227               | 22,206 | 278        |
|                      | 2017 | 10,545     | 14,373  | 233     | 72      | 176               | 24,437 | 301        |
|                      | 2018 | 9,530      | 14,719  | 120     | 90      | -99               | 24,138 | 293        |
|                      | 2019 | 13,938     | 11,183  | 1,382   | 145     | -106              | 23,700 | 284        |
| Turkmenistan         | 2016 | 2,770      | ..      | 690     | ..      | ..                | 2,080  | 367        |
|                      | 2017 | 2,770      | ..      | 690     | ..      | ..                | 2,080  | 361        |
|                      | 2018 | 2,770      | ..      | 690     | ..      | ..                | 2,080  | 356        |
|                      | 2019 | 2,770      | ..      | 690     | ..      | ..                | 2,080  | 350        |
| United Arab Emirates | 2016 | 10,865     | 684     | 9,561   | 89      | ..                | 1,899  | 203        |
|                      | 2017 | 10,427     | 204     | 7,015   | 177     | 451               | 2,988  | 315        |
|                      | 2018 | 10,929     | 603     | 8,421   | 93      | ..                | 3,017  | 313        |
|                      | 2019 | 11,343     | 158     | 9,753   | 81      | ..                | 1,667  | 171        |

Table 21

## Production, trade and supply of gas oil/diesel oil

Thousand metric tons and kilograms per capita

| Country or area        | Year        | Production     | Imports        | Exports        | Bunkers       | Changes in stocks | Supply         |            |
|------------------------|-------------|----------------|----------------|----------------|---------------|-------------------|----------------|------------|
|                        |             |                |                |                |               |                   | Total          | Per capita |
| Uzbekistan             | 2016        | 1,008          | ..             | ..             | ..            | -32               | 1,041          | 33         |
|                        | 2017        | 1,017          | ..             | ..             | ..            | -25               | 1,042          | 33         |
|                        | 2018        | 1,081          | ..             | ..             | ..            | 17                | 1,064          | 33         |
|                        | 2019        | 1,030          | 71             | ..             | ..            | -3                | 1,104          | 33         |
| Viet Nam               | 2016        | 2,855          | 6,716          | 1,451          | ..            | 127               | 7,993          | 85         |
|                        | 2017        | 2,481          | 7,309          | 527            | ..            | -56               | 9,319          | 99         |
|                        | 2018        | 4,286          | 6,417          | 573            | ..            | 201               | 9,929          | 104        |
|                        | 2019        | 5,647          | 5,014          | 478            | ..            | ..                | 10,183         | 106        |
| Yemen                  | 2016        | 189            | 514            | ..             | 48            | ..                | 655            | 24         |
|                        | 2017        | 248            | 488            | ..             | 46            | ..                | 691            | 25         |
|                        | 2018        | 297            | 492            | ..             | 46            | ..                | 742            | 26         |
|                        | 2019        | 476            | 564            | ..             | 53            | ..                | 988            | 34         |
| <b>Europe</b>          | <b>2016</b> | <b>354,579</b> | <b>154,142</b> | <b>152,056</b> | <b>24,419</b> | <b>2,032</b>      | <b>330,213</b> | <b>442</b> |
|                        | <b>2017</b> | <b>363,062</b> | <b>151,861</b> | <b>153,962</b> | <b>25,224</b> | <b>-5,095</b>     | <b>340,832</b> | <b>456</b> |
|                        | <b>2018</b> | <b>358,088</b> | <b>143,960</b> | <b>141,133</b> | <b>20,430</b> | <b>-2,771</b>     | <b>343,256</b> | <b>459</b> |
|                        | <b>2019</b> | <b>363,265</b> | <b>149,734</b> | <b>156,864</b> | <b>12,000</b> | <b>2,691</b>      | <b>341,443</b> | <b>456</b> |
| Albania                | 2016        | 18             | 743            | 4              | 34            | 16                | 707            | 245        |
|                        | 2017        | 158            | 723            | 19             | 36            | 16                | 810            | 281        |
|                        | 2018        | 104            | 665            | 40             | 31            | 16                | 682            | 237        |
|                        | 2019        | 76             | 686            | 28             | 22            | 31                | 681            | 236        |
| Andorra                | 2016        | ..             | 132            | ..             | ..            | ..                | 132            | 1,711      |
|                        | 2017        | ..             | 131            | ..             | ..            | ..                | 131            | 1,707      |
|                        | 2018        | ..             | 138            | ..             | ..            | ..                | 138            | 1,797      |
|                        | 2019        | ..             | 133            | ..             | ..            | ..                | 133            | 1,723      |
| Austria                | 2016        | 3,802          | 5,057          | 841            | 21            | 116               | 7,881          | 901        |
|                        | 2017        | 3,981          | 5,107          | 964            | 21            | -61               | 8,165          | 926        |
|                        | 2018        | 4,053          | 5,065          | 1,008          | 14            | -25               | 8,121          | 913        |
|                        | 2019        | 4,191          | 5,234          | 1,077          | 14            | 160               | 8,174          | 913        |
| Belarus                | 2016        | 6,768          | 693            | 4,850          | ..            | -19               | 2,630          | 278        |
|                        | 2017        | 6,563          | 790            | 4,303          | ..            | 202               | 2,848          | 301        |
|                        | 2018        | 6,457          | 209            | 3,450          | ..            | 174               | 3,042          | 322        |
|                        | 2019        | 7,019          | 0              | 3,900          | ..            | 112               | 3,007          | 318        |
| Belgium                | 2016        | 12,751         | 11,119         | 11,659         | 1,438         | -313              | 11,086         | 976        |
|                        | 2017        | 13,267         | 10,629         | 12,310         | 1,053         | -827              | 11,360         | 995        |
|                        | 2018        | 13,930         | 9,844          | 11,575         | 1,296         | -118              | 11,021         | 960        |
|                        | 2019        | 15,091         | 8,197          | 10,982         | 1,160         | 396               | 10,750         | 932        |
| Bosnia and Herzegovina | 2016        | 381            | 795            | 1              | ..            | 18                | 1,157          | 342        |
|                        | 2017        | 366            | 807            | 11             | ..            | 12                | 1,150          | 343        |
|                        | 2018        | 300            | 839            | 23             | ..            | -21               | 1,137          | 342        |
|                        | 2019        | 9              | 1,176          | 2              | ..            | -12               | 1,195          | 362        |
| Bulgaria               | 2016        | 2,745          | 961            | 1,382          | 59            | 105               | 2,160          | 302        |
|                        | 2017        | 3,032          | 1,035          | 1,769          | 57            | -17               | 2,257          | 318        |
|                        | 2018        | 2,545          | 807            | 959            | 57            | -86               | 2,422          | 344        |
|                        | 2019        | 3,191          | 893            | 1,567          | 59            | -54               | 2,513          | 359        |
| Croatia                | 2016        | 1,434          | 1,008          | 675            | 3             | 3                 | 1,761          | 418        |
|                        | 2017        | 1,492          | 1,414          | 939            | 4             | 34                | 1,929          | 461        |
|                        | 2018        | 1,556          | 1,336          | 976            | 16            | 39                | 1,860          | 448        |
|                        | 2019        | 1,239          | 1,924          | 1,123          | 20            | 104               | 1,916          | 464        |
| Czechia                | 2016        | 2,757          | 2,861          | 857            | ..            | -12               | 4,773          | 449        |
|                        | 2017        | 3,679          | 2,087          | 898            | ..            | -46               | 4,914          | 462        |
|                        | 2018        | 3,505          | 2,410          | 842            | ..            | 114               | 4,959          | 465        |
|                        | 2019        | 3,648          | 2,226          | 843            | ..            | -2                | 5,033          | 471        |

## Production, trade and supply of gas oil/diesel oil

Thousand metric tons and kilograms per capita

| Country or area | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|-----------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                 |      |            |         |         |         |                   | Total  | Per capita |
| Denmark         | 2016 | 4,897      | 3,749   | 2,816   | 411     | -20               | 5,439  | 952        |
|                 | 2017 | 4,538      | 2,732   | 2,354   | 390     | -331              | 4,856  | 847        |
|                 | 2018 | 4,687      | 2,396   | 1,763   | 370     | -194              | 5,144  | 894        |
|                 | 2019 | 4,455      | 2,706   | 1,965   | 365     | 285               | 4,545  | 788        |
| Estonia         | 2016 | ..         | 799     | 4       | 111     | 33                | 651    | 494        |
|                 | 2017 | ..         | 789     | ..      | 112     | 32                | 645    | 489        |
|                 | 2018 | ..         | 902     | 74      | 157     | -46               | 717    | 542        |
|                 | 2019 | ..         | 834     | 41      | 63      | 51                | 679    | 512        |
| Faeroe Islands  | 2016 | ..         | *149    | ..      | 16      | ..                | *133   | *2,761     |
|                 | 2017 | ..         | *168    | ..      | 16      | ..                | *152   | *3,142     |
|                 | 2018 | ..         | *176    | ..      | 18      | ..                | *157   | *3,243     |
|                 | 2019 | ..         | *177    | ..      | 19      | ..                | *158   | *3,241     |
| Finland         | 2016 | 6,395      | 1,923   | 3,813   | 41      | -43               | 4,507  | 820        |
|                 | 2017 | 6,605      | 1,782   | 3,739   | 70      | -261              | 4,839  | 878        |
|                 | 2018 | 6,652      | 1,556   | 3,587   | 57      | -161              | 4,725  | 856        |
|                 | 2019 | 6,655      | 1,592   | 3,773   | 72      | -103              | 4,505  | 814        |
| France          | 2016 | 27,901     | 22,423  | 2,064   | 236     | 246               | 47,778 | 715        |
|                 | 2017 | 27,905     | 21,965  | 2,592   | 181     | -150              | 47,247 | 705        |
|                 | 2018 | 26,204     | 22,454  | 2,195   | 171     | -395              | 46,687 | 694        |
|                 | 2019 | 23,887     | 24,314  | 2,566   | 139     | -78               | 45,574 | 676        |
| Germany         | 2016 | 46,100     | 19,238  | 9,511   | 999     | 449               | 54,379 | 662        |
|                 | 2017 | 45,709     | 19,456  | 9,022   | 862     | -255              | 55,536 | 672        |
|                 | 2018 | 43,143     | 18,551  | 8,221   | 734     | -405              | 53,144 | 639        |
|                 | 2019 | 44,045     | 19,896  | 7,480   | 706     | 200               | 55,555 | 665        |
| Gibraltar       | 2016 | ..         | 531     | ..      | 423     | ..                | 108    | 3,201      |
|                 | 2017 | ..         | 588     | ..      | 471     | ..                | 117    | 3,469      |
|                 | 2018 | ..         | 587     | ..      | 460     | ..                | 127    | 3,767      |
|                 | 2019 | ..         | 607     | ..      | 471     | ..                | 136    | 4,032      |
| Greece          | 2016 | 10,892     | 1,133   | 7,363   | 309     | -135              | 4,488  | 423        |
|                 | 2017 | 10,992     | 1,151   | 7,127   | 340     | 138               | 4,539  | 429        |
|                 | 2018 | 11,172     | 999     | 7,571   | 323     | 25                | 4,252  | 404        |
|                 | 2019 | 10,453     | 1,508   | 7,060   | 384     | -70               | 4,587  | 438        |
| Hungary         | 2016 | 3,114      | 1,543   | 1,231   | ..      | 137               | 3,289  | 337        |
|                 | 2017 | 3,167      | 1,671   | 1,414   | ..      | -20               | 3,444  | 354        |
|                 | 2018 | 3,302      | 2,279   | 1,939   | ..      | -75               | 3,717  | 383        |
|                 | 2019 | 3,245      | 2,119   | 1,450   | ..      | 48                | 3,866  | 399        |
| Iceland         | 2016 | 12         | 341     | ..      | 34      | 0                 | 319    | 959        |
|                 | 2017 | 13         | 347     | ..      | 33      | 2                 | 325    | 971        |
|                 | 2018 | 15         | 369     | ..      | 42      | 29                | 314    | 932        |
|                 | 2019 | 15         | 393     | ..      | 45      | -7                | 370    | 1,090      |
| Ireland         | 2016 | 1,263      | 2,669   | 114     | 144     | -36               | 3,710  | 790        |
|                 | 2017 | 1,303      | 2,849   | 187     | 138     | 61                | 3,766  | 792        |
|                 | 2018 | 1,146      | 2,931   | 99      | 142     | -8                | 3,845  | 798        |
|                 | 2019 | 1,131      | 3,069   | 159     | 127     | -38               | 3,952  | 809        |
| Italy           | 2016 | 31,806     | 4,412   | 9,324   | 268     | -91               | 26,717 | 440        |
|                 | 2017 | 30,685     | 5,037   | 10,188  | 282     | -232              | 25,484 | 420        |
|                 | 2018 | 30,373     | 5,347   | 8,982   | 482     | -363              | 26,619 | 439        |
|                 | 2019 | 32,879     | 5,196   | 9,618   | 512     | 123               | 27,821 | 459        |
| Kosovo          | 2016 | ..         | 424     | ..      | ..      | ..                | 424    | 239        |
|                 | 2017 | ..         | 462     | ..      | ..      | ..                | 462    | 258        |
|                 | 2018 | ..         | 494     | ..      | ..      | ..                | 494    | 275        |
|                 | 2019 | ..         | 494     | ..      | ..      | ..                | 494    | 275        |

Table 21

## Production, trade and supply of gas oil/diesel oil

Thousand metric tons and kilograms per capita

| Country or area     | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|---------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                     |      |            |         |         |         |                   | Total  | Per capita |
| Latvia              | 2016 | 5          | 1,874   | 591     | 164     | 167               | 957    | 485        |
|                     | 2017 | 3          | 1,712   | 528     | 136     | 21                | 1,030  | 528        |
|                     | 2018 | 33         | 1,735   | 679     | 36      | -19               | 1,072  | 556        |
|                     | 2019 | 35         | 1,595   | 318     | 248     | 9                 | 1,055  | 553        |
| Lithuania           | 2016 | 3,172      | 1,162   | 3,578   | 67      | 5                 | 684    | 237        |
|                     | 2017 | 3,392      | 665     | 3,172   | 73      | -55               | 868    | 305        |
|                     | 2018 | 3,480      | 521     | 2,726   | 83      | 48                | 1,145  | 409        |
|                     | 2019 | 3,329      | 527     | 2,620   | 79      | -23               | 1,180  | 428        |
| Luxembourg          | 2016 | ..         | 1,852   | 1       | ..      | -4                | 1,854  | 3,201      |
|                     | 2017 | ..         | 1,917   | 1       | ..      | -7                | 1,924  | 3,250      |
|                     | 2018 | ..         | 2,013   | 2       | ..      | -6                | 2,018  | 3,339      |
|                     | 2019 | ..         | 2,069   | 3       | ..      | 14                | 2,052  | 3,332      |
| Malta               | 2016 | ..         | 677     | 249     | 262     | 14                | 152    | 349        |
|                     | 2017 | ..         | 635     | 69      | 322     | 88                | 156    | 355        |
|                     | 2018 | ..         | 643     | 193     | 360     | -78               | 167    | 380        |
|                     | 2019 | ..         | 725     | 136     | 378     | 28                | 184    | 419        |
| Montenegro          | 2016 | ..         | 223     | 0       | ..      | 9                 | 214    | 341        |
|                     | 2017 | ..         | 252     | ..      | ..      | 14                | 238    | 379        |
|                     | 2018 | ..         | 259     | ..      | ..      | 1                 | 258    | 411        |
|                     | 2019 | ..         | 256     | ..      | ..      | -15               | 272    | 432        |
| Netherlands         | 2016 | 19,278     | 18,861  | 30,158  | 2,026   | -469              | 6,424  | 378        |
|                     | 2017 | 19,438     | 16,818  | 29,299  | 2,083   | -1,461            | 6,336  | 372        |
|                     | 2018 | 18,939     | 12,056  | 23,285  | 2,001   | -719              | 6,428  | 377        |
|                     | 2019 | 21,225     | 12,816  | 24,031  | 2,524   | 750               | 6,737  | 394        |
| North Macedonia     | 2016 | 0          | 654     | 39      | ..      | 12                | 603    | 290        |
|                     | 2017 | 0          | 661     | 39      | ..      | -3                | 625    | 300        |
|                     | 2018 | ..         | 667     | 53      | ..      | -7                | 620    | 298        |
|                     | 2019 | ..         | 751     | 63      | ..      | 21                | 667    | 320        |
| Norway              | 2016 | 5,337      | 1,794   | 2,672   | 50      | -196              | 4,605  | 877        |
|                     | 2017 | 7,193      | 1,717   | 4,241   | 122     | -110              | 4,657  | 879        |
|                     | 2018 | 7,845      | 1,580   | 4,115   | 149     | 40                | 5,121  | 959        |
|                     | 2019 | 7,019      | 2,079   | 4,146   | 114     | -114              | 4,952  | 921        |
| Poland              | 2016 | 11,863     | 3,740   | 1,086   | 129     | 126               | 14,262 | 375        |
|                     | 2017 | 12,338     | 5,209   | 187     | 211     | 259               | 16,890 | 445        |
|                     | 2018 | 13,282     | 4,810   | 36      | 189     | 104               | 17,763 | 468        |
|                     | 2019 | 13,709     | 4,549   | 59      | 192     | 53                | 17,954 | 474        |
| Portugal            | 2016 | 5,976      | 962     | 2,076   | 127     | -102              | 4,837  | 468        |
|                     | 2017 | 6,218      | 893     | 2,079   | 130     | -7                | 4,908  | 477        |
|                     | 2018 | 5,520      | 857     | 1,134   | 137     | 95                | 5,011  | 489        |
|                     | 2019 | 4,915      | 1,258   | 900     | 153     | 7                 | 5,113  | 500        |
| Republic of Moldova | 2016 | 2          | 555     | 7       | ..      | 6                 | 544    | 134        |
|                     | 2017 | 1          | 594     | 21      | ..      | -4                | 578    | 142        |
|                     | 2018 | 2          | 610     | 24      | ..      | ..                | 588    | 145        |
|                     | 2019 | ..         | 622     | 9       | ..      | -2                | 615    | 152        |
| Romania             | 2016 | 5,437      | 1,232   | 1,690   | 31      | 53                | 4,895  | 247        |
|                     | 2017 | 5,655      | 1,366   | 1,547   | 28      | 28                | 5,418  | 276        |
|                     | 2018 | 5,656      | 1,457   | 1,586   | 18      | -128              | 5,638  | 289        |
|                     | 2019 | 6,139      | 1,227   | 1,531   | 34      | 69                | 5,732  | 296        |
| Russian Federation  | 2016 | 76,249     | 82      | *34,115 | 12,977  | 348               | 28,891 | 199        |
|                     | 2017 | 80,090     | 143     | *33,684 | 14,375  | 45                | 32,129 | 221        |
|                     | 2018 | 77,464     | 57      | *33,468 | *9,645  | 212               | 34,196 | 235        |
|                     | 2019 | 81,560     | 62      | 51,528  | 385     | 408               | 29,301 | 201        |

## Production, trade and supply of gas oil/diesel oil

Thousand metric tons and kilograms per capita

| Country or area | Year        | Production    | Imports       | Exports    | Bunkers    | Changes in stocks | Supply        |            |
|-----------------|-------------|---------------|---------------|------------|------------|-------------------|---------------|------------|
|                 |             |               |               |            |            |                   | Total         | Per capita |
| Serbia          | 2016        | 1,322         | 448           | 128        | 20         | 14                | 1,608         | 227        |
|                 | 2017        | 1,401         | 527           | 220        | 14         | 0                 | 1,695         | 241        |
|                 | 2018        | 1,572         | 459           | 233        | 17         | 33                | 1,748         | 250        |
|                 | 2019        | 1,458         | 675           | 250        | 16         | -39               | 1,906         | 273        |
| Slovakia        | 2016        | 2,997         | 834           | 2,198      | ..         | -32               | 1,665         | 306        |
|                 | 2017        | 3,006         | 1,048         | 2,064      | ..         | -9                | 1,999         | 367        |
|                 | 2018        | 2,857         | 988           | 1,803      | ..         | 11                | 2,031         | 372        |
|                 | 2019        | 2,714         | 973           | 1,653      | ..         | -3                | 2,037         | 373        |
| Slovenia        | 2016        | 16            | 2,997         | 1,349      | ..         | -37               | 1,701         | 820        |
|                 | 2017        | 24            | 3,135         | 1,364      | ..         | 69                | 1,725         | 831        |
|                 | 2018        | 74            | 3,151         | 1,449      | 19         | -6                | 1,764         | 849        |
|                 | 2019        | 102           | 3,280         | 1,608      | 28         | 18                | 1,727         | 831        |
| Spain           | 2016        | 27,749        | 4,790         | 5,381      | 1,560      | -278              | 25,876        | 555        |
|                 | 2017        | 28,426        | 5,085         | 6,578      | 1,271      | -503              | 26,165        | 561        |
|                 | 2018        | 28,846        | 4,748         | 6,140      | 1,249      | -61               | 26,266        | 563        |
|                 | 2019        | 28,669        | 5,026         | 5,983      | 1,594      | 144               | 25,974        | 556        |
| Sweden          | 2016        | 8,310         | 3,089         | 5,315      | 684        | 1,003             | 4,397         | 447        |
|                 | 2017        | 9,032         | 2,910         | 6,938      | 723        | -1,320            | 5,601         | 565        |
|                 | 2018        | 9,646         | 2,262         | 6,361      | 523        | -260              | 5,284         | 530        |
|                 | 2019        | 6,690         | 2,591         | 3,887      | 476        | -121              | 5,039         | 502        |
| Switzerland     | 2016        | 1,766         | 3,803         | 30         | 5          | 152               | 5,382         | 642        |
|                 | 2017        | 1,786         | 3,814         | 28         | 4          | -89               | 5,657         | 669        |
|                 | 2018        | 1,939         | 2,902         | 29         | 3          | -363              | 5,171         | 607        |
|                 | 2019        | 1,744         | 4,004         | 16         | 3          | 165               | 5,564         | 648        |
| Ukraine         | 2016        | 929           | 5,125         | 0          | ..         | 612               | 5,442         | 122        |
|                 | 2017        | 680           | 5,422         | 193        | ..         | -359              | 6,268         | 141        |
|                 | 2018        | *730          | 5,594         | 214        | ..         | -137              | 6,247         | 141        |
|                 | 2019        | *813          | 6,257         | 264        | ..         | 38                | 6,768         | 154        |
| United Kingdom  | 2016        | 21,136        | 16,685        | 4,884      | 1,770      | 175               | 30,992        | 467        |
|                 | 2017        | 20,923        | 15,619        | 3,875      | 1,667      | 12                | 30,988        | 464        |
|                 | 2018        | 21,057        | 16,239        | 4,299      | 1,630      | -28               | 31,395        | 468        |
|                 | 2019        | 21,916        | 15,020        | 4,225      | 1,599      | 139               | 30,973        | 459        |
| <b>Oceania</b>  | <b>2016</b> | <b>10,076</b> | <b>17,682</b> | <b>184</b> | <b>181</b> | <b>214</b>        | <b>27,179</b> | <b>672</b> |
|                 | <b>2017</b> | <b>9,764</b>  | <b>18,253</b> | <b>238</b> | <b>185</b> | <b>-214</b>       | <b>27,808</b> | <b>678</b> |
|                 | <b>2018</b> | <b>9,973</b>  | <b>20,354</b> | <b>215</b> | <b>195</b> | <b>284</b>        | <b>29,632</b> | <b>713</b> |
|                 | <b>2019</b> | <b>10,124</b> | <b>20,707</b> | <b>256</b> | <b>221</b> | <b>309</b>        | <b>30,044</b> | <b>713</b> |
| American Samoa  | 2016        | ..            | *90           | ..         | *8         | ..                | *82           | *1,475     |
|                 | 2017        | ..            | *90           | ..         | *8         | ..                | *82           | *1,478     |
|                 | 2018        | ..            | *90           | ..         | *8         | ..                | *82           | *1,482     |
|                 | 2019        | ..            | *90           | ..         | *8         | ..                | *82           | *1,486     |
| Australia       | 2016        | 7,579         | 14,896        | 44         | 46         | 217               | 22,168        | 914        |
|                 | 2017        | 7,279         | 15,418        | 89         | 47         | -173              | 22,733        | 925        |
|                 | 2018        | 7,707         | 16,993        | 73         | 54         | 308               | 24,266        | 975        |
|                 | 2019        | 7,596         | 17,352        | 95         | 77         | 258               | 24,519        | 973        |
| Cook Islands    | 2016        | ..            | *14           | ..         | ..         | ..                | *14           | *822       |
|                 | 2017        | ..            | *16           | ..         | ..         | ..                | *16           | *885       |
|                 | 2018        | ..            | *16           | ..         | ..         | ..                | *16           | *885       |
|                 | 2019        | ..            | *16           | ..         | ..         | ..                | *16           | *895       |
| Fiji            | 2016        | ..            | 375           | 140        | *50        | ..                | 186           | 213        |
|                 | 2017        | ..            | 385           | 118        | *55        | ..                | 212           | 242        |
|                 | 2018        | ..            | *402          | *142       | *60        | ..                | *201          | *227       |
|                 | 2019        | ..            | *390          | *130       | *55        | ..                | *205          | *230       |

Table 21

## Production, trade and supply of gas oil/diesel oil

Thousand metric tons and kilograms per capita

| Country or area             | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|-----------------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                             |      |            |         |         |         |                   | Total  | Per capita |
| French Polynesia            | 2016 | ..         | 135     | ..      | ..      | -5                | 140    | 510        |
|                             | 2017 | ..         | 138     | ..      | ..      | -2                | 141    | 510        |
|                             | 2018 | ..         | 141     | ..      | ..      | 3                 | 137    | 495        |
|                             | 2019 | ..         | 135     | ..      | ..      | -4                | 139    | 499        |
| Kiribati                    | 2016 | ..         | 10      | ..      | ..      | ..                | 10     | 92         |
|                             | 2017 | ..         | 13      | ..      | ..      | ..                | 13     | 113        |
|                             | 2018 | ..         | *13     | ..      | ..      | ..                | *13    | *113       |
|                             | 2019 | ..         | *13     | ..      | ..      | ..                | *13    | *112       |
| Marshall Islands            | 2016 | ..         | *35     | ..      | ..      | ..                | *35    | *606       |
|                             | 2017 | ..         | *36     | ..      | ..      | ..                | *36    | *615       |
|                             | 2018 | ..         | *36     | ..      | ..      | ..                | *36    | *616       |
|                             | 2019 | ..         | *36     | ..      | ..      | ..                | *36    | *617       |
| Micronesia (Fed. States of) | 2016 | ..         | *30     | ..      | *3      | ..                | *27    | *240       |
|                             | 2017 | ..         | *30     | ..      | *3      | ..                | *27    | *238       |
|                             | 2018 | ..         | *30     | ..      | *3      | ..                | *27    | *236       |
|                             | 2019 | ..         | *30     | ..      | *3      | ..                | *27    | *233       |
| Nauru                       | 2016 | ..         | *10     | ..      | ..      | 0                 | *10    | *923       |
|                             | 2017 | ..         | *10     | ..      | ..      | ..                | *10    | *962       |
|                             | 2018 | ..         | *10     | ..      | ..      | ..                | *10    | *928       |
|                             | 2019 | ..         | *10     | ..      | ..      | ..                | *10    | *906       |
| New Caledonia               | 2016 | ..         | 286     | ..      | 4       | -7                | 289    | 1,054      |
|                             | 2017 | ..         | 294     | ..      | 7       | 5                 | 282    | 1,019      |
|                             | 2018 | ..         | 347     | ..      | 12      | -3                | 338    | 1,206      |
|                             | 2019 | ..         | 311     | ..      | 9       | -5                | 307    | 1,085      |
| New Zealand                 | 2016 | 1,949      | 1,033   | 0       | 48      | 38                | 2,896  | 622        |
|                             | 2017 | 1,942      | 979     | 31      | 38      | -56               | 2,908  | 618        |
|                             | 2018 | 1,790      | 1,259   | 0       | 34      | -36               | 3,051  | 643        |
|                             | 2019 | 2,029      | 1,258   | 31      | 45      | 47                | 3,164  | 662        |
| Niue                        | 2016 | ..         | *1      | ..      | ..      | ..                | *1     | *683       |
|                             | 2017 | ..         | *1      | ..      | ..      | ..                | *1     | *664       |
|                             | 2018 | ..         | *1      | ..      | ..      | ..                | *1     | *714       |
|                             | 2019 | ..         | *1      | ..      | ..      | ..                | *1     | *743       |
| Northern Mariana Islands    | 2016 | ..         | *164    | ..      | *16     | ..                | *148   | *2,634     |
|                             | 2017 | ..         | *177    | ..      | *21     | ..                | *156   | *2,758     |
|                             | 2018 | ..         | *171    | ..      | *18     | ..                | *153   | *2,689     |
|                             | 2019 | ..         | *172    | ..      | *18     | ..                | *154   | *2,692     |
| Palau                       | 2016 | ..         | 30      | ..      | ..      | ..                | 30     | 1,668      |
|                             | 2017 | ..         | *29     | ..      | ..      | ..                | *29    | *1,628     |
|                             | 2018 | ..         | *28     | ..      | ..      | ..                | *28    | *1,569     |
|                             | 2019 | ..         | *29     | ..      | ..      | ..                | *29    | *1,583     |
| Papua New Guinea            | 2016 | 548        | 403     | ..      | ..      | -25               | 977    | 118        |
|                             | 2017 | 543        | 465     | ..      | ..      | 11                | 997    | 118        |
|                             | 2018 | 475        | 636     | ..      | ..      | 11                | 1,100  | 128        |
|                             | 2019 | *499       | *668    | ..      | ..      | *11               | *1,155 | *132       |
| Samoa                       | 2016 | ..         | 45      | 1       | ..      | *-3               | 47     | 242        |
|                             | 2017 | ..         | 49      | *1      | ..      | *2                | 47     | 239        |
|                             | 2018 | ..         | 45      | *1      | ..      | *1                | 43     | 221        |
|                             | 2019 | ..         | 53      | *1      | ..      | *2                | 51     | 258        |
| Solomon Islands             | 2016 | ..         | *78     | ..      | *5      | ..                | *73    | *117       |
|                             | 2017 | ..         | *77     | ..      | *5      | ..                | *72    | *113       |
|                             | 2018 | ..         | *79     | ..      | *6      | ..                | *73    | *112       |
|                             | 2019 | ..         | *80     | ..      | *6      | ..                | *74    | *111       |



## Production, trade and supply of gas oil/diesel oil

Thousand metric tons and kilograms per capita

| Country or area       | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|-----------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                       |      |            |         |         |         |                   | Total  | Per capita |
| Tonga                 | 2016 | ..         | 0       | ..      | ..      | ..                | 0      | 0          |
|                       | 2017 | ..         | 0       | ..      | ..      | ..                | 0      | 0          |
|                       | 2018 | ..         | 0       | ..      | ..      | ..                | 0      | 0          |
|                       | 2019 | ..         | 9       | ..      | ..      | ..                | 9      | 89         |
| Tuvalu                | 2016 | ..         | *2      | ..      | ..      | ..                | *2     | *166       |
|                       | 2017 | ..         | *2      | ..      | ..      | ..                | *2     | *172       |
|                       | 2018 | ..         | *2      | ..      | ..      | ..                | *2     | *200       |
|                       | 2019 | ..         | *2      | ..      | ..      | ..                | *2     | *197       |
| Vanuatu               | 2016 | ..         | 39      | ..      | ..      | ..                | 39     | 140        |
|                       | 2017 | ..         | 38      | ..      | ..      | ..                | 38     | 133        |
|                       | 2018 | ..         | 48      | ..      | ..      | ..                | 48     | 163        |
|                       | 2019 | ..         | 44      | ..      | ..      | ..                | 44     | 147        |
| Wallis and Futuna Is. | 2016 | ..         | 7       | ..      | ..      | ..                | 7      | 554        |
|                       | 2017 | ..         | 7       | ..      | ..      | ..                | 7      | 550        |
|                       | 2018 | ..         | 7       | ..      | ..      | ..                | 7      | 577        |
|                       | 2019 | ..         | 7       | ..      | ..      | ..                | 7      | 612        |



### Production, trade and supply of fuel oil

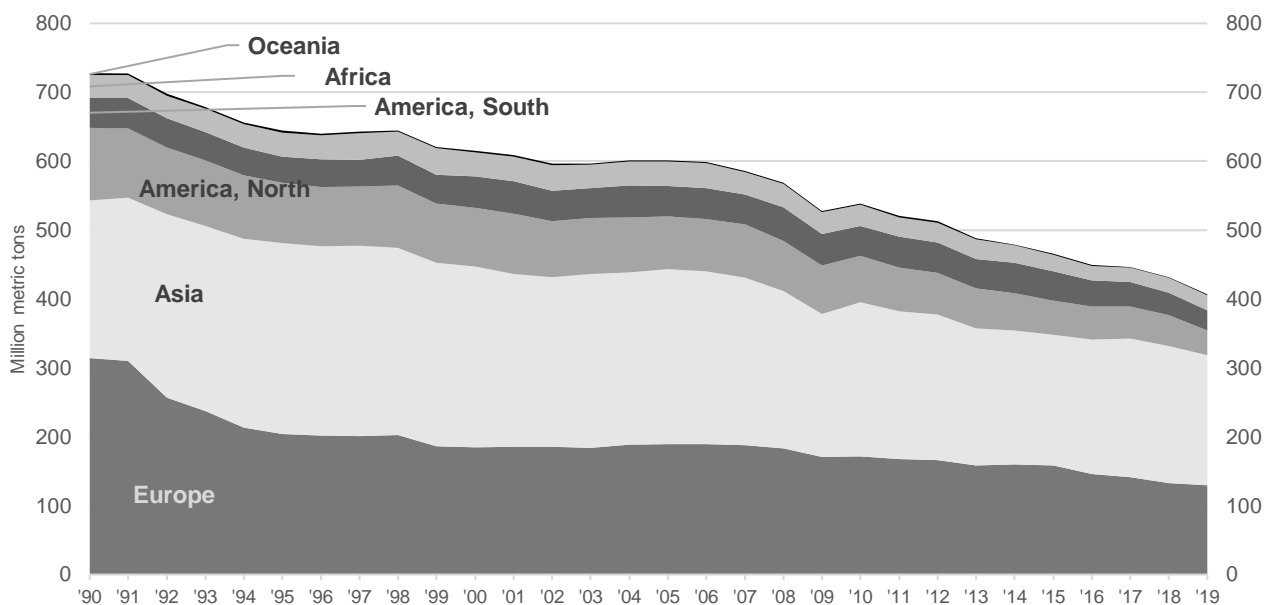
Thousand metric tons and kilograms per capita

#### Table Notes

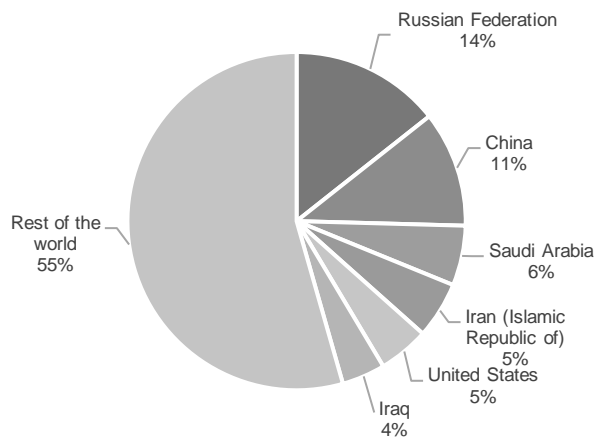
**Production** includes output from refineries and plants.

Please refer to the Definitions Section on pages ix to xv for the appropriate product description /classification, and xvi to xvii for the descriptions of relevant flows.

**Figure 60: Production of fuel oil by region, 1990-2019**



**Figure 61: Major fuel oil producing countries, 2019**



**Figure 62: Major fuel oil consuming countries, 2019**

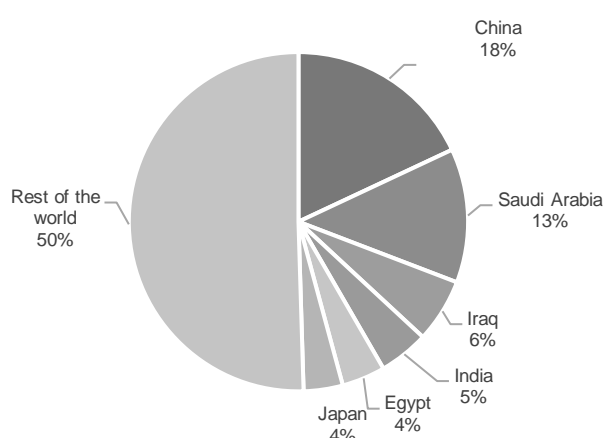


Table 22

## Production, trade and supply of fuel oil

Thousand metric tons and kilograms per capita

| Country or area      | Year        | Production     | Imports        | Exports        | Bunkers        | Changes in stocks | Supply         |            |
|----------------------|-------------|----------------|----------------|----------------|----------------|-------------------|----------------|------------|
|                      |             |                |                |                |                |                   | Total          | Per capita |
| <b>World</b>         | <b>2016</b> | <b>449,000</b> | <b>242,548</b> | <b>300,392</b> | <b>165,403</b> | <b>-4,230</b>     | <b>229,984</b> | <b>31</b>  |
|                      | <b>2017</b> | <b>446,610</b> | <b>231,970</b> | <b>286,310</b> | <b>173,016</b> | <b>-4,288</b>     | <b>223,542</b> | <b>30</b>  |
|                      | <b>2018</b> | <b>431,931</b> | <b>228,033</b> | <b>273,667</b> | <b>170,715</b> | <b>-6,215</b>     | <b>221,796</b> | <b>29</b>  |
|                      | <b>2019</b> | <b>406,889</b> | <b>209,160</b> | <b>237,386</b> | <b>169,693</b> | <b>99</b>         | <b>208,872</b> | <b>27</b>  |
| <b>Africa</b>        | <b>2016</b> | <b>20,726</b>  | <b>7,535</b>   | <b>9,593</b>   | <b>1,411</b>   | <b>-101</b>       | <b>17,358</b>  | <b>14</b>  |
|                      | <b>2017</b> | <b>20,424</b>  | <b>7,950</b>   | <b>9,621</b>   | <b>1,793</b>   | <b>-57</b>        | <b>17,017</b>  | <b>14</b>  |
|                      | <b>2018</b> | <b>21,459</b>  | <b>6,321</b>   | <b>9,258</b>   | <b>3,054</b>   | <b>-324</b>       | <b>15,792</b>  | <b>12</b>  |
|                      | <b>2019</b> | <b>22,102</b>  | <b>5,713</b>   | <b>8,688</b>   | <b>2,727</b>   | <b>-430</b>       | <b>16,830</b>  | <b>13</b>  |
| Algeria              | 2016        | 6,870          | 146            | 6,940          | 182            | -106              | 0              | 0          |
|                      | 2017        | 6,402          | 186            | 6,379          | 172            | 25                | 12             | 0          |
|                      | 2018        | 5,822          | 141            | 5,810          | 156            | -21               | 18             | 0          |
|                      | 2019        | 5,915          | 79             | 5,687          | 17             | 129               | 161            | 4          |
| Angola               | 2016        | 971            | 0              | 541            | 360            | *51               | 19             | 1          |
|                      | 2017        | 947            | ..             | 582            | 388            | *50               | -72            | -2         |
|                      | 2018        | 614            | ..             | 377            | 252            | *20               | -35            | -1         |
|                      | 2019        | 1,072          | ..             | 409            | 273            | ..                | 391            | 12         |
| Benin                | 2016        | ..             | 5              | ..             | 1              | -18               | 22             | 2          |
|                      | 2017        | ..             | 14             | ..             | 1              | -9                | 22             | 2          |
|                      | 2018        | ..             | 25             | ..             | ..             | -2                | 27             | 2          |
|                      | 2019        | ..             | 39             | ..             | ..             | 5                 | 34             | 3          |
| Botswana             | 2016        | ..             | 12             | ..             | ..             | ..                | 12             | 6          |
|                      | 2017        | ..             | 12             | ..             | ..             | ..                | 12             | 5          |
|                      | 2018        | ..             | 13             | ..             | ..             | ..                | 13             | 6          |
|                      | 2019        | ..             | 13             | ..             | ..             | ..                | 13             | 6          |
| Burkina Faso         | 2016        | ..             | 165            | ..             | ..             | *21               | 144            | 8          |
|                      | 2017        | ..             | 224            | ..             | ..             | *20               | 204            | 11         |
|                      | 2018        | ..             | 225            | ..             | ..             | ..                | 225            | 11         |
|                      | 2019        | ..             | 212            | ..             | ..             | *-3               | 215            | 11         |
| Burundi              | 2016        | ..             | *9             | ..             | ..             | ..                | *9             | *1         |
|                      | 2017        | ..             | *24            | ..             | ..             | ..                | *24            | *2         |
|                      | 2018        | ..             | *31            | ..             | ..             | ..                | *31            | *3         |
|                      | 2019        | ..             | *32            | ..             | ..             | ..                | *32            | *3         |
| Cabo Verde           | 2016        | ..             | *105           | ..             | *40            | ..                | *65            | *123       |
|                      | 2017        | ..             | *114           | ..             | *43            | ..                | *71            | *133       |
|                      | 2018        | ..             | *113           | ..             | *44            | ..                | *69            | *126       |
|                      | 2019        | ..             | *120           | ..             | *45            | ..                | *75            | *136       |
| Cameroon             | 2016        | 270            | ..             | 148            | 0              | ..                | 122            | 5          |
|                      | 2017        | 222            | ..             | 97             | 0              | ..                | 126            | 5          |
|                      | 2018        | 201            | ..             | 72             | ..             | ..                | 130            | 5          |
|                      | 2019        | 104            | 48             | 37             | ..             | ..                | 115            | 4          |
| Central African Rep. | 2016        | ..             | 1              | ..             | ..             | ..                | 1              | 0          |
|                      | 2017        | ..             | *2             | ..             | ..             | ..                | *2             | 0          |
|                      | 2018        | ..             | *2             | ..             | ..             | ..                | *2             | 0          |
|                      | 2019        | ..             | *2             | ..             | ..             | ..                | *2             | 0          |
| Chad                 | 2016        | *24            | ..             | *19            | ..             | ..                | *5             | 0          |
|                      | 2017        | *24            | ..             | *18            | ..             | 0                 | *6             | 0          |
|                      | 2018        | *24            | ..             | *20            | ..             | ..                | *4             | 0          |
|                      | 2019        | *26            | ..             | *20            | ..             | ..                | *6             | 0          |
| Congo                | 2016        | 325            | 26             | 325            | ..             | ..                | 26             | 5          |
|                      | 2017        | 358            | 16             | 343            | ..             | ..                | 31             | 6          |
|                      | 2018        | 362            | 16             | 348            | ..             | ..                | 30             | 6          |
|                      | 2019        | 368            | 16             | 352            | ..             | ..                | 32             | 6          |

## Production, trade and supply of fuel oil

Thousand metric tons and kilograms per capita

| Country or area        | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|------------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                        |      |            |         |         |         |                   | Total  | Per capita |
| Côte d'Ivoire          | 2016 | 317        | ..      | 271     | 7       | 0                 | 39     | 2          |
|                        | 2017 | *313       | ..      | *254    | 6       | ..                | *53    | *2         |
|                        | 2018 | 652        | ..      | 623     | 7       | ..                | 22     | 1          |
|                        | 2019 | 704        | ..      | 691     | 7       | ..                | 5      | 0          |
| Dem. Rep. of the Congo | 2016 | ..         | 22      | ..      | ..      | ..                | 22     | 0          |
|                        | 2017 | ..         | 16      | ..      | ..      | ..                | 16     | 0          |
|                        | 2018 | ..         | 14      | ..      | ..      | ..                | 14     | 0          |
|                        | 2019 | ..         | 6       | ..      | ..      | ..                | 6      | 0          |
| Djibouti               | 2016 | ..         | 15      | ..      | *9      | 6                 | 0      | 0          |
|                        | 2017 | ..         | 9       | ..      | *9      | 0                 | 0      | 0          |
|                        | 2018 | ..         | *9      | ..      | *9      | ..                | 0      | 0          |
|                        | 2019 | ..         | *9      | ..      | *9      | ..                | 0      | 0          |
| Egypt                  | 2016 | 7,567      | 2,302   | ..      | 21      | ..                | 9,848  | 104        |
|                        | 2017 | 7,354      | 1,422   | ..      | 158     | ..                | 8,618  | 89         |
|                        | 2018 | 7,444      | 498     | 234     | 27      | ..                | 7,681  | 78         |
|                        | 2019 | 9,009      | ..      | 356     | 13      | ..                | 8,640  | 86         |
| Eritrea                | 2016 | ..         | 68      | ..      | ..      | ..                | 68     | 20         |
|                        | 2017 | ..         | 63      | ..      | ..      | ..                | 63     | 19         |
|                        | 2018 | ..         | 82      | ..      | ..      | ..                | 82     | 24         |
|                        | 2019 | ..         | 84      | ..      | ..      | ..                | 84     | 24         |
| Eswatini               | 2016 | ..         | *1      | ..      | ..      | ..                | *1     | *1         |
|                        | 2017 | ..         | 0       | ..      | ..      | ..                | 0      | 0          |
|                        | 2018 | ..         | 0       | ..      | ..      | ..                | 0      | 0          |
|                        | 2019 | ..         | 0       | ..      | ..      | ..                | 0      | 0          |
| Ethiopia               | 2016 | ..         | 38      | ..      | ..      | ..                | 38     | 0          |
|                        | 2017 | ..         | 43      | ..      | ..      | ..                | 43     | 0          |
|                        | 2018 | ..         | 46      | ..      | ..      | ..                | 46     | 0          |
|                        | 2019 | ..         | 60      | ..      | ..      | ..                | 60     | 1          |
| Gabon                  | 2016 | 418        | ..      | 241     | 107     | ..                | 70     | 35         |
|                        | 2017 | 396        | ..      | 191     | 83      | ..                | 121    | 59         |
|                        | 2018 | 362        | ..      | 175     | 83      | ..                | 104    | 49         |
|                        | 2019 | 308        | ..      | 149     | 84      | ..                | 75     | 35         |
| Gambia                 | 2016 | ..         | 72      | ..      | ..      | ..                | 72     | 34         |
|                        | 2017 | ..         | 73      | ..      | ..      | ..                | 73     | 33         |
|                        | 2018 | ..         | *69     | ..      | ..      | ..                | *69    | *30        |
|                        | 2019 | ..         | *70     | ..      | ..      | ..                | *70    | *30        |
| Ghana                  | 2016 | 64         | 0       | 70      | ..      | 0                 | -6     | 0          |
|                        | 2017 | 4          | 0       | 53      | ..      | 0                 | -49    | -2         |
|                        | 2018 | 32         | 0       | 42      | ..      | ..                | -10    | 0          |
|                        | 2019 | 205        | 0       | 66      | ..      | 13                | 126    | 4          |
| Guinea                 | 2016 | ..         | 162     | ..      | ..      | ..                | 162    | 14         |
|                        | 2017 | ..         | 158     | ..      | ..      | ..                | 158    | 13         |
|                        | 2018 | ..         | 374     | ..      | ..      | ..                | 374    | 30         |
|                        | 2019 | ..         | 377     | ..      | ..      | ..                | 377    | 29         |
| Guinea-Bissau          | 2016 | ..         | *34     | ..      | ..      | ..                | *34    | *19        |
|                        | 2017 | ..         | *34     | ..      | ..      | ..                | *34    | *18        |
|                        | 2018 | ..         | *34     | ..      | ..      | ..                | *34    | *18        |
|                        | 2019 | ..         | *35     | ..      | ..      | ..                | *35    | *18        |
| Kenya                  | 2016 | 0          | 349     | 19      | 0       | 0                 | 329    | 7          |
|                        | 2017 | 0          | 599     | 38      | 8       | 0                 | 553    | 11         |
|                        | 2018 | ..         | 512     | ..      | 46      | ..                | 466    | 9          |
|                        | 2019 | ..         | 432     | 1       | ..      | ..                | 430    | 8          |

Table 22

## Production, trade and supply of fuel oil

Thousand metric tons and kilograms per capita

| Country or area | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|-----------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                 |      |            |         |         |         |                   | Total  | Per capita |
| Libya           | 2016 | 1,827      | 0       | 427     | 85      | ..                | 1,315  | 203        |
|                 | 2017 | 1,676      | 0       | 339     | 220     | ..                | 1,117  | 170        |
|                 | 2018 | 1,850      | ..      | 218     | 281     | ..                | 1,351  | 202        |
|                 | 2019 | 1,587      | ..      | 175     | 291     | ..                | 1,122  | 166        |
| Madagascar      | 2016 | ..         | 80      | ..      | *9      | *1                | 71     | 3          |
|                 | 2017 | ..         | 160     | ..      | 5       | 12                | 143    | 6          |
|                 | 2018 | ..         | 131     | ..      | ..      | -21               | 152    | 6          |
|                 | 2019 | ..         | 219     | ..      | ..      | 15                | 204    | 8          |
| Malawi          | 2016 | ..         | *2      | ..      | ..      | ..                | *2     | 0          |
|                 | 2017 | ..         | *2      | ..      | ..      | ..                | *2     | 0          |
|                 | 2018 | ..         | *2      | ..      | ..      | ..                | *2     | 0          |
|                 | 2019 | ..         | *2      | ..      | ..      | ..                | *2     | 0          |
| Mali            | 2016 | ..         | *89     | ..      | ..      | ..                | *89    | *5         |
|                 | 2017 | ..         | *90     | ..      | ..      | ..                | *90    | *5         |
|                 | 2018 | ..         | *92     | ..      | ..      | ..                | *92    | *5         |
|                 | 2019 | ..         | *94     | ..      | ..      | ..                | *94    | *5         |
| Mauritania      | 2016 | ..         | 171     | ..      | ..      | ..                | 171    | 41         |
|                 | 2017 | ..         | 277     | ..      | ..      | *16               | 261    | 61         |
|                 | 2018 | ..         | 402     | ..      | ..      | *88               | 313    | 71         |
|                 | 2019 | ..         | 391     | ..      | ..      | *88               | 303    | 67         |
| Mauritius       | 2016 | ..         | 490     | ..      | 217     | 7                 | 265    | 210        |
|                 | 2017 | ..         | 649     | ..      | 341     | 27                | 281    | 222        |
|                 | 2018 | ..         | 663     | ..      | 436     | -63               | 290    | 229        |
|                 | 2019 | ..         | 850     | ..      | 520     | 13                | 317    | 249        |
| Morocco         | 2016 | 0          | 1,518   | 0       | 114     | 129               | 1,275  | 36         |
|                 | 2017 | ..         | 1,795   | ..      | 114     | 6                 | 1,675  | 46         |
|                 | 2018 | ..         | 1,217   | ..      | 114     | 70                | 1,033  | 28         |
|                 | 2019 | ..         | 836     | ..      | 114     | -3                | 725    | 20         |
| Mozambique      | 2016 | ..         | 0       | ..      | ..      | ..                | 0      | 0          |
|                 | 2017 | ..         | 82      | ..      | ..      | ..                | 82     | 3          |
|                 | 2018 | ..         | 65      | ..      | ..      | ..                | 65     | 2          |
|                 | 2019 | ..         | 30      | ..      | ..      | ..                | 30     | 1          |
| Namibia         | 2016 | ..         | 18      | ..      | ..      | ..                | 18     | 8          |
|                 | 2017 | ..         | 18      | ..      | ..      | ..                | 18     | 7          |
|                 | 2018 | ..         | 18      | ..      | ..      | ..                | 18     | 7          |
|                 | 2019 | ..         | 18      | ..      | ..      | ..                | 18     | 7          |
| Niger           | 2016 | ..         | 6       | ..      | ..      | ..                | 6      | 0          |
|                 | 2017 | ..         | *24     | ..      | ..      | ..                | *24    | *1         |
|                 | 2018 | ..         | 1       | ..      | ..      | ..                | 1      | 0          |
|                 | 2019 | ..         | 0       | ..      | ..      | ..                | 0      | 0          |
| Nigeria         | 2016 | 577        | 297     | 169     | 216     | -187              | 676    | 4          |
|                 | 2017 | 994        | 297     | 511     | 218     | -190              | 752    | 4          |
|                 | 2018 | 552        | 9       | 88      | 228     | -386              | 630    | 3          |
|                 | 2019 | 34         | 32      | ..      | 237     | -677              | 506    | 3          |
| Rwanda          | 2016 | ..         | 5       | ..      | ..      | ..                | 5      | 0          |
|                 | 2017 | ..         | *15     | ..      | ..      | ..                | *15    | *1         |
|                 | 2018 | ..         | *21     | ..      | ..      | ..                | *21    | *2         |
|                 | 2019 | ..         | 39      | ..      | ..      | ..                | 39     | 3          |
| Senegal         | 2016 | 266        | 624     | 56      | 3       | -1                | 832    | 55         |
|                 | 2017 | 285        | 672     | 56      | 3       | 0                 | 898    | 58         |
|                 | 2018 | 220        | 615     | ..      | ..      | ..                | 835    | 53         |
|                 | 2019 | 191        | 746     | ..      | ..      | 1                 | 936    | 57         |

Table 22

## Production, trade and supply of fuel oil

Thousand metric tons and kilograms per capita

| Country or area         | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|-------------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                         |      |            |         |         |         |                   | Total  | Per capita |
| Seychelles              | 2016 | ..         | 87      | ..      | *1      | ..                | 86     | 900        |
|                         | 2017 | ..         | 95      | ..      | *1      | ..                | 94     | 977        |
|                         | 2018 | ..         | 86      | ..      | *1      | ..                | 85     | 871        |
|                         | 2019 | ..         | 72      | ..      | *1      | ..                | 71     | 729        |
| Sierra Leone            | 2016 | ..         | 32      | ..      | ..      | ..                | 32     | 4          |
|                         | 2017 | ..         | 44      | ..      | ..      | ..                | 44     | 6          |
|                         | 2018 | ..         | 48      | ..      | ..      | ..                | 48     | 6          |
|                         | 2019 | ..         | 86      | ..      | ..      | ..                | 86     | 11         |
| Somalia                 | 2016 | ..         | *39     | ..      | *12     | ..                | *27    | *2         |
|                         | 2017 | ..         | *39     | ..      | *12     | ..                | *27    | *2         |
|                         | 2018 | ..         | *39     | ..      | *12     | ..                | *27    | *2         |
|                         | 2019 | ..         | *39     | ..      | *12     | ..                | *27    | *2         |
| South Africa            | 2016 | 584        | ..      | ..      | ..      | ..                | 584    | 10         |
|                         | 2017 | 895        | 34      | 437     | ..      | ..                | 492    | 9          |
|                         | 2018 | 2,753      | 97      | 955     | 1,352   | ..                | 543    | 9          |
|                         | 2019 | 2,238      | 136     | 710     | 1,099   | ..                | 566    | 10         |
| Sudan                   | 2016 | 135        | ..      | ..      | ..      | ..                | 135    | 3          |
|                         | 2017 | 51         | 140     | ..      | ..      | ..                | 191    | 5          |
|                         | 2018 | 114        | 188     | ..      | ..      | ..                | 302    | 7          |
|                         | 2019 | *116       | *190    | ..      | ..      | ..                | *306   | *7         |
| Togo                    | 2016 | ..         | *185    | ..      | ..      | ..                | *185   | *25        |
|                         | 2017 | ..         | *149    | ..      | ..      | ..                | *149   | *19        |
|                         | 2018 | ..         | 55      | ..      | ..      | -2                | 57     | 7          |
|                         | 2019 | ..         | 22      | ..      | ..      | ..                | 22     | 3          |
| Tunisia                 | 2016 | 409        | 230     | 367     | ..      | -4                | 276    | 24         |
|                         | 2017 | 327        | 222     | 323     | ..      | -13               | 239    | 21         |
|                         | 2018 | 338        | 276     | 296     | ..      | -8                | 326    | 28         |
|                         | 2019 | 52         | 223     | 35      | ..      | -11               | 250    | 21         |
| Uganda                  | 2016 | ..         | *40     | ..      | ..      | ..                | *40    | *1         |
|                         | 2017 | ..         | *95     | ..      | ..      | ..                | *95    | *2         |
|                         | 2018 | ..         | 75      | ..      | ..      | ..                | 75     | 2          |
|                         | 2019 | ..         | 24      | ..      | ..      | ..                | 24     | 1          |
| United Rep. of Tanzania | 2016 | ..         | 92      | ..      | 27      | ..                | 65     | 1          |
|                         | 2017 | ..         | 43      | ..      | 13      | ..                | 30     | 1          |
|                         | 2018 | ..         | 17      | ..      | 5       | ..                | 12     | 0          |
|                         | 2019 | ..         | 31      | ..      | 5       | ..                | 26     | 0          |
| Zambia                  | 2016 | 102        | 0       | 0       | ..      | ..                | 102    | 6          |
|                         | 2017 | 176        | ..      | ..      | ..      | ..                | 176    | 10         |
|                         | 2018 | 119        | ..      | ..      | ..      | ..                | 119    | 7          |
|                         | 2019 | 172        | ..      | ..      | ..      | ..                | 172    | 10         |
| America, North          | 2016 | 47,767     | 26,814  | 31,507  | 20,578  | -94               | 22,590 | 39         |
|                         | 2017 | 47,056     | 27,341  | 29,911  | 22,712  | -1,468            | 23,241 | 40         |
|                         | 2018 | 44,858     | 27,787  | 32,136  | 20,487  | -2,363            | 22,385 | 38         |
|                         | 2019 | 35,815     | 25,921  | 19,187  | 20,329  | 205               | 22,016 | 38         |
| Antigua and Barbuda     | 2016 | ..         | *41     | ..      | *4      | ..                | *37    | *391       |
|                         | 2017 | ..         | *41     | ..      | *4      | ..                | *37    | *388       |
|                         | 2018 | ..         | *42     | ..      | *4      | ..                | *38    | *395       |
|                         | 2019 | ..         | *42     | ..      | *4      | ..                | *38    | *391       |
| Aruba                   | 2016 | ..         | *202    | ..      | *11     | ..                | *191   | *1,821     |
|                         | 2017 | ..         | *201    | ..      | *11     | ..                | *190   | *1,803     |
|                         | 2018 | ..         | 195     | ..      | *12     | ..                | 183    | 1,729      |
|                         | 2019 | ..         | *208    | ..      | *12     | ..                | *196   | *1,844     |

Table 22

## Production, trade and supply of fuel oil

Thousand metric tons and kilograms per capita

| Country or area             | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|-----------------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                             |      |            |         |         |         |                   | Total  | Per capita |
| Bahamas                     | 2016 | ..         | 35      | ..      | *25     | ..                | 10     | 26         |
|                             | 2017 | ..         | 84      | ..      | *71     | ..                | 13     | 34         |
|                             | 2018 | ..         | 72      | ..      | *60     | ..                | 12     | 31         |
|                             | 2019 | ..         | 56      | ..      | *44     | ..                | 12     | 31         |
| Barbados                    | 2016 | ..         | 228     | ..      | ..      | 17                | 210    | 736        |
|                             | 2017 | ..         | 180     | ..      | ..      | 15                | 165    | 577        |
|                             | 2018 | ..         | 195     | ..      | ..      | 2                 | 193    | 675        |
|                             | 2019 | ..         | 147     | ..      | ..      | -6                | 153    | 535        |
| Belize                      | 2016 | ..         | 4       | ..      | ..      | ..                | 4      | 11         |
|                             | 2017 | ..         | 6       | ..      | ..      | ..                | 6      | 17         |
|                             | 2018 | ..         | 9       | ..      | ..      | ..                | 9      | 23         |
|                             | 2019 | ..         | 22      | ..      | ..      | ..                | 22     | 56         |
| Bermuda                     | 2016 | ..         | 101     | ..      | *10     | ..                | 91     | 1,433      |
|                             | 2017 | ..         | 122     | ..      | *11     | ..                | 112    | 1,770      |
|                             | 2018 | ..         | 135     | ..      | *11     | ..                | 124    | 1,969      |
|                             | 2019 | ..         | 115     | ..      | *9      | ..                | 106    | 1,702      |
| Bonaire, St Eustatius, Saba | 2016 | ..         | *65     | ..      | *38     | *3                | *24    | *952       |
|                             | 2017 | ..         | *69     | ..      | *39     | *4                | *25    | *997       |
|                             | 2018 | ..         | *61     | ..      | *39     | *-1               | *23    | *902       |
|                             | 2019 | ..         | *64     | ..      | *39     | *-1               | *26    | *1,000     |
| Canada                      | 2016 | 4,115      | 780     | 3,023   | 245     | -180              | 1,807  | 50         |
|                             | 2017 | 4,739      | 843     | 2,952   | 298     | 44                | 2,288  | 62         |
|                             | 2018 | 5,196      | 598     | 3,701   | 378     | -29               | 1,744  | 47         |
|                             | 2019 | 5,073      | 764     | 1,908   | 468     | 8                 | 3,453  | 92         |
| Costa Rica                  | 2016 | ..         | 142     | ..      | ..      | -16               | 159    | 32         |
|                             | 2017 | ..         | 123     | ..      | ..      | -2                | 124    | 25         |
|                             | 2018 | ..         | 130     | ..      | ..      | -16               | 146    | 29         |
|                             | 2019 | ..         | 133     | ..      | ..      | 28                | 105    | 21         |
| Cuba                        | 2016 | 1,032      | 1,213   | ..      | 609     | ..                | 1,636  | 144        |
|                             | 2017 | 1,255      | 1,166   | ..      | *440    | ..                | 1,980  | 175        |
|                             | 2018 | 1,313      | 912     | ..      | *404    | ..                | 1,821  | 161        |
|                             | 2019 | 1,246      | 1,343   | ..      | *380    | ..                | 2,209  | 195        |
| Curaçao                     | 2016 | 2,996      | 1,685   | 2,917   | 1,402   | ..                | 362    | 2,248      |
|                             | 2017 | 1,366      | 1,671   | 1,330   | 1,404   | ..                | 303    | 1,873      |
|                             | 2018 | 1,037      | 1,622   | 1,009   | 1,400   | ..                | 250    | 1,535      |
|                             | 2019 | 0          | 1,588   | 0       | 1,408   | ..                | 180    | 1,103      |
| Dominica                    | 2016 | ..         | *16     | ..      | *1      | ..                | *14    | *203       |
|                             | 2017 | ..         | *14     | ..      | *1      | ..                | *13    | *183       |
|                             | 2018 | ..         | *14     | ..      | *1      | ..                | *13    | *185       |
|                             | 2019 | ..         | *15     | ..      | *1      | ..                | *14    | *190       |
| Dominican Republic          | 2016 | 310        | 1,564   | ..      | ..      | 6                 | 1,868  | 180        |
|                             | 2017 | 254        | 1,401   | ..      | ..      | 4                 | 1,650  | 157        |
|                             | 2018 | 372        | 1,424   | ..      | ..      | -1                | 1,797  | 169        |
|                             | 2019 | 329        | 1,565   | ..      | ..      | -1                | 1,896  | 177        |
| El Salvador                 | 2016 | 0          | 592     | ..      | ..      | ..                | 592    | 93         |
|                             | 2017 | ..         | 343     | ..      | ..      | ..                | 343    | 54         |
|                             | 2018 | ..         | 283     | ..      | ..      | ..                | 283    | 44         |
|                             | 2019 | ..         | 373     | 0       | ..      | ..                | 373    | 58         |
| Greenland                   | 2016 | ..         | 12      | ..      | 1       | 0                 | 11     | 195        |
|                             | 2017 | ..         | 14      | ..      | 2       | 0                 | 12     | 217        |
|                             | 2018 | ..         | *10     | ..      | *2      | 0                 | *9     | *159       |
|                             | 2019 | ..         | *11     | ..      | *2      | ..                | *9     | *164       |



## Production, trade and supply of fuel oil

Thousand metric tons and kilograms per capita

| Country or area           | Year        | Production    | Imports      | Exports       | Bunkers      | Changes in stocks | Supply        |            |
|---------------------------|-------------|---------------|--------------|---------------|--------------|-------------------|---------------|------------|
|                           |             |               |              |               |              |                   | Total         | Per capita |
| Guatemala                 | 2016        | ..            | 486          | 5             | ..           | 29                | 451           | 27         |
|                           | 2017        | ..            | 283          | 5             | ..           | -5                | 284           | 17         |
|                           | 2018        | ..            | 242          | 9             | ..           | -21               | 254           | 15         |
|                           | 2019        | ..            | 264          | 17            | ..           | 2                 | 245           | 14         |
| Haiti                     | 2016        | ..            | 109          | ..            | ..           | ..                | 109           | 10         |
|                           | 2017        | ..            | 123          | ..            | ..           | ..                | 123           | 11         |
|                           | 2018        | ..            | 116          | ..            | ..           | ..                | 116           | 10         |
|                           | 2019        | ..            | 126          | ..            | ..           | ..                | 126           | 11         |
| Honduras                  | 2016        | ..            | 870          | 16            | ..           | -56               | 910           | 98         |
|                           | 2017        | ..            | 696          | ..            | ..           | -11               | 708           | 75         |
|                           | 2018        | ..            | 521          | 1             | ..           | 29                | 491           | 51         |
|                           | 2019        | ..            | 750          | 1             | ..           | ..                | 748           | 77         |
| Jamaica                   | 2016        | 677           | 873          | 260           | ..           | -15               | 1,305         | 449        |
|                           | 2017        | 677           | 867          | 302           | ..           | 18                | 1,224         | 419        |
|                           | 2018        | 729           | 966          | 250           | ..           | -15               | 1,460         | 497        |
|                           | 2019        | 884           | 559          | 312           | ..           | 0                 | 1,131         | 384        |
| Mexico                    | 2016        | 13,007        | 1,508        | 6,458         | 86           | 89                | 7,882         | 64         |
|                           | 2017        | 12,360        | 2,242        | 5,887         | 72           | 162               | 8,481         | 68         |
|                           | 2018        | 10,550        | 2,330        | 5,561         | 84           | -81               | 7,316         | 58         |
|                           | 2019        | 8,472         | 2,358        | 4,005         | 74           | -67               | 6,818         | 53         |
| Nicaragua                 | 2016        | 330           | 195          | 0             | ..           | 8                 | 517           | 82         |
|                           | 2017        | 318           | 142          | 10            | ..           | -2                | 452           | 71         |
|                           | 2018        | 240           | *242         | 10            | ..           | 22                | 450           | 70         |
|                           | 2019        | 96            | 443          | 30            | ..           | 57                | 453           | 69         |
| Panama                    | 2016        | ..            | 3,789        | ..            | 3,538        | -167              | 419           | 104        |
|                           | 2017        | ..            | 4,697        | ..            | 4,274        | -114              | 537           | 131        |
|                           | 2018        | ..            | 4,308        | ..            | 4,130        | -119              | 296           | 71         |
|                           | 2019        | ..            | 4,875        | ..            | 4,745        | -101              | 231           | 54         |
| Sint Maarten (Dutch part) | 2016        | ..            | *260         | ..            | *133         | ..                | *127          | *3,117     |
|                           | 2017        | ..            | *244         | ..            | *128         | ..                | *116          | *2,789     |
|                           | 2018        | ..            | *234         | ..            | *123         | ..                | *112          | *2,659     |
|                           | 2019        | ..            | *235         | ..            | *124         | ..                | *111          | *2,628     |
| St. Lucia                 | 2016        | ..            | *6           | ..            | *6           | ..                | 0             | 0          |
|                           | 2017        | ..            | *7           | ..            | *7           | ..                | 0             | 0          |
|                           | 2018        | ..            | *7           | ..            | *7           | ..                | 0             | 0          |
|                           | 2019        | ..            | *7           | ..            | *7           | ..                | 0             | 0          |
| Trinidad and Tobago       | 2016        | 2,236         | ..           | 1,821         | 296          | 120               | -1            | -1         |
|                           | 2017        | 2,345         | ..           | 1,956         | 318          | 53                | 17            | 13         |
|                           | 2018        | 1,810         | ..           | 1,560         | 254          | -4                | 0             | 0          |
|                           | 2019        | ..            | 105          | 21            | 3            | ..                | 80            | 58         |
| United States             | 2016        | 23,064        | 12,039       | 17,007        | 14,173       | 68                | 3,855         | 12         |
|                           | 2017        | 23,742        | 11,764       | 17,470        | 15,634       | -1,635            | 4,037         | 12         |
|                           | 2018        | 23,612        | 13,120       | 20,034        | 13,580       | -2,128            | 5,246         | 16         |
|                           | 2019        | 19,715        | 9,754        | 12,892        | 13,009       | 286               | 3,281         | 10         |
| <b>America, South</b>     | <b>2016</b> | <b>38,073</b> | <b>894</b>   | <b>19,852</b> | <b>4,516</b> | <b>-459</b>       | <b>15,058</b> | <b>36</b>  |
|                           | <b>2017</b> | <b>35,597</b> | <b>1,065</b> | <b>19,373</b> | <b>4,657</b> | <b>-232</b>       | <b>12,864</b> | <b>31</b>  |
|                           | <b>2018</b> | <b>32,599</b> | <b>1,497</b> | <b>20,462</b> | <b>4,604</b> | <b>-537</b>       | <b>9,568</b>  | <b>23</b>  |
|                           | <b>2019</b> | <b>29,089</b> | <b>1,249</b> | <b>15,734</b> | <b>4,527</b> | <b>-121</b>       | <b>10,199</b> | <b>24</b>  |
| Argentina                 | 2016        | 3,923         | 0            | 25            | 628          | -55               | 3,325         | 76         |
|                           | 2017        | 2,993         | 0            | 370           | 687          | 104               | 1,832         | 42         |
|                           | 2018        | 1,878         | *236         | 584           | 591          | -13               | 952           | 21         |
|                           | 2019        | 2,138         | *200         | 863           | 377          | -48               | 1,146         | 26         |

Table 22

## Production, trade and supply of fuel oil

Thousand metric tons and kilograms per capita

| Country or area           | Year        | Production     | Imports        | Exports        | Bunkers        | Changes in stocks | Supply         |            |
|---------------------------|-------------|----------------|----------------|----------------|----------------|-------------------|----------------|------------|
|                           |             |                |                |                |                |                   | Total          | Per capita |
| Bolivia (Plur. State of)  | 2016        | 121            | ..             | 367            | ..             | -116              | -130           | -12        |
|                           | 2017        | 81             | ..             | 326            | ..             | -149              | -96            | -9         |
|                           | 2018        | 38             | ..             | 180            | ..             | -39               | -103           | -9         |
|                           | 2019        | 21             | ..             | 72             | ..             | 28                | -79            | -7         |
| Brazil                    | 2016        | 11,424         | 62             | 3,436          | 3,216          | 2                 | 4,832          | 23         |
|                           | 2017        | 11,646         | 71             | 3,623          | 3,310          | 64                | 4,720          | 23         |
|                           | 2018        | 10,761         | 303            | 5,136          | 2,556          | -213              | 3,585          | 17         |
|                           | 2019        | 11,626         | 53             | 5,801          | 2,972          | 34                | 2,872          | 14         |
| Chile                     | 2016        | 1,220          | 42             | 326            | 135            | -15               | 816            | 45         |
|                           | 2017        | 1,170          | 26             | 290            | 142            | 54                | 709            | 38         |
|                           | 2018        | 1,149          | 27             | 391            | 136            | 2                 | 648            | 35         |
|                           | 2019        | 993            | 14             | 179            | 102            | 55                | 671            | 35         |
| Colombia                  | 2016        | 3,418          | 0              | 2,387          | ..             | ..                | 1,030          | 21         |
|                           | 2017        | 2,852          | 8              | 2,082          | ..             | ..                | 778            | 16         |
|                           | 2018        | 3,260          | 1              | 1,667          | ..             | ..                | 1,595          | 32         |
|                           | 2019        | 2,915          | 0              | 1,595          | ..             | ..                | 1,320          | 26         |
| Ecuador                   | 2016        | 2,873          | 472            | 1,714          | 290            | -1                | 1,343          | 81         |
|                           | 2017        | 2,968          | 634            | 2,288          | 332            | -9                | 992            | 59         |
|                           | 2018        | 3,572          | 624            | 2,389          | 669            | 3                 | 1,135          | 66         |
|                           | 2019        | 2,769          | 662            | 2,223          | 523            | 2                 | 684            | 39         |
| Guyana                    | 2016        | ..             | 208            | ..             | ..             | -1                | 209            | 271        |
|                           | 2017        | ..             | 204            | ..             | ..             | 2                 | 202            | 261        |
|                           | 2018        | ..             | 216            | ..             | ..             | 1                 | 215            | 276        |
|                           | 2019        | ..             | 215            | ..             | ..             | -4                | 219            | 280        |
| Paraguay                  | 2016        | ..             | 46             | ..             | ..             | -1                | 47             | 7          |
|                           | 2017        | ..             | 5              | ..             | ..             | 1                 | 5              | 1          |
|                           | 2018        | ..             | 4              | ..             | ..             | 0                 | 4              | 1          |
|                           | 2019        | ..             | 5              | ..             | ..             | 0                 | 5              | 1          |
| Peru                      | 2016        | 2,432          | 23             | 1,884          | ..             | -281              | 852            | 28         |
|                           | 2017        | 3,258          | 23             | 2,615          | ..             | -233              | 899            | 29         |
|                           | 2018        | 2,780          | 0              | 2,063          | 463            | -277              | 532            | 17         |
|                           | 2019        | 2,316          | 30             | 1,511          | 391            | -175              | 618            | 19         |
| Suriname                  | 2016        | 296            | 30             | 383            | 37             | ..                | -93            | -165       |
|                           | 2017        | 323            | 31             | 257            | 36             | ..                | 60             | 106        |
|                           | 2018        | 300            | 30             | 270            | 32             | ..                | 28             | 48         |
|                           | 2019        | 255            | 30             | 124            | *32            | ..                | 129            | 222        |
| Uruguay                   | 2016        | 334            | 11             | ..             | 73             | 9                 | 263            | 77         |
|                           | 2017        | 105            | 63             | ..             | 34             | -66               | 200            | 58         |
|                           | 2018        | 242            | 56             | ..             | 64             | 0                 | 235            | 68         |
|                           | 2019        | 225            | 40             | ..             | 68             | -13               | 210            | 61         |
| Venezuela (Bolivar. Rep.) | 2016        | 12,032         | 0              | 9,330          | 138            | ..                | 2,564          | 86         |
|                           | 2017        | 10,201         | 0              | 7,523          | 116            | ..                | 2,562          | 87         |
|                           | 2018        | 8,618          | ..             | 7,782          | 94             | ..                | 742            | 26         |
|                           | 2019        | 5,831          | ..             | 3,366          | 61             | ..                | 2,404          | 84         |
| <b>Asia</b>               | <b>2016</b> | <b>195,479</b> | <b>137,716</b> | <b>100,978</b> | <b>97,537</b>  | <b>-2,362</b>     | <b>137,041</b> | <b>31</b>  |
|                           | <b>2017</b> | <b>201,275</b> | <b>143,260</b> | <b>111,142</b> | <b>101,708</b> | <b>-152</b>       | <b>131,838</b> | <b>29</b>  |
|                           | <b>2018</b> | <b>198,694</b> | <b>140,445</b> | <b>104,980</b> | <b>99,615</b>  | <b>-2,463</b>     | <b>137,006</b> | <b>30</b>  |
|                           | <b>2019</b> | <b>189,015</b> | <b>128,630</b> | <b>90,640</b>  | <b>99,837</b>  | <b>250</b>        | <b>126,919</b> | <b>28</b>  |
| Afghanistan               | 2016        | *10            | *1             | ..             | ..             | ..                | *11            | 0          |
|                           | 2017        | *12            | *1             | ..             | ..             | ..                | *13            | 0          |
|                           | 2018        | *20            | *1             | ..             | ..             | ..                | *21            | *1         |
|                           | 2019        | *12            | *1             | ..             | ..             | ..                | *13            | 0          |

## Production, trade and supply of fuel oil

Thousand metric tons and kilograms per capita

| Country or area      | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|----------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                      |      |            |         |         |         |                   | Total  | Per capita |
| Azerbaijan           | 2016 | 399        | 187     | 23      | ..      | -118              | 681    | 70         |
|                      | 2017 | 236        | 198     | 12      | ..      | 83                | 339    | 34         |
|                      | 2018 | 107        | ..      | 19      | ..      | 46                | 42     | 4          |
|                      | 2019 | 127        | ..      | 0       | ..      | 49                | 77     | 8          |
| Bahrain              | 2016 | 2,484      | ..      | 2,443   | ..      | 41                | 0      | 0          |
|                      | 2017 | 2,750      | ..      | 2,777   | ..      | -27               | 0      | 0          |
|                      | 2018 | 2,599      | ..      | 2,564   | ..      | 35                | 0      | 0          |
|                      | 2019 | 2,662      | ..      | 2,690   | ..      | -28               | 0      | 0          |
| Bangladesh           | 2016 | 363        | 335     | ..      | 115     | ..                | 583    | 4          |
|                      | 2017 | 443        | 521     | ..      | 122     | ..                | 842    | 5          |
|                      | 2018 | 304        | 678     | ..      | 121     | ..                | 860    | 5          |
|                      | 2019 | 344        | 651     | ..      | 144     | ..                | 851    | 5          |
| Bhutan               | 2016 | ..         | 1       | ..      | ..      | ..                | 1      | 2          |
|                      | 2017 | ..         | 2       | ..      | ..      | ..                | 2      | 2          |
|                      | 2018 | ..         | 3       | ..      | ..      | ..                | 3      | 4          |
|                      | 2019 | ..         | 1       | ..      | ..      | ..                | 1      | 2          |
| Brunei Darussalam    | 2016 | 39         | ..      | ..      | 39      | ..                | 0      | 0          |
|                      | 2017 | ..         | ..      | ..      | ..      | ..                | ..     | ..         |
|                      | 2018 | ..         | ..      | ..      | ..      | ..                | ..     | ..         |
|                      | 2019 | ..         | ..      | ..      | ..      | ..                | ..     | ..         |
| Cambodia             | 2016 | ..         | 140     | ..      | ..      | ..                | 140    | 9          |
|                      | 2017 | ..         | 78      | ..      | ..      | ..                | 78     | 5          |
|                      | 2018 | ..         | 85      | ..      | ..      | ..                | 85     | 5          |
|                      | 2019 | ..         | 253     | ..      | ..      | ..                | 253    | 15         |
| China                | 2016 | 42,369     | 11,744  | 9,856   | 9,251   | -64               | 35,070 | 25         |
|                      | 2017 | 45,635     | 13,568  | 11,089  | 9,663   | 662               | 37,789 | 27         |
|                      | 2018 | 38,997     | 16,656  | 12,300  | 10,489  | -874              | 33,739 | 24         |
|                      | 2019 | 45,061     | 14,855  | 11,177  | 9,738   | 1,350             | 37,651 | 26         |
| China, Hong Kong SAR | 2016 | ..         | 7,251   | 264     | 6,529   | 458               | 0      | 0          |
|                      | 2017 | ..         | 7,958   | 168     | 8,042   | -251              | -1     | 0          |
|                      | 2018 | ..         | 7,303   | 90      | 7,502   | -348              | 59     | 8          |
|                      | 2019 | ..         | 6,749   | 186     | 6,439   | 123               | 1      | 0          |
| China, Macao SAR     | 2016 | ..         | 148     | ..      | ..      | -3                | 151    | 246        |
|                      | 2017 | ..         | 128     | ..      | ..      | 8                 | 120    | 193        |
|                      | 2018 | ..         | 37      | ..      | ..      | -7                | 44     | 70         |
|                      | 2019 | ..         | 21      | ..      | ..      | -13               | 34     | 53         |
| Cyprus               | 2016 | ..         | 1,095   | ..      | 193     | -4                | 906    | 774        |
|                      | 2017 | ..         | 980     | ..      | 154     | 18                | 808    | 685        |
|                      | 2018 | ..         | 1,016   | ..      | 154     | 19                | 842    | 708        |
|                      | 2019 | ..         | 968     | ..      | 156     | 4                 | 807    | 673        |
| Georgia              | 2016 | 8          | 44      | 19      | ..      | -23               | 57     | 14         |
|                      | 2017 | 9          | 87      | 32      | ..      | 1                 | 63     | 16         |
|                      | 2018 | 9          | 89      | 95      | ..      | -1                | 3      | 1          |
|                      | 2019 | 16         | 0       | 15      | ..      | 0                 | 0      | 0          |
| India                | 2016 | 9,962      | 956     | 2,248   | 1,506   | ..                | 7,164  | 5          |
|                      | 2017 | 9,486      | 1,273   | 2,492   | 1,578   | ..                | 6,689  | 5          |
|                      | 2018 | 10,032     | 1,419   | 2,197   | *1,685  | ..                | 7,569  | 6          |
|                      | 2019 | 8,609      | 4,583   | 1,527   | *1,725  | ..                | 9,940  | 7          |
| Indonesia            | 2016 | 1,305      | 719     | 342     | 137     | 0                 | 1,545  | 6          |
|                      | 2017 | 1,027      | 643     | 262     | 144     | 0                 | 1,264  | 5          |
|                      | 2018 | 1,258      | 493     | 176     | 0       | 2                 | 1,573  | 6          |
|                      | 2019 | 1,168      | 198     | 0       | 2       | 0                 | 1,363  | 5          |

Table 22

## Production, trade and supply of fuel oil

Thousand metric tons and kilograms per capita

| Country or area        | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|------------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                        |      |            |         |         |         |                   | Total  | Per capita |
| Iran (Islamic Rep. of) | 2016 | 21,964     | ..      | 15,817  | 1,826   | ..                | 4,321  | 54         |
|                        | 2017 | 19,707     | ..      | 15,843  | 1,179   | ..                | 2,685  | 33         |
|                        | 2018 | 24,238     | ..      | 15,955  | 1,179   | ..                | 7,104  | 87         |
|                        | 2019 | 22,048     | ..      | 16,688  | 1,179   | ..                | 4,181  | 50         |
| Iraq                   | 2016 | 12,774     | ..      | 330     | 284     | ..                | 12,160 | 332        |
|                        | 2017 | 14,573     | ..      | 3,658   | 286     | ..                | 10,629 | 283        |
|                        | 2018 | 16,182     | ..      | 1,098   | 291     | ..                | 14,793 | 385        |
|                        | 2019 | 16,880     | ..      | 3,882   | 299     | ..                | 12,699 | 323        |
| Israel                 | 2016 | 2,715      | 0       | 2,369   | 128     | -68               | 286    | 35         |
|                        | 2017 | 2,667      | ..      | 2,453   | 200     | 66                | -52    | -6         |
|                        | 2018 | 2,576      | ..      | 2,067   | 259     | -4                | 254    | 30         |
|                        | 2019 | 2,425      | ..      | 2,011   | 281     | -54               | 187    | 22         |
| Japan                  | 2016 | 17,758     | 2,265   | 3,065   | 4,150   | -31               | 12,839 | 100        |
|                        | 2017 | 15,334     | 2,164   | 2,411   | 3,983   | -90               | 11,193 | 88         |
|                        | 2018 | 14,735     | 1,730   | 2,715   | 4,237   | 106               | 9,407  | 74         |
|                        | 2019 | 14,321     | 479     | 2,978   | 4,275   | -240              | 7,787  | 61         |
| Jordan                 | 2016 | 599        | 0       | ..      | 85      | 8                 | 506    | 53         |
|                        | 2017 | 564        | 0       | ..      | 73      | 29                | 462    | 47         |
|                        | 2018 | 458        | 0       | ..      | *47     | -2                | 413    | 41         |
|                        | 2019 | 464        | ..      | ..      | 32      | ..                | 431    | 43         |
| Kazakhstan             | 2016 | 3,101      | 0       | *1,856  | ..      | -26               | 1,271  | 71         |
|                        | 2017 | 3,365      | ..      | *1,733  | ..      | -1                | 1,633  | 90         |
|                        | 2018 | 2,948      | 66      | 3,002   | ..      | 16                | -3     | 0          |
|                        | 2019 | 2,875      | 1       | 2,622   | ..      | 7                 | 247    | 13         |
| Korea, Dem.Ppl's.Rep.  | 2016 | 109        | 422     | ..      | ..      | ..                | 531    | 21         |
|                        | 2017 | 109        | 350     | ..      | ..      | ..                | 459    | 18         |
|                        | 2018 | 109        | 343     | ..      | ..      | ..                | 452    | 18         |
|                        | 2019 | 109        | 415     | ..      | ..      | ..                | 524    | 20         |
| Korea, Republic of     | 2016 | 10,383     | 7,052   | 1,956   | 9,172   | -352              | 6,659  | 131        |
|                        | 2017 | 9,874      | 5,952   | 2,463   | 8,743   | 240               | 4,380  | 86         |
|                        | 2018 | 10,200     | 6,589   | 4,036   | 8,275   | 49                | 4,429  | 87         |
|                        | 2019 | 8,526      | 4,753   | 2,649   | 6,715   | -298              | 4,214  | 82         |
| Kuwait                 | 2016 | 10,002     | ..      | 4,540   | 1,019   | -928              | 5,371  | 1,357      |
|                        | 2017 | 8,723      | ..      | 3,816   | 889     | -1,341            | 5,359  | 1,321      |
|                        | 2018 | 8,642      | ..      | 3,699   | 880     | -1,461            | 5,524  | 1,335      |
|                        | 2019 | 8,357      | ..      | 3,261   | 851     | -591              | 4,836  | 1,149      |
| Kyrgyzstan             | 2016 | 75         | 33      | 0       | ..      | -39               | 147    | 24         |
|                        | 2017 | 63         | 76      | 7       | ..      | 16                | 116    | 19         |
|                        | 2018 | 156        | 14      | 34      | ..      | -36               | 172    | 27         |
|                        | 2019 | 115        | 58      | 44      | ..      | 3                 | 126    | 20         |
| Lao People's Dem. Rep. | 2016 | ..         | 11      | ..      | ..      | ..                | 11     | 2          |
|                        | 2017 | ..         | 11      | ..      | ..      | ..                | 11     | 2          |
|                        | 2018 | ..         | 16      | ..      | ..      | ..                | 16     | 2          |
|                        | 2019 | ..         | *11     | ..      | ..      | ..                | *11    | *2         |
| Lebanon                | 2016 | ..         | 1,732   | ..      | *30     | ..                | 1,702  | 253        |
|                        | 2017 | ..         | 2,095   | ..      | *30     | ..                | 2,065  | 303        |
|                        | 2018 | ..         | 2,048   | ..      | 30      | ..                | 2,018  | 294        |
|                        | 2019 | ..         | 1,852   | ..      | *30     | ..                | 1,822  | 266        |
| Malaysia               | 2016 | 1,492      | 51      | 610     | 299     | -39               | 673    | 22         |
|                        | 2017 | 1,739      | 228     | 622     | 300     | 11                | 1,034  | 33         |
|                        | 2018 | 2,452      | 103     | 1,375   | 321     | 526               | 333    | 11         |
|                        | 2019 | 2,322      | 127     | 1,670   | 335     | ..                | 444    | 14         |

## Production, trade and supply of fuel oil

Thousand metric tons and kilograms per capita

| Country or area      | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|----------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                      |      |            |         |         |         |                   | Total  | Per capita |
| Mongolia             | 2016 | ..         | 3       | ..      | ..      | ..                | 3      | 1          |
|                      | 2017 | ..         | 2       | ..      | ..      | ..                | 2      | 1          |
|                      | 2018 | ..         | 3       | ..      | ..      | ..                | 3      | 1          |
|                      | 2019 | ..         | 3       | ..      | ..      | ..                | 3      | 1          |
| Myanmar              | 2016 | 67         | ..      | ..      | ..      | 18                | 49     | 1          |
|                      | 2017 | 78         | ..      | ..      | ..      | 34                | 44     | 1          |
|                      | 2018 | 37         | ..      | ..      | ..      | -7                | 44     | 1          |
|                      | 2019 | 23         | ..      | ..      | ..      | ..                | 23     | 0          |
| Oman                 | 2016 | 278        | ..      | 285     | *36     | ..                | -43    | -10        |
|                      | 2017 | 372        | ..      | 377     | *24     | ..                | -29    | -6         |
|                      | 2018 | 277        | ..      | 276     | *43     | ..                | -42    | -9         |
|                      | 2019 | 286        | ..      | 228     | *97     | ..                | -39    | -8         |
| Other Asia           | 2016 | 5,125      | 1,687   | 1,267   | 1,193   | -102              | 4,454  | 189        |
|                      | 2017 | 4,953      | 2,464   | 1,543   | 1,103   | -27               | 4,798  | 203        |
|                      | 2018 | 4,173      | 2,136   | 1,866   | 1,040   | -188              | 3,590  | 151        |
|                      | 2019 | 3,690      | 1,233   | 1,760   | 1,079   | -230              | 2,314  | 97         |
| Pakistan             | 2016 | 3,054      | 6,533   | 1       | 91      | -153              | 9,648  | 47         |
|                      | 2017 | 3,303      | 4,247   | ..      | 39      | *-153             | 7,664  | 37         |
|                      | 2018 | 3,398      | 552     | ..      | 35      | 0                 | 3,915  | 18         |
|                      | 2019 | 2,702      | 775     | ..      | 30      | ..                | 3,447  | 16         |
| Philippines          | 2016 | 781        | 1,082   | 239     | 46      | -37               | 1,615  | 16         |
|                      | 2017 | 977        | 1,046   | 433     | 90      | 26                | 1,474  | 14         |
|                      | 2018 | 737        | 792     | 259     | 67      | -2                | 1,205  | 11         |
|                      | 2019 | 702        | 765     | 287     | 42      | -25               | 1,162  | 11         |
| Qatar                | 2016 | 225        | ..      | 211     | ..      | ..                | 14     | 5          |
|                      | 2017 | 234        | ..      | 249     | ..      | ..                | -15    | -6         |
|                      | 2018 | 146        | ..      | 144     | ..      | ..                | 2      | 1          |
|                      | 2019 | 141        | ..      | 141     | ..      | ..                | 0      | 0          |
| Saudi Arabia         | 2016 | 25,425     | 7,542   | 8,785   | 3,453   | -290              | 21,019 | 648        |
|                      | 2017 | 25,699     | 10,547  | 14,015  | 3,325   | -19               | 18,925 | 572        |
|                      | 2018 | 25,106     | 16,772  | 10,791  | 3,518   | 159               | 27,410 | 813        |
|                      | 2019 | 23,344     | *11,102 | *4,456  | *3,358  | *-77              | 26,709 | 779        |
| Singapore            | 2016 | 4,279      | 71,052  | 31,812  | 46,624  | -408              | -2,697 | -477       |
|                      | 2017 | 5,383      | 76,356  | 32,529  | 48,615  | 451               | 144    | 25         |
|                      | 2018 | 5,461      | 68,809  | 26,489  | 47,513  | -749              | 1,017  | 177        |
|                      | 2019 | 4,924      | 59,798  | 23,331  | 43,581  | 41                | -2,232 | -385       |
| Sri Lanka            | 2016 | 479        | 350     | 56      | 594     | -525              | 703    | 33         |
|                      | 2017 | 494        | 581     | 0       | 564     | -121              | 632    | 30         |
|                      | 2018 | 424        | 553     | 26      | 603     | -42               | 390    | 18         |
|                      | 2019 | 483        | 504     | ..      | 603     | -52               | 436    | 20         |
| State of Palestine   | 2016 | ..         | 5       | ..      | ..      | ..                | 5      | 1          |
|                      | 2017 | ..         | 5       | ..      | ..      | ..                | 5      | 1          |
|                      | 2018 | ..         | 7       | ..      | ..      | ..                | 7      | 1          |
|                      | 2019 | ..         | 4       | ..      | ..      | ..                | 4      | 1          |
| Syrian Arab Republic | 2016 | 2,886      | 0       | ..      | 4       | ..                | 2,882  | 165        |
|                      | 2017 | 3,205      | ..      | ..      | 2       | ..                | 3,203  | 187        |
|                      | 2018 | 3,001      | ..      | ..      | 2       | ..                | 2,999  | 177        |
|                      | 2019 | 2,592      | ..      | ..      | 1       | ..                | 2,591  | 152        |
| Tajikistan           | 2016 | 7          | 16      | ..      | ..      | ..                | 23     | 3          |
|                      | 2017 | 9          | 25      | ..      | ..      | ..                | 34     | 4          |
|                      | 2018 | 26         | 24      | ..      | ..      | ..                | 50     | 6          |
|                      | 2019 | 15         | 23      | ..      | ..      | ..                | 38     | 4          |

Table 22

## Production, trade and supply of fuel oil

Thousand metric tons and kilograms per capita

| Country or area        | Year        | Production     | Imports       | Exports        | Bunkers       | Changes in stocks | Supply        |            |
|------------------------|-------------|----------------|---------------|----------------|---------------|-------------------|---------------|------------|
|                        |             |                |               |                |               |                   | Total         | Per capita |
| Thailand               | 2016        | 5,326          | 113           | 3,059          | 1,219         | 238               | 923           | 13         |
|                        | 2017        | 5,526          | 55            | 3,309          | 1,165         | 311               | 796           | 12         |
|                        | 2018        | 5,580          | 8             | 3,242          | 1,391         | 256               | 698           | 10         |
|                        | 2019        | 5,152          | 23            | 3,021          | 1,170         | 287               | 697           | 10         |
| Turkey                 | 2016        | 2,835          | 1,707         | 1,652          | 812           | 90                | 1,988         | 25         |
|                        | 2017        | 2,987          | 2,105         | 1,495          | 794           | -138              | 2,941         | 36         |
|                        | 2018        | 2,189          | 2,404         | 1,112          | 845           | 49                | 2,587         | 31         |
|                        | 2019        | 3,114          | 2,047         | 2,126          | 768           | -3                | 2,270         | 27         |
| Turkmenistan           | 2016        | 1,690          | ..            | 759            | ..            | ..                | 931           | 164        |
|                        | 2017        | 1,690          | ..            | 759            | ..            | ..                | 931           | 162        |
|                        | 2018        | 1,690          | ..            | 759            | ..            | ..                | 931           | 159        |
|                        | 2019        | 1,690          | ..            | 759            | ..            | ..                | 931           | 157        |
| United Arab Emirates   | 2016        | 4,732          | 12,098        | 6,912          | *8,442        | ..                | 1,476         | 158        |
|                        | 2017        | 9,608          | *8,530        | 6,321          | 10,338        | 57                | 1,422         | 150        |
|                        | 2018        | 9,854          | *8,601        | 8,201          | 8,751         | ..                | 1,502         | 156        |
|                        | 2019        | 2,958          | 15,182        | 2,799          | 16,665        | ..                | -1,324        | -136       |
| Uzbekistan             | 2016        | 93             | ..            | ..             | ..            | -9                | 102           | 3          |
|                        | 2017        | 112            | ..            | ..             | ..            | 1                 | 110           | 3          |
|                        | 2018        | 143            | 74            | ..             | ..            | -6                | 222           | 7          |
|                        | 2019        | 211            | 124           | ..             | ..            | -3                | 338           | 10         |
| Viet Nam               | 2016        | 138            | 883           | 202            | 207           | 4                 | 608           | 6          |
|                        | 2017        | 136            | 597           | 274            | 214           | ..                | 245           | 3          |
|                        | 2018        | 200            | 699           | 394            | 286           | ..                | 219           | 2          |
|                        | 2019        | 178            | 833           | 332            | 183           | ..                | 496           | 5          |
| Yemen                  | 2016        | 148            | 458           | 0              | 53            | ..                | 553           | 20         |
|                        | 2017        | 194            | 387           | ..             | 50            | ..                | 531           | 19         |
|                        | 2018        | 232            | 324           | ..             | 51            | ..                | 505           | 18         |
|                        | 2019        | 373            | 239           | ..             | 58            | ..                | 553           | 19         |
| <b>Europe</b>          | <b>2016</b> | <b>145,842</b> | <b>68,128</b> | <b>138,115</b> | <b>40,602</b> | <b>-1,163</b>     | <b>36,416</b> | <b>49</b>  |
|                        | <b>2017</b> | <b>141,037</b> | <b>51,037</b> | <b>115,790</b> | <b>41,378</b> | <b>-2,450</b>     | <b>37,356</b> | <b>50</b>  |
|                        | <b>2018</b> | <b>132,968</b> | <b>49,998</b> | <b>106,407</b> | <b>42,157</b> | <b>-666</b>       | <b>35,068</b> | <b>47</b>  |
|                        | <b>2019</b> | <b>129,409</b> | <b>45,590</b> | <b>102,800</b> | <b>41,297</b> | <b>174</b>        | <b>30,727</b> | <b>41</b>  |
| Albania                | 2016        | 1              | 0             | ..             | ..            | ..                | 1             | 0          |
|                        | 2017        | 0              | 0             | ..             | ..            | ..                | 0             | 0          |
|                        | 2018        | ..             | 1             | ..             | ..            | ..                | 1             | 1          |
|                        | 2019        | ..             | 3             | ..             | ..            | ..                | 3             | 1          |
| Austria                | 2016        | 898            | 16            | 576            | ..            | -119              | 457           | 52         |
|                        | 2017        | 839            | 68            | 437            | ..            | -71               | 541           | 61         |
|                        | 2018        | 710            | 65            | 467            | ..            | -17               | 325           | 37         |
|                        | 2019        | 735            | 44            | 455            | ..            | -58               | 382           | 43         |
| Belarus                | 2016        | 5,569          | 38            | 4,970          | ..            | 9                 | 628           | 66         |
|                        | 2017        | 5,112          | 0             | 4,685          | ..            | -2                | 429           | 45         |
|                        | 2018        | 5,409          | ..            | 5,019          | ..            | -9                | 399           | 42         |
|                        | 2019        | 4,382          | ..            | 4,062          | ..            | -1                | 321           | 34         |
| Belgium                | 2016        | 5,349          | 4,079         | 4,183          | 5,443         | 83                | -281          | -25        |
|                        | 2017        | 7,488          | 4,988         | 6,284          | 6,715         | -33               | -490          | -43        |
|                        | 2018        | 7,507          | 6,127         | 5,794          | 8,327         | 53                | -540          | -47        |
|                        | 2019        | 4,585          | 5,733         | 4,296          | 7,336         | 76                | -1,389        | -120       |
| Bosnia and Herzegovina | 2016        | 69             | 40            | 1              | ..            | -13               | 121           | 36         |
|                        | 2017        | 81             | 56            | 2              | ..            | ..                | 135           | 40         |
|                        | 2018        | 57             | 52            | 3              | ..            | ..                | 106           | 32         |
|                        | 2019        | 25             | 31            | 15             | ..            | -4                | 45            | 14         |

Table 22

## Production, trade and supply of fuel oil

Thousand metric tons and kilograms per capita

| Country or area | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|-----------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                 |      |            |         |         |         |                   | Total  | Per capita |
| Bulgaria        | 2016 | 1,297      | 73      | 1,262   | 19      | -7                | 96     | 13         |
|                 | 2017 | 974        | 58      | 900     | 24      | -28               | 136    | 19         |
|                 | 2018 | 948        | 27      | 847     | 25      | 25                | 77     | 11         |
|                 | 2019 | 581        | 35      | 544     | 17      | 13                | 43     | 6          |
| Croatia         | 2016 | 601        | 46      | 451     | 2       | 29                | 165    | 39         |
|                 | 2017 | 577        | 48      | 520     | 3       | -69               | 170    | 41         |
|                 | 2018 | 669        | 57      | 595     | 5       | 6                 | 121    | 29         |
|                 | 2019 | 397        | 41      | 350     | 5       | -5                | 88     | 21         |
| Czechia         | 2016 | 104        | 0       | 84      | ..      | -22               | 42     | 4          |
|                 | 2017 | 169        | ..      | 149     | ..      | -26               | 46     | 4          |
|                 | 2018 | 137        | 2       | 137     | ..      | -32               | 34     | 3          |
|                 | 2019 | 139        | ..      | 119     | ..      | -8                | 28     | 3          |
| Denmark         | 2016 | 1,771      | 3,412   | 4,527   | 258     | -194              | 592    | 104        |
|                 | 2017 | 1,626      | 980     | 2,445   | 139     | -483              | 506    | 88         |
|                 | 2018 | 1,870      | 1,796   | 2,843   | 221     | -170              | 773    | 134        |
|                 | 2019 | 1,559      | 2,432   | 2,946   | 377     | 391               | 277    | 48         |
| Estonia         | 2016 | ..         | 371     | 176     | 167     | 3                 | 25     | 19         |
|                 | 2017 | ..         | 441     | 203     | 207     | 20                | 11     | 8          |
|                 | 2018 | ..         | 474     | 321     | 140     | 4                 | 9      | 7          |
|                 | 2019 | ..         | 437     | 337     | 106     | -20               | 15     | 11         |
| Faeroe Islands  | 2016 | ..         | *77     | ..      | 16      | ..                | *60    | *1,249     |
|                 | 2017 | ..         | *88     | ..      | 21      | ..                | *67    | *1,385     |
|                 | 2018 | ..         | *89     | ..      | 21      | ..                | *68    | *1,398     |
|                 | 2019 | ..         | *98     | ..      | 26      | ..                | *72    | *1,481     |
| Finland         | 2016 | 1,554      | 1,221   | 1,324   | 253     | -104              | 1,302  | 237        |
|                 | 2017 | 1,614      | 902     | 1,190   | 288     | 21                | 1,017  | 185        |
|                 | 2018 | 1,543      | 449     | 1,165   | 276     | 64                | 487    | 88         |
|                 | 2019 | 1,412      | 601     | 1,175   | 272     | -122              | 688    | 124        |
| France          | 2016 | 7,686      | 4,203   | 5,827   | 1,442   | -165              | 4,785  | 72         |
|                 | 2017 | 6,403      | 3,584   | 4,774   | 1,597   | -82               | 3,698  | 55         |
|                 | 2018 | 5,853      | 3,422   | 4,895   | 1,842   | -100              | 2,638  | 39         |
|                 | 2019 | 6,176      | 2,883   | 3,852   | 1,617   | 77                | 3,513  | 52         |
| Germany         | 2016 | 7,374      | 2,531   | 2,154   | 1,855   | 199               | 5,697  | 69         |
|                 | 2017 | 7,376      | 2,276   | 1,862   | 1,457   | -8                | 6,341  | 77         |
|                 | 2018 | 7,296      | 2,144   | 2,658   | 981     | 17                | 5,784  | 70         |
|                 | 2019 | 7,034      | 1,628   | 2,736   | 668     | -122              | 5,380  | 64         |
| Gibraltar       | 2016 | ..         | 3,463   | ..      | 3,412   | ..                | 51     | 1,512      |
|                 | 2017 | ..         | 3,842   | ..      | 3,799   | ..                | 43     | 1,275      |
|                 | 2018 | ..         | 3,762   | ..      | 3,711   | ..                | 51     | 1,513      |
|                 | 2019 | ..         | 3,835   | ..      | 3,800   | ..                | 35     | 1,036      |
| Greece          | 2016 | 6,150      | 1,617   | 3,739   | 1,462   | -98               | 2,664  | 251        |
|                 | 2017 | 7,028      | 1,745   | 4,300   | 1,864   | 105               | 2,503  | 237        |
|                 | 2018 | 6,551      | 1,725   | 3,852   | 1,936   | -150              | 2,638  | 251        |
|                 | 2019 | 5,172      | 2,331   | 2,737   | 2,220   | 123               | 2,423  | 231        |
| Hungary         | 2016 | 39         | 9       | 27      | ..      | -20               | 41     | 4          |
|                 | 2017 | 78         | 20      | 50      | ..      | -2                | 50     | 5          |
|                 | 2018 | 43         | 24      | 14      | ..      | 16                | 37     | 4          |
|                 | 2019 | 21         | 11      | 3       | ..      | -2                | 31     | 3          |
| Iceland         | 2016 | ..         | 101     | ..      | 24      | -1                | 78     | 235        |
|                 | 2017 | ..         | 102     | ..      | 34      | 2                 | 66     | 198        |
|                 | 2018 | ..         | 119     | ..      | 34      | 3                 | 83     | 245        |
|                 | 2019 | ..         | 57      | ..      | 19      | -12               | 50     | 148        |

Table 22

## Production, trade and supply of fuel oil

Thousand metric tons and kilograms per capita

| Country or area | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|-----------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                 |      |            |         |         |         |                   | Total  | Per capita |
| Ireland         | 2016 | 1,070      | 60      | 1,060   | 11      | -34               | 93     | 20         |
|                 | 2017 | 1,042      | 62      | 1,058   | 14      | -14               | 46     | 10         |
|                 | 2018 | 976        | 97      | 1,002   | 16      | -24               | 79     | 16         |
|                 | 2019 | 725        | 114     | 724     | 10      | 1                 | 103    | 21         |
| Italy           | 2016 | 8,074      | 827     | 4,663   | 1,995   | -144              | 2,387  | 39         |
|                 | 2017 | 8,511      | 847     | 5,258   | 2,075   | -88               | 2,113  | 35         |
|                 | 2018 | 6,858      | 1,692   | 4,449   | 2,302   | 39                | 1,761  | 29         |
|                 | 2019 | 6,709      | 1,008   | 3,718   | 2,201   | 57                | 1,741  | 29         |
| Kosovo          | 2016 | ..         | 22      | ..      | ..      | ..                | 22     | 12         |
|                 | 2017 | ..         | 26      | ..      | ..      | ..                | 26     | 15         |
|                 | 2018 | ..         | 21      | ..      | ..      | ..                | 21     | 12         |
|                 | 2019 | ..         | 20      | ..      | ..      | ..                | 20     | 11         |
| Latvia          | 2016 | ..         | 157     | 2       | 153     | 2                 | 0      | 0          |
|                 | 2017 | ..         | 127     | 1       | 126     | -1                | 1      | 0          |
|                 | 2018 | ..         | 4       | ..      | 2       | -1                | 3      | 2          |
|                 | 2019 | ..         | 44      | ..      | 43      | -1                | 2      | 1          |
| Lithuania       | 2016 | 1,840      | 107     | 1,749   | 99      | 17                | 82     | 28         |
|                 | 2017 | 1,688      | 113     | 1,658   | 106     | -29               | 66     | 23         |
|                 | 2018 | 1,681      | 129     | 1,640   | 122     | -10               | 59     | 21         |
|                 | 2019 | 1,539      | 123     | 1,549   | 120     | -26               | 19     | 7          |
| Luxembourg      | 2016 | ..         | 1       | ..      | ..      | ..                | 1      | 2          |
|                 | 2017 | ..         | 2       | 0       | ..      | ..                | 2      | 4          |
|                 | 2018 | ..         | 3       | 0       | ..      | ..                | 3      | 4          |
|                 | 2019 | ..         | 2       | 0       | ..      | ..                | 2      | 3          |
| Malta           | 2016 | ..         | 1,793   | 24      | 1,552   | 34                | 183    | 420        |
|                 | 2017 | ..         | 2,022   | 83      | 1,888   | -2                | 53     | 121        |
|                 | 2018 | ..         | 2,109   | 161     | 1,923   | 20                | 5      | 12         |
|                 | 2019 | ..         | 2,115   | 246     | 1,962   | -100              | 6      | 14         |
| Montenegro      | 2016 | ..         | 4       | 0       | ..      | 1                 | 3      | 5          |
|                 | 2017 | ..         | 4       | ..      | ..      | 2                 | 2      | 3          |
|                 | 2018 | ..         | 4       | ..      | ..      | 2                 | 2      | 3          |
|                 | 2019 | ..         | 3       | 0       | ..      | 1                 | 2      | 3          |
| Netherlands     | 2016 | 11,961     | 31,645  | 31,729  | 9,901   | -256              | 2,232  | 131        |
|                 | 2017 | 11,684     | 16,060  | 15,064  | 9,585   | -1,057            | 4,152  | 244        |
|                 | 2018 | 11,077     | 13,047  | 11,314  | 9,213   | -9                | 3,607  | 211        |
|                 | 2019 | 8,909      | 11,709  | 9,682   | 9,395   | 86                | 1,455  | 85         |
| North Macedonia | 2016 | 0          | 97      | 5       | ..      | 2                 | 91     | 44         |
|                 | 2017 | 0          | 79      | 3       | ..      | -1                | 77     | 37         |
|                 | 2018 | ..         | 67      | 3       | ..      | -3                | 68     | 32         |
|                 | 2019 | ..         | 81      | 5       | ..      | 2                 | 74     | 36         |
| Norway          | 2016 | 1,290      | 1,350   | 1,058   | 22      | -1                | 1,561  | 297        |
|                 | 2017 | 1,545      | 1,888   | 1,432   | 26      | -60               | 2,035  | 384        |
|                 | 2018 | 1,474      | 1,440   | 1,419   | 30      | 25                | 1,440  | 270        |
|                 | 2019 | 1,806      | 1,012   | 1,661   | 36      | -31               | 1,153  | 214        |
| Poland          | 2016 | 3,609      | 47      | 2,514   | 53      | 2                 | 1,087  | 29         |
|                 | 2017 | 3,436      | 38      | 2,471   | 53      | 18                | 932    | 25         |
|                 | 2018 | 3,630      | 48      | 2,774   | 78      | -2                | 828    | 22         |
|                 | 2019 | 3,115      | 16      | 2,283   | 81      | -27               | 794    | 21         |
| Portugal        | 2016 | 2,675      | 223     | 1,710   | 661     | -61               | 588    | 57         |
|                 | 2017 | 2,645      | 158     | 1,607   | 672     | -16               | 540    | 52         |
|                 | 2018 | 2,358      | 443     | 1,307   | 699     | 229               | 567    | 55         |
|                 | 2019 | 2,114      | 189     | 1,113   | 831     | -191              | 549    | 54         |



## Production, trade and supply of fuel oil

Thousand metric tons and kilograms per capita

| Country or area     | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|---------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                     |      |            |         |         |         |                   | Total  | Per capita |
| Republic of Moldova | 2016 | 13         | 29      | 9       | ..      | 16                | 17     | 4          |
|                     | 2017 | 11         | 10      | 9       | ..      | -3                | 15     | 4          |
|                     | 2018 | 6          | 7       | 3       | ..      | ..                | 10     | 2          |
|                     | 2019 | 4          | 6       | ..      | ..      | 5                 | 5      | 1          |
| Romania             | 2016 | 218        | ..      | 168     | ..      | -34               | 84     | 4          |
|                     | 2017 | 182        | ..      | 158     | ..      | -17               | 41     | 2          |
|                     | 2018 | 196        | ..      | 124     | ..      | 15                | 58     | 3          |
|                     | 2019 | 193        | 5       | 139     | ..      | -3                | 61     | 3          |
| Russian Federation  | 2016 | 61,426     | 2       | *52,109 | 3,305   | -124              | 6,138  | 42         |
|                     | 2017 | 56,018     | 12      | *47,448 | 2,747   | -159              | 5,994  | 41         |
|                     | 2018 | 50,147     | 0       | *42,068 | 2,035   | -181              | 6,224  | 43         |
|                     | 2019 | 58,417     | 109     | 49,104  | 1,973   | -230              | 7,679  | 53         |
| Serbia              | 2016 | 389        | 25      | 50      | ..      | -7                | 371    | 52         |
|                     | 2017 | 380        | 9       | 55      | ..      | 10                | 324    | 46         |
|                     | 2018 | 361        | 7       | 28      | ..      | 2                 | 338    | 48         |
|                     | 2019 | 257        | 9       | 7       | ..      | -1                | 260    | 37         |
| Slovakia            | 2016 | 470        | 142     | 339     | ..      | 35                | 238    | 44         |
|                     | 2017 | 363        | 133     | 307     | ..      | -26               | 215    | 39         |
|                     | 2018 | 482        | 77      | 319     | ..      | 14                | 226    | 41         |
|                     | 2019 | 535        | 44      | 344     | ..      | 13                | 222    | 41         |
| Slovenia            | 2016 | ..         | 436     | 311     | 124     | ..                | 1      | 0          |
|                     | 2017 | ..         | 409     | 252     | 157     | ..                | 0      | 0          |
|                     | 2018 | ..         | 442     | 232     | 210     | ..                | 0      | 0          |
|                     | 2019 | ..         | 302     | 137     | 165     | ..                | 0      | 0          |
| Spain               | 2016 | 5,109      | 6,144   | 3,023   | 6,136   | 117               | 1,977  | 42         |
|                     | 2017 | 5,532      | 7,020   | 3,642   | 5,571   | 99                | 3,240  | 69         |
|                     | 2018 | 6,000      | 7,371   | 3,761   | 5,926   | -199              | 3,883  | 83         |
|                     | 2019 | 5,056      | 6,843   | 2,701   | 5,713   | 25                | 3,460  | 74         |
| Sweden              | 2016 | 4,003      | 2,057   | 4,547   | 1,348   | -104              | 269    | 27         |
|                     | 2017 | 4,010      | 1,577   | 4,148   | 1,641   | -459              | 257    | 26         |
|                     | 2018 | 5,150      | 1,799   | 4,362   | 1,267   | -263              | 1,583  | 159        |
|                     | 2019 | 4,413      | 842     | 3,186   | 1,573   | 285               | 211    | 21         |
| Switzerland         | 2016 | 319        | 1       | 350     | ..      | -39               | 9      | 1          |
|                     | 2017 | 290        | ..      | 274     | ..      | 9                 | 7      | 1          |
|                     | 2018 | 316        | 0       | 304     | ..      | 11                | 1      | 0          |
|                     | 2019 | 311        | 1       | 327     | ..      | -14               | 0      | 0          |
| Ukraine             | 2016 | 590        | 380     | 3       | ..      | -62               | 1,029  | 23         |
|                     | 2017 | 444        | 273     | ..      | ..      | -24               | 741    | 17         |
|                     | 2018 | 429        | 42      | ..      | ..      | 3                 | 468    | 11         |
|                     | 2019 | 74         | 1       | 13      | ..      | -31               | 93     | 2          |
| United Kingdom      | 2016 | 4,324      | 1,282   | 3,391   | 889     | -103              | 1,429  | 22         |
|                     | 2017 | 3,893      | 970     | 3,062   | 570     | 25                | 1,207  | 18         |
|                     | 2018 | 3,233      | 812     | 2,527   | 818     | -42               | 743    | 11         |
|                     | 2019 | 3,015      | 792     | 2,235   | 731     | 28                | 813    | 12         |
| Oceania             | 2016 | 1,114      | 1,461   | 347     | 758     | -52               | 1,521  | 38         |
|                     | 2017 | 1,220      | 1,317   | 473     | 767     | 71                | 1,226  | 30         |
|                     | 2018 | 1,353      | 1,985   | 424     | 798     | 138               | 1,977  | 48         |
|                     | 2019 | 1,459      | 2,057   | 337     | 977     | 22                | 2,180  | 52         |
| American Samoa      | 2016 | ..         | 0       | ..      | ..      | ..                | 0      | *2         |
|                     | 2017 | ..         | 0       | ..      | ..      | ..                | 0      | *2         |
|                     | 2018 | ..         | 0       | ..      | ..      | ..                | 0      | *2         |
|                     | 2019 | ..         | 0       | ..      | ..      | ..                | 0      | *2         |

Table 22

## Production, trade and supply of fuel oil

Thousand metric tons and kilograms per capita

| Country or area  | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                  |      |            |         |         |         |                   | Total  | Per capita |
| Australia        | 2016 | 516        | 312     | 171     | 490     | -23               | 190    | 8          |
|                  | 2017 | 644        | 214     | 301     | 502     | 16                | 39     | 2          |
|                  | 2018 | 765        | 686     | 224     | 504     | 143               | 580    | 23         |
|                  | 2019 | 909        | 703     | 203     | 677     | 0                 | 732    | 29         |
| Cook Islands     | 2016 | ..         | *4      | ..      | *1      | ..                | *2     | *127       |
|                  | 2017 | ..         | *4      | ..      | *2      | ..                | *2     | *134       |
|                  | 2018 | ..         | *4      | ..      | *2      | ..                | *2     | *134       |
|                  | 2019 | ..         | *4      | ..      | *2      | ..                | *2     | *137       |
| Fiji             | 2016 | ..         | 78      | 15      | ..      | -3                | 66     | 76         |
|                  | 2017 | ..         | *92     | *20     | ..      | ..                | *71    | *81        |
|                  | 2018 | ..         | *100    | *29     | *5      | ..                | *66    | *75        |
|                  | 2019 | ..         | *108    | *37     | *5      | ..                | *66    | *74        |
| French Polynesia | 2016 | ..         | 67      | ..      | ..      | 1                 | 67     | 243        |
|                  | 2017 | ..         | 68      | ..      | ..      | 2                 | 66     | 240        |
|                  | 2018 | ..         | 70      | ..      | ..      | 1                 | 69     | 248        |
|                  | 2019 | ..         | 73      | ..      | ..      | 4                 | 69     | 246        |
| Nauru            | 2016 | ..         | *9      | ..      | 5       | ..                | *4     | *401       |
|                  | 2017 | ..         | *9      | ..      | *4      | ..                | *5     | *473       |
|                  | 2018 | ..         | *9      | ..      | *4      | ..                | *5     | *440       |
|                  | 2019 | ..         | *9      | ..      | *4      | ..                | *5     | *427       |
| New Caledonia    | 2016 | ..         | 501     | ..      | ..      | -6                | 507    | 1,849      |
|                  | 2017 | ..         | 466     | ..      | ..      | 31                | 434    | 1,567      |
|                  | 2018 | ..         | 449     | ..      | ..      | -13               | 462    | 1,649      |
|                  | 2019 | ..         | 458     | ..      | ..      | 19                | 439    | 1,553      |
| New Zealand      | 2016 | 463        | 0       | 161     | 248     | 3                 | 51     | 11         |
|                  | 2017 | 435        | ..      | 151     | 245     | 6                 | 33     | 7          |
|                  | 2018 | 465        | ..      | 171     | 271     | -3                | 26     | 6          |
|                  | 2019 | 422        | 23      | 97      | 276     | -3                | 74     | 16         |
| Palau            | 2016 | ..         | *31     | ..      | ..      | ..                | *31    | *1,744     |
|                  | 2017 | ..         | *32     | ..      | ..      | ..                | *32    | *1,797     |
|                  | 2018 | ..         | *31     | ..      | ..      | ..                | *31    | *1,753     |
|                  | 2019 | ..         | *32     | ..      | ..      | ..                | *32    | *1,767     |
| Papua New Guinea | 2016 | 135        | 429     | ..      | 9       | -25               | 579    | 70         |
|                  | 2017 | 141        | 396     | ..      | 9       | 9                 | 519    | 61         |
|                  | 2018 | 122        | 605     | ..      | 7       | 9                 | 711    | 83         |
|                  | 2019 | *128       | *635    | ..      | *8      | *10               | *746   | *85        |
| Tonga            | 2016 | ..         | 25      | ..      | 0       | *1                | 23     | 231        |
|                  | 2017 | ..         | 32      | ..      | 0       | *7                | 24     | 239        |
|                  | 2018 | ..         | 26      | ..      | 0       | *1                | 24     | 234        |
|                  | 2019 | ..         | 7       | ..      | 0       | *-9               | *15    | *147       |
| Vanuatu          | 2016 | ..         | *4      | ..      | *4      | ..                | 0      | 0          |
|                  | 2017 | ..         | *5      | ..      | *5      | ..                | 0      | 0          |
|                  | 2018 | ..         | *5      | ..      | *5      | ..                | 0      | 0          |
|                  | 2019 | ..         | *6      | ..      | *6      | ..                | 0      | 0          |





## Production of minor oil products from refineries - by type

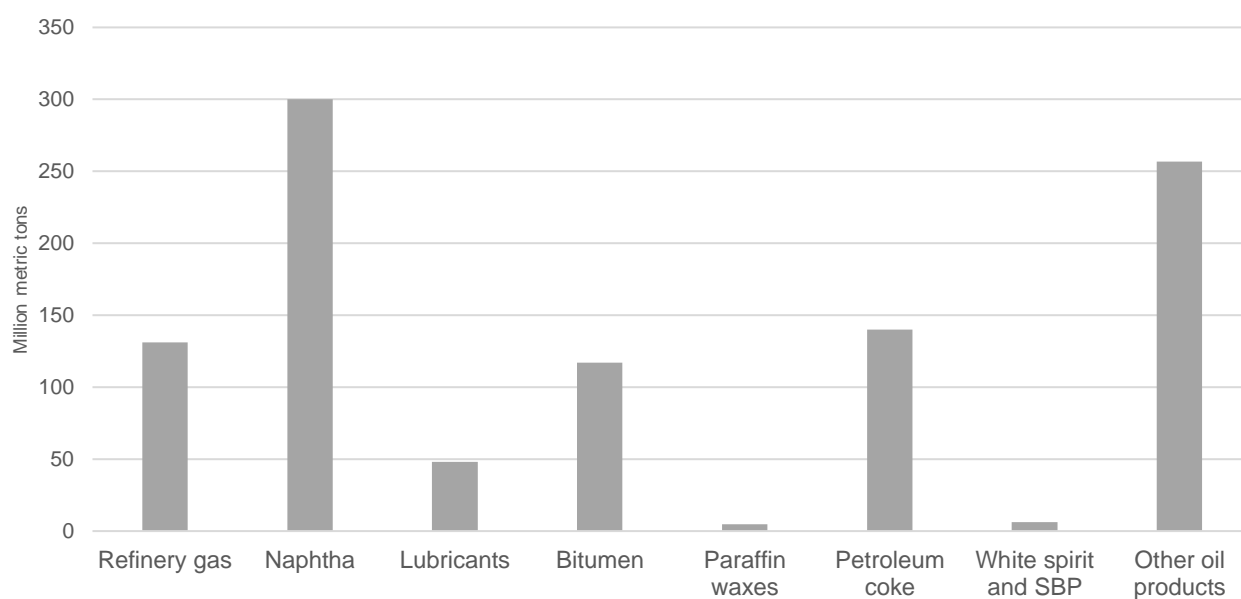
Thousand metric tons

### Table Notes

Data refer to production from refineries of refinery gas, ethane, naphtha, lubricants, bitumen, paraffin waxes, petroleum coke, white spirit, and other oil products (which for this table includes refinery output of feedstocks).

Please refer to the Definitions Section on pages ix to xv for the appropriate product description /classification, and xvi to xvii for the descriptions of relevant flows.

**Figure 63: Production of minor oil products from refineries, 2019\***



\*Ethane is included with other oil products

Table 23

## Production of minor oil products from refineries - by type

Thousand metric tons

| Country or area | Year | Refinery gas | Ethane | Naphtha | Lubricants | Bitumen | Paraffin waxes | Petroleum coke | White spirit and SBP | Other oil products |
|-----------------|------|--------------|--------|---------|------------|---------|----------------|----------------|----------------------|--------------------|
| World           | 2016 | 129,019      | 2,119  | 281,399 | 37,216     | 114,474 | 3,490          | 150,634        | 8,778                | 180,593            |
|                 | 2017 | 124,722      | 1,650  | 291,928 | 42,123     | 115,852 | 4,619          | 153,856        | 8,850                | 195,989            |
|                 | 2018 | 128,972      | 2,055  | 297,748 | 47,560     | 115,795 | 4,687          | 150,689        | 6,654                | 227,466            |
|                 | 2019 | 130,959      | 2,021  | 300,081 | 48,181     | 116,904 | 4,729          | 140,057        | 6,158                | 254,814            |
| Africa          | 2016 | 680          | ..     | 11,125  | 482        | 1,488   | 10             | 581            | 116                  | 1,508              |
|                 | 2017 | 1,257        | ..     | 10,529  | 551        | 1,437   | 10             | 563            | 115                  | 1,660              |
|                 | 2018 | 1,227        | ..     | 10,675  | 572        | 1,410   | 10             | 522            | 96                   | 2,409              |
|                 | 2019 | 1,305        | ..     | 10,014  | 585        | 1,353   | 10             | 543            | 87                   | 1,117              |
| Algeria         | 2016 | ..           | ..     | 7,929   | *55        | *144    | ..             | ..             | ..                   | *236               |
|                 | 2017 | ..           | ..     | 8,143   | *73        | *127    | ..             | ..             | ..                   | *184               |
|                 | 2018 | ..           | ..     | 7,634   | *98        | *115    | ..             | ..             | ..                   | *134               |
|                 | 2019 | ..           | ..     | 7,268   | 110        | *110    | ..             | ..             | ..                   | *158               |
| Angola          | 2016 | *79          | ..     | 305     | ..         | 3       | ..             | ..             | ..                   | 200                |
|                 | 2017 | 74           | ..     | 278     | ..         | 16      | ..             | ..             | ..                   | 162                |
|                 | 2018 | 53           | ..     | 244     | ..         | 12      | ..             | ..             | ..                   | 207                |
|                 | 2019 | 74           | ..     | 333     | ..         | 23      | ..             | ..             | ..                   | ..                 |
| Cameroon        | 2016 | 67           | ..     | ..      | ..         | ..      | ..             | ..             | ..                   | 155                |
|                 | 2017 | 55           | ..     | ..      | ..         | ..      | ..             | ..             | ..                   | 128                |
|                 | 2018 | 50           | ..     | ..      | ..         | ..      | ..             | ..             | ..                   | 116                |
|                 | 2019 | 26           | ..     | ..      | ..         | ..      | ..             | ..             | ..                   | 60                 |
| Chad            | 2016 | ..           | ..     | ..      | *1         | *1      | ..             | *36            | ..                   | *14                |
|                 | 2017 | ..           | ..     | ..      | *1         | *1      | ..             | *36            | ..                   | *14                |
|                 | 2018 | ..           | ..     | ..      | *1         | *1      | ..             | *36            | ..                   | *14                |
|                 | 2019 | ..           | ..     | ..      | *1         | *1      | ..             | *37            | ..                   | *15                |
| Congo           | 2016 | ..           | ..     | 8       | ..         | ..      | ..             | ..             | ..                   | 30                 |
|                 | 2017 | ..           | ..     | 9       | ..         | ..      | ..             | ..             | ..                   | 19                 |
|                 | 2018 | ..           | ..     | 9       | ..         | ..      | ..             | ..             | ..                   | 19                 |
|                 | 2019 | ..           | ..     | 10      | ..         | ..      | ..             | ..             | ..                   | 19                 |
| Côte d'Ivoire   | 2016 | 25           | ..     | ..      | 29         | 236     | ..             | ..             | ..                   | ..                 |
|                 | 2017 | 19           | ..     | ..      | 36         | 249     | ..             | ..             | ..                   | ..                 |
|                 | 2018 | 20           | ..     | ..      | 46         | 259     | ..             | ..             | ..                   | ..                 |
|                 | 2019 | 23           | ..     | ..      | 20         | 136     | ..             | ..             | ..                   | ..                 |
| Egypt           | 2016 | *125         | ..     | 1,790   | *273       | *605    | ..             | *237           | ..                   | *343               |
|                 | 2017 | 136          | ..     | 450     | 297        | 658     | ..             | 257            | ..                   | 373                |
|                 | 2018 | 130          | ..     | 737     | 286        | 633     | ..             | 248            | ..                   | 1,352              |
|                 | 2019 | 142          | ..     | 833     | 312        | 691     | ..             | 271            | ..                   | 393                |
| Gabon           | 2016 | ..           | ..     | ..      | 11         | 2       | ..             | ..             | ..                   | ..                 |
|                 | 2017 | ..           | ..     | ..      | 10         | 2       | ..             | ..             | ..                   | ..                 |
|                 | 2018 | ..           | ..     | ..      | 9          | 2       | ..             | ..             | ..                   | ..                 |
|                 | 2019 | ..           | ..     | ..      | 8          | 2       | ..             | ..             | ..                   | ..                 |
| Libya           | 2016 | 81           | ..     | 518     | ..         | 21      | ..             | ..             | ..                   | 4                  |
|                 | 2017 | 97           | ..     | 667     | ..         | 25      | ..             | ..             | ..                   | 5                  |
|                 | 2018 | 113          | ..     | 948     | ..         | 29      | ..             | ..             | ..                   | 6                  |
|                 | 2019 | 96           | ..     | 790     | ..         | 25      | ..             | ..             | ..                   | 5                  |
| Niger           | 2016 | ..           | ..     | ..      | ..         | ..      | ..             | ..             | ..                   | ..                 |
|                 | 2017 | ..           | ..     | ..      | ..         | ..      | ..             | ..             | ..                   | 19                 |
|                 | 2018 | ..           | ..     | ..      | ..         | ..      | ..             | ..             | ..                   | 19                 |
|                 | 2019 | ..           | ..     | ..      | ..         | ..      | ..             | ..             | ..                   | 17                 |
| Nigeria         | 2016 | 77           | ..     | 82      | ..         | 7       | ..             | 9              | ..                   | 475                |
|                 | 2017 | 102          | ..     | 342     | ..         | 0       | ..             | 12             | ..                   | 720                |
|                 | 2018 | 57           | ..     | 158     | ..         | 5       | ..             | 7              | ..                   | 492                |
|                 | 2019 | 12           | ..     | 35      | ..         | 4       | ..             | 1              | ..                   | 401                |

## Production of minor oil products from refineries - by type

Thousand metric tons

| Country or area       | Year        | Refinery gas  | Ethane     | Naphtha       | Lubricants    | Bitumen       | Paraffin waxes | Petroleum coke | White spirit and SBP | Other oil products |
|-----------------------|-------------|---------------|------------|---------------|---------------|---------------|----------------|----------------|----------------------|--------------------|
| Senegal               | 2016        | 23            | ..         | 87            | ..            | ..            | ..             | ..             | ..                   | ..                 |
|                       | 2017        | 15            | ..         | 123           | ..            | ..            | ..             | ..             | ..                   | ..                 |
|                       | 2018        | 13            | ..         | 76            | ..            | ..            | ..             | ..             | ..                   | ..                 |
|                       | 2019        | 12            | ..         | 71            | ..            | ..            | ..             | ..             | ..                   | ..                 |
| South Africa          | 2016        | 166           | ..         | 166           | 113           | 468           | 10             | ..             | 106                  | 39                 |
|                       | 2017        | 723           | ..         | 420           | 133           | 359           | 10             | ..             | 104                  | 25                 |
|                       | 2018        | 758           | ..         | 618           | 132           | 354           | 10             | ..             | 83                   | 37                 |
|                       | 2019        | 886           | ..         | 632           | 135           | 362           | 10             | ..             | 85                   | 36                 |
| Sudan                 | 2016        | 24            | ..         | 11            | ..            | ..            | ..             | 299            | ..                   | ..                 |
|                       | 2017        | 20            | ..         | 4             | ..            | ..            | ..             | 258            | ..                   | ..                 |
|                       | 2018        | *20           | ..         | 9             | ..            | ..            | ..             | 231            | ..                   | ..                 |
|                       | 2019        | *20           | ..         | *9            | ..            | ..            | ..             | *234           | ..                   | ..                 |
| Tunisia               | 2016        | 2             | ..         | 230           | ..            | ..            | ..             | ..             | 10                   | ..                 |
|                       | 2017        | 4             | ..         | 93            | ..            | ..            | ..             | ..             | 11                   | ..                 |
|                       | 2018        | ..            | ..         | 241           | ..            | ..            | ..             | ..             | 13                   | ..                 |
|                       | 2019        | ..            | ..         | 33            | ..            | ..            | ..             | ..             | 2                    | ..                 |
| Zambia                | 2016        | 11            | ..         | ..            | ..            | ..            | ..             | ..             | ..                   | 11                 |
|                       | 2017        | 12            | ..         | ..            | ..            | ..            | ..             | ..             | ..                   | 12                 |
|                       | 2018        | 13            | ..         | ..            | ..            | ..            | ..             | ..             | ..                   | 13                 |
|                       | 2019        | 14            | ..         | ..            | ..            | ..            | ..             | ..             | ..                   | 14                 |
| <b>America, North</b> | <b>2016</b> | <b>22,227</b> | <b>72</b>  | <b>15,760</b> | <b>9,839</b>  | <b>25,706</b> | <b>246</b>     | <b>64,526</b>  | <b>1,568</b>         | <b>15,349</b>      |
|                       | <b>2017</b> | <b>20,583</b> | <b>116</b> | <b>12,974</b> | <b>10,455</b> | <b>26,089</b> | <b>245</b>     | <b>62,760</b>  | <b>1,714</b>         | <b>15,791</b>      |
|                       | <b>2018</b> | <b>20,525</b> | <b>128</b> | <b>13,629</b> | <b>10,897</b> | <b>25,929</b> | <b>239</b>     | <b>62,082</b>  | <b>1,633</b>         | <b>16,586</b>      |
|                       | <b>2019</b> | <b>21,011</b> | <b>107</b> | <b>11,902</b> | <b>10,323</b> | <b>25,441</b> | <b>227</b>     | <b>59,564</b>  | <b>1,412</b>         | <b>21,679</b>      |
| Canada                | 2016        | 3,259         | ..         | 3,892         | 954           | 4,763         | ..             | 1,378          | 74                   | 2,441              |
|                       | 2017        | 2,645         | ..         | 1,749         | 1,038         | 5,176         | ..             | 1,266          | 95                   | 2,681              |
|                       | 2018        | 2,948         | ..         | 1,939         | 1,127         | 5,420         | ..             | 1,301          | 82                   | 3,372              |
|                       | 2019        | 3,824         | ..         | 1,170         | 1,598         | 5,414         | ..             | 1,838          | 49                   | 9,487              |
| Cuba                  | 2016        | 5             | ..         | 232           | 50            | 57            | ..             | 8              | ..                   | ..                 |
|                       | 2017        | 3             | ..         | 289           | 51            | 58            | ..             | 2              | ..                   | ..                 |
|                       | 2018        | 4             | ..         | 301           | 51            | 63            | ..             | 1              | ..                   | ..                 |
|                       | 2019        | 5             | ..         | *292          | *46           | 38            | ..             | 1              | ..                   | ..                 |
| Curaçao               | 2016        | 169           | ..         | 353           | 103           | 121           | ..             | 152            | ..                   | 304                |
|                       | 2017        | 106           | ..         | 63            | 64            | 76            | ..             | 95             | ..                   | 190                |
|                       | 2018        | 52            | ..         | 48            | 32            | 37            | ..             | 47             | ..                   | 93                 |
|                       | 2019        | 0             | ..         | 0             | 0             | 0             | ..             | 0              | ..                   | 0                  |
| Dominican Republic    | 2016        | 13            | ..         | ..            | ..            | ..            | ..             | ..             | ..                   | ..                 |
|                       | 2017        | 10            | ..         | ..            | ..            | ..            | ..             | ..             | ..                   | ..                 |
|                       | 2018        | 14            | ..         | ..            | ..            | ..            | ..             | ..             | ..                   | ..                 |
|                       | 2019        | 11            | ..         | ..            | ..            | ..            | ..             | ..             | ..                   | ..                 |
| Guatemala             | 2016        | ..            | ..         | ..            | ..            | 14            | ..             | ..             | ..                   | ..                 |
|                       | 2017        | ..            | ..         | ..            | ..            | 38            | ..             | ..             | ..                   | ..                 |
|                       | 2018        | ..            | ..         | ..            | ..            | 97            | ..             | ..             | ..                   | ..                 |
|                       | 2019        | ..            | ..         | ..            | ..            | 146           | ..             | ..             | ..                   | ..                 |
| Jamaica               | 2016        | ..            | ..         | 51            | ..            | 20            | ..             | ..             | ..                   | ..                 |
|                       | 2017        | ..            | ..         | 40            | ..            | 18            | ..             | ..             | ..                   | ..                 |
|                       | 2018        | ..            | ..         | 0             | ..            | *10           | ..             | ..             | ..                   | ..                 |
|                       | 2019        | ..            | ..         | 0             | ..            | *10           | ..             | ..             | ..                   | ..                 |
| Mexico                | 2016        | 3,190         | ..         | 3,008         | 155           | 982           | 26             | 2,530          | ..                   | 94                 |
|                       | 2017        | 2,445         | ..         | 2,441         | 99            | 959           | 20             | 1,657          | ..                   | 108                |
|                       | 2018        | 1,816         | ..         | 2,046         | 155           | 805           | 26             | 1,030          | ..                   | 93                 |
|                       | 2019        | 2,319         | ..         | 2,201         | 56            | 792           | 24             | 1,819          | ..                   | 94                 |

Table 23

## Production of minor oil products from refineries - by type

Thousand metric tons

| Country or area          | Year        | Refinery gas | Ethane    | Naphtha      | Lubricants   | Bitumen      | Paraffin waxes | Petroleum coke | White spirit and SBP | Other oil products |
|--------------------------|-------------|--------------|-----------|--------------|--------------|--------------|----------------|----------------|----------------------|--------------------|
| Nicaragua                | 2016        | 17           | ..        | ..           | ..           | 19           | ..             | ..             | 12                   | ..                 |
|                          | 2017        | 18           | ..        | ..           | ..           | 17           | ..             | ..             | 14                   | ..                 |
|                          | 2018        | 15           | ..        | ..           | ..           | 21           | ..             | ..             | 13                   | ..                 |
|                          | 2019        | 24           | ..        | ..           | ..           | 4            | ..             | ..             | 10                   | ..                 |
| Trinidad and Tobago      | 2016        | 59           | ..        | 0            | ..           | 9            | ..             | ..             | ..                   | 71                 |
|                          | 2017        | 52           | ..        | 0            | ..           | 12           | ..             | ..             | ..                   | 309                |
|                          | 2018        | 88           | ..        | ..           | ..           | 11           | ..             | ..             | ..                   | 50                 |
|                          | 2019        | ..           | ..        | ..           | ..           | ..           | ..             | ..             | ..                   | ..                 |
| United States            | 2016        | 15,516       | 72        | 8,225        | 8,577        | 19,721       | 220            | 60,458         | 1,482                | 12,439             |
|                          | 2017        | 15,305       | 116       | 8,391        | 9,203        | 19,736       | 225            | 59,740         | 1,605                | 12,503             |
|                          | 2018        | 15,588       | 128       | 9,296        | 9,533        | 19,466       | 213            | 59,703         | 1,538                | 12,978             |
|                          | 2019        | 14,827       | 107       | 8,239        | 8,623        | 19,037       | 203            | 55,906         | 1,352                | 12,098             |
| <b>America, South</b>    | <b>2016</b> | <b>7,485</b> | <b>..</b> | <b>5,923</b> | <b>1,116</b> | <b>3,490</b> | <b>60</b>      | <b>9,893</b>   | <b>621</b>           | <b>8,676</b>       |
|                          | <b>2017</b> | <b>7,469</b> | <b>..</b> | <b>6,017</b> | <b>1,181</b> | <b>3,121</b> | <b>56</b>      | <b>9,880</b>   | <b>515</b>           | <b>7,557</b>       |
|                          | <b>2018</b> | <b>7,210</b> | <b>..</b> | <b>6,147</b> | <b>1,284</b> | <b>3,174</b> | <b>53</b>      | <b>9,621</b>   | <b>490</b>           | <b>6,566</b>       |
|                          | <b>2019</b> | <b>6,402</b> | <b>..</b> | <b>6,437</b> | <b>1,253</b> | <b>2,780</b> | <b>53</b>      | <b>8,784</b>   | <b>432</b>           | <b>6,927</b>       |
| Argentina                | 2016        | 1,051        | ..        | 764          | 238          | 334          | 9              | 1,406          | 301                  | ..                 |
|                          | 2017        | 1,017        | ..        | 727          | 219          | 242          | 8              | 1,478          | 230                  | ..                 |
|                          | 2018        | 1,072        | ..        | 400          | 225          | 396          | 7              | 1,511          | 201                  | ..                 |
|                          | 2019        | 925          | ..        | 640          | 218          | 328          | 8              | 1,462          | 196                  | ..                 |
| Bolivia (Plur. State of) | 2016        | 97           | ..        | 1            | 25           | 2            | ..             | ..             | 80                   | ..                 |
|                          | 2017        | 91           | ..        | 0            | 24           | 2            | ..             | ..             | 52                   | ..                 |
|                          | 2018        | 87           | ..        | 0            | 22           | 1            | ..             | ..             | 50                   | ..                 |
|                          | 2019        | 74           | ..        | 0            | 39           | 1            | ..             | ..             | 10                   | ..                 |
| Brazil                   | 2016        | 4,445        | ..        | 2,308        | 546          | 2,152        | ..             | 5,786          | 238                  | 2,446              |
|                          | 2017        | 4,549        | ..        | 2,248        | 656          | 1,955        | ..             | 5,618          | 232                  | 2,370              |
|                          | 2018        | 4,264        | ..        | 2,944        | 785          | 1,900        | ..             | 5,093          | 237                  | 2,312              |
|                          | 2019        | 4,022        | ..        | 3,250        | 784          | 1,722        | ..             | 5,029          | 224                  | 2,448              |
| Chile                    | 2016        | 203          | ..        | 48           | ..           | ..           | ..             | 365            | ..                   | 744                |
|                          | 2017        | 211          | ..        | 75           | ..           | ..           | ..             | 446            | ..                   | 579                |
|                          | 2018        | 215          | ..        | 64           | ..           | ..           | ..             | 443            | ..                   | 608                |
|                          | 2019        | 242          | ..        | 137          | ..           | ..           | ..             | 464            | ..                   | 431                |
| Colombia                 | 2016        | ..           | ..        | 814          | 141          | 345          | 37             | 583            | ..                   | 1,362              |
|                          | 2017        | ..           | ..        | 1,070        | 142          | 279          | 37             | 681            | ..                   | 1,035              |
|                          | 2018        | ..           | ..        | 1,164        | 139          | 263          | 37             | 953            | ..                   | 439                |
|                          | 2019        | ..           | ..        | 942          | 139          | 198          | 37             | 891            | ..                   | 1,493              |
| Ecuador                  | 2016        | 2            | ..        | ..           | ..           | ..           | ..             | ..             | ..                   | 920                |
|                          | 2017        | 2            | ..        | ..           | ..           | ..           | ..             | ..             | ..                   | 923                |
|                          | 2018        | 1            | ..        | ..           | ..           | ..           | ..             | ..             | ..                   | 848                |
|                          | 2019        | 1            | ..        | ..           | ..           | ..           | ..             | ..             | ..                   | 824                |
| Peru                     | 2016        | 137          | ..        | ..           | ..           | ..           | ..             | ..             | ..                   | 239                |
|                          | 2017        | 151          | ..        | ..           | ..           | ..           | ..             | ..             | ..                   | 274                |
|                          | 2018        | 139          | ..        | ..           | ..           | ..           | ..             | ..             | ..                   | 276                |
|                          | 2019        | 149          | ..        | ..           | ..           | ..           | ..             | ..             | ..                   | 248                |
| Suriname                 | 2016        | ..           | ..        | ..           | ..           | 5            | ..             | ..             | ..                   | ..                 |
|                          | 2017        | ..           | ..        | ..           | ..           | 5            | ..             | ..             | ..                   | ..                 |
|                          | 2018        | ..           | ..        | ..           | ..           | 4            | ..             | ..             | ..                   | ..                 |
|                          | 2019        | ..           | ..        | ..           | ..           | 10           | ..             | ..             | ..                   | ..                 |
| Uruguay                  | 2016        | 62           | ..        | ..           | ..           | 40           | ..             | 38             | 2                    | ..                 |
|                          | 2017        | 18           | ..        | ..           | ..           | 26           | ..             | 10             | 0                    | ..                 |
|                          | 2018        | 58           | ..        | ..           | ..           | 102          | ..             | 37             | 2                    | ..                 |
|                          | 2019        | 54           | ..        | ..           | ..           | 75           | ..             | 31             | 2                    | ..                 |



Table 23

## Production of minor oil products from refineries - by type

Thousand metric tons

| Country or area           | Year        | Refinery gas  | Ethane    | Naphtha        | Lubricants    | Bitumen       | Paraffin waxes | Petroleum coke | White spirit and SBP | Other oil products |
|---------------------------|-------------|---------------|-----------|----------------|---------------|---------------|----------------|----------------|----------------------|--------------------|
| Venezuela (Bolivar. Rep.) | 2016        | 1,488         | ..        | 1,988          | 166           | 612           | 14             | 1,715          | ..                   | 2,965              |
|                           | 2017        | 1,430         | ..        | 1,897          | 140           | 612           | 11             | 1,648          | ..                   | 2,376              |
|                           | 2018        | 1,374         | ..        | 1,575          | 113           | 507           | 9              | 1,584          | ..                   | 2,083              |
|                           | 2019        | 934           | ..        | 1,468          | 73            | 445           | 8              | 907            | ..                   | 1,484              |
| <b>Asia</b>               | <b>2016</b> | <b>59,364</b> | <b>0</b>  | <b>180,672</b> | <b>14,835</b> | <b>56,279</b> | <b>2,440</b>   | <b>59,360</b>  | <b>3,530</b>         | <b>128,966</b>     |
|                           | <b>2017</b> | <b>56,202</b> | <b>0</b>  | <b>188,213</b> | <b>15,291</b> | <b>58,612</b> | <b>3,375</b>   | <b>63,685</b>  | <b>3,644</b>         | <b>142,779</b>     |
|                           | <b>2018</b> | <b>61,107</b> | <b>..</b> | <b>193,420</b> | <b>16,058</b> | <b>58,646</b> | <b>3,288</b>   | <b>62,136</b>  | <b>2,469</b>         | <b>170,718</b>     |
|                           | <b>2019</b> | <b>63,498</b> | <b>..</b> | <b>200,687</b> | <b>15,219</b> | <b>60,409</b> | <b>3,410</b>   | <b>54,451</b>  | <b>2,226</b>         | <b>192,440</b>     |
| Afghanistan               | 2016        | ..            | ..        | ..             | ..            | *10           | ..             | ..             | ..                   | ..                 |
|                           | 2017        | ..            | ..        | ..             | ..            | *12           | ..             | ..             | ..                   | ..                 |
|                           | 2018        | ..            | ..        | ..             | ..            | *20           | ..             | ..             | ..                   | ..                 |
|                           | 2019        | ..            | ..        | ..             | ..            | *12           | ..             | ..             | ..                   | ..                 |
| Azerbaijan                | 2016        | 231           | ..        | 174            | 10            | 179           | ..             | 207            | ..                   | 380                |
|                           | 2017        | 214           | ..        | 169            | 39            | 237           | ..             | 227            | ..                   | 585                |
|                           | 2018        | 214           | ..        | 205            | 52            | 290           | ..             | 244            | ..                   | 606                |
|                           | 2019        | 242           | ..        | *243           | 36            | 260           | ..             | 238            | ..                   | 626                |
| Bahrain                   | 2016        | ..            | ..        | 1,565          | ..            | 450           | ..             | ..             | ..                   | 441                |
|                           | 2017        | ..            | ..        | 1,494          | ..            | 298           | ..             | ..             | ..                   | 568                |
|                           | 2018        | ..            | ..        | 1,655          | ..            | 316           | ..             | ..             | ..                   | 551                |
|                           | 2019        | ..            | ..        | 1,706          | ..            | 331           | ..             | ..             | ..                   | 489                |
| Bangladesh                | 2016        | 13            | ..        | 132            | 17            | 65            | ..             | ..             | 3                    | 17                 |
|                           | 2017        | 16            | ..        | 161            | 19            | 79            | ..             | ..             | 4                    | 21                 |
|                           | 2018        | 14            | ..        | 97             | 20            | 58            | ..             | ..             | 5                    | 21                 |
|                           | 2019        | 15            | ..        | 101            | 23            | 70            | ..             | ..             | 3                    | 11                 |
| Brunei Darussalam         | 2016        | 10            | ..        | ..             | ..            | ..            | ..             | ..             | ..                   | ..                 |
|                           | 2017        | 3             | ..        | ..             | ..            | ..            | ..             | ..             | ..                   | ..                 |
|                           | 2018        | 18            | ..        | ..             | ..            | ..            | ..             | ..             | ..                   | ..                 |
|                           | 2019        | 14            | ..        | ..             | ..            | ..            | ..             | ..             | ..                   | 243                |
| China                     | 2016        | 18,923        | ..        | 50,324         | 1,474         | 21,716        | 2,122          | 25,909         | 2,325                | 87,822             |
|                           | 2017        | 19,825        | ..        | 53,339         | 1,998         | 25,828        | 2,982          | 28,217         | 1,712                | 96,284             |
|                           | 2018        | 20,132        | ..        | 60,255         | 2,206         | 26,877        | 2,795          | 26,636         | 1,088                | 118,749            |
|                           | 2019        | 21,879        | ..        | 66,201         | 2,324         | 29,704        | 3,089          | 28,388         | 824                  | 149,225            |
| Georgia                   | 2016        | ..            | ..        | ..             | ..            | ..            | ..             | ..             | ..                   | ..                 |
|                           | 2017        | ..            | ..        | 3              | ..            | ..            | ..             | ..             | ..                   | ..                 |
|                           | 2018        | ..            | ..        | 3              | ..            | ..            | ..             | ..             | ..                   | ..                 |
|                           | 2019        | ..            | ..        | 4              | ..            | ..            | ..             | ..             | ..                   | ..                 |
| India                     | 2016        | *12,268       | ..        | 17,607         | 1,029         | 5,185         | 85             | *13,936        | ..                   | 22,507             |
|                           | 2017        | *9,825        | ..        | 18,786         | 1,036         | 5,277         | 104            | 14,754         | ..                   | 26,210             |
|                           | 2018        | *14,117       | ..        | *18,536        | 949           | 5,803         | *117           | *14,676        | ..                   | *29,973            |
|                           | 2019        | *15,470       | ..        | *19,399        | 932           | 5,244         | *96            | 15,528         | ..                   | 18,384             |
| Indonesia                 | 2016        | 655           | ..        | 1,371          | 282           | 192           | 20             | 436            | 26                   | 2,689              |
|                           | 2017        | 673           | ..        | 1,565          | 344           | 112           | 16             | 497            | 26                   | 4,195              |
|                           | 2018        | 690           | ..        | 1,666          | 390           | 164           | 19             | 554            | 27                   | 4,096              |
|                           | 2019        | *694          | ..        | 1,619          | 326           | 100           | 19             | 550            | 19                   | *4,096             |
| Iran (Islamic Rep. of)    | 2016        | 1,951         | 0         | 3,505          | 1,738         | 6,046         | ..             | ..             | 396                  | 826                |
|                           | 2017        | 1,581         | 0         | 3,000          | 1,761         | 4,837         | ..             | ..             | 541                  | 753                |
|                           | 2018        | 1,545         | ..        | 3,030          | 1,720         | 4,662         | ..             | ..             | 528                  | 761                |
|                           | 2019        | 1,543         | ..        | 3,103          | 1,797         | 4,872         | ..             | ..             | 552                  | 779                |
| Iraq                      | 2016        | 137           | ..        | 480            | 45            | 88            | 1              | ..             | ..                   | ..                 |
|                           | 2017        | 164           | ..        | 571            | 52            | 140           | 110            | ..             | ..                   | 113                |
|                           | 2018        | 192           | ..        | 442            | 53            | 143           | 112            | ..             | ..                   | 123                |
|                           | 2019        | 206           | ..        | 2,069          | 77            | 208           | 4              | ..             | ..                   | 167                |

Table 23

## Production of minor oil products from refineries - by type

Thousand metric tons

| Country or area    | Year | Refinery gas | Ethane | Naphtha | Lubricants | Bitumen | Paraffin waxes | Petroleum coke | White spirit and SBP | Other oil products |
|--------------------|------|--------------|--------|---------|------------|---------|----------------|----------------|----------------------|--------------------|
| Israel             | 2016 | 616          | ..     | 1,095   | ..         | 280     | ..             | ..             | ..                   | 541                |
|                    | 2017 | 569          | ..     | 1,201   | ..         | 310     | ..             | ..             | ..                   | 458                |
|                    | 2018 | 567          | ..     | 1,153   | ..         | 308     | ..             | ..             | ..                   | 588                |
|                    | 2019 | 615          | ..     | 1,383   | ..         | 264     | ..             | ..             | ..                   | 401                |
| Japan              | 2016 | 6,557        | ..     | 14,656  | 2,201      | 3,249   | 58             | 1,267          | 74                   | 2,327              |
|                    | 2017 | 6,515        | ..     | 13,175  | 1,958      | 3,051   | 64             | 1,320          | 72                   | 2,222              |
|                    | 2018 | 6,356        | ..     | 12,385  | 2,181      | 2,854   | 70             | 1,345          | 71                   | 2,192              |
|                    | 2019 | 5,833        | ..     | 12,546  | 2,013      | 2,744   | 71             | 1,075          | 62                   | 2,038              |
| Jordan             | 2016 | *36          | ..     | ..      | 24         | 238     | ..             | ..             | ..                   | *4                 |
|                    | 2017 | *33          | ..     | ..      | 23         | 226     | ..             | ..             | ..                   | *4                 |
|                    | 2018 | 42           | ..     | ..      | 19         | 127     | ..             | ..             | ..                   | *3                 |
|                    | 2019 | *40          | ..     | ..      | 20         | 45      | ..             | ..             | ..                   | *3                 |
| Kazakhstan         | 2016 | 111          | ..     | ..      | 53         | 605     | ..             | 311            | ..                   | ..                 |
|                    | 2017 | 161          | ..     | ..      | 24         | 809     | ..             | 474            | 0                    | ..                 |
|                    | 2018 | 177          | ..     | ..      | 26         | 926     | ..             | 530            | 6                    | ..                 |
|                    | 2019 | 264          | ..     | ..      | 32         | 989     | ..             | 507            | 9                    | ..                 |
| Korea, Republic of | 2016 | 4,566        | ..     | 31,503  | 2,569      | 5,064   | 16             | 372            | 388                  | 2,834              |
|                    | 2017 | 3,831        | ..     | 35,356  | 2,747      | 5,185   | 18             | 404            | 506                  | 2,856              |
|                    | 2018 | 4,365        | ..     | 36,933  | 3,307      | 4,489   | 15             | 408            | 456                  | 2,737              |
|                    | 2019 | 4,729        | ..     | 36,758  | 2,567      | 5,043   | 19             | 634            | 472                  | 2,708              |
| Kuwait             | 2016 | 383          | ..     | 7,120   | ..         | 99      | ..             | ..             | ..                   | 560                |
|                    | 2017 | 310          | ..     | 5,675   | ..         | 118     | ..             | ..             | ..                   | 454                |
|                    | 2018 | 322          | ..     | 5,613   | ..         | 183     | ..             | ..             | ..                   | 471                |
|                    | 2019 | 288          | ..     | 5,561   | ..         | 241     | ..             | ..             | ..                   | ..                 |
| Kyrgyzstan         | 2016 | ..           | ..     | ..      | ..         | ..      | ..             | ..             | ..                   | ..                 |
|                    | 2017 | ..           | ..     | ..      | ..         | ..      | ..             | ..             | ..                   | ..                 |
|                    | 2018 | ..           | ..     | ..      | ..         | 35      | ..             | ..             | ..                   | ..                 |
|                    | 2019 | ..           | ..     | ..      | ..         | 2       | ..             | ..             | ..                   | ..                 |
| Malaysia           | 2016 | 198          | ..     | 2,744   | 972        | 197     | 93             | 265            | ..                   | ..                 |
|                    | 2017 | 172          | ..     | 2,356   | 368        | 171     | 23             | 166            | ..                   | ..                 |
|                    | 2018 | 128          | ..     | 1,818   | 279        | 405     | 32             | 20             | ..                   | ..                 |
|                    | 2019 | 113          | ..     | *1,506  | *231       | *335    | *27            | 17             | ..                   | ..                 |
| Myanmar            | 2016 | ..           | ..     | ..      | ..         | ..      | 1              | 13             | ..                   | 5                  |
|                    | 2017 | ..           | ..     | ..      | ..         | ..      | 0              | 12             | ..                   | 5                  |
|                    | 2018 | ..           | ..     | ..      | ..         | ..      | 0              | 9              | ..                   | 4                  |
|                    | 2019 | ..           | ..     | ..      | ..         | ..      | 0              | 11             | ..                   | 0                  |
| Oman               | 2016 | 93           | ..     | 482     | 46         | ..      | ..             | ..             | ..                   | 192                |
|                    | 2017 | 124          | ..     | 939     | 62         | ..      | ..             | ..             | ..                   | 357                |
|                    | 2018 | 149          | ..     | 1,375   | 75         | ..      | ..             | ..             | ..                   | 1,068              |
|                    | 2019 | 136          | ..     | 1,374   | 68         | ..      | ..             | ..             | ..                   | 1,043              |
| Other Asia         | 2016 | 2,096        | ..     | 7,074   | 610        | 664     | ..             | 1,266          | 63                   | 668                |
|                    | 2017 | 1,887        | ..     | 7,667   | 672        | 547     | ..             | 1,175          | 59                   | 839                |
|                    | 2018 | 2,295        | ..     | 8,696   | 551        | 630     | ..             | 1,276          | 35                   | 957                |
|                    | 2019 | 2,331        | ..     | 8,587   | 663        | 665     | ..             | 1,228          | 36                   | 954                |
| Pakistan           | 2016 | 190          | ..     | 767     | 192        | 223     | *12            | ..             | ..                   | *35                |
|                    | 2017 | ..           | ..     | 781     | 180        | *291    | 2              | ..             | ..                   | 60                 |
|                    | 2018 | 33           | ..     | 794     | 178        | 288     | 0              | ..             | ..                   | 60                 |
|                    | 2019 | 21           | ..     | 570     | 176        | 193     | 2              | ..             | ..                   | *30                |
| Philippines        | 2016 | ..           | ..     | 256     | ..         | ..      | ..             | ..             | ..                   | 1,278              |
|                    | 2017 | ..           | ..     | 200     | ..         | ..      | ..             | ..             | ..                   | 1,266              |
|                    | 2018 | ..           | ..     | 241     | ..         | 16      | ..             | ..             | ..                   | 1,496              |
|                    | 2019 | ..           | ..     | 161     | ..         | 47      | ..             | ..             | ..                   | 782                |

## Production of minor oil products from refineries - by type

Thousand metric tons

| Country or area      | Year | Refinery gas | Ethane | Naphtha | Lubricants | Bitumen | Paraffin waxes | Petroleum coke | White spirit and SBP | Other oil products |
|----------------------|------|--------------|--------|---------|------------|---------|----------------|----------------|----------------------|--------------------|
| Qatar                | 2016 | 61           | ..     | 3,997   | ..         | ..      | ..             | ..             | ..                   | 740                |
|                      | 2017 | 58           | ..     | 5,592   | ..         | ..      | ..             | ..             | ..                   | 527                |
|                      | 2018 | 58           | ..     | 4,965   | ..         | ..      | ..             | ..             | ..                   | 720                |
|                      | 2019 | 63           | ..     | 4,689   | ..         | ..      | ..             | ..             | ..                   | 1,730              |
| Saudi Arabia         | 2016 | 4,291        | ..     | 8,669   | ..         | 3,016   | ..             | 14,477         | ..                   | *397               |
|                      | 2017 | 4,300        | ..     | 8,499   | ..         | 2,778   | ..             | 15,231         | ..                   | *610               |
|                      | 2018 | 4,248        | ..     | 6,877   | ..         | 2,326   | ..             | 15,299         | ..                   | 1,307              |
|                      | 2019 | *3,704       | ..     | 5,819   | ..         | 2,365   | ..             | 4,805          | ..                   | *503               |
| Singapore            | 2016 | 3,155        | ..     | 3,667   | 3,162      | 3,432   | 20             | 137            | 232                  | 699                |
|                      | 2017 | 3,251        | ..     | 4,494   | 3,230      | 2,945   | 28             | 245            | 705                  | 1,035              |
|                      | 2018 | 3,107        | ..     | 2,898   | 3,110      | 2,871   | 76             | 232            | 216                  | 410                |
|                      | 2019 | 2,978        | ..     | 4,296   | 3,184      | 2,746   | 75             | 224            | 206                  | 350                |
| Sri Lanka            | 2016 | 14           | ..     | 144     | ..         | 0       | ..             | ..             | 1                    | ..                 |
|                      | 2017 | 13           | ..     | 142     | ..         | 0       | ..             | ..             | 1                    | ..                 |
|                      | 2018 | 13           | ..     | 141     | ..         | ..      | ..             | ..             | 2                    | ..                 |
|                      | 2019 | 15           | ..     | 162     | ..         | ..      | ..             | ..             | 2                    | ..                 |
| Syrian Arab Republic | 2016 | 94           | ..     | 577     | 26         | 321     | ..             | ..             | ..                   | 17                 |
|                      | 2017 | 104          | ..     | 641     | 29         | 356     | ..             | ..             | ..                   | 19                 |
|                      | 2018 | 98           | ..     | 600     | 27         | 334     | ..             | ..             | ..                   | 18                 |
|                      | 2019 | 84           | ..     | 518     | 23         | 288     | ..             | ..             | ..                   | 15                 |
| Tajikistan           | 2016 | ..           | ..     | *9      | ..         | 3       | ..             | ..             | ..                   | ..                 |
|                      | 2017 | ..           | ..     | ..      | ..         | 3       | ..             | ..             | ..                   | ..                 |
|                      | 2018 | ..           | ..     | ..      | ..         | 3       | ..             | ..             | ..                   | ..                 |
|                      | 2019 | ..           | ..     | ..      | ..         | 3       | ..             | ..             | ..                   | ..                 |
| Thailand             | 2016 | 546          | ..     | 10,478  | ..         | 1,364   | ..             | ..             | ..                   | 1,637              |
|                      | 2017 | 565          | ..     | 10,430  | ..         | 1,361   | ..             | ..             | ..                   | 1,130              |
|                      | 2018 | 565          | ..     | 10,431  | ..         | 1,377   | ..             | ..             | ..                   | 1,131              |
|                      | 2019 | 507          | ..     | 9,445   | ..         | 1,257   | ..             | ..             | ..                   | 1,014              |
| Turkey               | 2016 | 1,541        | ..     | 320     | 128        | 3,436   | ..             | 733            | 12                   | 342                |
|                      | 2017 | 1,354        | ..     | 343     | 187        | 3,496   | ..             | 934            | 7                    | 917                |
|                      | 2018 | 1,004        | ..     | 375     | 218        | 2,981   | 32             | 868            | 5                    | 720                |
|                      | 2019 | 1,084        | ..     | 1,138   | 125        | 2,248   | ..             | 1,213          | 11                   | 1,901              |
| Turkmenistan         | 2016 | 120          | ..     | ..      | ..         | ..      | ..             | ..             | ..                   | 370                |
|                      | 2017 | 112          | ..     | ..      | ..         | ..      | ..             | ..             | ..                   | 370                |
|                      | 2018 | 106          | ..     | ..      | ..         | ..      | ..             | ..             | ..                   | 370                |
|                      | 2019 | 104          | ..     | ..      | ..         | ..      | ..             | ..             | ..                   | 370                |
| United Arab Emirates | 2016 | *422         | ..     | 11,782  | 181        | ..      | ..             | ..             | ..                   | 1,620              |
|                      | 2017 | 447          | ..     | 11,407  | 477        | ..      | ..             | ..             | ..                   | 779                |
|                      | 2018 | 437          | ..     | 11,963  | 578        | ..      | ..             | ..             | ..                   | 1,332              |
|                      | 2019 | 413          | ..     | 11,291  | 541        | ..      | ..             | ..             | ..                   | 4,114              |
| Uzbekistan           | 2016 | 86           | ..     | ..      | 76         | 152     | 12             | 31             | 11                   | ..                 |
|                      | 2017 | 94           | ..     | ..      | 84         | 138     | 27             | 29             | 12                   | ..                 |
|                      | 2018 | 114          | ..     | ..      | 98         | 153     | 21             | 39             | 31                   | ..                 |
|                      | 2019 | *114         | ..     | ..      | 60         | 117     | 8              | 32             | 30                   | ..                 |
| Viet Nam             | 2016 | ..           | ..     | ..      | ..         | ..      | ..             | ..             | ..                   | 18                 |
|                      | 2017 | ..           | ..     | ..      | ..         | ..      | ..             | ..             | ..                   | 144                |
|                      | 2018 | ..           | ..     | ..      | 20         | ..      | ..             | ..             | ..                   | 254                |
|                      | 2019 | ..           | ..     | ..      | ..         | ..      | ..             | ..             | ..                   | 465                |
| Yemen                | 2016 | ..           | ..     | 174     | ..         | 6       | ..             | ..             | ..                   | ..                 |
|                      | 2017 | ..           | ..     | 229     | ..         | 8       | ..             | ..             | ..                   | ..                 |
|                      | 2018 | ..           | ..     | 273     | ..         | 9       | ..             | ..             | ..                   | ..                 |
|                      | 2019 | ..           | ..     | 438     | ..         | 15      | ..             | ..             | ..                   | ..                 |

Table 23

## Production of minor oil products from refineries - by type

Thousand metric tons

| Country or area        | Year        | Refinery gas  | Ethane       | Naphtha       | Lubricants    | Bitumen       | Paraffin waxes | Petroleum coke | White spirit and SBP | Other oil products |
|------------------------|-------------|---------------|--------------|---------------|---------------|---------------|----------------|----------------|----------------------|--------------------|
| <b>Europe</b>          | <b>2016</b> | <b>38,254</b> | <b>2,047</b> | <b>67,069</b> | <b>10,945</b> | <b>27,195</b> | <b>734</b>     | <b>15,850</b>  | <b>2,867</b>         | <b>25,865</b>      |
|                        | <b>2017</b> | <b>38,189</b> | <b>1,534</b> | <b>73,357</b> | <b>14,645</b> | <b>26,392</b> | <b>933</b>     | <b>16,593</b>  | <b>2,796</b>         | <b>28,034</b>      |
|                        | <b>2018</b> | <b>37,845</b> | <b>1,927</b> | <b>73,133</b> | <b>18,749</b> | <b>26,471</b> | <b>1,097</b>   | <b>16,007</b>  | <b>1,893</b>         | <b>31,099</b>      |
|                        | <b>2019</b> | <b>37,678</b> | <b>1,914</b> | <b>70,276</b> | <b>20,801</b> | <b>26,704</b> | <b>1,029</b>   | <b>16,476</b>  | <b>1,921</b>         | <b>30,358</b>      |
| Albania                | 2016        | *6            | ..           | 4             | ..            | 84            | ..             | 14             | ..                   | 56                 |
|                        | 2017        | 19            | ..           | 40            | ..            | 77            | ..             | 105            | ..                   | 103                |
|                        | 2018        | 9             | ..           | 29            | ..            | 26            | ..             | 58             | ..                   | 66                 |
|                        | 2019        | 7             | ..           | 23            | ..            | 105           | ..             | 54             | ..                   | 58                 |
| Austria                | 2016        | 218           | ..           | 961           | 0             | 333           | ..             | 71             | ..                   | 26                 |
|                        | 2017        | 262           | ..           | 804           | 0             | 306           | ..             | 59             | ..                   | 27                 |
|                        | 2018        | 281           | ..           | 1,028         | 0             | 369           | ..             | 71             | ..                   | 21                 |
|                        | 2019        | 316           | ..           | 1,006         | 0             | 395           | ..             | 67             | ..                   | 23                 |
| Belarus                | 2016        | 632           | ..           | ..            | ..            | 677           | ..             | ..             | ..                   | 806                |
|                        | 2017        | 617           | ..           | ..            | ..            | 852           | ..             | ..             | ..                   | 1,028              |
|                        | 2018        | 697           | ..           | ..            | ..            | 781           | ..             | ..             | ..                   | 1,245              |
|                        | 2019        | 713           | ..           | ..            | ..            | 819           | ..             | ..             | ..                   | 1,021              |
| Belgium                | 2016        | 860           | ..           | 2,443         | ..            | 1,271         | ..             | 315            | ..                   | 3,903              |
|                        | 2017        | 916           | ..           | 2,319         | ..            | 395           | ..             | 305            | ..                   | 3,698              |
|                        | 2018        | 824           | ..           | 2,611         | ..            | ..            | ..             | 400            | ..                   | 2,488              |
|                        | 2019        | 685           | ..           | 2,769         | ..            | ..            | ..             | 1,047          | ..                   | 3,830              |
| Bosnia and Herzegovina | 2016        | ..            | ..           | 7             | 37            | 152           | ..             | ..             | ..                   | 21                 |
|                        | 2017        | ..            | ..           | 7             | 51            | 171           | ..             | ..             | ..                   | 20                 |
|                        | 2018        | ..            | ..           | 7             | 40            | 146           | ..             | ..             | ..                   | 19                 |
|                        | 2019        | ..            | ..           | 1             | 16            | 4             | ..             | ..             | ..                   | ..                 |
| Bulgaria               | 2016        | 310           | ..           | 366           | ..            | 23            | ..             | 93             | 4                    | 9                  |
|                        | 2017        | 331           | ..           | 448           | ..            | 16            | ..             | 98             | 4                    | 9                  |
|                        | 2018        | 294           | ..           | 372           | ..            | 84            | ..             | 75             | 3                    | 4                  |
|                        | 2019        | 374           | ..           | 487           | ..            | 105           | ..             | 85             | 3                    | 2                  |
| Croatia                | 2016        | 155           | ..           | 64            | 11            | 1             | ..             | 53             | ..                   | 208                |
|                        | 2017        | 185           | ..           | 52            | 11            | ..            | ..             | 74             | ..                   | 115                |
|                        | 2018        | 187           | ..           | 39            | 11            | 1             | ..             | 58             | ..                   | 106                |
|                        | 2019        | 129           | ..           | 14            | 10            | ..            | ..             | 67             | ..                   | 25                 |
| Czechia                | 2016        | 101           | ..           | 394           | 84            | 363           | 10             | 62             | ..                   | 494                |
|                        | 2017        | 145           | ..           | 840           | 85            | 551           | 12             | 102            | ..                   | 817                |
|                        | 2018        | 140           | ..           | 930           | 95            | 566           | 11             | 89             | ..                   | 669                |
|                        | 2019        | 148           | ..           | 911           | 92            | 547           | 9              | 99             | ..                   | 636                |
| Denmark                | 2016        | 287           | ..           | ..            | ..            | ..            | ..             | ..             | ..                   | ..                 |
|                        | 2017        | 306           | ..           | ..            | ..            | ..            | ..             | ..             | ..                   | ..                 |
|                        | 2018        | 301           | ..           | ..            | ..            | ..            | ..             | ..             | ..                   | ..                 |
|                        | 2019        | 320           | ..           | ..            | ..            | ..            | ..             | ..             | ..                   | ..                 |
| Finland                | 2016        | 591           | ..           | 133           | 308           | 231           | ..             | 128            | 116                  | ..                 |
|                        | 2017        | 574           | ..           | 103           | 296           | 139           | ..             | 117            | 130                  | 5                  |
|                        | 2018        | 586           | ..           | 70            | 305           | 225           | ..             | 100            | 140                  | 38                 |
|                        | 2019        | 632           | ..           | 133           | 299           | 218           | ..             | 109            | 155                  | 46                 |
| France                 | 2016        | 1,322         | 9            | 4,974         | 603           | 1,706         | 73             | 542            | 38                   | 917                |
|                        | 2017        | 1,282         | 20           | 5,301         | 719           | 2,047         | 97             | 485            | 58                   | 963                |
|                        | 2018        | 1,167         | 7            | 5,387         | 571           | 2,056         | 71             | 481            | 85                   | 859                |
|                        | 2019        | 1,178         | 9            | 4,267         | 555           | 1,976         | 63             | 387            | 68                   | 821                |
| Germany                | 2016        | 3,937         | ..           | 7,860         | 2,367         | 4,065         | 122            | 1,887          | 1                    | 1,190              |
|                        | 2017        | 4,051         | ..           | 7,635         | 2,508         | 4,289         | 94             | 1,911          | 259                  | 1,393              |
|                        | 2018        | 3,742         | ..           | 6,373         | 2,460         | 4,083         | 219            | 1,715          | 174                  | 1,238              |
|                        | 2019        | 3,835         | ..           | 6,662         | 2,282         | 3,915         | 306            | 1,705          | 414                  | 1,337              |

Table 23

## Production of minor oil products from refineries - by type

Thousand metric tons

| Country or area     | Year | Refinery gas | Ethane | Naphtha | Lubricants | Bitumen | Paraffin waxes | Petroleum coke | White spirit and SBP | Other oil products |
|---------------------|------|--------------|--------|---------|------------|---------|----------------|----------------|----------------------|--------------------|
| Greece              | 2016 | 662          | ..     | 1,657   | 225        | 748     | ..             | 597            | ..                   | 1,156              |
|                     | 2017 | 664          | ..     | 1,616   | 249        | 907     | ..             | 483            | ..                   | 1,462              |
|                     | 2018 | 839          | ..     | 1,795   | 281        | 1,142   | ..             | 583            | ..                   | 1,271              |
|                     | 2019 | 776          | ..     | 1,618   | 251        | 1,549   | ..             | 505            | ..                   | 1,389              |
| Hungary             | 2016 | 173          | ..     | 1,008   | 134        | 518     | 35             | 380            | 20                   | 625                |
|                     | 2017 | 174          | ..     | 862     | 133        | 440     | 42             | 309            | 24                   | 640                |
|                     | 2018 | 207          | ..     | 1,036   | 135        | 404     | 34             | 330            | 19                   | 752                |
|                     | 2019 | 206          | ..     | 880     | 124        | 407     | 31             | 317            | 16                   | 783                |
| Ireland             | 2016 | 72           | ..     | 77      | ..         | ..      | ..             | ..             | ..                   | ..                 |
|                     | 2017 | 74           | ..     | 94      | ..         | ..      | ..             | ..             | ..                   | ..                 |
|                     | 2018 | 76           | ..     | 35      | ..         | ..      | ..             | ..             | ..                   | ..                 |
|                     | 2019 | 62           | ..     | 42      | ..         | ..      | ..             | ..             | ..                   | ..                 |
| Italy               | 2016 | 2,559        | ..     | 2,436   | 1,368      | 2,557   | 108            | 834            | 3                    | 3,936              |
|                     | 2017 | 2,718        | ..     | 6,391   | 1,554      | 2,772   | 145            | 1,033          | 4                    | 2,563              |
|                     | 2018 | 2,790        | ..     | 5,108   | 1,347      | 2,554   | 100            | 759            | 3                    | 2,907              |
|                     | 2019 | 2,733        | ..     | 4,965   | 755        | 2,750   | 83             | 769            | 3                    | 2,379              |
| Lithuania           | 2016 | 346          | ..     | ..      | 56         | 166     | ..             | 127            | ..                   | 95                 |
|                     | 2017 | 352          | ..     | ..      | 66         | 209     | ..             | 119            | ..                   | 94                 |
|                     | 2018 | 332          | ..     | ..      | 72         | 242     | ..             | 121            | ..                   | 94                 |
|                     | 2019 | 302          | ..     | ..      | 86         | 372     | ..             | 122            | ..                   | 86                 |
| Netherlands         | 2016 | 2,243        | ..     | 10,159  | 16         | 225     | 3              | 403            | 322                  | 1,831              |
|                     | 2017 | 2,099        | ..     | 10,993  | 0          | 216     | 78             | 388            | 121                  | 2,378              |
|                     | 2018 | 1,946        | ..     | 11,572  | ..         | 330     | 174            | 391            | 114                  | 2,319              |
|                     | 2019 | 2,295        | ..     | 11,446  | 561        | 252     | 55             | 443            | 82                   | 2,591              |
| Norway              | 2016 | 420          | ..     | 1,111   | ..         | ..      | ..             | 473            | ..                   | ..                 |
|                     | 2017 | 482          | ..     | 1,236   | ..         | ..      | ..             | 504            | ..                   | ..                 |
|                     | 2018 | 478          | ..     | 1,281   | ..         | ..      | ..             | 485            | ..                   | ..                 |
|                     | 2019 | 426          | ..     | 1,329   | ..         | ..      | ..             | 363            | ..                   | ..                 |
| Poland              | 2016 | 663          | ..     | 1,810   | 651        | 1,427   | 86             | ..             | 130                  | 1,362              |
|                     | 2017 | 542          | ..     | 1,935   | 452        | 1,452   | 76             | ..             | 89                   | 1,246              |
|                     | 2018 | 623          | ..     | 2,000   | 472        | 1,494   | 87             | ..             | 113                  | 1,164              |
|                     | 2019 | 702          | ..     | 2,020   | 415        | 1,485   | 87             | 30             | 107                  | 1,340              |
| Portugal            | 2016 | 8            | ..     | 1,146   | 121        | 164     | 10             | ..             | 24                   | 976                |
|                     | 2017 | 9            | ..     | 1,321   | 136        | 196     | 10             | ..             | 16                   | 886                |
|                     | 2018 | 11           | ..     | 1,018   | 116        | 132     | 9              | ..             | 16                   | 775                |
|                     | 2019 | 13           | ..     | 1,091   | 103        | 171     | 8              | ..             | 8                    | 729                |
| Republic of Moldova | 2016 | ..           | ..     | ..      | 0          | ..      | ..             | ..             | ..                   | 1                  |
|                     | 2017 | ..           | ..     | ..      | ..         | ..      | ..             | ..             | ..                   | 3                  |
|                     | 2018 | ..           | ..     | ..      | 0          | 0       | ..             | ..             | 0                    | 1                  |
|                     | 2019 | ..           | ..     | ..      | ..         | 0       | ..             | ..             | ..                   | 1                  |
| Romania             | 2016 | 787          | ..     | 184     | ..         | 91      | ..             | 843            | 128                  | 96                 |
|                     | 2017 | 783          | ..     | 230     | ..         | 96      | ..             | 909            | 126                  | 196                |
|                     | 2018 | 788          | ..     | 193     | ..         | 102     | ..             | 838            | 132                  | 254                |
|                     | 2019 | 842          | ..     | 181     | ..         | 120     | ..             | 846            | 138                  | 247                |
| Russian Federation  | 2016 | 15,590       | *2,038 | 25,946  | 3,720      | 7,633   | 178            | 3,229          | 1,721                | *1,623             |
|                     | 2017 | 15,318       | *1,514 | 26,485  | 7,041      | 6,693   | 251            | 3,727          | 1,705                | 4,245              |
|                     | 2018 | *15,350      | *1,920 | 27,236  | 11,480     | 6,912   | 246            | 3,829          | 845                  | 9,267              |
|                     | 2019 | *15,400      | *1,905 | 25,783  | 14,144     | 7,069   | 243            | 3,971          | 717                  | 6,275              |
| Serbia              | 2016 | 65           | ..     | 359     | 12         | 333     | ..             | 13             | ..                   | 171                |
|                     | 2017 | 53           | ..     | 441     | 11         | 360     | ..             | 13             | ..                   | 197                |
|                     | 2018 | 59           | ..     | 449     | 13         | 416     | ..             | 12             | ..                   | 188                |
|                     | 2019 | 62           | ..     | 398     | 14         | 398     | ..             | 12             | ..                   | 203                |

Table 23

## Production of minor oil products from refineries - by type

Thousand metric tons

| Country or area  | Year        | Refinery gas | Ethane | Naphtha    | Lubricants | Bitumen    | Paraffin waxes | Petroleum coke | White spirit and SBP | Other oil products |
|------------------|-------------|--------------|--------|------------|------------|------------|----------------|----------------|----------------------|--------------------|
| Slovakia         | 2016        | 549          | 0      | 384        | ..         | ..         | ..             | 53             | ..                   | 146                |
|                  | 2017        | 572          | ..     | 472        | ..         | ..         | ..             | 59             | ..                   | 153                |
|                  | 2018        | 528          | ..     | 397        | ..         | ..         | ..             | 55             | ..                   | 127                |
|                  | 2019        | 494          | ..     | 430        | ..         | ..         | ..             | 38             | ..                   | 148                |
| Spain            | 2016        | 2,366        | ..     | 1,194      | 409        | 2,471      | 95             | 3,782          | 265                  | 2,575              |
|                  | 2017        | 2,346        | ..     | 1,368      | 399        | 2,483      | 88             | 3,823          | 255                  | 2,338              |
|                  | 2018        | 2,236        | ..     | 1,756      | 415        | 2,630      | 90             | 3,802          | 243                  | 2,319              |
|                  | 2019        | 2,113        | ..     | 1,438      | 354        | 2,373      | 78             | 3,604          | 202                  | 2,474              |
| Sweden           | 2016        | 739          | ..     | 86         | 383        | 961        | ..             | 69             | ..                   | 2,082              |
|                  | 2017        | 733          | ..     | 83         | 378        | 870        | ..             | 59             | ..                   | 1,800              |
|                  | 2018        | 822          | ..     | 188        | 355        | 733        | ..             | 69             | ..                   | 122                |
|                  | 2019        | 489          | ..     | 293        | 297        | 760        | ..             | 42             | ..                   | 1,728              |
| Switzerland      | 2016        | 123          | ..     | 0          | ..         | ..         | ..             | 0              | ..                   | 33                 |
|                  | 2017        | 121          | ..     | 1          | ..         | ..         | ..             | ..             | ..                   | 37                 |
|                  | 2018        | 131          | ..     | 16         | ..         | ..         | ..             | ..             | ..                   | 45                 |
|                  | 2019        | 119          | ..     | 19         | ..         | ..         | ..             | ..             | ..                   | 30                 |
| Ukraine          | 2016        | 26           | ..     | ..         | 90         | 27         | ..             | ..             | ..                   | 430                |
|                  | 2017        | 36           | ..     | ..         | 112        | 37         | ..             | ..             | ..                   | 599                |
|                  | 2018        | 35           | ..     | ..         | 147        | 170        | ..             | ..             | ..                   | 1,282              |
|                  | 2019        | 41           | ..     | ..         | 150        | 23         | ..             | ..             | ..                   | 432                |
| United Kingdom   | 2016        | 2,444        | ..     | 2,306      | 350        | 968        | 14             | 1,882          | 95                   | 1,097              |
|                  | 2017        | 2,424        | ..     | 2,280      | 443        | 817        | 39             | 1,910          | 7                    | 1,018              |
|                  | 2018        | 2,368        | ..     | 2,209      | 436        | 875        | 55             | 1,685          | 7                    | 1,459              |
|                  | 2019        | 2,266        | ..     | 2,072      | 293        | 892        | 68             | 1,793          | 8                    | 1,726              |
| <b>Oceania</b>   | <b>2016</b> | <b>1,009</b> | ..     | <b>850</b> | <b>0</b>   | <b>316</b> | ..             | <b>424</b>     | <b>76</b>            | <b>230</b>         |
|                  | <b>2017</b> | <b>1,021</b> | ..     | <b>838</b> | ..         | <b>202</b> | ..             | <b>374</b>     | <b>66</b>            | <b>167</b>         |
|                  | <b>2018</b> | <b>1,058</b> | ..     | <b>743</b> | ..         | <b>164</b> | ..             | <b>321</b>     | <b>72</b>            | <b>88</b>          |
|                  | <b>2019</b> | <b>1,065</b> | ..     | <b>765</b> | ..         | <b>219</b> | ..             | <b>238</b>     | <b>82</b>            | <b>2,293</b>       |
| Australia        | 2016        | 762          | ..     | 341        | 0          | 172        | ..             | 424            | 76                   | 141                |
|                  | 2017        | 757          | ..     | 318        | ..         | 124        | ..             | 374            | 66                   | 79                 |
|                  | 2018        | 808          | ..     | 310        | ..         | 98         | ..             | 321            | 72                   | 11                 |
|                  | 2019        | 807          | ..     | 310        | ..         | 93         | ..             | 238            | 82                   | 1,877              |
| New Zealand      | 2016        | 247          | ..     | ..         | ..         | 144        | ..             | ..             | ..                   | 75                 |
|                  | 2017        | 264          | ..     | ..         | ..         | 78         | ..             | ..             | ..                   | 75                 |
|                  | 2018        | 250          | ..     | ..         | ..         | 66         | ..             | ..             | ..                   | 64                 |
|                  | 2019        | 258          | ..     | ..         | ..         | 125        | ..             | ..             | ..                   | 402                |
| Papua New Guinea | 2016        | ..           | ..     | 509        | ..         | ..         | ..             | ..             | ..                   | 14                 |
|                  | 2017        | ..           | ..     | 520        | ..         | ..         | ..             | ..             | ..                   | 13                 |
|                  | 2018        | ..           | ..     | 433        | ..         | ..         | ..             | ..             | ..                   | 14                 |
|                  | 2019        | ..           | ..     | *454       | ..         | ..         | ..             | ..             | ..                   | *14                |







### Production of oil products from refineries – by type

Thousand metric tons

#### Table Notes

**Production** comprises all refinery output of all oil products.

The **Jet fuels** column comprises aviation gasoline, gasoline-type jet fuel and kerosene-type jet fuel.

The **Other products** column includes bitumen, ethane, feedstocks, lubricants, petroleum coke, paraffin waxes, white spirit, and other oil products.

Please refer to the Definitions Section on pages ix to xv for the appropriate product description /classification, and xvi to xvii for the descriptions of relevant flows.

**Figure 64: Production of selected oil products from refineries, 1990-2019**

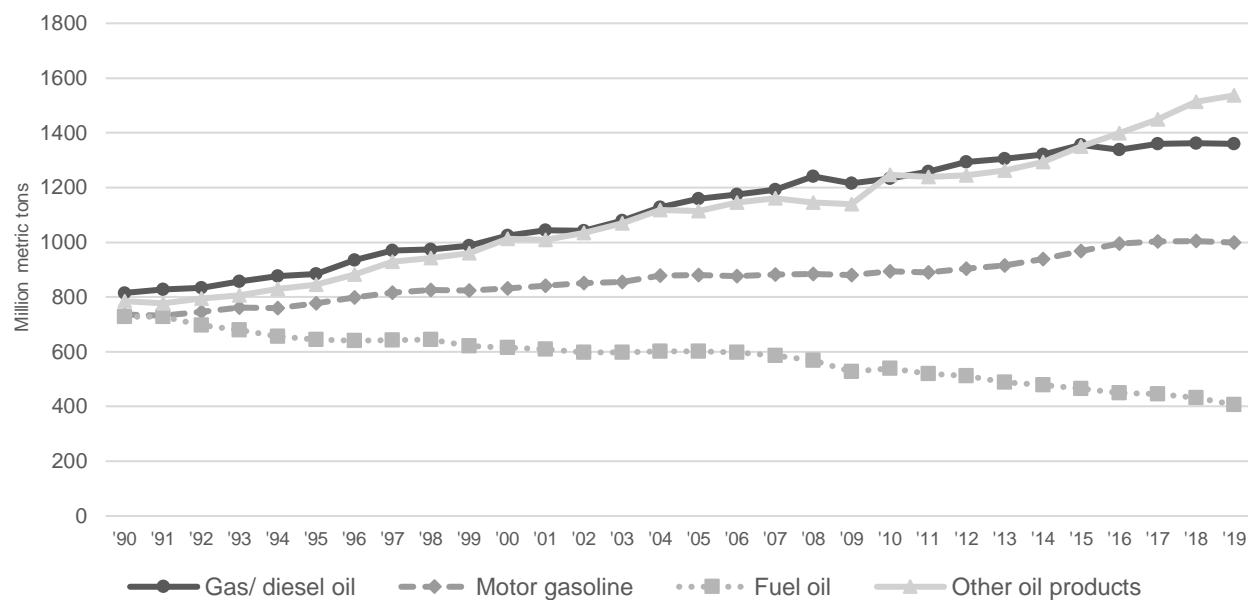


Table 24

## Production of oil products from refineries - by type

Thousand metric tons

| Country or area | Year        | Total            | Gas/<br>diesel oil | Motor<br>gasoline | Fuel oil       | Naphtha        | Jet fuels      | Refinery<br>gas | LPG            | Other<br>kerosene | Other<br>products |
|-----------------|-------------|------------------|--------------------|-------------------|----------------|----------------|----------------|-----------------|----------------|-------------------|-------------------|
| <b>World</b>    | <b>2016</b> | <b>4,181,061</b> | <b>1,337,839</b>   | <b>995,865</b>    | <b>449,000</b> | <b>281,399</b> | <b>301,482</b> | <b>129,019</b>  | <b>129,786</b> | <b>59,368</b>     | <b>497,304</b>    |
|                 | <b>2017</b> | <b>4,258,112</b> | <b>1,359,044</b>   | <b>1,003,064</b>  | <b>446,610</b> | <b>291,928</b> | <b>315,664</b> | <b>124,722</b>  | <b>137,720</b> | <b>56,422</b>     | <b>522,940</b>    |
|                 | <b>2018</b> | <b>4,311,362</b> | <b>1,362,098</b>   | <b>1,004,231</b>  | <b>431,931</b> | <b>297,748</b> | <b>335,175</b> | <b>128,972</b>  | <b>140,662</b> | <b>55,641</b>     | <b>554,906</b>    |
|                 | <b>2019</b> | <b>4,303,360</b> | <b>1,360,132</b>   | <b>999,894</b>    | <b>406,889</b> | <b>300,081</b> | <b>337,721</b> | <b>130,959</b>  | <b>142,440</b> | <b>52,381</b>     | <b>572,864</b>    |
| <b>Africa</b>   | <b>2016</b> | <b>100,247</b>   | <b>32,454</b>      | <b>19,417</b>     | <b>20,726</b>  | <b>11,125</b>  | <b>7,736</b>   | <b>680</b>      | <b>2,500</b>   | <b>1,424</b>      | <b>4,184</b>      |
|                 | <b>2017</b> | <b>95,459</b>    | <b>30,608</b>      | <b>17,157</b>     | <b>20,424</b>  | <b>10,529</b>  | <b>7,297</b>   | <b>1,257</b>    | <b>2,358</b>   | <b>1,494</b>      | <b>4,336</b>      |
|                 | <b>2018</b> | <b>98,683</b>    | <b>31,534</b>      | <b>17,802</b>     | <b>21,459</b>  | <b>10,675</b>  | <b>7,617</b>   | <b>1,227</b>    | <b>2,089</b>   | <b>1,261</b>      | <b>5,019</b>      |
|                 | <b>2019</b> | <b>97,866</b>    | <b>33,639</b>      | <b>16,563</b>     | <b>22,102</b>  | <b>10,014</b>  | <b>7,668</b>   | <b>1,305</b>    | <b>2,002</b>   | <b>879</b>        | <b>3,695</b>      |
| Algeria         | 2016        | 29,160           | 8,892              | 2,613             | 6,870          | 7,929          | *1,635         | ..              | 765            | *21               | *435              |
|                 | 2017        | 28,317           | 8,537              | 2,547             | 6,402          | 8,143          | *1,544         | ..              | 743            | *17               | *384              |
|                 | 2018        | 29,914           | 10,189             | 3,749             | 5,822          | 7,634          | *1,497         | ..              | 658            | *18               | *347              |
|                 | 2019        | 28,298           | 9,590              | 3,253             | 5,915          | 7,268          | 1,221          | ..              | 658            | *15               | *378              |
| Angola          | 2016        | 2,641            | 599                | 33                | 971            | 305            | 338            | *79             | 27             | 85                | 204               |
|                 | 2017        | 2,547            | 607                | 35                | 947            | 278            | 350            | 74              | 27             | 52                | 178               |
|                 | 2018        | 1,853            | 436                | 5                 | 614            | 244            | 228            | 53              | 17             | 36                | 219               |
|                 | 2019        | 2,514            | 615                | 39                | 1,072          | 333            | 305            | 74              | 28             | 24                | 23                |
| Cameroon        | 2016        | 1,596            | 572                | 292               | 270            | ..             | 106            | 67              | 13             | 121               | 155               |
|                 | 2017        | 1,313            | 471                | 240               | 222            | ..             | 87             | 55              | 11             | 100               | 128               |
|                 | 2018        | 1,191            | 427                | 218               | 201            | ..             | 79             | 50              | 10             | 90                | 116               |
|                 | 2019        | 616              | 221                | 113               | 104            | ..             | 41             | 26              | 5              | 47                | 60                |
| Chad            | 2016        | *669             | *275               | *231              | *24            | ..             | *33            | ..              | *52            | *4                | *52               |
|                 | 2017        | *670             | *272               | *231              | *24            | ..             | *36            | ..              | *52            | *4                | *52               |
|                 | 2018        | *671             | *265               | *235              | *24            | ..             | *38            | ..              | *52            | *4                | *53               |
|                 | 2019        | *678             | *270               | *240              | *26            | ..             | *35            | ..              | *50            | *4                | *54               |
| Congo           | 2016        | 649              | 168                | 56                | 325            | 8              | 45             | ..              | 7              | 10                | 30                |
|                 | 2017        | 716              | 214                | 64                | 358            | 9              | 37             | ..              | 8              | 7                 | 19                |
|                 | 2018        | 725              | 217                | 65                | 362            | 9              | 38             | ..              | 8              | 7                 | 19                |
|                 | 2019        | 735              | 221                | 65                | 368            | 10             | 38             | ..              | 8              | 7                 | 19                |
| Côte d'Ivoire   | 2016        | 3,186            | 1,237              | 693               | 317            | ..             | 634            | 25              | 16             | ..                | 265               |
|                 | 2017        | *3,064           | *1,222             | *888              | *313           | ..             | *327           | 19              | *10            | ..                | 285               |
|                 | 2018        | 3,366            | 1,241              | 771               | 652            | ..             | 359            | 20              | 18             | ..                | 305               |
|                 | 2019        | 3,711            | 1,411              | 844               | 704            | ..             | 552            | 23              | 22             | ..                | 155               |
| Egypt           | 2016        | 25,052           | 7,183              | 4,536             | 7,567          | 1,790          | 1,790          | *125            | 540            | 63                | *1,458            |
|                 | 2017        | 23,888           | 7,403              | 4,453             | 7,354          | 450            | 1,909          | 136             | 533            | 65                | 1,585             |
|                 | 2018        | 26,083           | 7,640              | 4,827             | 7,444          | 737            | 2,162          | 130             | 591            | 33                | 2,519             |
|                 | 2019        | 28,310           | 8,046              | 5,258             | 9,009          | 833            | 2,744          | 142             | 571            | 41                | 1,666             |
| Gabon           | 2016        | 849              | 234                | 76                | 418            | ..             | 65             | ..              | 14             | 29                | 13                |
|                 | 2017        | 793              | 254                | 32                | 396            | ..             | 36             | ..              | 41             | 22                | 12                |
|                 | 2018        | 726              | 233                | 29                | 362            | ..             | 33             | ..              | 37             | 20                | 11                |
|                 | 2019        | 624              | 189                | 30                | 308            | ..             | 31             | ..              | 38             | 19                | 10                |
| Ghana           | 2016        | 739              | 255                | 244               | 64             | ..             | 38             | ..              | 114            | 25                | ..                |
|                 | 2017        | 19               | 6                  | 7                 | 4              | ..             | 0              | ..              | 0              | 2                 | ..                |
|                 | 2018        | 310              | 114                | 102               | 32             | ..             | 22             | ..              | 8              | 33                | ..                |
|                 | 2019        | 624              | 198                | 125               | 205            | ..             | 80             | ..              | 4              | 12                | ..                |
| Libya           | 2016        | 4,004            | 917                | 399               | 1,827          | 518            | 182            | 81              | 30             | 25                | 25                |
|                 | 2017        | 4,793            | 1,332              | 470               | 1,676          | 667            | 455            | 97              | 43             | 24                | 30                |
|                 | 2018        | 5,598            | 1,563              | 391               | 1,850          | 948            | 639            | 113             | 35             | 24                | 35                |
|                 | 2019        | 4,677            | 1,302              | 339               | 1,587          | 790            | 476            | 96              | 35             | 21                | 29                |
| Niger           | 2016        | 596              | 352                | 184               | ..             | ..             | 25             | ..              | 35             | ..                | ..                |
|                 | 2017        | 814              | 520                | 228               | ..             | ..             | 0              | ..              | 47             | ..                | 19                |
|                 | 2018        | 763              | 492                | 197               | ..             | ..             | 3              | ..              | 53             | ..                | 19                |
|                 | 2019        | 634              | 382                | 175               | ..             | ..             | 0              | ..              | 60             | ..                | 17                |

## Production of oil products from refineries - by type

Thousand metric tons

| Country or area       | Year        | Total          | Gas/<br>diesel oil | Motor<br>gasoline | Fuel oil      | Naphtha       | Jet fuels     | Refinery<br>gas | LPG           | Other<br>kerosene | Other<br>products |
|-----------------------|-------------|----------------|--------------------|-------------------|---------------|---------------|---------------|-----------------|---------------|-------------------|-------------------|
| Nigeria               | 2016        | 3,351          | 685                | 931               | 577           | 82            | 41            | 77              | 66            | 401               | 491               |
|                       | 2017        | 4,379          | 900                | 675               | 994           | 342           | 54            | 102             | 79            | 502               | 732               |
|                       | 2018        | 2,389          | 347                | 368               | 552           | 158           | 27            | 57              | 48            | 327               | 503               |
|                       | 2019        | 742            | 81                 | 107               | 34            | 35            | 5             | 12              | 3             | 60                | 406               |
| Senegal               | 2016        | 1,124          | 629                | 116               | 266           | 87            | 0             | 23              | 3             | ..                | ..                |
|                       | 2017        | 1,202          | 679                | 97                | 285           | 123           | 0             | 15              | 3             | ..                | ..                |
|                       | 2018        | 981            | 576                | 93                | 220           | 76            | ..            | 13              | 3             | ..                | ..                |
|                       | 2019        | 886            | 522                | 84                | 191           | 71            | ..            | 12              | 3             | 2                 | ..                |
| South Africa          | 2016        | 20,809         | 7,845              | 7,693             | 584           | 166           | 2,640         | 166             | 420           | 558               | 736               |
|                       | 2017        | 17,918         | *5,861             | 5,983             | 895           | 420           | 2,379         | 723             | 405           | 619               | 631               |
|                       | 2018        | 19,125         | 5,417              | 5,668             | 2,753         | 618           | 2,444         | 758             | 246           | 605               | 616               |
|                       | 2019        | 20,633         | 8,539              | 4,795             | 2,238         | 632           | 2,100         | 886             | 221           | 596               | 628               |
| Sudan                 | 2016        | 4,165          | 1,960              | 1,196             | 135           | 11            | 156           | 24              | 373           | 11                | 299               |
|                       | 2017        | 3,609          | 1,797              | 1,063             | 51            | 4             | 82            | 20              | 329           | 4                 | 258               |
|                       | 2018        | 3,320          | 1,696              | 925               | 114           | 9             | 38            | *20             | 277           | 10                | 231               |
|                       | 2019        | *3,362         | *1,717             | *937              | *116          | *9            | *39           | *20             | *281          | *10               | *234              |
| Tunisia               | 2016        | 1,192          | 439                | 29                | 409           | 230           | ..            | 2               | 20            | 53                | 10                |
|                       | 2017        | 848            | 314                | 21                | 327           | 93            | ..            | 4               | 19            | 59                | 11                |
|                       | 2018        | 1,074          | 407                | 23                | 338           | 241           | ..            | ..              | 18            | 34                | 13                |
|                       | 2019        | 163            | 41                 | 22                | 52            | 33            | ..            | ..              | 3             | 11                | 2                 |
| Zambia                | 2016        | 465            | 213                | 95                | 102           | ..            | 9             | 11              | 5             | 18                | 11                |
|                       | 2017        | 569            | 217                | 124               | 176           | ..            | 0             | 12              | 9             | 18                | 12                |
|                       | 2018        | 595            | 274                | 136               | 119           | ..            | 11            | 13              | 9             | 21                | 13                |
|                       | 2019        | 658            | 294                | 138               | 172           | ..            | 2             | 14              | 11            | 13                | 14                |
| <b>America, North</b> | <b>2016</b> | <b>987,261</b> | <b>278,097</b>     | <b>407,609</b>    | <b>47,767</b> | <b>15,760</b> | <b>84,701</b> | <b>22,227</b>   | <b>12,326</b> | <b>1,467</b>      | <b>117,306</b>    |
|                       | <b>2017</b> | <b>990,990</b> | <b>284,659</b>     | <b>407,538</b>    | <b>47,056</b> | <b>12,974</b> | <b>87,405</b> | <b>20,583</b>   | <b>12,468</b> | <b>1,136</b>      | <b>117,171</b>    |
|                       | <b>2018</b> | <b>995,146</b> | <b>286,725</b>     | <b>407,310</b>    | <b>44,858</b> | <b>13,629</b> | <b>91,630</b> | <b>20,525</b>   | <b>11,764</b> | <b>1,209</b>      | <b>117,495</b>    |
|                       | <b>2019</b> | <b>972,072</b> | <b>285,645</b>     | <b>396,456</b>    | <b>35,815</b> | <b>11,902</b> | <b>90,338</b> | <b>21,011</b>   | <b>11,553</b> | <b>600</b>        | <b>118,752</b>    |
| Canada                | 2016        | 88,966         | 29,802             | 31,772            | 4,115         | 3,892         | 4,578         | 3,259           | 1,165         | 773               | 9,610             |
|                       | 2017        | 92,827         | 32,268             | 33,229            | 4,739         | 1,749         | 5,661         | 2,645           | 1,524         | 756               | 10,256            |
|                       | 2018        | 89,859         | 29,953             | 30,891            | 5,196         | 1,939         | 5,540         | 2,948           | 1,362         | 728               | 11,302            |
|                       | 2019        | 99,453         | 32,628             | 31,117            | 5,073         | 1,170         | 5,575         | 3,824           | 1,576         | 104               | 18,386            |
| Cuba                  | 2016        | 2,205          | 558                | 185               | 1,032         | 232           | 42            | 5               | 36            | 2                 | 115               |
|                       | 2017        | 2,632          | 714                | 139               | 1,255         | 289           | 68            | 3               | 51            | 3                 | 110               |
|                       | 2018        | 2,751          | 703                | 212               | 1,313         | 301           | 66            | 4               | 30            | 7                 | 116               |
|                       | 2019        | 2,566          | *632               | 199               | 1,246         | *292          | 83            | 5               | 22            | 1                 | *86               |
| Curaçao               | 2016        | 8,216          | 1,611              | 1,788             | 2,996         | 353           | 574           | 169             | 45            | ..                | 680               |
|                       | 2017        | 4,295          | 845                | 1,181             | 1,366         | 63            | 286           | 106             | 24            | ..                | 425               |
|                       | 2018        | 3,060          | 641                | 843               | 1,037         | 48            | 215           | 52              | 18            | ..                | 208               |
|                       | 2019        | 0              | 0                  | 0                 | 0             | 0             | 0             | 0               | 0             | ..                | 0                 |
| Dominican Republic    | 2016        | 1,097          | 316                | 229               | 310           | ..            | 204           | 13              | 16            | 9                 | ..                |
|                       | 2017        | 899            | 274                | 189               | 254           | ..            | 154           | 10              | 11            | 6                 | ..                |
|                       | 2018        | 1,208          | 356                | 256               | 372           | ..            | 189           | 14              | 14            | 8                 | ..                |
|                       | 2019        | 1,156          | 328                | 251               | 329           | ..            | 193           | 11              | 27            | 16                | ..                |
| Guatemala             | 2016        | 56             | 43                 | ..                | ..            | ..            | ..            | ..              | ..            | 0                 | 14                |
|                       | 2017        | 85             | 47                 | ..                | ..            | ..            | ..            | ..              | ..            | 0                 | 38                |
|                       | 2018        | 147            | 50                 | ..                | ..            | ..            | ..            | ..              | ..            | ..                | 97                |
|                       | 2019        | 203            | 57                 | ..                | ..            | ..            | ..            | ..              | ..            | ..                | 146               |
| Jamaica               | 2016        | 1,094          | 130                | 133               | 677           | 51            | 74            | ..              | 9             | ..                | 20                |
|                       | 2017        | 1,048          | 108                | 143               | 677           | 40            | 50            | ..              | 13            | ..                | 18                |
|                       | 2018        | 1,032          | 102                | 119               | 729           | 0             | 61            | ..              | 11            | ..                | *10               |
|                       | 2019        | 1,240          | 125                | 154               | 884           | 0             | 60            | ..              | 7             | ..                | *10               |

Table 24

## Production of oil products from refineries - by type

Thousand metric tons

| Country or area          | Year        | Total          | Gas/<br>diesel oil | Motor<br>gasoline | Fuel oil      | Naphtha      | Jet fuels     | Refinery<br>gas | LPG          | Other<br>kerosene | Other<br>products |
|--------------------------|-------------|----------------|--------------------|-------------------|---------------|--------------|---------------|-----------------|--------------|-------------------|-------------------|
| Mexico                   | 2016        | 50,634         | 11,580             | 13,563            | 13,007        | 3,008        | 1,958         | 3,190           | 541          | ..                | 3,787             |
|                          | 2017        | 44,357         | 11,165             | 10,715            | 12,360        | 2,441        | 1,884         | 2,445           | 504          | ..                | 2,843             |
|                          | 2018        | 35,566         | 8,485              | 8,654             | 10,550        | 2,046        | 1,589         | 1,816           | 317          | ..                | 2,109             |
|                          | 2019        | 34,410         | 8,964              | 8,213             | 8,472         | 2,201        | 1,234         | 2,319           | 222          | ..                | 2,785             |
| Nicaragua                | 2016        | 659            | 137                | 91                | 330           | ..           | 28            | 17              | 18           | 6                 | 31                |
|                          | 2017        | 692            | 169                | 101               | 318           | ..           | 29            | 18              | 20           | 8                 | 31                |
|                          | 2018        | 639            | 210                | 96                | 240           | ..           | 18            | 15              | 17           | 8                 | 34                |
|                          | 2019        | 518            | 233                | 108               | 96            | ..           | 17            | 24              | 21           | 6                 | 14                |
| Trinidad and Tobago      | 2016        | 7,303          | 2,113              | 2,052             | 2,236         | 0            | 669           | 59              | 62           | 32                | 80                |
|                          | 2017        | 6,387          | 1,468              | 1,601             | 2,345         | 0            | 509           | 52              | 63           | 29                | 321               |
|                          | 2018        | 5,032          | 1,178              | 1,435             | 1,810         | ..           | 397           | 88              | 39           | 24                | 61                |
|                          | 2019        | ..             | ..                 | ..                | ..            | ..           | ..            | ..              | ..           | ..                | ..                |
| United States            | 2016        | 827,031        | 231,807            | 357,795           | 23,064        | 8,225        | 76,575        | 15,516          | 10,434       | 646               | 102,969           |
|                          | 2017        | 837,767        | 237,599            | 360,241           | 23,742        | 8,391        | 78,766        | 15,305          | 10,260       | 335               | 103,129           |
|                          | 2018        | 855,853        | 245,048            | 364,804           | 23,612        | 9,296        | 83,556        | 15,588          | 9,956        | 434               | 103,559           |
|                          | 2019        | 832,525        | 242,678            | 356,414           | 19,715        | 8,239        | 83,176        | 14,827          | 9,679        | 473               | 97,326            |
| <b>America, South</b>    | <b>2016</b> | <b>209,245</b> | <b>71,460</b>      | <b>45,003</b>     | <b>38,073</b> | <b>5,923</b> | <b>10,640</b> | <b>7,485</b>    | <b>6,544</b> | <b>262</b>        | <b>23,855</b>     |
|                          | <b>2017</b> | <b>200,858</b> | <b>66,908</b>      | <b>45,163</b>     | <b>35,597</b> | <b>6,017</b> | <b>10,629</b> | <b>7,469</b>    | <b>6,512</b> | <b>252</b>        | <b>22,310</b>     |
|                          | <b>2018</b> | <b>195,618</b> | <b>67,803</b>      | <b>43,123</b>     | <b>32,599</b> | <b>6,147</b> | <b>10,915</b> | <b>7,210</b>    | <b>6,381</b> | <b>251</b>        | <b>21,187</b>     |
|                          | <b>2019</b> | <b>188,480</b> | <b>65,853</b>      | <b>43,163</b>     | <b>29,089</b> | <b>6,437</b> | <b>10,873</b> | <b>6,402</b>    | <b>6,204</b> | <b>229</b>        | <b>20,229</b>     |
| Argentina                | 2016        | 26,363         | 9,716              | 6,242             | 3,923         | 764          | 1,298         | 1,051           | 1,067        | 14                | 2,288             |
|                          | 2017        | 25,741         | 9,803              | 6,576             | 2,993         | 727          | 1,434         | 1,017           | 1,004        | 10                | 2,177             |
|                          | 2018        | 24,053         | 9,397              | 6,575             | 1,878         | 400          | 1,461         | 1,072           | 921          | 9                 | 2,340             |
|                          | 2019        | 24,127         | 9,484              | 6,481             | 2,138         | 640          | 1,466         | 925             | 773          | 8                 | 2,212             |
| Bolivia (Plur. State of) | 2016        | 2,514          | 814                | 1,055             | 121           | 1            | 189           | 97              | 112          | 18                | 107               |
|                          | 2017        | 2,341          | 745                | 1,035             | 81            | 0            | 190           | 91              | 105          | 16                | 79                |
|                          | 2018        | 2,213          | 724                | 993               | 38            | 0            | 179           | 87              | 100          | 18                | 73                |
|                          | 2019        | 1,934          | 584                | 895               | 21            | 0            | 177           | 74              | 112          | 20                | 50                |
| Brazil                   | 2016        | 97,217         | 39,532             | 19,638            | 11,424        | 2,308        | 4,729         | 4,445           | 3,967        | 6                 | 11,168            |
|                          | 2017        | 93,083         | 35,321             | 19,406            | 11,646        | 2,248        | 5,041         | 4,549           | 4,036        | 5                 | 10,831            |
|                          | 2018        | 91,463         | 36,396             | 17,550            | 10,761        | 2,944        | 5,200         | 4,264           | 4,016        | 5                 | 10,327            |
|                          | 2019        | 91,193         | 35,557             | 17,684            | 11,626        | 3,250        | 4,916         | 4,022           | 3,926        | 5                 | 10,207            |
| Chile                    | 2016        | 9,429          | 2,907              | 2,974             | 1,220         | 48           | 556           | 203             | 251          | 161               | 1,109             |
|                          | 2017        | 9,648          | 3,073              | 3,055             | 1,170         | 75           | 592           | 211             | 286          | 161               | 1,025             |
|                          | 2018        | 9,727          | 3,052              | 2,964             | 1,149         | 64           | 635           | 215             | 434          | 162               | 1,051             |
|                          | 2019        | 10,245         | 3,077              | 3,319             | 993           | 137          | 880           | 242             | 543          | 161               | 894               |
| Colombia                 | 2016        | 15,184         | 4,621              | 2,226             | 3,418         | 814          | 1,033         | ..              | 604          | ..                | 2,468             |
|                          | 2017        | 17,180         | 5,762              | 3,579             | 2,852         | 1,070        | 1,124         | ..              | 619          | ..                | 2,174             |
|                          | 2018        | 19,408         | 7,190              | 4,458             | 3,260         | 1,164        | 1,227         | ..              | 278          | ..                | 1,831             |
|                          | 2019        | 19,518         | 6,679              | 4,691             | 2,915         | 942          | 1,224         | ..              | 310          | ..                | 2,758             |
| Ecuador                  | 2016        | 7,695          | 1,907              | 1,495             | 2,873         | ..           | 342           | 2               | 155          | 2                 | 920               |
|                          | 2017        | 7,759          | 1,902              | 1,410             | 2,968         | ..           | 393           | 2               | 157          | 4                 | 923               |
|                          | 2018        | 8,259          | 1,820              | 1,405             | 3,572         | ..           | 365           | 1               | 245          | 3                 | 848               |
|                          | 2019        | 7,168          | 1,741              | 1,290             | 2,769         | ..           | 360           | 1               | 179          | 3                 | 824               |
| Peru                     | 2016        | 8,561          | 3,112              | 1,796             | 2,432         | ..           | 639           | 137             | 206          | ..                | 239               |
|                          | 2017        | 9,373          | 2,998              | 1,872             | 3,258         | ..           | 620           | 151             | 200          | ..                | 274               |
|                          | 2018        | 8,660          | 2,716              | 1,924             | 2,780         | ..           | 625           | 139             | 201          | ..                | 276               |
|                          | 2019        | 8,162          | 2,560              | 1,990             | 2,316         | ..           | 686           | 149             | 214          | ..                | 248               |
| Suriname                 | 2016        | 542            | 206                | 34                | 296           | ..           | ..            | ..              | ..           | ..                | 5                 |
|                          | 2017        | 685            | 293                | 64                | 323           | ..           | ..            | ..              | ..           | ..                | 5                 |
|                          | 2018        | 671            | 301                | 66                | 300           | ..           | ..            | ..              | ..           | ..                | 4                 |
|                          | 2019        | 637            | 311                | 61                | 255           | ..           | ..            | ..              | ..           | ..                | 10                |

Table 24

## Production of oil products from refineries - by type

Thousand metric tons

| Country or area           | Year        | Total            | Gas/<br>diesel oil | Motor<br>gasoline | Fuel oil       | Naphtha        | Jet fuels      | Refinery<br>gas | LPG           | Other<br>kerosene | Other<br>products |
|---------------------------|-------------|------------------|--------------------|-------------------|----------------|----------------|----------------|-----------------|---------------|-------------------|-------------------|
| Uruguay                   | 2016        | 1,994            | 767                | 535               | 334            | ..             | 114            | 62              | 96            | 7                 | 79                |
|                           | 2017        | 557              | 191                | 149               | 105            | ..             | 31             | 18              | 22            | 5                 | 36                |
|                           | 2018        | 2,073            | 883                | 533               | 242            | ..             | 105            | 58              | 106           | 5                 | 141               |
|                           | 2019        | 1,991            | 850                | 549               | 225            | ..             | 100            | 54              | 102           | 4                 | 108               |
| Venezuela (Bolivar. Rep.) | 2016        | 39,747           | 7,878              | 9,008             | 12,032         | 1,988          | 1,741          | 1,488           | 86            | 54                | 5,472             |
|                           | 2017        | 34,492           | 6,821              | 8,018             | 10,201         | 1,897          | 1,204          | 1,430           | 83            | 51                | 4,787             |
|                           | 2018        | 29,092           | 5,325              | 6,656             | 8,618          | 1,575          | 1,119          | 1,374           | 80            | 49                | 4,296             |
|                           | 2019        | 23,503           | 5,011              | 6,203             | 5,831          | 1,468          | 1,064          | 934             | 45            | 28                | 2,918             |
| <b>Asia</b>               | <b>2016</b> | <b>1,909,553</b> | <b>603,216</b>     | <b>345,683</b>    | <b>195,479</b> | <b>180,672</b> | <b>148,004</b> | <b>59,364</b>   | <b>68,006</b> | <b>43,721</b>     | <b>265,410</b>    |
|                           | <b>2017</b> | <b>1,974,117</b> | <b>617,159</b>     | <b>356,426</b>    | <b>201,275</b> | <b>188,213</b> | <b>156,880</b> | <b>56,202</b>   | <b>69,879</b> | <b>40,696</b>     | <b>287,386</b>    |
|                           | <b>2018</b> | <b>2,028,252</b> | <b>622,880</b>     | <b>358,421</b>    | <b>198,694</b> | <b>193,420</b> | <b>167,753</b> | <b>61,107</b>   | <b>73,424</b> | <b>39,238</b>     | <b>313,315</b>    |
|                           | <b>2019</b> | <b>2,052,263</b> | <b>617,276</b>     | <b>369,667</b>    | <b>189,015</b> | <b>200,687</b> | <b>171,506</b> | <b>63,498</b>   | <b>75,327</b> | <b>37,132</b>     | <b>328,155</b>    |
| Afghanistan               | 2016        | *106             | *43                | *43               | *10            | ..             | ..             | ..              | ..            | ..                | *10               |
|                           | 2017        | *112             | *44                | *44               | *12            | ..             | ..             | ..              | ..            | ..                | *12               |
|                           | 2018        | *176             | *68                | *68               | *20            | ..             | ..             | ..              | ..            | ..                | *20               |
|                           | 2019        | *112             | *44                | *44               | *12            | ..             | ..             | ..              | ..            | ..                | *12               |
| Azerbaijan                | 2016        | 5,793            | 2,247              | 1,153             | 399            | 174            | 627            | 231             | 186           | ..                | 776               |
|                           | 2017        | 5,559            | 1,849              | 1,215             | 236            | 169            | 588            | 214             | 200           | ..                | 1,088             |
|                           | 2018        | 5,963            | 2,148              | 1,186             | 107            | 205            | 708            | 214             | 204           | ..                | 1,192             |
|                           | 2019        | 6,041            | 2,243              | 1,161             | 127            | *243           | 667            | 242             | 198           | ..                | 1,161             |
| Bahrain                   | 2016        | 13,058           | 3,997              | 784               | 2,484          | 1,565          | 3,175          | ..              | 162           | 0                 | 891               |
|                           | 2017        | 13,303           | 4,184              | 744               | 2,750          | 1,494          | 3,116          | ..              | 149           | 0                 | 866               |
|                           | 2018        | 13,227           | 4,083              | 741               | 2,599          | 1,655          | 3,116          | ..              | 166           | 0                 | 867               |
|                           | 2019        | 13,386           | 4,210              | 755               | 2,662          | 1,706          | 3,097          | ..              | 136           | 0                 | 820               |
| Bangladesh                | 2016        | 1,174            | 333                | 26                | 363            | 132            | 1              | 13              | 10            | 194               | 102               |
|                           | 2017        | 1,432            | 407                | 32                | 443            | 161            | 1              | 16              | 12            | 237               | 123               |
|                           | 2018        | 1,249            | 499                | 94                | 304            | 97             | 1              | 14              | 10            | 127               | 103               |
|                           | 2019        | 1,408            | 638                | 95                | 344            | 101            | ..             | 15              | 13            | 95                | 107               |
| Brunei Darussalam         | 2016        | 306              | 114                | 92                | 39             | ..             | 45             | 10              | ..            | 6                 | ..                |
|                           | 2017        | 232              | 104                | 73                | ..             | ..             | 46             | 3               | ..            | 6                 | ..                |
|                           | 2018        | 321              | 110                | 133               | ..             | ..             | 56             | 18              | ..            | 4                 | ..                |
|                           | 2019        | 1,330            | 422                | 325               | ..             | ..             | 248            | 14              | 75            | 3                 | 243               |
| China                     | 2016        | 637,212          | 179,177            | 129,320           | 42,369         | 50,324         | 39,081         | 18,923          | 35,039        | 1,613             | 141,367           |
|                           | 2017        | 675,125          | 186,679            | 132,762           | 45,635         | 53,339         | 41,797         | 19,825          | 36,625        | 1,442             | 157,021           |
|                           | 2018        | 711,792          | 183,601            | 142,647           | 38,997         | 60,255         | 47,216         | 20,132          | 39,156        | 1,437             | 178,351           |
|                           | 2019        | 764,010          | 173,083            | 147,816           | 45,061         | 66,201         | 52,502         | 21,879          | 42,100        | 1,815             | 213,554           |
| Georgia                   | 2016        | 25               | 9                  | 7                 | 8              | ..             | ..             | ..              | ..            | 0                 | ..                |
|                           | 2017        | 24               | 10                 | 2                 | 9              | 3              | ..             | ..              | ..            | ..                | ..                |
|                           | 2018        | 22               | 10                 | 1                 | 9              | 3              | ..             | ..              | ..            | ..                | ..                |
|                           | 2019        | 37               | 15                 | 1                 | 16             | 4              | ..             | ..              | ..            | ..                | ..                |
| India                     | 2016        | 253,122          | 103,113            | 36,593            | 9,962          | 17,607         | *13,828        | *12,268         | 10,968        | 6,041             | 42,742            |
|                           | 2017        | 260,900          | 108,466            | 37,784            | 9,486          | 18,786         | 14,594         | *9,825          | 10,170        | 4,408             | 47,381            |
|                           | 2018        | 273,711          | 111,236            | 38,039            | 10,032         | *18,536        | *15,461        | *14,117         | *10,700       | 4,072             | *51,518           |
|                           | 2019        | 263,195          | 111,841            | 38,616            | 8,609          | *19,399        | *15,212        | *15,470         | 10,723        | 3,141             | 40,184            |
| Indonesia                 | 2016        | 37,793           | 16,186             | 10,297            | 1,305          | 1,371          | 2,599          | 655             | 892           | 843               | 3,645             |
|                           | 2017        | 38,923           | 16,723             | 9,473             | 1,027          | 1,565          | 2,613          | 673             | 871           | 788               | 5,190             |
|                           | 2018        | 38,887           | 17,614             | 7,746             | 1,258          | 1,666          | 2,993          | 690             | 891           | 779               | 5,250             |
|                           | 2019        | 42,353           | 17,307             | 11,310            | 1,168          | 1,619          | 3,389          | *694            | 861           | 896               | *5,110            |
| Iran (Islamic Rep. of)    | 2016        | 87,830           | 28,509             | 16,798            | 21,964         | 3,505          | 1,505          | 1,951           | 2,070         | 2,523             | 9,006             |
|                           | 2017        | 87,782           | 26,937             | 22,130            | 19,707         | 3,000          | 1,592          | 1,581           | 2,123         | 2,820             | 7,892             |
|                           | 2018        | 88,357           | 28,608             | 16,917            | 24,238         | 3,030          | 1,633          | 1,545           | 1,820         | 2,895             | 7,671             |
|                           | 2019        | 88,068           | 28,566             | 18,169            | 22,048         | 3,103          | 1,597          | 1,543           | 2,215         | 2,829             | 8,000             |

Table 24

## Production of oil products from refineries - by type

Thousand metric tons

| Country or area       | Year | Total   | Gas/<br>diesel oil | Motor<br>gasoline | Fuel oil | Naphtha | Jet fuels | Refinery<br>gas | LPG   | Other<br>kerosene | Other<br>products |
|-----------------------|------|---------|--------------------|-------------------|----------|---------|-----------|-----------------|-------|-------------------|-------------------|
| Iraq                  | 2016 | 20,404  | 3,287              | 2,117             | 12,774   | 480     | 211       | 137             | 116   | 1,148             | 134               |
|                       | 2017 | 24,034  | 4,012              | 2,483             | 14,573   | 571     | 247       | 164             | 173   | 1,396             | 415               |
|                       | 2018 | 27,271  | 5,291              | 2,832             | 16,182   | 442     | 212       | 192             | 242   | 1,447             | 431               |
|                       | 2019 | 29,953  | 5,824              | 2,553             | 16,880   | 2,069   | 236       | 206             | 208   | 1,521             | 456               |
| Israel                | 2016 | 14,174  | 4,411              | 2,945             | 2,715    | 1,095   | 934       | 616             | 354   | 283               | 821               |
|                       | 2017 | 14,088  | 4,628              | 2,766             | 2,667    | 1,201   | 1,127     | 569             | 362   | ..                | 767               |
|                       | 2018 | 14,782  | 4,789              | 3,055             | 2,576    | 1,153   | 1,325     | 567             | 422   | ..                | 895               |
|                       | 2019 | 15,268  | 5,389              | 2,946             | 2,425    | 1,383   | 1,420     | 615             | 425   | ..                | 665               |
| Japan                 | 2016 | 162,776 | 45,582             | 39,513            | 17,758   | 14,656  | 12,461    | 6,557           | 4,210 | 12,863            | 9,176             |
|                       | 2017 | 157,198 | 45,619             | 39,157            | 15,334   | 13,175  | 11,501    | 6,515           | 4,416 | 12,796            | 8,686             |
|                       | 2018 | 150,956 | 44,574             | 37,464            | 14,735   | 12,385  | 12,194    | 6,356           | 3,755 | 10,780            | 8,713             |
|                       | 2019 | 147,426 | 44,287             | 36,020            | 14,321   | 12,546  | 12,238    | 5,833           | 3,401 | 10,777            | 8,004             |
| Jordan                | 2016 | 2,861   | 909                | 583               | 599      | ..      | 291       | *36             | 81    | 97                | 266               |
|                       | 2017 | 2,671   | 845                | 557               | 564      | ..      | 287       | *33             | 78    | 54                | 253               |
|                       | 2018 | 2,281   | 738                | 483               | 458      | ..      | 336       | 42              | 65    | 11                | 149               |
|                       | 2019 | 2,251   | 765                | 507               | 464      | ..      | 330       | *40             | 68    | *10               | 68                |
| Kazakhstan            | 2016 | 12,881  | 4,652              | 2,939             | 3,101    | ..      | *264      | 111             | *844  | 2                 | 969               |
|                       | 2017 | 13,619  | 4,352              | 3,055             | 3,365    | ..      | 302       | 161             | 1,077 | 0                 | 1,307             |
|                       | 2018 | 14,617  | 4,664              | 3,955             | 2,948    | ..      | 387       | 177             | 995   | 5                 | 1,486             |
|                       | 2019 | 15,910  | 5,033              | 4,533             | 2,875    | ..      | 629       | 264             | 1,035 | 5                 | 1,536             |
| Korea, Dem.Ppl's.Rep. | 2016 | 515     | 191                | 178               | 109      | ..      | ..        | ..              | ..    | 37                | ..                |
|                       | 2017 | 515     | 191                | 178               | 109      | ..      | ..        | ..              | ..    | 37                | ..                |
|                       | 2018 | 515     | 191                | 178               | 109      | ..      | ..        | ..              | ..    | 37                | ..                |
|                       | 2019 | 515     | 191                | 178               | 109      | ..      | ..        | ..              | ..    | 37                | ..                |
| Korea, Republic of    | 2016 | 146,029 | 45,831             | 17,266            | 10,383   | 31,503  | 20,277    | 4,566           | 2,244 | 2,716             | 11,243            |
|                       | 2017 | 153,142 | 46,583             | 18,343            | 9,874    | 35,356  | 21,944    | 3,831           | 2,773 | 2,722             | 11,716            |
|                       | 2018 | 158,099 | 48,366             | 19,601            | 10,200   | 36,933  | 21,571    | 4,365           | 2,922 | 2,729             | 11,412            |
|                       | 2019 | 157,811 | 49,425             | 19,722            | 8,526    | 36,758  | 21,544    | 4,729           | 2,882 | 2,781             | 11,444            |
| Kuwait                | 2016 | 37,847  | 9,425              | 2,405             | 10,002   | 7,120   | 2,184     | 383             | 164   | 5,505             | 659               |
|                       | 2017 | 32,151  | 8,476              | 2,113             | 8,723    | 5,675   | 1,731     | 310             | 189   | 4,362             | 572               |
|                       | 2018 | 32,449  | 8,397              | 2,097             | 8,642    | 5,613   | 1,855     | 322             | 193   | 4,676             | 654               |
|                       | 2019 | 30,906  | 8,168              | 2,587             | 8,357    | 5,561   | 1,573     | 288             | 166   | 3,965             | 241               |
| Kyrgyzstan            | 2016 | 379     | 106                | 171               | 75       | ..      | ..        | ..              | 27    | ..                | ..                |
|                       | 2017 | 431     | 89                 | 235               | 63       | ..      | ..        | ..              | 44    | ..                | ..                |
|                       | 2018 | 544     | 79                 | 219               | 156      | ..      | ..        | ..              | 55    | ..                | 35                |
|                       | 2019 | 318     | 83                 | 103               | 115      | ..      | ..        | ..              | 15    | ..                | 2                 |
| Malaysia              | 2016 | 24,249  | 9,833              | 4,801             | 1,492    | 2,744   | 2,469     | 198             | 1,181 | 4                 | 1,527             |
|                       | 2017 | 26,501  | 9,725              | 7,855             | 1,739    | 2,356   | 3,152     | 172             | 764   | 10                | 728               |
|                       | 2018 | 24,093  | 9,515              | 5,258             | 2,452    | 1,818   | 3,342     | 128             | 826   | 18                | 736               |
|                       | 2019 | 22,506  | 9,011              | 4,979             | 2,322    | *1,506  | 3,165     | 113             | 783   | 17                | *610              |
| Myanmar               | 2016 | 405     | 150                | 153               | 67       | ..      | 16        | ..              | ..    | 0                 | 19                |
|                       | 2017 | 406     | 151                | 145               | 78       | ..      | 15        | ..              | ..    | 0                 | 17                |
|                       | 2018 | 247     | 115                | 70                | 37       | ..      | 11        | ..              | ..    | 0                 | 13                |
|                       | 2019 | 207     | 103                | 52                | 23       | ..      | 12        | ..              | 6     | 0                 | 11                |
| Oman                  | 2016 | 7,981   | 2,922              | 3,018             | 278      | 482     | 666       | 93              | 278   | 6                 | 238               |
|                       | 2017 | 9,625   | 3,437              | 2,990             | 372      | 939     | 923       | 124             | 417   | 4                 | 419               |
|                       | 2018 | 12,141  | 3,769              | 3,185             | 277      | 1,375   | 1,715     | 149             | 526   | 3                 | 1,143             |
|                       | 2019 | 11,982  | 3,463              | 3,311             | 286      | 1,374   | 1,804     | 136             | 495   | 2                 | 1,111             |
| Other Asia            | 2016 | 45,311  | 13,653             | 9,248             | 5,125    | 7,074   | 3,729     | 2,096           | 1,108 | 7                 | 3,271             |
|                       | 2017 | 44,406  | 13,343             | 8,463             | 4,953    | 7,667   | 3,780     | 1,887           | 1,018 | 2                 | 3,292             |
|                       | 2018 | 46,752  | 14,379             | 8,537             | 4,173    | 8,696   | 4,087     | 2,295           | 1,131 | 5                 | 3,449             |
|                       | 2019 | 46,305  | 14,847             | 8,141             | 3,690    | 8,587   | 4,111     | 2,331           | 1,050 | 2                 | 3,546             |

Table 24

## Production of oil products from refineries - by type

Thousand metric tons

| Country or area      | Year | Total   | Gas/<br>diesel oil | Motor<br>gasoline | Fuel oil | Naphtha | Jet fuels | Refinery<br>gas | LPG   | Other<br>kerosene | Other<br>products |
|----------------------|------|---------|--------------------|-------------------|----------|---------|-----------|-----------------|-------|-------------------|-------------------|
| Pakistan             | 2016 | 12,276  | 4,783              | 1,839             | 3,054    | 767     | 879       | 190             | 178   | 125               | 462               |
|                      | 2017 | 13,751  | 5,501              | 2,212             | 3,303    | 781     | 914       | ..              | 392   | 115               | *534              |
|                      | 2018 | 13,472  | 5,232              | 2,383             | 3,398    | 794     | 783       | 33              | 210   | 113               | 526               |
|                      | 2019 | 11,939  | 4,715              | 2,183             | 2,702    | 570     | 799       | 21              | 442   | 107               | 400               |
| Philippines          | 2016 | 10,089  | 4,030              | 2,197             | 781      | 256     | 1,020     | ..              | 460   | 67                | 1,278             |
|                      | 2017 | 9,847   | 3,840              | 2,153             | 977      | 200     | 913       | ..              | 446   | 53                | 1,266             |
|                      | 2018 | 11,110  | 4,589              | 2,435             | 737      | 241     | 1,040     | ..              | 509   | 47                | 1,511             |
|                      | 2019 | 7,735   | 3,227              | 1,689             | 702      | 161     | 810       | ..              | 286   | 33                | 828               |
| Qatar                | 2016 | 12,853  | 2,081              | 1,963             | 225      | 3,997   | 3,447     | 61              | 339   | ..                | 740               |
|                      | 2017 | 15,883  | 1,973              | 1,937             | 234      | 5,592   | 5,230     | 58              | 332   | ..                | 527               |
|                      | 2018 | 15,867  | 2,059              | 1,770             | 146      | 4,965   | 5,858     | 58              | 290   | ..                | 720               |
|                      | 2019 | 16,047  | 1,948              | 1,671             | 141      | 4,689   | 5,532     | 63              | 273   | ..                | 1,730             |
| Saudi Arabia         | 2016 | 146,396 | 53,198             | 24,065            | 25,425   | 8,669   | 4,271     | 4,291           | 1,340 | 7,247             | 17,890            |
|                      | 2017 | 148,540 | 54,486             | 23,949            | 25,699   | 8,499   | 4,321     | 4,300           | 1,335 | 7,332             | 18,619            |
|                      | 2018 | 146,532 | 54,156             | 23,418            | 25,106   | 6,877   | 4,572     | 4,248           | 1,465 | 7,758             | 18,932            |
|                      | 2019 | 128,774 | 53,355             | 22,772            | 23,344   | 5,819   | *4,043    | *3,704          | 1,259 | *6,804            | 7,674             |
| Singapore            | 2016 | 50,852  | 12,199             | 9,096             | 4,279    | 3,667   | 10,175    | 3,155           | 333   | 266               | 7,682             |
|                      | 2017 | 53,684  | 10,967             | 9,108             | 5,383    | 4,494   | 11,864    | 3,251           | 224   | 205               | 8,188             |
|                      | 2018 | 49,002  | 9,185              | 8,491             | 5,461    | 2,898   | 11,862    | 3,107           | 833   | 250               | 6,915             |
|                      | 2019 | 50,315  | 10,734             | 8,122             | 4,924    | 4,296   | 11,347    | 2,978           | 873   | 256               | 6,786             |
| Sri Lanka            | 2016 | 1,647   | 583                | 166               | 479      | 144     | 148       | 14              | 9     | 104               | 1                 |
|                      | 2017 | 1,636   | 506                | 165               | 494      | 142     | 236       | 13              | 19    | 60                | 1                 |
|                      | 2018 | 1,607   | 568                | 165               | 424      | 141     | 237       | 13              | 22    | 35                | 2                 |
|                      | 2019 | 1,797   | 624                | 186               | 483      | 162     | 259       | 15              | 27    | 38                | 2                 |
| Syrian Arab Republic | 2016 | 6,996   | 2,207              | 581               | 2,886    | 577     | 211       | 94              | 73    | 3                 | 364               |
|                      | 2017 | 7,768   | 2,451              | 645               | 3,205    | 641     | 234       | 104             | 81    | 3                 | 404               |
|                      | 2018 | 7,275   | 2,295              | 604               | 3,001    | 600     | 219       | 98              | 76    | 3                 | 379               |
|                      | 2019 | 6,284   | 1,982              | 522               | 2,592    | 518     | 190       | 84              | 66    | 3                 | 327               |
| Tajikistan           | 2016 | 24      | 5                  | 1                 | 7        | *9      | ..        | ..              | ..    | ..                | 3                 |
|                      | 2017 | 23      | 10                 | 1                 | 9        | ..      | ..        | ..              | ..    | ..                | 3                 |
|                      | 2018 | 46      | 17                 | 1                 | 26       | ..      | ..        | ..              | ..    | ..                | 3                 |
|                      | 2019 | 30      | 13                 | 0                 | 15       | ..      | ..        | ..              | ..    | ..                | 3                 |
| Thailand             | 2016 | 57,789  | 22,103             | 7,764             | 5,326    | 10,478  | 5,262     | 546             | 1,553 | 1,756             | 3,001             |
|                      | 2017 | 59,202  | 23,150             | 8,090             | 5,526    | 10,430  | 5,573     | 565             | 1,821 | 1,557             | 2,491             |
|                      | 2018 | 60,363  | 23,152             | 8,398             | 5,580    | 10,431  | 6,097     | 565             | 1,938 | 1,694             | 2,508             |
|                      | 2019 | 54,687  | 20,637             | 7,604             | 5,152    | 9,445   | 5,710     | 507             | 1,742 | 1,619             | 2,271             |
| Turkey               | 2016 | 29,605  | 9,661              | 5,103             | 2,835    | 320     | 4,504     | 1,541           | 972   | 18                | 4,651             |
|                      | 2017 | 31,940  | 10,478             | 5,366             | 2,987    | 343     | 4,837     | 1,354           | 1,015 | 19                | 5,541             |
|                      | 2018 | 28,227  | 9,421              | 4,691             | 2,189    | 375     | 4,787     | 1,004           | 913   | 23                | 4,824             |
|                      | 2019 | 37,005  | 13,817             | 5,298             | 3,114    | 1,138   | 5,964     | 1,084           | 1,082 | 10                | 5,498             |
| Turkmenistan         | 2016 | 8,540   | 2,770              | 2,610             | 1,690    | ..      | 470       | 120             | 360   | 150               | 370               |
|                      | 2017 | 8,532   | 2,770              | 2,610             | 1,690    | ..      | 470       | 112             | 360   | 150               | 370               |
|                      | 2018 | 8,526   | 2,770              | 2,610             | 1,690    | ..      | 470       | 106             | 360   | 150               | 370               |
|                      | 2019 | 8,524   | 2,770              | 2,610             | 1,690    | ..      | 470       | 104             | 360   | 150               | 370               |
| United Arab Emirates | 2016 | 49,179  | 10,865             | 5,863             | 4,732    | 11,782  | 12,664    | *422            | 1,050 | ..                | 1,801             |
|                      | 2017 | 50,401  | 10,427             | 3,819             | 9,608    | 11,407  | 12,398    | 447             | 1,039 | ..                | 1,256             |
|                      | 2018 | 52,431  | 10,929             | 3,578             | 9,854    | 11,963  | 12,931    | 437             | 829   | ..                | 1,910             |
|                      | 2019 | 49,487  | 11,343             | 6,412             | 2,958    | 11,291  | 11,829    | 413             | 587   | ..                | 4,655             |
| Uzbekistan           | 2016 | 3,653   | 1,008              | 1,134             | 93       | ..      | 183       | 86              | 856   | 12                | 281               |
|                      | 2017 | 3,609   | 1,017              | 1,112             | 112      | ..      | 146       | 94              | 830   | 9                 | 289               |
|                      | 2018 | 3,847   | 1,081              | 1,147             | 143      | ..      | 193       | 114             | 819   | 9                 | 342               |
|                      | 2019 | 3,611   | 1,030              | 1,016             | 211      | ..      | 157       | *114            | 830   | 6                 | 247               |

Table 24

## Production of oil products from refineries - by type

Thousand metric tons

| Country or area        | Year        | Total          | Gas/<br>diesel oil | Motor<br>gasoline | Fuel oil       | Naphtha       | Jet fuels     | Refinery<br>gas | LPG           | Other<br>kerosene | Other<br>products |
|------------------------|-------------|----------------|--------------------|-------------------|----------------|---------------|---------------|-----------------|---------------|-------------------|-------------------|
| Viet Nam               | 2016        | 6,662          | 2,855              | 2,777             | 138            | ..            | 383           | ..              | 491           | ..                | 18                |
|                        | 2017        | 6,122          | 2,481              | 2,565             | 136            | ..            | 352           | ..              | 444           | ..                | 144               |
|                        | 2018        | 10,301         | 4,286              | 4,109             | 200            | ..            | 444           | ..              | 988           | ..                | 274               |
|                        | 2019        | 12,815         | 5,647              | 5,470             | 178            | ..            | 559           | ..              | 496           | ..                | 465               |
| Yemen                  | 2016        | 761            | 189                | 74                | 148            | 174           | 26            | ..              | 60            | 84                | 6                 |
|                        | 2017        | 999            | 248                | 97                | 194            | 229           | 34            | ..              | 79            | 110               | 8                 |
|                        | 2018        | 1,194          | 297                | 116               | 232            | 273           | 41            | ..              | 94            | 131               | 9                 |
|                        | 2019        | 1,916          | 476                | 186               | 373            | 438           | 65            | ..              | 151           | 211               | 15                |
| <b>Europe</b>          | <b>2016</b> | <b>945,991</b> | <b>342,590</b>     | <b>168,088</b>    | <b>145,842</b> | <b>67,069</b> | <b>46,376</b> | <b>38,254</b>   | <b>39,828</b> | <b>12,441</b>     | <b>85,503</b>     |
|                        | <b>2017</b> | <b>968,832</b> | <b>349,950</b>     | <b>167,322</b>    | <b>141,037</b> | <b>73,357</b> | <b>49,291</b> | <b>38,189</b>   | <b>45,967</b> | <b>12,792</b>     | <b>90,927</b>     |
|                        | <b>2018</b> | <b>965,096</b> | <b>343,184</b>     | <b>167,803</b>    | <b>132,968</b> | <b>73,133</b> | <b>52,839</b> | <b>37,845</b>   | <b>46,457</b> | <b>13,625</b>     | <b>97,243</b>     |
|                        | <b>2019</b> | <b>961,624</b> | <b>347,598</b>     | <b>164,385</b>    | <b>129,409</b> | <b>70,276</b> | <b>52,785</b> | <b>37,678</b>   | <b>46,803</b> | <b>13,488</b>     | <b>99,202</b>     |
| Albania                | 2016        | 183            | 18                 | ..                | 1              | 4             | ..            | *6              | ..            | ..                | 154               |
|                        | 2017        | 503            | 158                | ..                | 0              | 40            | ..            | 19              | ..            | ..                | 285               |
|                        | 2018        | 291            | 104                | ..                | ..             | 29            | ..            | 9               | ..            | ..                | 150               |
|                        | 2019        | 323            | 76                 | 0                 | ..             | 23            | ..            | 7               | ..            | ..                | 217               |
| Austria                | 2016        | 8,554          | 3,581              | 1,671             | 898            | 961           | 652           | 218             | 122           | 21                | 430               |
|                        | 2017        | 8,496          | 3,776              | 1,692             | 839            | 804           | 613           | 262             | 102           | 15                | 393               |
|                        | 2018        | 9,165          | 3,860              | 1,928             | 710            | 1,028         | 761           | 281             | 111           | 26                | 462               |
|                        | 2019        | 9,555          | 3,997              | 1,971             | 735            | 1,006         | 894           | 316             | 137           | 15                | 485               |
| Belarus                | 2016        | 18,697         | 6,748              | 3,573             | 5,569          | ..            | 329           | 632             | 358           | 5                 | 1,483             |
|                        | 2017        | 18,451         | 6,543              | 3,481             | 5,112          | ..            | 401           | 617             | 410           | 7                 | 1,880             |
|                        | 2018        | 18,752         | 6,443              | 3,335             | 5,409          | ..            | 370           | 697             | 465           | 7                 | 2,026             |
|                        | 2019        | 17,607         | 7,003              | 2,900             | 4,382          | ..            | 463           | 713             | 292           | 14                | 1,840             |
| Belgium                | 2016        | 33,631         | 12,309             | 4,797             | 5,349          | 2,443         | 1,666         | 860             | 697           | 21                | 5,489             |
|                        | 2017        | 35,283         | 12,843             | 4,608             | 7,488          | 2,319         | 1,942         | 916             | 738           | 31                | 4,397             |
|                        | 2018        | 34,070         | 13,525             | 4,013             | 7,507          | 2,611         | 1,842         | 824             | 829           | 30                | 2,889             |
|                        | 2019        | 35,151         | 14,695             | 4,253             | 4,585          | 2,769         | 2,195         | 685             | 1,069         | 25                | 4,876             |
| Bosnia and Herzegovina | 2016        | 826            | 381                | 140               | 69             | 7             | ..            | ..              | 19            | ..                | 210               |
|                        | 2017        | 862            | 366                | 142               | 81             | 7             | ..            | ..              | 24            | ..                | 242               |
|                        | 2018        | 704            | 300                | 116               | 57             | 7             | ..            | ..              | 19            | ..                | 205               |
|                        | 2019        | 74             | 9                  | 18                | 25             | 1             | ..            | ..              | 1             | ..                | 20                |
| Bulgaria               | 2016        | 6,942          | 2,745              | 1,785             | 1,297          | 366           | 207           | 310             | 103           | ..                | 129               |
|                        | 2017        | 7,142          | 3,032              | 1,848             | 974            | 448           | 265           | 331             | 120           | ..                | 126               |
|                        | 2018        | 6,189          | 2,545              | 1,508             | 948            | 372           | 259           | 294             | 97            | ..                | 166               |
|                        | 2019        | 6,968          | 3,191              | 1,778             | 581            | 487           | 232           | 374             | 131           | ..                | 195               |
| Croatia                | 2016        | 3,715          | 1,434              | 864               | 601            | 64            | 116           | 155             | 208           | ..                | 273               |
|                        | 2017        | 3,882          | 1,492              | 1,005             | 577            | 52            | 131           | 185             | 242           | ..                | 200               |
|                        | 2018        | 3,929          | 1,556              | 895               | 669            | 39            | 192           | 187             | 216           | ..                | 175               |
|                        | 2019        | 2,908          | 1,239              | 712               | 397            | 14            | 158           | 129             | 156           | ..                | 102               |
| Czechia                | 2016        | 5,604          | 2,498              | 1,179             | 104            | 394           | 60            | 101             | 255           | ..                | 1,013             |
|                        | 2017        | 8,183          | 3,403              | 1,521             | 169            | 840           | 180           | 145             | 358           | ..                | 1,567             |
|                        | 2018        | 7,848          | 3,276              | 1,398             | 137            | 930           | 181           | 140             | 356           | ..                | 1,430             |
|                        | 2019        | 8,089          | 3,409              | 1,483             | 139            | 911           | 216           | 148             | 400           | ..                | 1,383             |
| Denmark                | 2016        | 9,091          | 4,703              | 2,098             | 1,771          | ..            | 130           | 287             | 102           | ..                | ..                |
|                        | 2017        | 8,759          | 4,346              | 2,241             | 1,626          | ..            | 122           | 306             | 118           | ..                | ..                |
|                        | 2018        | 9,095          | 4,496              | 2,189             | 1,870          | ..            | 113           | 301             | 126           | ..                | ..                |
|                        | 2019        | 8,602          | 4,251              | 2,225             | 1,559          | ..            | 121           | 320             | 127           | ..                | ..                |
| Finland                | 2016        | 14,307         | 6,290              | 4,109             | 1,554          | 133           | 572           | 591             | 275           | ..                | 783               |
|                        | 2017        | 14,727         | 6,306              | 4,403             | 1,614          | 103           | 755           | 574             | 285           | ..                | 687               |
|                        | 2018        | 14,866         | 6,376              | 4,435             | 1,543          | 70            | 794           | 586             | 254           | ..                | 808               |
|                        | 2019        | 14,808         | 6,324              | 4,441             | 1,412          | 133           | 750           | 632             | 289           | ..                | 827               |



## Production of oil products from refineries - by type

Thousand metric tons

| Country or area     | Year | Total   | Gas/<br>diesel oil | Motor<br>gasoline | Fuel oil | Naphtha | Jet fuels | Refinery<br>gas | LPG   | Other<br>kerosene | Other<br>products |
|---------------------|------|---------|--------------------|-------------------|----------|---------|-----------|-----------------|-------|-------------------|-------------------|
| France              | 2016 | 59,365  | 24,963             | 11,214            | 7,686    | 4,974   | 3,790     | 1,322           | 1,528 | 0                 | 3,888             |
|                     | 2017 | 59,348  | 24,794             | 11,304            | 6,403    | 5,301   | 4,257     | 1,282           | 1,618 | ..                | 4,389             |
|                     | 2018 | 55,639  | 23,087             | 10,408            | 5,853    | 5,387   | 4,186     | 1,167           | 1,421 | ..                | 4,130             |
|                     | 2019 | 50,842  | 20,799             | 9,298             | 6,176    | 4,267   | 3,889     | 1,178           | 1,357 | ..                | 3,878             |
| Germany             | 2016 | 100,381 | 43,834             | 19,674            | 7,374    | 7,860   | 5,317     | 3,937           | 2,744 | 9                 | 9,632             |
|                     | 2017 | 101,529 | 43,432             | 19,806            | 7,376    | 7,635   | 5,347     | 4,051           | 3,419 | 9                 | 10,454            |
|                     | 2018 | 97,088  | 40,743             | 20,718            | 7,296    | 6,373   | 5,101     | 3,742           | 3,224 | 2                 | 9,889             |
|                     | 2019 | 97,682  | 41,610             | 20,269            | 7,034    | 6,662   | 5,077     | 3,835           | 3,232 | 4                 | 9,959             |
| Greece              | 2016 | 30,217  | 10,701             | 5,169             | 6,150    | 1,657   | 2,328     | 662             | 824   | 0                 | 2,726             |
|                     | 2017 | 31,766  | 10,797             | 5,291             | 7,028    | 1,616   | 2,431     | 664             | 837   | 0                 | 3,101             |
|                     | 2018 | 32,771  | 10,975             | 5,351             | 6,551    | 1,795   | 3,136     | 839             | 847   | ..                | 3,277             |
|                     | 2019 | 30,133  | 10,252             | 5,007             | 5,172    | 1,618   | 2,813     | 776             | 802   | ..                | 3,694             |
| Hungary             | 2016 | 7,334   | 3,009              | 1,093             | 39       | 1,008   | 199       | 173             | 101   | ..                | 1,712             |
|                     | 2017 | 7,146   | 3,086              | 1,023             | 78       | 862     | 236       | 174             | 99    | ..                | 1,588             |
|                     | 2018 | 7,658   | 3,174              | 1,117             | 43       | 1,036   | 297       | 207             | 110   | ..                | 1,674             |
|                     | 2019 | 7,402   | 3,114              | 1,093             | 21       | 880     | 300       | 206             | 110   | ..                | 1,678             |
| Ireland             | 2016 | 3,180   | 1,198              | 547               | 1,070    | 77      | ..        | 72              | 41    | 175               | ..                |
|                     | 2017 | 3,184   | 1,216              | 551               | 1,042    | 94      | ..        | 74              | 49    | 158               | ..                |
|                     | 2018 | 3,057   | 1,097              | 601               | 976      | 35      | ..        | 76              | 58    | 215               | ..                |
|                     | 2019 | 2,733   | 1,044              | 509               | 725      | 42      | ..        | 62              | 45    | 307               | ..                |
| Italy               | 2016 | 71,361  | 30,665             | 15,106            | 8,074    | 2,436   | 2,047     | 2,559           | 1,236 | 432               | 8,806             |
|                     | 2017 | 74,946  | 29,521             | 15,679            | 8,511    | 6,391   | 2,218     | 2,718           | 1,348 | 487               | 8,072             |
|                     | 2018 | 71,741  | 28,996             | 15,601            | 6,858    | 5,108   | 2,770     | 2,790           | 1,228 | 721               | 7,670             |
|                     | 2019 | 73,437  | 31,469             | 16,377            | 6,709    | 4,965   | 2,706     | 2,733           | 1,269 | 471               | 6,738             |
| Lithuania           | 2016 | 9,790   | 3,118              | 2,615             | 1,840    | ..      | 1,082     | 346             | 345   | ..                | 444               |
|                     | 2017 | 10,021  | 3,332              | 2,738             | 1,688    | ..      | 1,059     | 352             | 363   | ..                | 488               |
|                     | 2018 | 9,782   | 3,389              | 2,555             | 1,681    | ..      | 955       | 332             | 342   | ..                | 529               |
|                     | 2019 | 9,605   | 3,240              | 2,465             | 1,539    | ..      | 996       | 302             | 399   | ..                | 665               |
| Netherlands         | 2016 | 60,097  | 19,096             | 3,902             | 11,961   | 10,159  | 7,556     | 2,243           | 1,650 | 730               | 2,800             |
|                     | 2017 | 59,664  | 19,148             | 2,951             | 11,684   | 10,993  | 7,654     | 2,099           | 1,557 | 398               | 3,180             |
|                     | 2018 | 60,920  | 18,441             | 3,937             | 11,077   | 11,572  | 8,929     | 1,946           | 1,481 | 211               | 3,327             |
|                     | 2019 | 61,863  | 20,552             | 3,997             | 8,909    | 11,446  | 8,810     | 2,295           | 1,566 | 305               | 3,983             |
| Norway              | 2016 | 13,014  | 4,984              | 3,766             | 1,290    | 1,111   | 533       | 420             | 419   | 18                | 473               |
|                     | 2017 | 16,358  | 6,667              | 4,596             | 1,545    | 1,236   | 763       | 482             | 478   | 87                | 504               |
|                     | 2018 | 16,823  | 7,470              | 4,421             | 1,474    | 1,281   | 778       | 478             | 428   | 8                 | 485               |
|                     | 2019 | 15,100  | 6,545              | 3,616             | 1,806    | 1,329   | 655       | 426             | 320   | 40                | 363               |
| Poland              | 2016 | 27,027  | 11,558             | 3,947             | 3,609    | 1,810   | 1,183     | 663             | 601   | 0                 | 3,656             |
|                     | 2017 | 26,694  | 11,884             | 3,916             | 3,436    | 1,935   | 1,119     | 542             | 545   | 0                 | 3,315             |
|                     | 2018 | 28,226  | 12,491             | 4,208             | 3,630    | 2,000   | 1,339     | 623             | 605   | 0                 | 3,329             |
|                     | 2019 | 28,457  | 12,859             | 4,312             | 3,115    | 2,020   | 1,355     | 702             | 630   | 0                 | 3,464             |
| Portugal            | 2016 | 14,915  | 5,695              | 2,619             | 2,675    | 1,146   | 1,237     | 8               | 240   | 0                 | 1,295             |
|                     | 2017 | 15,478  | 5,935              | 2,749             | 2,645    | 1,321   | 1,361     | 9               | 214   | 0                 | 1,245             |
|                     | 2018 | 13,796  | 5,224              | 2,501             | 2,358    | 1,018   | 1,432     | 11              | 205   | 0                 | 1,047             |
|                     | 2019 | 12,762  | 4,614              | 2,401             | 2,114    | 1,091   | 1,346     | 13              | 165   | 0                 | 1,018             |
| Republic of Moldova | 2016 | 16      | 2                  | ..                | 13       | ..      | ..        | ..              | ..    | ..                | 1                 |
|                     | 2017 | 15      | 1                  | ..                | 11       | ..      | ..        | ..              | ..    | ..                | 3                 |
|                     | 2018 | 10      | 2                  | ..                | 6        | ..      | ..        | ..              | ..    | ..                | 2                 |
|                     | 2019 | 5       | ..                 | ..                | 4        | ..      | ..        | ..              | ..    | ..                | 1                 |
| Romania             | 2016 | 12,194  | 5,437              | 3,405             | 218      | 184     | 398       | 787             | 597   | 10                | 1,158             |
|                     | 2017 | 12,462  | 5,655              | 3,285             | 182      | 230     | 381       | 783             | 617   | 1                 | 1,328             |
|                     | 2018 | 12,584  | 5,656              | 3,381             | 196      | 193     | 418       | 788             | 624   | 1                 | 1,326             |
|                     | 2019 | 13,327  | 6,139              | 3,485             | 193      | 181     | 512       | 842             | 625   | 1                 | 1,351             |

Table 24

## Production of oil products from refineries - by type

Thousand metric tons

| Country or area    | Year        | Total         | Gas/<br>diesel oil | Motor<br>gasoline | Fuel oil     | Naphtha    | Jet fuels    | Refinery<br>gas | LPG        | Other<br>kerosene | Other<br>products |
|--------------------|-------------|---------------|--------------------|-------------------|--------------|------------|--------------|-----------------|------------|-------------------|-------------------|
| Russian Federation | 2016        | 273,944       | 76,249             | 40,004            | 61,426       | 25,946     | *12,030      | 15,590          | 22,259     | *298              | 20,142            |
|                    | 2017        | 281,548       | 80,090             | 38,027            | 56,018       | 26,485     | 12,577       | 15,318          | 27,605     | *252              | 25,176            |
|                    | 2018        | 285,776       | 77,464             | 39,053            | 50,147       | 27,236     | 12,982       | *15,350         | 28,730     | *315              | 34,499            |
|                    | 2019        | 297,661       | 81,560             | 39,494            | 58,417       | 25,783     | 13,176       | *15,400         | 29,077     | *428              | 34,325            |
| Serbia             | 2016        | 3,435         | 1,322              | 482               | 389          | 359        | 123          | 65              | 166        | ..                | 529               |
|                    | 2017        | 3,638         | 1,401              | 499               | 380          | 441        | 155          | 53              | 127        | ..                | 582               |
|                    | 2018        | 3,859         | 1,572              | 516               | 361          | 449        | 190          | 59              | 83         | ..                | 629               |
|                    | 2019        | 3,496         | 1,458              | 445               | 257          | 398        | 155          | 62              | 94         | ..                | 627               |
| Slovakia           | 2016        | 6,214         | 2,852              | 1,485             | 470          | 384        | 99           | 549             | 176        | 0                 | 199               |
|                    | 2017        | 6,119         | 2,852              | 1,395             | 363          | 472        | 76           | 572             | 177        | ..                | 212               |
|                    | 2018        | 5,930         | 2,704              | 1,362             | 482          | 397        | 95           | 528             | 180        | ..                | 182               |
|                    | 2019        | 5,580         | 2,562              | 1,137             | 535          | 430        | 72           | 494             | 164        | ..                | 186               |
| Spain              | 2016        | 64,893        | 26,644             | 9,555             | 5,109        | 1,194      | 214          | 2,366           | 1,541      | 8,673             | 9,597             |
|                    | 2017        | 65,766        | 27,143             | 9,101             | 5,532        | 1,368      | 189          | 2,346           | 1,401      | 9,300             | 9,386             |
|                    | 2018        | 67,599        | 27,167             | 9,211             | 6,000        | 1,756      | 381          | 2,236           | 1,311      | 10,038            | 9,499             |
|                    | 2019        | 65,221        | 27,005             | 9,087             | 5,056        | 1,438      | 454          | 2,113           | 1,167      | 9,816             | 9,085             |
| Sweden             | 2016        | 21,211        | 7,428              | 4,906             | 4,003        | 86         | 73           | 739             | 481        | ..                | 3,495             |
|                    | 2017        | 21,132        | 8,082              | 4,674             | 4,010        | 83         | 22           | 733             | 421        | ..                | 3,107             |
|                    | 2018        | 21,649        | 8,504              | 5,003             | 5,150        | 188        | 204          | 822             | 499        | ..                | 1,279             |
|                    | 2019        | 18,078        | 5,698              | 3,653             | 4,413        | 293        | 259          | 489             | 446        | ..                | 2,827             |
| Switzerland        | 2016        | 3,005         | 1,693              | 690               | 319          | 0          | 43           | 123             | 104        | ..                | 33                |
|                    | 2017        | 2,877         | 1,666              | 648               | 290          | 1          | 7            | 121             | 107        | ..                | 37                |
|                    | 2018        | 3,069         | 1,776              | 648               | 316          | 16         | 5            | 131             | 133        | ..                | 45                |
|                    | 2019        | 2,763         | 1,577              | 596               | 311          | 19         | 3            | 119             | 108        | ..                | 30                |
| Ukraine            | 2016        | 2,851         | 929                | *350              | 590          | ..         | ..           | 26              | 409        | ..                | 547               |
|                    | 2017        | 3,050         | 680                | 731               | 444          | ..         | ..           | 36              | 411        | ..                | 748               |
|                    | 2018        | 4,008         | *730               | *818              | 429          | ..         | ..           | 35              | 397        | ..                | 1,599             |
|                    | 2019        | *2,843        | *813               | *901              | 74           | ..         | ..           | 41              | 409        | ..                | 605               |
| United Kingdom     | 2016        | 59,997        | 20,506             | 17,343            | 4,324        | 2,306      | 4,392        | 2,444           | 2,227      | 2,049             | 4,406             |
|                    | 2017        | 59,805        | 20,303             | 17,416            | 3,893        | 2,280      | 5,031        | 2,424           | 2,178      | 2,047             | 4,234             |
|                    | 2018        | 58,205        | 20,043             | 16,575            | 3,233        | 2,209      | 5,129        | 2,368           | 2,079      | 2,053             | 4,516             |
|                    | 2019        | 58,548        | 20,494             | 16,464            | 3,015        | 2,072      | 5,178        | 2,266           | 2,216      | 2,062             | 4,781             |
| <b>Oceania</b>     | <b>2016</b> | <b>28,763</b> | <b>10,022</b>      | <b>10,064</b>     | <b>1,114</b> | <b>850</b> | <b>4,024</b> | <b>1,009</b>    | <b>582</b> | <b>52</b>         | <b>1,046</b>      |
|                    | <b>2017</b> | <b>27,855</b> | <b>9,760</b>       | <b>9,459</b>      | <b>1,220</b> | <b>838</b> | <b>4,162</b> | <b>1,021</b>    | <b>535</b> | <b>52</b>         | <b>809</b>        |
|                    | <b>2018</b> | <b>28,567</b> | <b>9,972</b>       | <b>9,771</b>      | <b>1,353</b> | <b>743</b> | <b>4,422</b> | <b>1,058</b>    | <b>546</b> | <b>56</b>         | <b>646</b>        |
|                    | <b>2019</b> | <b>31,056</b> | <b>10,122</b>      | <b>9,660</b>      | <b>1,459</b> | <b>765</b> | <b>4,551</b> | <b>1,065</b>    | <b>552</b> | <b>53</b>         | <b>2,831</b>      |
| Australia          | 2016        | 21,873        | 7,525              | 8,579             | 516          | 341        | 2,759        | 762             | 569        | 9                 | 813               |
|                    | 2017        | 21,135        | 7,275              | 8,131             | 644          | 318        | 2,841        | 757             | 518        | 7                 | 643               |
|                    | 2018        | 22,070        | 7,706              | 8,401             | 765          | 310        | 3,041        | 808             | 529        | 6                 | 503               |
|                    | 2019        | 23,778        | 7,595              | 8,171             | 909          | 310        | 3,162        | 807             | 534        | ..                | 2,290             |
| New Zealand        | 2016        | 5,522         | 1,949              | 1,485             | 463          | ..         | 1,159        | 247             | ..         | ..                | 219               |
|                    | 2017        | 5,343         | 1,942              | 1,328             | 435          | ..         | 1,221        | 264             | ..         | ..                | 153               |
|                    | 2018        | 5,330         | 1,790              | 1,370             | 465          | ..         | 1,325        | 250             | ..         | ..                | 130               |
|                    | 2019        | 6,053         | 2,028              | 1,489             | 422          | ..         | 1,330        | 258             | ..         | ..                | 527               |
| Papua New Guinea   | 2016        | 1,368         | 548                | 0                 | 135          | 509        | 106          | ..              | 13         | 43                | 14                |
|                    | 2017        | 1,378         | 543                | 0                 | 141          | 520        | 100          | ..              | 17         | 45                | 13                |
|                    | 2018        | 1,167         | 475                | ..                | 122          | 433        | 56           | ..              | 17         | 51                | 14                |
|                    | 2019        | *1,226        | *499               | ..                | *128         | *454       | *59          | ..              | *18        | 53                | *14               |





## Production, trade and supply of oil products

Thousand metric tons

### Table Notes

**Production** refers to the production from refineries and plants of all oil products, together with quantities from other sources which include any blended biofuels.

**Imports, Exports, Bunkers and Changes in stocks** refer to all oil products.

Please refer to the Definitions Section on pages ix to xv for the appropriate product description /classification, and xvi to xvii for the descriptions of relevant flows.

**Figure 65: Production of oil products by region, 1990-2019**

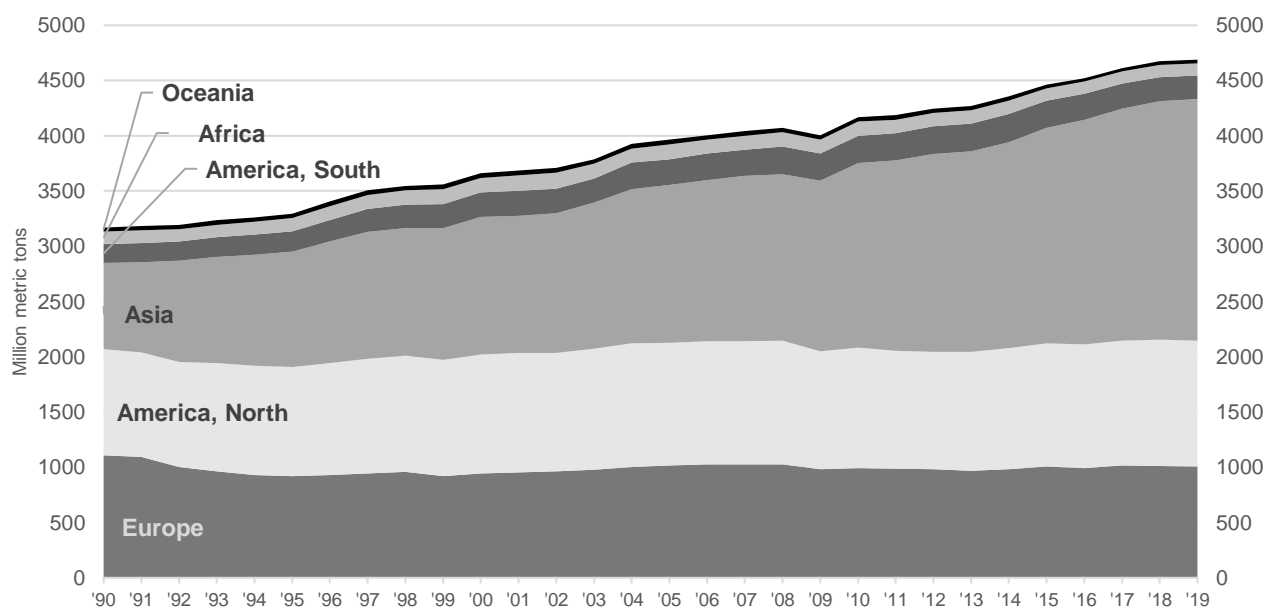


Table 25

## Production, trade and supply of oil products

Thousand metric tons and kilograms per capita

| Country or area      | Year        | Production       | Imports          | Exports          | Bunkers        | Changes in stocks | Supply           |            |
|----------------------|-------------|------------------|------------------|------------------|----------------|-------------------|------------------|------------|
|                      |             |                  |                  |                  |                |                   | Total            | Per capita |
| <b>World</b>         | <b>2016</b> | <b>4,522,805</b> | <b>1,381,107</b> | <b>1,446,882</b> | <b>383,608</b> | <b>1,639</b>      | <b>4,071,783</b> | <b>546</b> |
|                      | <b>2017</b> | <b>4,611,514</b> | <b>1,432,731</b> | <b>1,491,139</b> | <b>402,987</b> | <b>-15,281</b>    | <b>4,165,399</b> | <b>552</b> |
|                      | <b>2018</b> | <b>4,673,708</b> | <b>1,438,204</b> | <b>1,508,242</b> | <b>403,957</b> | <b>2,855</b>      | <b>4,196,858</b> | <b>550</b> |
|                      | <b>2019</b> | <b>4,689,320</b> | <b>1,395,276</b> | <b>1,459,945</b> | <b>401,940</b> | <b>7,211</b>      | <b>4,215,500</b> | <b>547</b> |
| <b>Africa</b>        | <b>2016</b> | <b>111,595</b>   | <b>114,691</b>   | <b>38,201</b>    | <b>11,388</b>  | <b>-410</b>       | <b>177,107</b>   | <b>146</b> |
|                      | <b>2017</b> | <b>107,445</b>   | <b>120,303</b>   | <b>38,229</b>    | <b>11,890</b>  | <b>-979</b>       | <b>178,608</b>   | <b>144</b> |
|                      | <b>2018</b> | <b>110,433</b>   | <b>110,850</b>   | <b>37,718</b>    | <b>13,679</b>  | <b>-3,326</b>     | <b>173,212</b>   | <b>136</b> |
|                      | <b>2019</b> | <b>109,580</b>   | <b>120,296</b>   | <b>34,382</b>    | <b>12,945</b>  | <b>-1,529</b>     | <b>184,078</b>   | <b>141</b> |
| Algeria              | 2016        | 37,854           | 3,573            | 23,346           | *616           | 51                | 17,414           | 429        |
|                      | 2017        | 36,842           | 3,452            | 22,637           | *591           | -135              | 17,201           | 416        |
|                      | 2018        | 38,309           | 840              | 21,052           | *648           | 504               | 16,945           | 401        |
|                      | 2019        | 36,664           | 1,884            | 20,079           | 499            | -11               | 17,981           | 418        |
| Angola               | 2016        | 2,866            | 3,546            | 1,303            | 654            | *-808             | 5,262            | 182        |
|                      | 2017        | 3,488            | 3,476            | 1,944            | 688            | *-661             | 4,993            | 167        |
|                      | 2018        | 2,675            | 3,351            | 1,747            | 546            | *-1,272           | 5,004            | 162        |
|                      | 2019        | 3,571            | 3,136            | 1,131            | 565            | *132              | 4,879            | 153        |
| Benin                | 2016        | ..               | 1,945            | ..               | 33             | -66               | 1,978            | 182        |
|                      | 2017        | ..               | 2,054            | ..               | 31             | -35               | 2,058            | 184        |
|                      | 2018        | ..               | 2,301            | ..               | 30             | -12               | 2,283            | 199        |
|                      | 2019        | ..               | 2,114            | ..               | 22             | 11                | 2,082            | 176        |
| Botswana             | 2016        | ..               | 935              | ..               | 11             | ..                | 924              | 428        |
|                      | 2017        | ..               | 951              | ..               | 11             | ..                | 940              | 426        |
|                      | 2018        | ..               | 975              | ..               | 12             | ..                | 963              | 427        |
|                      | 2019        | ..               | 988              | ..               | 12             | ..                | 976              | 424        |
| Burkina Faso         | 2016        | ..               | 944              | ..               | 22             | -142              | 1,064            | 57         |
|                      | 2017        | ..               | 1,183            | ..               | 27             | *-89              | 1,245            | 65         |
|                      | 2018        | ..               | 1,495            | ..               | 30             | *101              | 1,365            | 69         |
|                      | 2019        | ..               | 1,334            | ..               | 30             | *-145             | 1,448            | 71         |
| Burundi              | 2016        | ..               | 145              | ..               | 2              | 0                 | 144              | 14         |
|                      | 2017        | ..               | *178             | ..               | 4              | 0                 | *174             | *16        |
|                      | 2018        | ..               | 220              | ..               | 5              | 0                 | 216              | 19         |
|                      | 2019        | ..               | *223             | ..               | 5              | 0                 | *218             | *19        |
| Cabo Verde           | 2016        | ..               | *297             | ..               | *120           | ..                | *177             | *334       |
|                      | 2017        | ..               | *319             | ..               | *128           | ..                | *191             | *355       |
|                      | 2018        | ..               | *326             | ..               | *133           | ..                | *193             | *355       |
|                      | 2019        | ..               | *336             | ..               | *135           | ..                | *201             | *365       |
| Cameroon             | 2016        | 1,596            | 741              | 521              | 21             | -6                | 1,801            | 75         |
|                      | 2017        | 1,313            | 889              | 386              | 17             | ..                | 1,799            | 73         |
|                      | 2018        | 1,191            | 945              | 334              | 16             | ..                | 1,786            | 71         |
|                      | 2019        | 616              | 1,308            | 189              | 17             | ..                | 1,717            | 66         |
| Central African Rep. | 2016        | ..               | *81              | ..               | 15             | ..                | *66              | *15        |
|                      | 2017        | ..               | *87              | ..               | 16             | ..                | *71              | *15        |
|                      | 2018        | ..               | *90              | ..               | 17             | ..                | *73              | *16        |
|                      | 2019        | ..               | *92              | ..               | *17            | ..                | *75              | *16        |
| Chad                 | 2016        | *669             | *162             | *372             | *24            | ..                | *436             | *30        |
|                      | 2017        | *670             | *155             | *370             | 26             | 0                 | *429             | *29        |
|                      | 2018        | *671             | *171             | *367             | 28             | ..                | *447             | *29        |
|                      | 2019        | *678             | *173             | *376             | 25             | ..                | *451             | *28        |
| Comoros              | 2016        | ..               | *70              | ..               | *1             | ..                | *69              | *86        |
|                      | 2017        | ..               | *89              | ..               | *1             | ..                | *88              | *108       |
|                      | 2018        | ..               | *97              | ..               | *2             | ..                | *95              | *114       |
|                      | 2019        | ..               | *104             | ..               | *2             | ..                | *102             | *120       |

## Production, trade and supply of oil products

Thousand metric tons and kilograms per capita

| Country or area        | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|------------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                        |      |            |         |         |         |                   | Total  | Per capita |
| Congo                  | 2016 | 649        | 381     | 325     | 41      | 0                 | 664    | 133        |
|                        | 2017 | 716        | 198     | 343     | 31      | ..                | 541    | 106        |
|                        | 2018 | 725        | 202     | 348     | 32      | ..                | 548    | 104        |
|                        | 2019 | 735        | 204     | 352     | 32      | ..                | 555    | 103        |
| Côte d'Ivoire          | 2016 | 3,192      | 1,232   | 1,392   | 238     | 0                 | 2,793  | 117        |
|                        | 2017 | *3,070     | 1,332   | *1,097  | *241    | -17               | *3,081 | *126       |
|                        | 2018 | 3,371      | 1,244   | 1,491   | 231     | ..                | 2,893  | 115        |
|                        | 2019 | 3,717      | 1,072   | 1,741   | 258     | ..                | 2,791  | 109        |
| Dem. Rep. of the Congo | 2016 | ..         | 743     | ..      | 115     | ..                | 628    | 8          |
|                        | 2017 | ..         | 815     | ..      | 117     | ..                | 697    | 9          |
|                        | 2018 | ..         | 811     | ..      | 134     | ..                | 678    | 8          |
|                        | 2019 | ..         | 827     | ..      | 121     | ..                | 706    | 8          |
| Djibouti               | 2016 | ..         | 231     | ..      | 100     | *15               | 116    | 125        |
|                        | 2017 | ..         | 220     | ..      | *100    | *6                | 115    | 122        |
|                        | 2018 | ..         | *219    | ..      | *100    | *10               | *109   | *113       |
|                        | 2019 | ..         | *219    | ..      | *100    | *10               | *109   | *112       |
| Egypt                  | 2016 | 26,364     | 15,475  | 1,529   | 477     | -25               | 39,858 | 422        |
|                        | 2017 | 25,118     | 14,297  | 1,428   | 631     | 35                | 37,321 | 387        |
|                        | 2018 | 27,382     | 12,572  | 3,277   | 713     | 0                 | 35,964 | 365        |
|                        | 2019 | 29,503     | 10,362  | 2,775   | 857     | ..                | 36,233 | 361        |
| Equatorial Guinea      | 2016 | 605        | *292    | 604     | *47     | *-23              | 269    | 221        |
|                        | 2017 | 660        | *305    | 656     | 49      | -17               | 278    | 220        |
|                        | 2018 | 587        | *281    | 574     | 44      | *-10              | 260    | 199        |
|                        | 2019 | 512        | *295    | 495     | 42      | *-5               | 275    | 203        |
| Eritrea                | 2016 | ..         | 199     | ..      | 10      | ..                | 189    | 56         |
|                        | 2017 | ..         | 215     | ..      | 8       | ..                | 207    | 61         |
|                        | 2018 | ..         | 253     | ..      | 14      | ..                | 239    | 69         |
|                        | 2019 | ..         | 256     | ..      | 9       | ..                | 247    | 71         |
| Eswatini               | 2016 | ..         | 264     | ..      | 1       | ..                | 263    | 236        |
|                        | 2017 | ..         | 272     | ..      | 2       | ..                | 271    | 241        |
|                        | 2018 | ..         | 286     | ..      | 2       | ..                | 284    | 250        |
|                        | 2019 | ..         | *303    | ..      | 2       | ..                | *301   | *262       |
| Ethiopia               | 2016 | ..         | 3,848   | ..      | 588     | -8                | 3,268  | 32         |
|                        | 2017 | ..         | 4,108   | ..      | 682     | -101              | 3,527  | 33         |
|                        | 2018 | ..         | 4,407   | ..      | 728     | -30               | 3,709  | 34         |
|                        | 2019 | ..         | 5,128   | ..      | 730     | ..                | 4,397  | 39         |
| Gabon                  | 2016 | 849        | 515     | 269     | 249     | ..                | 846    | 421        |
|                        | 2017 | 793        | *381    | 245     | 161     | ..                | 768    | 372        |
|                        | 2018 | 726        | 341     | 213     | 164     | ..                | 689    | 325        |
|                        | 2019 | 624        | *437    | 196     | 169     | ..                | 697    | 321        |
| Gambia                 | 2016 | ..         | 216     | *2      | *21     | ..                | 192    | 90         |
|                        | 2017 | ..         | 219     | *2      | *22     | ..                | 195    | 88         |
|                        | 2018 | ..         | 215     | *2      | *19     | ..                | 193    | 85         |
|                        | 2019 | ..         | *218    | *2      | *20     | ..                | *196   | *84        |
| Ghana                  | 2016 | 739        | 3,322   | 537     | 133     | 0                 | 3,391  | 119        |
|                        | 2017 | 133        | 3,539   | 468     | 232     | -23               | 2,996  | 103        |
|                        | 2018 | 390        | 3,680   | 159     | 185     | 0                 | 3,726  | 125        |
|                        | 2019 | 690        | 3,545   | 292     | 219     | -12               | 3,735  | 123        |
| Guinea                 | 2016 | ..         | 954     | ..      | *26     | ..                | 929    | 79         |
|                        | 2017 | ..         | 1,145   | ..      | *32     | ..                | 1,114  | 92         |
|                        | 2018 | ..         | 1,291   | ..      | *30     | ..                | 1,261  | 102        |
|                        | 2019 | ..         | 1,549   | ..      | *42     | ..                | 1,508  | 118        |

Table 25

## Production, trade and supply of oil products

Thousand metric tons and kilograms per capita

| Country or area | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|-----------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                 |      |            |         |         |         |                   | Total  | Per capita |
| Guinea-Bissau   | 2016 | ..         | *136    | ..      | *13     | ..                | *124   | *70        |
|                 | 2017 | ..         | *137    | ..      | *13     | ..                | *125   | *68        |
|                 | 2018 | ..         | *142    | ..      | *13     | ..                | *129   | *69        |
|                 | 2019 | ..         | *146    | ..      | *13     | ..                | *133   | *69        |
| Kenya           | 2016 | 0          | 6,830   | 1,682   | 705     | 0                 | 4,444  | 91         |
|                 | 2017 | 0          | 6,638   | 1,451   | 770     | 0                 | 4,417  | 88         |
|                 | 2018 | ..         | 5,378   | 26      | 723     | ..                | 4,629  | 90         |
|                 | 2019 | ..         | 5,762   | 23      | 705     | ..                | 5,034  | 96         |
| Lesotho         | 2016 | 3          | 215     | ..      | 0       | ..                | 217    | 105        |
|                 | 2017 | 3          | 216     | ..      | 0       | ..                | 220    | 105        |
|                 | 2018 | *3         | 227     | ..      | 0       | ..                | 230    | 109        |
|                 | 2019 | *3         | 237     | ..      | 0       | ..                | 241    | 113        |
| Liberia         | 2016 | ..         | *433    | ..      | *15     | ..                | *418   | *91        |
|                 | 2017 | ..         | *381    | ..      | *11     | ..                | *371   | *79        |
|                 | 2018 | ..         | *329    | ..      | *10     | ..                | *319   | *66        |
|                 | 2019 | ..         | *334    | ..      | *10     | ..                | *324   | *66        |
| Libya           | 2016 | 4,367      | 5,838   | 1,196   | 138     | ..                | 8,871  | 1,366      |
|                 | 2017 | 5,176      | 5,663   | 1,538   | 276     | ..                | 9,025  | 1,371      |
|                 | 2018 | 6,040      | 5,495   | 1,941   | 327     | ..                | 9,267  | 1,388      |
|                 | 2019 | 5,086      | 5,847   | 1,544   | 340     | ..                | 9,049  | 1,335      |
| Madagascar      | 2016 | ..         | 886     | ..      | 43      | 59                | 784    | 31         |
|                 | 2017 | ..         | 920     | ..      | 49      | -35               | 906    | 35         |
|                 | 2018 | ..         | 833     | 0       | 47      | -91               | 876    | 33         |
|                 | 2019 | ..         | 1,063   | 0       | 50      | 38                | 974    | 36         |
| Malawi          | 2016 | ..         | 317     | ..      | *6      | ..                | 311    | 18         |
|                 | 2017 | ..         | 363     | ..      | *7      | ..                | 356    | 20         |
|                 | 2018 | ..         | 423     | ..      | *8      | ..                | 415    | 23         |
|                 | 2019 | ..         | 433     | ..      | *4      | ..                | 430    | 23         |
| Mali            | 2016 | ..         | *1,104  | 10      | *58     | *30               | *1,005 | *56        |
|                 | 2017 | ..         | *1,156  | *10     | *60     | *14               | *1,072 | *58        |
|                 | 2018 | ..         | *1,191  | *10     | *61     | *10               | *1,110 | *58        |
|                 | 2019 | ..         | *1,211  | *10     | *62     | *10               | *1,129 | *57        |
| Mauritania      | 2016 | ..         | 860     | ..      | 20      | ..                | 839    | 202        |
|                 | 2017 | ..         | 1,187   | ..      | 20      | *54               | 1,113  | 260        |
|                 | 2018 | ..         | 1,652   | ..      | 22      | *384              | 1,245  | 283        |
|                 | 2019 | ..         | 1,758   | ..      | 20      | *447              | 1,291  | 285        |
| Mauritius       | 2016 | ..         | 1,468   | *91     | 479     | 26                | 873    | 691        |
|                 | 2017 | ..         | 1,649   | ..      | 624     | 108               | 917    | 725        |
|                 | 2018 | ..         | 1,663   | ..      | 738     | -14               | 940    | 741        |
|                 | 2019 | ..         | 1,868   | 62      | 808     | 6                 | 992    | 781        |
| Morocco         | 2016 | 0          | 12,524  | 12      | 779     | -85               | 11,818 | 331        |
|                 | 2017 | ..         | 13,394  | ..      | 815     | 67                | 12,512 | 346        |
|                 | 2018 | ..         | 13,012  | ..      | 871     | 14                | 12,126 | 331        |
|                 | 2019 | ..         | 12,906  | ..      | 912     | -412              | 12,406 | 335        |
| Mozambique      | 2016 | ..         | 2,152   | ..      | *46     | *63               | 2,043  | 73         |
|                 | 2017 | ..         | 1,654   | ..      | 15      | ..                | 1,639  | 57         |
|                 | 2018 | ..         | 1,678   | ..      | 10      | ..                | 1,668  | 57         |
|                 | 2019 | ..         | 1,652   | ..      | 10      | ..                | 1,643  | 54         |
| Namibia         | 2016 | ..         | 1,284   | 4       | 38      | ..                | 1,242  | 527        |
|                 | 2017 | ..         | 1,284   | 4       | 37      | ..                | 1,243  | 517        |
|                 | 2018 | ..         | 1,257   | 4       | 37      | ..                | 1,216  | 497        |
|                 | 2019 | ..         | 1,220   | 4       | 36      | ..                | 1,180  | 473        |



## Production, trade and supply of oil products

Thousand metric tons and kilograms per capita

| Country or area        | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|------------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                        |      |            |         |         |         |                   | Total  | Per capita |
| Niger                  | 2016 | 596        | 71      | 296     | 45      | *-92              | 418    | 20         |
|                        | 2017 | 814        | 102     | *362    | *57     | *21               | 474    | 22         |
|                        | 2018 | 763        | 51      | *337    | *45     | *36               | 397    | 18         |
|                        | 2019 | 634        | 56      | *115    | *49     | ..                | 526    | 23         |
| Nigeria                | 2016 | 3,351      | 18,786  | 251     | 737     | 664               | 20,485 | 110        |
|                        | 2017 | 4,379      | 17,451  | 853     | 820     | -117              | 20,274 | 106        |
|                        | 2018 | 2,389      | 12,651  | 246     | 982     | -3,002            | 16,814 | 86         |
|                        | 2019 | 742        | 21,383  | 35      | 803     | -1,496            | 22,784 | 113        |
| Rwanda                 | 2016 | ..         | 314     | ..      | *22     | *8                | 284    | 24         |
|                        | 2017 | ..         | 341     | ..      | *30     | *-3               | 314    | 26         |
|                        | 2018 | ..         | 370     | ..      | *30     | *-3               | 343    | 28         |
|                        | 2019 | ..         | 536     | ..      | *24     | ..                | 511    | 40         |
| Sao Tome and Principe  | 2016 | ..         | *52     | ..      | *11     | ..                | *41    | *200       |
|                        | 2017 | ..         | *54     | ..      | *11     | ..                | *43    | *205       |
|                        | 2018 | ..         | *55     | ..      | *12     | ..                | *43    | *206       |
|                        | 2019 | ..         | *56     | ..      | *12     | ..                | *44    | *206       |
| Senegal                | 2016 | 1,124      | 2,119   | 857     | 351     | -66               | 2,101  | 140        |
|                        | 2017 | 1,202      | 1,633   | 263     | 338     | -15               | 2,249  | 146        |
|                        | 2018 | 981        | 2,101   | *433    | 332     | *120              | 2,197  | 139        |
|                        | 2019 | 886        | 2,605   | *670    | 385     | -25               | 2,460  | 151        |
| Seychelles             | 2016 | ..         | 395     | ..      | *194    | *20               | 181    | 1,895      |
|                        | 2017 | ..         | 412     | ..      | 214     | *10               | 188    | 1,955      |
|                        | 2018 | ..         | 366     | ..      | *169    | 0                 | 196    | 2,021      |
|                        | 2019 | ..         | 348     | ..      | *154    | 0                 | 193    | 1,980      |
| Sierra Leone           | 2016 | ..         | 383     | ..      | 4       | ..                | 379    | 52         |
|                        | 2017 | ..         | 362     | ..      | 13      | ..                | 349    | 47         |
|                        | 2018 | ..         | 348     | ..      | 5       | ..                | 343    | 45         |
|                        | 2019 | ..         | 396     | ..      | 4       | ..                | 392    | 50         |
| Somalia                | 2016 | ..         | *279    | ..      | 71      | ..                | *208   | *15        |
|                        | 2017 | ..         | *279    | ..      | 71      | ..                | *208   | *14        |
|                        | 2018 | ..         | *279    | ..      | 71      | ..                | *208   | *14        |
|                        | 2019 | ..         | *279    | ..      | 71      | ..                | *208   | *13        |
| South Africa           | 2016 | 20,809     | 5,585   | 2,853   | 3,224   | ..                | 20,317 | 361        |
|                        | 2017 | 17,918     | 11,436  | 3,619   | 2,903   | ..                | 22,832 | 400        |
|                        | 2018 | 19,125     | 10,511  | 4,516   | 4,396   | ..                | 20,723 | 359        |
|                        | 2019 | 20,633     | 9,480   | 4,108   | 3,599   | ..                | 22,406 | 383        |
| South Sudan            | 2016 | ..         | 553     | ..      | 68      | ..                | 485    | 45         |
|                        | 2017 | ..         | 477     | ..      | 74      | ..                | 404    | 37         |
|                        | 2018 | ..         | 493     | ..      | 74      | ..                | 419    | 38         |
|                        | 2019 | ..         | 538     | ..      | 83      | ..                | 455    | 41         |
| St. Helena and Depend. | 2016 | ..         | 4       | ..      | ..      | ..                | 4      | 750        |
|                        | 2017 | ..         | 3       | ..      | ..      | ..                | 3      | 509        |
|                        | 2018 | ..         | 4       | ..      | ..      | ..                | 4      | 659        |
|                        | 2019 | ..         | 4       | ..      | ..      | ..                | 4      | 737        |
| Sudan                  | 2016 | 4,165      | 1,516   | 147     | *182    | 0                 | 5,352  | 134        |
|                        | 2017 | 3,609      | 2,447   | 122     | *161    | ..                | 5,773  | 141        |
|                        | 2018 | 3,320      | 2,649   | 103     | *146    | ..                | 5,721  | 137        |
|                        | 2019 | *3,362     | *2,680  | *104    | *148    | ..                | *5,790 | *135       |
| Togo                   | 2016 | ..         | 522     | ..      | 53      | -18               | 487    | 65         |
|                        | 2017 | ..         | 508     | ..      | 73      | -20               | 455    | 59         |
|                        | 2018 | ..         | 480     | ..      | 62      | -17               | 435    | 55         |
|                        | 2019 | ..         | 447     | ..      | 65      | ..                | 382    | 47         |

Table 25

## Production, trade and supply of oil products

Thousand metric tons and kilograms per capita

| Country or area         | Year        | Production       | Imports        | Exports        | Bunkers       | Changes in stocks | Supply           |              |
|-------------------------|-------------|------------------|----------------|----------------|---------------|-------------------|------------------|--------------|
|                         |             |                  |                |                |               |                   | Total            | Per capita   |
| Tunisia                 | 2016        | 1,332            | 3,922          | 600            | 217           | -7                | 4,444            | 393          |
|                         | 2017        | 971              | 4,186          | 430            | 258           | -25               | 4,494            | 393          |
|                         | 2018        | 1,192            | 4,247          | 531            | 294           | -54               | 4,667            | 404          |
|                         | 2019        | 265              | 4,521          | 76             | 310           | -78               | 4,478            | 383          |
| Uganda                  | 2016        | ..               | 1,551          | ..             | 98            | ..                | 1,454            | 37           |
|                         | 2017        | ..               | 1,741          | ..             | 102           | ..                | 1,639            | 40           |
|                         | 2018        | ..               | 1,849          | ..             | 108           | ..                | 1,740            | 41           |
|                         | 2019        | ..               | 1,895          | ..             | 111           | ..                | 1,784            | 40           |
| United Rep. of Tanzania | 2016        | ..               | 2,465          | ..             | 142           | ..                | 2,323            | 44           |
|                         | 2017        | ..               | 2,417          | ..             | 146           | ..                | 2,271            | 42           |
|                         | 2018        | ..               | 2,461          | ..             | 136           | ..                | 2,325            | 41           |
|                         | 2019        | ..               | 2,408          | ..             | 144           | ..                | 2,264            | 39           |
| Zambia                  | 2016        | 465              | 934            | 3              | 27            | ..                | 1,368            | 84           |
|                         | 2017        | 569              | 809            | 2              | 26            | ..                | 1,349            | 80           |
|                         | 2018        | 595              | 636            | 6              | 29            | ..                | 1,196            | 69           |
|                         | 2019        | 658              | 852            | 3              | 29            | ..                | 1,478            | 83           |
| Zimbabwe                | 2016        | ..               | 1,083          | ..             | 39            | ..                | 1,044            | 74           |
|                         | 2017        | ..               | 1,123          | ..             | 49            | ..                | 1,075            | 75           |
|                         | 2018        | ..               | 1,405          | ..             | 60            | ..                | 1,345            | 93           |
|                         | 2019        | ..               | 1,266          | ..             | 51            | ..                | 1,215            | 83           |
| <b>America, North</b>   | <b>2016</b> | <b>1,119,973</b> | <b>195,469</b> | <b>243,404</b> | <b>58,805</b> | <b>-746</b>       | <b>1,013,979</b> | <b>1,771</b> |
|                         | <b>2017</b> | <b>1,130,406</b> | <b>203,321</b> | <b>262,106</b> | <b>63,206</b> | <b>-3,673</b>     | <b>1,012,088</b> | <b>1,753</b> |
|                         | <b>2018</b> | <b>1,146,332</b> | <b>211,510</b> | <b>270,379</b> | <b>60,564</b> | <b>-804</b>       | <b>1,027,703</b> | <b>1,765</b> |
|                         | <b>2019</b> | <b>1,135,774</b> | <b>221,436</b> | <b>258,349</b> | <b>63,810</b> | <b>129</b>        | <b>1,034,921</b> | <b>1,764</b> |
| Anguilla                | 2016        | ..               | *50            | ..             | ..            | ..                | *50              | *3,471       |
|                         | 2017        | ..               | *46            | ..             | ..            | ..                | *46              | *3,146       |
|                         | 2018        | ..               | *47            | ..             | ..            | ..                | *47              | *3,196       |
|                         | 2019        | ..               | *50            | ..             | ..            | ..                | *50              | *3,342       |
| Antigua and Barbuda     | 2016        | ..               | *237           | *4             | *69           | ..                | *164             | *1,738       |
|                         | 2017        | ..               | *237           | *4             | *69           | ..                | *164             | *1,722       |
|                         | 2018        | ..               | *242           | *4             | *70           | ..                | *168             | *1,740       |
|                         | 2019        | ..               | *242           | *4             | *70           | ..                | *168             | *1,725       |
| Aruba                   | 2016        | ..               | *384           | ..             | *96           | ..                | *288             | *2,747       |
|                         | 2017        | ..               | *390           | ..             | *99           | ..                | *291             | *2,757       |
|                         | 2018        | ..               | 385            | ..             | *100          | ..                | 284              | 2,687        |
|                         | 2019        | ..               | *399           | ..             | *101          | ..                | *298             | *2,806       |
| Bahamas                 | 2016        | ..               | 510            | 0              | *51           | -193              | 652              | 1,725        |
|                         | 2017        | ..               | 647            | *1             | *100          | *-144             | 690              | 1,809        |
|                         | 2018        | ..               | 867            | ..             | *99           | *-117             | 886              | 2,297        |
|                         | 2019        | ..               | 974            | ..             | *95           | *46               | 833              | 2,138        |
| Barbados                | 2016        | ..               | 527            | ..             | *121          | 22                | 384              | 1,344        |
|                         | 2017        | ..               | 492            | ..             | *133          | 13                | 346              | 1,209        |
|                         | 2018        | ..               | 477            | ..             | *110          | -5                | 372              | 1,297        |
|                         | 2019        | ..               | 478            | ..             | *149          | -10               | 339              | 1,182        |
| Belize                  | 2016        | 1                | 206            | ..             | 15            | ..                | 192              | 520          |
|                         | 2017        | 1                | 202            | ..             | 15            | ..                | 188              | 501          |
|                         | 2018        | 1                | 200            | ..             | 14            | ..                | 187              | 487          |
|                         | 2019        | 1                | 249            | ..             | 25            | ..                | 225              | 578          |
| Bermuda                 | 2016        | ..               | 216            | ..             | *24           | -10               | 202              | 3,191        |
|                         | 2017        | ..               | 248            | ..             | *26           | *15               | 207              | 3,287        |
|                         | 2018        | ..               | 256            | ..             | *27           | 0                 | 229              | 3,656        |
|                         | 2019        | ..               | 215            | ..             | *25           | 0                 | 190              | 3,047        |

## Production, trade and supply of oil products

Thousand metric tons and kilograms per capita

| Country or area             | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|-----------------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                             |      |            |         |         |         |                   | Total  | Per capita |
| Bonaire, St Eustatius, Saba | 2016 | ..         | *94     | ..      | *53     | *7                | *35    | *1,394     |
|                             | 2017 | ..         | *102    | ..      | *54     | *11               | *37    | *1,447     |
|                             | 2018 | ..         | *84     | ..      | *53     | *-4               | *35    | *1,361     |
|                             | 2019 | ..         | *87     | ..      | *53     | *-5               | *38    | *1,462     |
| British Virgin Islands      | 2016 | ..         | *69     | ..      | ..      | ..                | *69    | *2,334     |
|                             | 2017 | ..         | *55     | ..      | ..      | ..                | *55    | *1,864     |
|                             | 2018 | ..         | *52     | ..      | ..      | ..                | *52    | *1,745     |
|                             | 2019 | ..         | *55     | ..      | ..      | ..                | *55    | *1,818     |
| Canada                      | 2016 | 91,692     | 13,578  | 21,044  | 928     | -674              | 83,972 | 2,308      |
|                             | 2017 | 95,934     | 11,700  | 23,589  | 983     | 334               | 82,728 | 2,252      |
|                             | 2018 | 92,976     | 13,613  | 21,777  | 1,301   | 303               | 83,208 | 2,244      |
|                             | 2019 | 102,638    | 13,273  | 22,231  | 1,384   | -1,380            | 93,676 | 2,504      |
| Cayman Islands              | 2016 | ..         | 217     | ..      | 36      | ..                | 181    | 2,898      |
|                             | 2017 | ..         | 229     | ..      | 38      | ..                | 191    | 3,015      |
|                             | 2018 | ..         | 238     | ..      | 37      | ..                | 202    | 3,140      |
|                             | 2019 | ..         | 261     | ..      | 34      | ..                | 227    | 3,502      |
| Costa Rica                  | 2016 | ..         | 2,633   | 0       | 189     | -53               | 2,497  | 510        |
|                             | 2017 | ..         | 2,812   | 0       | 187     | 69                | 2,556  | 516        |
|                             | 2018 | ..         | 2,689   | 0       | 209     | -87               | 2,566  | 513        |
|                             | 2019 | ..         | 2,782   | 0       | 223     | 56                | 2,502  | 496        |
| Cuba                        | 2016 | 2,205      | 3,221   | *424    | 820     | *-28              | 4,210  | 371        |
|                             | 2017 | 2,632      | 3,423   | *701    | *628    | ..                | 4,726  | 417        |
|                             | 2018 | 2,751      | 3,030   | *890    | *509    | ..                | 4,382  | 387        |
|                             | 2019 | 2,566      | 3,273   | *873    | *470    | ..                | 4,497  | 397        |
| Curaçao                     | 2016 | 8,267      | 2,882   | 7,464   | 1,659   | ..                | 2,026  | 12,580     |
|                             | 2017 | 4,331      | 2,655   | 3,833   | 1,661   | ..                | 1,492  | 9,209      |
|                             | 2018 | 3,087      | 2,561   | 2,820   | 1,657   | ..                | 1,171  | 7,196      |
|                             | 2019 | 0          | 2,406   | 0       | 1,667   | ..                | 739    | 4,523      |
| Dominica                    | 2016 | ..         | *59     | ..      | *2      | *-1               | *58    | *820       |
|                             | 2017 | ..         | *56     | ..      | *2      | *2                | *53    | *743       |
|                             | 2018 | ..         | *56     | ..      | *2      | *1                | *53    | *742       |
|                             | 2019 | ..         | *59     | ..      | *2      | *2                | *56    | *779       |
| Dominican Republic          | 2016 | 1,097      | 5,462   | ..      | 496     | -13               | 6,076  | 584        |
|                             | 2017 | 899        | 5,175   | ..      | 539     | 30                | 5,505  | 524        |
|                             | 2018 | 1,208      | 5,387   | ..      | 544     | -20               | 6,072  | 571        |
|                             | 2019 | 1,156      | 6,084   | ..      | 457     | -20               | 6,802  | 633        |
| El Salvador                 | 2016 | 0          | 2,249   | 25      | 166     | ..                | 2,058  | 324        |
|                             | 2017 | ..         | 2,040   | 25      | 165     | ..                | 1,850  | 290        |
|                             | 2018 | ..         | 2,154   | 15      | 174     | ..                | 1,965  | 306        |
|                             | 2019 | ..         | 2,488   | 7       | 183     | ..                | 2,298  | 356        |
| Greenland                   | 2016 | ..         | 183     | ..      | 17      | 1                 | 165    | 2,924      |
|                             | 2017 | ..         | 196     | ..      | 19      | 7                 | 170    | 3,010      |
|                             | 2018 | ..         | *164    | ..      | *19     | 0                 | *145   | *2,570     |
|                             | 2019 | ..         | *168    | ..      | *19     | ..                | *149   | *2,636     |
| Grenada                     | 2016 | ..         | 99      | ..      | 7       | 4                 | 87     | 790        |
|                             | 2017 | ..         | 102     | ..      | 7       | 5                 | 90     | 815        |
|                             | 2018 | ..         | 107     | ..      | 8       | -2                | 101    | 905        |
|                             | 2019 | ..         | 119     | ..      | 9       | 1                 | 109    | 972        |
| Guatemala                   | 2016 | 56         | 4,367   | 402     | 452     | 37                | 3,533  | 213        |
|                             | 2017 | 85         | 4,644   | 301     | 509     | 0                 | 3,919  | 232        |
|                             | 2018 | 147        | 4,727   | 255     | 528     | -86               | 4,177  | 242        |
|                             | 2019 | 203        | 5,270   | 247     | 524     | 115               | 4,586  | 261        |

Table 25

## Production, trade and supply of oil products

Thousand metric tons and kilograms per capita

| Country or area           | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|---------------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                           |      |            |         |         |         |                   | Total  | Per capita |
| Haiti                     | 2016 | ..         | 982     | ..      | 22      | ..                | 960    | 89         |
|                           | 2017 | ..         | 1,018   | ..      | 22      | ..                | 996    | 91         |
|                           | 2018 | ..         | 1,114   | ..      | 22      | ..                | 1,091  | 98         |
|                           | 2019 | ..         | 1,003   | ..      | 22      | ..                | 981    | 87         |
| Honduras                  | 2016 | ..         | 2,862   | 362     | ..      | -368              | 2,867  | 309        |
|                           | 2017 | ..         | 3,431   | 0       | ..      | 389               | 3,042  | 323        |
|                           | 2018 | ..         | 3,462   | 428     | ..      | 90                | 2,943  | 307        |
|                           | 2019 | ..         | 3,843   | 444     | ..      | -22               | 3,420  | 351        |
| Jamaica                   | 2016 | 1,094      | 1,725   | 264     | 232     | -40               | 2,363  | 813        |
|                           | 2017 | 1,048      | 1,755   | 304     | 223     | 49                | 2,227  | 763        |
|                           | 2018 | 1,032      | 1,893   | 289     | 254     | -21               | 2,403  | 819        |
|                           | 2019 | 1,240      | 1,480   | 312     | 272     | -4                | 2,140  | 726        |
| Mexico                    | 2016 | 57,093     | 41,105  | 9,405   | 4,372   | -20               | 84,441 | 685        |
|                           | 2017 | 50,322     | 49,222  | 7,997   | 4,518   | -50               | 87,079 | 698        |
|                           | 2018 | 40,747     | 53,795  | 7,304   | 4,731   | 320               | 82,187 | 651        |
|                           | 2019 | 39,104     | 52,737  | 5,929   | 4,686   | -1,491            | 82,717 | 648        |
| Montserrat                | 2016 | ..         | 11      | ..      | *1      | 0                 | 10     | 1,920      |
|                           | 2017 | ..         | 10      | ..      | *1      | 0                 | 8      | 1,694      |
|                           | 2018 | ..         | 11      | ..      | *1      | ..                | 10     | 1,925      |
|                           | 2019 | ..         | 9       | ..      | *1      | ..                | 8      | 1,608      |
| Nicaragua                 | 2016 | 659        | 1,043   | 21      | 22      | -48               | 1,707  | 271        |
|                           | 2017 | 692        | 1,054   | 28      | 25      | -13               | 1,706  | 267        |
|                           | 2018 | 639        | 1,026   | 29      | 16      | 15                | 1,605  | 248        |
|                           | 2019 | 518        | 1,223   | 40      | 16      | 64                | 1,622  | 248        |
| Panama                    | 2016 | ..         | 6,951   | 0       | 4,214   | -153              | 2,891  | 716        |
|                           | 2017 | ..         | 8,049   | 0       | 4,961   | -253              | 3,341  | 814        |
|                           | 2018 | ..         | 7,763   | 0       | 4,855   | -34               | 2,943  | 704        |
|                           | 2019 | ..         | 8,398   | 1       | 5,506   | -14               | 2,904  | 684        |
| Sint Maarten (Dutch part) | 2016 | ..         | *532    | ..      | *250    | ..                | *282   | *6,910     |
|                           | 2017 | ..         | *507    | ..      | *240    | ..                | *267   | *6,442     |
|                           | 2018 | ..         | *491    | ..      | *232    | ..                | *259   | *6,183     |
|                           | 2019 | ..         | *495    | ..      | *234    | ..                | *261   | *6,148     |
| St. Kitts-Nevis           | 2016 | ..         | *84     | ..      | *5      | ..                | *79    | *1,523     |
|                           | 2017 | ..         | *84     | ..      | *5      | ..                | *79    | *1,523     |
|                           | 2018 | ..         | *85     | ..      | *5      | ..                | *80    | *1,530     |
|                           | 2019 | ..         | *87     | ..      | *5      | ..                | *82    | *1,544     |
| St. Lucia                 | 2016 | ..         | *196    | ..      | 36      | ..                | *160   | *891       |
|                           | 2017 | ..         | *207    | ..      | 38      | ..                | *168   | *931       |
|                           | 2018 | ..         | *206    | ..      | 38      | ..                | *168   | *924       |
|                           | 2019 | ..         | *209    | ..      | *38     | ..                | *170   | *932       |
| St. Pierre-Miquelon       | 2016 | ..         | *28     | ..      | *6      | ..                | *21    | *3,578     |
|                           | 2017 | ..         | *28     | ..      | *6      | ..                | *21    | *3,619     |
|                           | 2018 | ..         | *25     | ..      | *5      | ..                | *20    | *3,353     |
|                           | 2019 | ..         | *27     | ..      | *5      | ..                | *21    | *3,659     |
| St. Vincent-Grenadines    | 2016 | ..         | 84      | ..      | 0       | *4                | 80     | 734        |
|                           | 2017 | ..         | 60      | ..      | 0       | *-11              | 70     | 641        |
|                           | 2018 | ..         | 85      | ..      | 0       | *5                | 80     | 724        |
|                           | 2019 | ..         | 65      | ..      | 0       | *-9               | 74     | 672        |
| Trinidad and Tobago       | 2016 | 8,203      | 0       | 5,762   | 939     | 304               | 1,198  | 870        |
|                           | 2017 | 7,340      | 2       | 5,138   | 743     | 210               | 1,252  | 904        |
|                           | 2018 | 5,874      | ..      | 4,153   | 601     | 131               | 988    | 711        |
|                           | 2019 | 843        | 2,072   | 1,476   | 231     | -27               | 1,235  | 885        |

Table 25

## Production, trade and supply of oil products

Thousand metric tons and kilograms per capita

| Country or area          | Year        | Production     | Imports       | Exports       | Bunkers       | Changes in stocks | Supply         |            |
|--------------------------|-------------|----------------|---------------|---------------|---------------|-------------------|----------------|------------|
|                          |             |                |               |               |               |                   | Total          | Per capita |
| Turks and Caicos Islands | 2016        | ..             | *131          | ..            | *22           | ..                | *108           | *2,968     |
|                          | 2017        | ..             | *141          | ..            | *24           | ..                | *117           | *3,152     |
|                          | 2018        | ..             | *144          | ..            | *25           | ..                | *119           | *3,170     |
|                          | 2019        | ..             | *145          | ..            | *25           | ..                | *121           | *3,158     |
| United States            | 2016        | 949,606        | 102,494       | 198,227       | 43,485        | 476               | 809,912        | 2,507      |
|                          | 2017        | 967,122        | 102,303       | 220,185       | 47,165        | -4,333            | 806,409        | 2,481      |
|                          | 2018        | 997,871        | 104,075       | 232,415       | 44,320        | -1,294            | 826,505        | 2,527      |
|                          | 2019        | 987,504        | 110,713       | 226,786       | 47,276        | 2,826             | 821,329        | 2,496      |
| <b>America, South</b>    | <b>2016</b> | <b>237,295</b> | <b>64,405</b> | <b>36,031</b> | <b>10,377</b> | <b>-89</b>        | <b>255,379</b> | <b>614</b> |
|                          | <b>2017</b> | <b>230,208</b> | <b>70,361</b> | <b>35,985</b> | <b>10,252</b> | <b>-533</b>       | <b>254,866</b> | <b>607</b> |
|                          | <b>2018</b> | <b>221,997</b> | <b>68,474</b> | <b>38,729</b> | <b>10,733</b> | <b>-763</b>       | <b>241,772</b> | <b>571</b> |
|                          | <b>2019</b> | <b>215,050</b> | <b>67,050</b> | <b>31,152</b> | <b>10,615</b> | <b>-25</b>        | <b>240,357</b> | <b>563</b> |
| Argentina                | 2016        | 30,659         | 4,025         | 1,523         | 1,622         | 26                | 31,513         | 724        |
|                          | 2017        | 30,390         | 3,709         | 1,831         | 1,784         | 105               | 30,379         | 691        |
|                          | 2018        | 28,811         | 3,917         | 3,198         | 1,618         | -50               | 27,962         | 630        |
|                          | 2019        | 29,178         | 2,987         | 3,586         | 1,339         | -239              | 27,479         | 614        |
| Bolivia (Plur. State of) | 2016        | 3,007          | 992           | 499           | 81            | -219              | 3,638          | 330        |
|                          | 2017        | 2,837          | 1,209         | 452           | 79            | -320              | 3,836          | 343        |
|                          | 2018        | 2,718          | 1,408         | 288           | 77            | -135              | 3,896          | 343        |
|                          | 2019        | 2,476          | 1,775         | 215           | 72            | 67                | 3,897          | 338        |
| Brazil                   | 2016        | 112,325        | 22,486        | 5,593         | 5,677         | 12                | 123,529        | 599        |
|                          | 2017        | 109,396        | 28,215        | 5,908         | 5,578         | 298               | 125,827        | 605        |
|                          | 2018        | 107,133        | 25,559        | 8,545         | 5,360         | -420              | 119,207        | 569        |
|                          | 2019        | 107,105        | 28,073        | 8,560         | 5,762         | 545               | 120,311        | 570        |
| Chile                    | 2016        | 9,429          | 8,097         | 463           | 683           | 93                | 16,287         | 894        |
|                          | 2017        | 9,648          | 7,826         | 521           | 721           | 146               | 16,087         | 871        |
|                          | 2018        | 9,727          | 8,130         | 811           | 772           | 52                | 16,222         | 866        |
|                          | 2019        | 10,245         | 7,542         | 536           | 823           | 217               | 16,210         | 855        |
| Colombia                 | 2016        | 16,590         | 7,674         | 4,509         | ..            | ..                | 19,755         | 410        |
|                          | 2017        | 18,701         | 5,322         | 5,432         | ..            | ..                | 18,591         | 380        |
|                          | 2018        | 19,742         | 4,447         | 5,441         | ..            | ..                | 18,748         | 378        |
|                          | 2019        | 19,891         | 5,341         | 5,430         | ..            | ..                | 19,801         | 393        |
| Ecuador                  | 2016        | 7,929          | 5,609         | 2,519         | 535           | -2                | 10,487         | 636        |
|                          | 2017        | 8,004          | 5,792         | 3,110         | 620           | -56               | 10,122         | 603        |
|                          | 2018        | 8,546          | 6,142         | 3,138         | 977           | 20                | 10,553         | 618        |
|                          | 2019        | 7,387          | 6,707         | 2,996         | 832           | 29                | 10,236         | 589        |
| Falkland Is. (Malvinas)  | 2016        | ..             | 11            | ..            | ..            | ..                | 11             | 3,692      |
|                          | 2017        | ..             | 10            | ..            | ..            | ..                | 10             | 3,409      |
|                          | 2018        | ..             | 11            | ..            | ..            | ..                | 11             | 3,438      |
|                          | 2019        | ..             | 12            | ..            | ..            | ..                | 12             | 3,428      |
| Guyana                   | 2016        | ..             | 736           | ..            | 16            | 2                 | 718            | 931        |
|                          | 2017        | ..             | 721           | ..            | 18            | -6                | 709            | 915        |
|                          | 2018        | ..             | 778           | ..            | 17            | -4                | 765            | 982        |
|                          | 2019        | ..             | 874           | 5             | 17            | -9                | 861            | 1,100      |
| Paraguay                 | 2016        | 216            | 2,382         | ..            | 45            | 76                | 2,476          | 365        |
|                          | 2017        | 223            | 2,494         | ..            | 60            | -119              | 2,776          | 404        |
|                          | 2018        | 244            | 2,787         | ..            | 72            | 20                | 2,939          | 423        |
|                          | 2019        | 287            | 2,679         | ..            | 71            | 2                 | 2,893          | 411        |
| Peru                     | 2016        | 12,327         | 4,749         | 5,026         | 950           | -51               | 11,150         | 361        |
|                          | 2017        | 12,913         | 5,554         | 6,166         | 678           | -529              | 12,151         | 386        |
|                          | 2018        | 11,823         | 5,491         | 4,576         | 1,151         | -245              | 11,832         | 370        |
|                          | 2019        | 11,372         | 5,129         | 3,597         | 1,116         | -531              | 12,318         | 379        |

Table 25

## Production, trade and supply of oil products

Thousand metric tons and kilograms per capita

| Country or area           | Year        | Production       | Imports        | Exports        | Bunkers        | Changes in stocks | Supply           |            |
|---------------------------|-------------|------------------|----------------|----------------|----------------|-------------------|------------------|------------|
|                           |             |                  |                |                |                |                   | Total            | Per capita |
| Suriname                  | 2016        | 542              | 470            | 459            | 93             | ..                | 460              | 815        |
|                           | 2017        | 685              | 305            | 362            | 84             | ..                | 545              | 955        |
|                           | 2018        | 671              | 212            | 356            | *78            | ..                | 449              | 779        |
|                           | 2019        | 637              | 319            | 191            | *77            | ..                | 688              | 1,183      |
| Uruguay                   | 2016        | 2,103            | 234            | 0              | 230            | -26               | 2,133            | 623        |
|                           | 2017        | 658              | 1,523          | 1              | 201            | -52               | 2,029            | 590        |
|                           | 2018        | 2,168            | 202            | 1              | 248            | -1                | 2,122            | 615        |
|                           | 2019        | 2,096            | 182            | 7              | 254            | -107              | 2,124            | 614        |
| Venezuela (Bolivar. Rep.) | 2016        | 42,168           | 6,939          | 15,440         | 445            | 0                 | 33,222           | 1,113      |
|                           | 2017        | 36,755           | 7,681          | 12,202         | 430            | 0                 | 31,804           | 1,082      |
|                           | 2018        | 30,414           | 9,391          | 12,375         | 364            | ..                | 27,066           | 937        |
|                           | 2019        | 24,376           | 5,432          | 6,027          | 252            | ..                | 23,529           | 825        |
| <b>Asia</b>               | <b>2016</b> | <b>2,033,083</b> | <b>558,873</b> | <b>599,192</b> | <b>178,876</b> | <b>420</b>        | <b>1,813,468</b> | <b>405</b> |
|                           | <b>2017</b> | <b>2,098,258</b> | <b>589,797</b> | <b>621,355</b> | <b>187,091</b> | <b>-2,906</b>     | <b>1,882,515</b> | <b>417</b> |
|                           | <b>2018</b> | <b>2,153,461</b> | <b>597,884</b> | <b>640,052</b> | <b>189,899</b> | <b>9,714</b>      | <b>1,911,681</b> | <b>419</b> |
|                           | <b>2019</b> | <b>2,188,261</b> | <b>540,837</b> | <b>602,731</b> | <b>193,393</b> | <b>3,859</b>      | <b>1,929,115</b> | <b>419</b> |
| Afghanistan               | 2016        | *106             | 1,961          | ..             | *22            | *-4               | 2,049            | 58         |
|                           | 2017        | *112             | 1,959          | ..             | *61            | -95               | 2,105            | 58         |
|                           | 2018        | *176             | 2,112          | ..             | *54            | *-41              | 2,275            | 61         |
|                           | 2019        | *112             | 2,426          | ..             | *10            | *175              | 2,353            | 62         |
| Armenia                   | 2016        | ..               | 340            | 0              | 44             | 7                 | 289              | 98         |
|                           | 2017        | ..               | 384            | 0              | 54             | 13                | 316              | 107        |
|                           | 2018        | ..               | 386            | 0              | 62             | 14                | 310              | 105        |
|                           | 2019        | ..               | 487            | 1              | 69             | 31                | 386              | 131        |
| Azerbaijan                | 2016        | 5,830            | 329            | 1,734          | 223            | -139              | 4,341            | 446        |
|                           | 2017        | 5,591            | 465            | 1,174          | 203            | 50                | 4,629            | 470        |
|                           | 2018        | 5,995            | 320            | 1,324          | 152            | 171               | 4,669            | 469        |
|                           | 2019        | 6,077            | 280            | 1,180          | 344            | 38                | 4,796            | 477        |
| Bahrain                   | 2016        | 13,058           | *552           | 11,182         | 435            | 139               | 1,854            | 1,300      |
|                           | 2017        | 13,303           | *604           | 11,899         | 447            | -380              | 1,941            | 1,299      |
|                           | 2018        | 13,227           | *612           | 11,540         | 483            | -184              | 2,000            | 1,274      |
|                           | 2019        | 13,386           | *626           | 11,883         | 508            | -346              | 1,967            | 1,199      |
| Bangladesh                | 2016        | 1,336            | 3,970          | 100            | 462            | -96               | 4,840            | 31         |
|                           | 2017        | 1,576            | 4,664          | 40             | 499            | ..                | 5,701            | 36         |
|                           | 2018        | 1,403            | 4,575          | 2              | 529            | -831              | 6,277            | 39         |
|                           | 2019        | 1,593            | 4,604          | 2              | 574            | ..                | 5,620            | 34         |
| Bhutan                    | 2016        | ..               | 173            | ..             | *3             | ..                | 171              | 232        |
|                           | 2017        | ..               | 190            | ..             | *3             | ..                | 186              | 250        |
|                           | 2018        | ..               | 218            | ..             | *4             | ..                | 214              | 283        |
|                           | 2019        | ..               | 210            | ..             | *4             | ..                | 206              | 270        |
| Brunei Darussalam         | 2016        | 322              | 373            | 0              | 113            | -11               | 593              | 1,413      |
|                           | 2017        | 249              | 440            | 0              | 71             | 11                | 607              | 1,431      |
|                           | 2018        | 338              | 354            | 0              | 81             | -5                | 616              | 1,436      |
|                           | 2019        | 1,348            | 690            | 835            | 108            | 223               | 871              | 2,011      |
| Cambodia                  | 2016        | ..               | 2,198          | ..             | 72             | ..                | 2,126            | 135        |
|                           | 2017        | ..               | 2,266          | ..             | 103            | ..                | 2,163            | 135        |
|                           | 2018        | ..               | 2,509          | ..             | 136            | ..                | 2,373            | 146        |
|                           | 2019        | ..               | 2,887          | ..             | 169            | ..                | 2,718            | 165        |
| China                     | 2016        | 637,212          | 53,843         | 53,042         | 18,026         | -650              | 620,637          | 439        |
|                           | 2017        | 675,125          | 61,271         | 56,633         | 19,452         | -1,874            | 662,186          | 466        |
|                           | 2018        | 711,792          | 67,525         | 63,519         | 20,960         | 7,336             | 687,501          | 482        |
|                           | 2019        | 764,010          | 64,029         | 71,704         | 21,090         | 5,108             | 730,135          | 509        |

## Production, trade and supply of oil products

Thousand metric tons and kilograms per capita

| Country or area        | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply  |            |
|------------------------|------|------------|---------|---------|---------|-------------------|---------|------------|
|                        |      |            |         |         |         |                   | Total   | Per capita |
| China, Hong Kong SAR   | 2016 | ..         | 20,301  | 371     | 15,384  | 928               | 3,618   | 499        |
|                        | 2017 | ..         | 21,375  | 293     | 17,578  | -397              | 3,900   | 534        |
|                        | 2018 | ..         | 21,605  | 224     | 17,869  | -281              | 3,792   | 514        |
|                        | 2019 | ..         | 20,363  | 290     | 15,982  | 274               | 3,816   | 513        |
| China, Macao SAR       | 2016 | ..         | 654     | ..      | 73      | 2                 | 579     | 945        |
|                        | 2017 | ..         | 605     | ..      | 66      | 13                | 526     | 845        |
|                        | 2018 | ..         | 408     | ..      | 64      | -8                | 352     | 557        |
|                        | 2019 | ..         | 348     | ..      | 44      | -12               | 316     | 493        |
| Cyprus                 | 2016 | ..         | 2,615   | 16      | 551     | 27                | 2,021   | 1,727      |
|                        | 2017 | ..         | 2,644   | 0       | 553     | 33                | 2,058   | 1,744      |
|                        | 2018 | ..         | 2,594   | ..      | 580     | -22               | 2,036   | 1,712      |
|                        | 2019 | ..         | 2,592   | ..      | 574     | 0                 | 2,017   | 1,683      |
| Georgia                | 2016 | 25         | 1,496   | 119     | 71      | -28               | 1,359   | 338        |
|                        | 2017 | 24         | 1,440   | *170    | 95      | -11               | 1,210   | 302        |
|                        | 2018 | 22         | 1,451   | 105     | 104     | 25                | 1,240   | 310        |
|                        | 2019 | 37         | 1,424   | 24      | 103     | -22               | 1,356   | 339        |
| India                  | 2016 | 255,853    | 35,336  | 65,483  | *6,405  | *57               | 219,244 | 166        |
|                        | 2017 | 264,330    | 49,726  | 74,501  | *5,370  | *10               | 234,175 | 175        |
|                        | 2018 | 277,047    | 41,702  | 71,763  | *5,814  | *98               | 241,074 | 178        |
|                        | 2019 | 266,575    | 43,789  | 68,920  | *5,704  | 71                | 235,669 | 172        |
| Indonesia              | 2016 | 39,203     | 27,473  | 1,252   | 1,104   | *-716             | 65,036  | 249        |
|                        | 2017 | 40,085     | 31,571  | 1,157   | 1,294   | *-644             | 69,849  | 264        |
|                        | 2018 | 40,030     | 30,990  | 1,168   | 1,232   | 156               | 68,463  | 256        |
|                        | 2019 | 43,494     | 28,279  | 1,155   | 1,135   | 152               | 69,332  | 256        |
| Iran (Islamic Rep. of) | 2016 | 99,237     | 2,584   | 26,469  | 2,749   | ..                | 72,603  | 913        |
|                        | 2017 | 100,213    | 3,536   | 24,140  | 2,119   | 0                 | 77,490  | 961        |
|                        | 2018 | 101,492    | 4,781   | 24,309  | 2,225   | ..                | 79,739  | 975        |
|                        | 2019 | 100,941    | 4,140   | 25,989  | 2,274   | ..                | 76,819  | 926        |
| Iraq                   | 2016 | 21,657     | 16,424  | 330     | 943     | 1                 | 36,807  | 1,005      |
|                        | 2017 | 25,483     | 16,194  | 3,658   | 925     | -29               | 37,123  | 989        |
|                        | 2018 | 28,811     | 13,771  | 1,304   | 910     | ..                | 40,368  | 1,050      |
|                        | 2019 | 31,524     | 4,863   | 5,237   | 942     | ..                | 30,208  | 768        |
| Israel                 | 2016 | 14,174     | 5,028   | 5,687   | 1,067   | -75               | 12,523  | 1,544      |
|                        | 2017 | 14,088     | 4,805   | 5,745   | 1,262   | 2                 | 11,884  | 1,442      |
|                        | 2018 | 14,782     | 4,550   | 5,952   | 1,397   | -8                | 11,991  | 1,431      |
|                        | 2019 | 15,268     | 4,007   | 6,127   | 1,464   | 29                | 11,655  | 1,368      |
| Japan                  | 2016 | 168,068    | 39,707  | 17,973  | 10,808  | -223              | 179,217 | 1,403      |
|                        | 2017 | 162,278    | 43,418  | 17,136  | 10,825  | -175              | 177,910 | 1,395      |
|                        | 2018 | 156,244    | 42,463  | 17,172  | 11,241  | 80                | 170,214 | 1,338      |
|                        | 2019 | 152,256    | 39,862  | 18,520  | 10,276  | 692               | 162,629 | 1,282      |
| Jordan                 | 2016 | 2,861      | 2,333   | ..      | 174     | 16                | 5,004   | 524        |
|                        | 2017 | 2,671      | 2,689   | ..      | 140     | 129               | 5,090   | 520        |
|                        | 2018 | 2,281      | 2,665   | ..      | 109     | -15               | 4,852   | 487        |
|                        | 2019 | 2,251      | 2,953   | ..      | *94     | ..                | 5,109   | 506        |
| Kazakhstan             | 2016 | 14,148     | 1,794   | 4,001   | *331    | -493              | 12,103  | 679        |
|                        | 2017 | 14,857     | 1,922   | 4,289   | *477    | -380              | 12,393  | 685        |
|                        | 2018 | 16,110     | 1,536   | 5,511   | 616     | 43                | 11,477  | 626        |
|                        | 2019 | 17,462     | 622     | 5,092   | 622     | 57                | 12,313  | 664        |
| Korea, Dem.Ppl's.Rep.  | 2016 | 515        | 511     | ..      | ..      | ..                | 1,026   | 41         |
|                        | 2017 | 515        | 424     | ..      | ..      | ..                | 939     | 37         |
|                        | 2018 | 515        | 415     | ..      | ..      | ..                | 930     | 36         |
|                        | 2019 | 515        | 502     | ..      | ..      | ..                | 1,017   | 40         |

Table 25

## Production, trade and supply of oil products

Thousand metric tons and kilograms per capita

| Country or area        | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply  |            |
|------------------------|------|------------|---------|---------|---------|-------------------|---------|------------|
|                        |      |            |         |         |         |                   | Total   | Per capita |
| Korea, Republic of     | 2016 | 156,422    | 39,328  | 62,396  | 15,008  | -46               | 118,392 | 2,322      |
|                        | 2017 | 164,332    | 37,113  | 64,818  | 14,773  | 441               | 121,413 | 2,376      |
|                        | 2018 | 169,765    | 40,413  | 68,700  | 14,375  | 798               | 126,305 | 2,468      |
|                        | 2019 | 169,264    | 40,002  | 67,173  | 13,476  | -599              | 129,217 | 2,523      |
| Kuwait                 | 2016 | 45,870     | ..      | 31,741  | 1,836   | -2,527            | 14,820  | 3,745      |
|                        | 2017 | 40,994     | ..      | 27,376  | 1,881   | -2,992            | 14,729  | 3,631      |
|                        | 2018 | 41,453     | ..      | 27,740  | 1,876   | -3,078            | 14,915  | 3,605      |
|                        | 2019 | 38,932     | ..      | 24,683  | 1,869   | -1,676            | 14,056  | 3,341      |
| Kyrgyzstan             | 2016 | 379        | 1,331   | 64      | 103     | -118              | 1,661   | 273        |
|                        | 2017 | 431        | 1,250   | 75      | 19      | 38                | 1,549   | 250        |
|                        | 2018 | 544        | 1,653   | 134     | 4       | 23                | 2,036   | 323        |
|                        | 2019 | 318        | 1,243   | 136     | *5      | -44               | 1,464   | 228        |
| Lao People's Dem. Rep. | 2016 | ..         | 1,067   | ..      | 41      | ..                | 1,027   | 150        |
|                        | 2017 | ..         | 1,084   | ..      | 36      | ..                | 1,048   | 151        |
|                        | 2018 | ..         | 1,140   | ..      | 58      | ..                | 1,082   | 153        |
|                        | 2019 | ..         | *1,128  | ..      | *36     | ..                | *1,092  | *152       |
| Lebanon                | 2016 | ..         | 8,033   | ..      | *274    | ..                | 7,759   | 1,156      |
|                        | 2017 | ..         | 8,528   | ..      | *300    | ..                | 8,228   | 1,207      |
|                        | 2018 | ..         | 8,055   | ..      | *294    | ..                | 7,761   | 1,131      |
|                        | 2019 | ..         | 8,050   | ..      | *300    | ..                | 7,749   | 1,130      |
| Malaysia               | 2016 | 26,474     | 14,802  | 12,018  | 2,639   | -878              | 27,497  | 896        |
|                        | 2017 | 28,620     | 12,835  | 10,861  | 2,885   | -131              | 27,840  | 895        |
|                        | 2018 | 26,315     | 19,084  | 15,714  | 2,838   | -298              | 27,145  | 861        |
|                        | 2019 | 24,605     | 15,424  | 12,052  | 3,058   | *-1,077           | 25,997  | 814        |
| Maldives               | 2016 | ..         | 543     | ..      | *70     | ..                | 473     | 995        |
|                        | 2017 | ..         | 565     | ..      | *69     | ..                | 496     | 998        |
|                        | 2018 | ..         | 645     | ..      | *78     | ..                | 567     | 1,099      |
|                        | 2019 | ..         | 724     | ..      | *86     | ..                | 638     | 1,201      |
| Mongolia               | 2016 | ..         | 960     | ..      | 19      | ..                | 941     | 308        |
|                        | 2017 | ..         | 1,252   | ..      | 27      | ..                | 1,225   | 393        |
|                        | 2018 | ..         | 1,327   | ..      | 37      | ..                | 1,290   | 407        |
|                        | 2019 | ..         | 1,672   | ..      | *40     | ..                | 1,632   | 506        |
| Myanmar                | 2016 | 415        | 3,822   | 173     | 89      | 196               | 3,779   | 71         |
|                        | 2017 | 418        | 3,858   | ..      | 71      | -28               | 4,233   | 79         |
|                        | 2018 | 264        | 6,407   | ..      | 71      | -114              | 6,714   | 125        |
|                        | 2019 | 218        | 6,612   | ..      | 73      | ..                | 6,757   | 125        |
| Nepal                  | 2016 | ..         | 1,881   | ..      | 128     | 0                 | 1,753   | 64         |
|                        | 2017 | ..         | 2,267   | ..      | 127     | ..                | 2,140   | 77         |
|                        | 2018 | ..         | 2,546   | ..      | 124     | ..                | 2,422   | 86         |
|                        | 2019 | ..         | 2,311   | ..      | 90      | ..                | 2,220   | 78         |
| Oman                   | 2016 | 8,235      | 60      | 1,400   | 556     | 163               | 6,176   | 1,379      |
|                        | 2017 | 9,863      | 342     | 2,008   | 581     | 4                 | 7,612   | 1,631      |
|                        | 2018 | 12,381     | 287     | 4,536   | 461     | 0                 | 7,671   | 1,588      |
|                        | 2019 | 12,263     | 294     | 4,458   | 702     | 0                 | 7,397   | 1,487      |
| Other Asia             | 2016 | 45,378     | 17,321  | 17,050  | 4,030   | -172              | 41,791  | 1,769      |
|                        | 2017 | 44,478     | 17,249  | 16,494  | 4,046   | -315              | 41,501  | 1,753      |
|                        | 2018 | 46,816     | 16,278  | 17,721  | 4,071   | 224               | 41,079  | 1,731      |
|                        | 2019 | 46,367     | 14,275  | 18,682  | 4,293   | -362              | 38,029  | 1,600      |
| Pakistan               | 2016 | 12,765     | 17,483  | 243     | 340     | 54                | 29,611  | 145        |
|                        | 2017 | 14,322     | 15,497  | 345     | *295    | *-81              | 29,259  | 141        |
|                        | 2018 | 14,036     | 10,395  | 291     | *250    | -5                | 23,896  | 113        |
|                        | 2019 | 12,538     | 11,925  | 156     | *280    | ..                | 24,027  | 111        |



Table 25

## Production, trade and supply of oil products

Thousand metric tons and kilograms per capita

| Country or area      | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply  |            |
|----------------------|------|------------|---------|---------|---------|-------------------|---------|------------|
|                      |      |            |         |         |         |                   | Total   | Per capita |
| Philippines          | 2016 | 10,089     | 10,817  | 1,321   | 1,365   | 133               | 18,086  | 174        |
|                      | 2017 | 9,847      | 12,172  | 1,550   | 1,702   | 174               | 18,594  | 177        |
|                      | 2018 | 11,110     | 12,085  | 1,757   | 1,733   | 390               | 19,315  | 181        |
|                      | 2019 | 7,735      | 13,650  | 1,045   | 1,696   | 45                | 18,599  | 172        |
| Qatar                | 2016 | 23,757     | 540     | 19,132  | 1,719   | 2,685             | 761     | 287        |
|                      | 2017 | 26,530     | 115     | 20,810  | 3,294   | -353              | 2,894   | 1,062      |
|                      | 2018 | 27,397     | 222     | 21,595  | 4,332   | 291               | 1,401   | 504        |
|                      | 2019 | 25,085     | 232     | 17,509  | 4,603   | 0                 | 3,205   | 1,132      |
| Saudi Arabia         | 2016 | 187,498    | 27,967  | 95,349  | 6,256   | 85                | 113,775 | 3,507      |
|                      | 2017 | 188,949    | 24,791  | 105,283 | 6,395   | -611              | 102,673 | 3,102      |
|                      | 2018 | 186,113    | 42,095  | 114,138 | 6,964   | 451               | 106,655 | 3,165      |
|                      | 2019 | 178,091    | *17,302 | *84,239 | *6,791  | *-900             | 105,262 | 3,072      |
| Singapore            | 2016 | 50,852     | 113,629 | 97,029  | 55,920  | -375              | 11,907  | 2,106      |
|                      | 2017 | 53,684     | 120,494 | 101,415 | 58,173  | 192               | 14,398  | 2,522      |
|                      | 2018 | 49,002     | 107,359 | 89,817  | 57,943  | -557              | 9,159   | 1,591      |
|                      | 2019 | 50,315     | 97,431  | 85,329  | 55,357  | -315              | 7,375   | 1,271      |
| Sri Lanka            | 2016 | 1,647      | 3,634   | 89      | 1,117   | -1,291            | 5,365   | 255        |
|                      | 2017 | 1,636      | 3,949   | 0       | 1,104   | -822              | 5,304   | 251        |
|                      | 2018 | 1,607      | 4,114   | 91      | 1,117   | -98               | 4,611   | 217        |
|                      | 2019 | 1,797      | 4,151   | 37      | 1,118   | -62               | 4,855   | 228        |
| State of Palestine   | 2016 | ..         | 1,084   | 0       | ..      | 0                 | 1,084   | 234        |
|                      | 2017 | ..         | 1,090   | 0       | ..      | ..                | 1,090   | 230        |
|                      | 2018 | ..         | 1,001   | 0       | ..      | 0                 | 1,001   | 206        |
|                      | 2019 | ..         | 1,099   | 0       | ..      | ..                | 1,099   | 221        |
| Syrian Arab Republic | 2016 | 7,072      | 985     | 714     | 395     | ..                | 6,948   | 398        |
|                      | 2017 | 7,844      | 1,047   | 787     | 371     | ..                | 7,733   | 452        |
|                      | 2018 | 7,351      | 989     | 738     | 361     | ..                | 7,241   | 427        |
|                      | 2019 | 6,370      | 892     | 641     | 366     | ..                | 6,255   | 366        |
| Tajikistan           | 2016 | 24         | 945     | *9      | 35      | ..                | 925     | 107        |
|                      | 2017 | 23         | 784     | ..      | 18      | ..                | 789     | 89         |
|                      | 2018 | 46         | 935     | ..      | 29      | ..                | 953     | 105        |
|                      | 2019 | 30         | 986     | ..      | 40      | ..                | 977     | 105        |
| Thailand             | 2016 | 64,436     | 6,518   | 10,981  | 5,190   | 3,321             | 51,462  | 746        |
|                      | 2017 | 66,165     | 6,547   | 12,007  | 5,314   | 3,585             | 51,806  | 749        |
|                      | 2018 | 67,487     | 6,598   | 13,016  | 5,875   | 3,770             | 51,423  | 741        |
|                      | 2019 | 61,553     | 8,924   | 10,162  | 5,783   | 2,620             | 51,912  | 746        |
| Timor-Leste          | 2016 | ..         | 168     | ..      | *3      | ..                | 166     | 136        |
|                      | 2017 | ..         | 187     | ..      | *4      | ..                | 184     | 148        |
|                      | 2018 | ..         | 176     | ..      | *3      | ..                | 172     | 136        |
|                      | 2019 | ..         | 213     | ..      | *3      | ..                | 210     | 162        |
| Turkey               | 2016 | 31,667     | 24,669  | 6,489   | 4,227   | 410               | 45,210  | 566        |
|                      | 2017 | 34,042     | 26,417  | 6,760   | 4,320   | 299               | 49,080  | 605        |
|                      | 2018 | 30,160     | 27,480  | 5,004   | 4,633   | 739               | 47,264  | 574        |
|                      | 2019 | 38,348     | 20,804  | 8,491   | 5,202   | -264              | 45,723  | 548        |
| Turkmenistan         | 2016 | 9,178      | ..      | 2,554   | 470     | ..                | 6,154   | 1,087      |
|                      | 2017 | 9,187      | ..      | 2,554   | 470     | ..                | 6,163   | 1,070      |
|                      | 2018 | 9,233      | ..      | 2,554   | 470     | ..                | 6,209   | 1,061      |
|                      | 2019 | 9,260      | ..      | 2,554   | 470     | ..                | 6,236   | 1,049      |
| United Arab Emirates | 2016 | 65,896     | 21,146  | 49,625  | *16,800 | *43               | 20,573  | 2,198      |
|                      | 2017 | 65,312     | 17,487  | 45,140  | 17,906  | 1,293             | 18,460  | 1,946      |
|                      | 2018 | 66,384     | 19,772  | 50,079  | 15,672  | *-38              | 20,444  | 2,123      |
|                      | 2019 | 69,581     | 24,926  | 45,747  | 23,919  | *-44              | 24,885  | 2,547      |

Table 25

## Production, trade and supply of oil products

Thousand metric tons and kilograms per capita

| Country or area        | Year        | Production       | Imports        | Exports        | Bunkers        | Changes in stocks | Supply         |              |
|------------------------|-------------|------------------|----------------|----------------|----------------|-------------------|----------------|--------------|
|                        |             |                  |                |                |                |                   | Total          | Per capita   |
| Uzbekistan             | 2016        | 3,653            | *772           | 34             | *91            | -27               | 4,327          | 138          |
|                        | 2017        | 3,609            | *876           | *42            | *73            | 9                 | 4,362          | 136          |
|                        | 2018        | 3,847            | *887           | 6              | *90            | 114               | 4,524          | 139          |
|                        | 2019        | 3,611            | *1,153         | 53             | *69            | -64               | 4,706          | 143          |
| Viet Nam               | 2016        | 6,969            | 17,295         | 2,828          | 988            | 20                | 20,428         | 218          |
|                        | 2017        | 6,439            | 17,638         | 1,937          | 1,140          | 116               | 20,884         | 221          |
|                        | 2018        | 10,682           | 16,750         | 2,221          | 1,415          | 576               | 23,220         | 243          |
|                        | 2019        | 13,206           | 13,907         | 2,130          | 1,460          | 127               | 23,396         | 243          |
| Yemen                  | 2016        | 802              | 2,077          | *194           | 107            | ..                | 2,578          | 95           |
|                        | 2017        | 1,034            | 1,774          | *257           | 102            | ..                | 2,450          | 88           |
|                        | 2018        | 1,205            | 1,648          | *309           | 102            | -1                | 2,443          | 86           |
|                        | 2019        | 1,928            | 1,526          | *497           | 117            | ..                | 2,839          | 97           |
| <b>Europe</b>          | <b>2016</b> | <b>990,043</b>   | <b>413,816</b> | <b>526,996</b> | <b>118,140</b> | <b>2,091</b>      | <b>756,633</b> | <b>1,014</b> |
|                        | <b>2017</b> | <b>1,015,466</b> | <b>414,163</b> | <b>529,862</b> | <b>124,036</b> | <b>-6,785</b>     | <b>782,516</b> | <b>1,047</b> |
|                        | <b>2018</b> | <b>1,011,132</b> | <b>411,831</b> | <b>517,736</b> | <b>122,194</b> | <b>-3,342</b>     | <b>786,375</b> | <b>1,050</b> |
|                        | <b>2019</b> | <b>1,007,806</b> | <b>408,553</b> | <b>529,349</b> | <b>113,816</b> | <b>4,380</b>      | <b>768,814</b> | <b>1,026</b> |
| Albania                | 2016        | 183              | 1,208          | 19             | 40             | 127               | 1,205          | 417          |
|                        | 2017        | 503              | 1,230          | 155            | 42             | 170               | 1,366          | 474          |
|                        | 2018        | 291              | 1,075          | 145            | 37             | 84                | 1,100          | 382          |
|                        | 2019        | 323              | 1,135          | 184            | 40             | 71                | 1,164          | 404          |
| Andorra                | 2016        | ..               | 154            | ..             | 0              | ..                | 154            | 1,988        |
|                        | 2017        | ..               | 153            | ..             | 0              | ..                | 153            | 1,992        |
|                        | 2018        | ..               | 162            | ..             | 0              | ..                | 161            | 2,097        |
|                        | 2019        | ..               | 158            | ..             | 0              | ..                | 157            | 2,041        |
| Austria                | 2016        | 8,863            | 6,798          | 2,757          | 759            | -129              | 12,273         | 1,403        |
|                        | 2017        | 8,790            | 6,987          | 2,758          | 734            | -67               | 12,352         | 1,400        |
|                        | 2018        | 9,460            | 6,673          | 3,183          | 817            | -90               | 12,223         | 1,375        |
|                        | 2019        | 9,853            | 6,792          | 2,944          | 937            | 10                | 12,754         | 1,424        |
| Belarus                | 2016        | 18,780           | 1,796          | 13,637         | 119            | 5                 | 6,815          | 721          |
|                        | 2017        | 18,545           | 1,756          | 12,973         | 126            | 236               | 6,966          | 737          |
|                        | 2018        | 18,866           | 1,238          | 11,890         | 144            | 175               | 7,895          | 835          |
|                        | 2019        | 17,725           | 140            | 10,752         | 186            | 105               | 6,822          | 722          |
| Belgium                | 2016        | 35,394           | 26,210         | 29,369         | 8,282          | -254              | 24,207         | 2,132        |
|                        | 2017        | 37,249           | 28,713         | 33,809         | 9,308          | -893              | 23,739         | 2,079        |
|                        | 2018        | 35,703           | 31,631         | 32,560         | 11,264         | 239               | 23,271         | 2,027        |
|                        | 2019        | 36,720           | 28,347         | 32,364         | 10,155         | 512               | 22,036         | 1,910        |
| Bosnia and Herzegovina | 2016        | 826              | 1,071          | 235            | 10             | 6                 | 1,646          | 486          |
|                        | 2017        | 862              | 1,092          | 272            | 10             | 27                | 1,645          | 491          |
|                        | 2018        | 704              | 1,132          | 242            | 7              | -36               | 1,623          | 488          |
|                        | 2019        | 74               | 1,554          | 42             | 9              | -37               | 1,614          | 489          |
| Bulgaria               | 2016        | 6,942            | 2,838          | 4,568          | 285            | 103               | 4,824          | 675          |
|                        | 2017        | 7,142            | 2,659          | 4,794          | 312            | 7                 | 4,688          | 660          |
|                        | 2018        | 6,189            | 2,169          | 3,530          | 331            | -168              | 4,664          | 661          |
|                        | 2019        | 6,968            | 2,250          | 4,263          | 312            | -25               | 4,666          | 667          |
| Croatia                | 2016        | 3,755            | 2,101          | 2,076          | 123            | 117               | 3,540          | 841          |
|                        | 2017        | 3,924            | 2,315          | 2,484          | 147            | -51               | 3,658          | 875          |
|                        | 2018        | 3,966            | 2,187          | 2,426          | 196            | 90                | 3,441          | 828          |
|                        | 2019        | 2,947            | 2,767          | 2,167          | 215            | 0                 | 3,333          | 807          |
| Czechia                | 2016        | 5,998            | 4,869          | 2,225          | 306            | -22               | 8,358          | 787          |
|                        | 2017        | 8,654            | 3,855          | 2,430          | 343            | -84               | 9,820          | 923          |
|                        | 2018        | 8,273            | 4,402          | 2,265          | 396            | 150               | 9,864          | 925          |
|                        | 2019        | 8,522            | 4,043          | 2,286          | 405            | -36               | 9,910          | 927          |

## Production, trade and supply of oil products

Thousand metric tons and kilograms per capita

| Country or area | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply  |            |
|-----------------|------|------------|---------|---------|---------|-------------------|---------|------------|
|                 |      |            |         |         |         |                   | Total   | Per capita |
| Denmark         | 2016 | 9,354      | 9,260   | 9,004   | 1,581   | -175              | 8,204   | 1,436      |
|                 | 2017 | 9,019      | 5,638   | 6,747   | 1,470   | -996              | 7,436   | 1,297      |
|                 | 2018 | 9,353      | 6,089   | 6,615   | 1,578   | -454              | 7,703   | 1,339      |
|                 | 2019 | 8,875      | 7,211   | 6,528   | 1,750   | 781               | 7,027   | 1,217      |
| Estonia         | 2016 | ..         | 1,812   | 479     | 323     | 12                | 998     | 758        |
|                 | 2017 | ..         | 1,889   | 419     | 377     | 79                | 1,014   | 769        |
|                 | 2018 | ..         | 2,059   | 682     | 365     | -64               | 1,076   | 814        |
|                 | 2019 | ..         | 1,862   | 508     | 236     | 60                | 1,059   | 799        |
| Faeroe Islands  | 2016 | ..         | *237    | ..      | 33      | ..                | *204    | *4,231     |
|                 | 2017 | ..         | *267    | ..      | 37      | ..                | *230    | *4,753     |
|                 | 2018 | ..         | *275    | ..      | 39      | ..                | *236    | *4,867     |
|                 | 2019 | ..         | *286    | ..      | 45      | ..                | *241    | *4,952     |
| Finland         | 2016 | 14,748     | 5,919   | 9,065   | 915     | -272              | 10,959  | 1,993      |
|                 | 2017 | 15,357     | 5,145   | 9,000   | 1,016   | -176              | 10,662  | 1,935      |
|                 | 2018 | 15,516     | 4,813   | 8,807   | 1,086   | -118              | 10,554  | 1,911      |
|                 | 2019 | 15,556     | 5,201   | 9,490   | 1,156   | -308              | 10,419  | 1,883      |
| France          | 2016 | 64,523     | 41,686  | 20,553  | 7,060   | 21                | 78,575  | 1,175      |
|                 | 2017 | 64,985     | 41,242  | 20,215  | 7,245   | -42               | 78,809  | 1,175      |
|                 | 2018 | 60,773     | 42,347  | 19,969  | 7,669   | -401              | 75,883  | 1,129      |
|                 | 2019 | 56,056     | 44,898  | 17,170  | 7,698   | -146              | 76,232  | 1,131      |
| Germany         | 2016 | 109,616    | 38,760  | 22,833  | 11,284  | 720               | 113,539 | 1,381      |
|                 | 2017 | 111,005    | 41,065  | 23,497  | 11,639  | -528              | 117,462 | 1,421      |
|                 | 2018 | 105,695    | 40,337  | 22,641  | 11,326  | -494              | 112,559 | 1,354      |
|                 | 2019 | 107,107    | 42,136  | 22,050  | 10,906  | 280               | 116,007 | 1,389      |
| Gibraltar       | 2016 | ..         | 4,064   | ..      | 3,843   | ..                | 221     | 6,550      |
|                 | 2017 | ..         | 4,505   | ..      | 4,278   | ..                | 227     | 6,743      |
|                 | 2018 | ..         | 4,427   | ..      | 4,177   | ..                | 250     | 7,409      |
|                 | 2019 | ..         | 4,527   | ..      | 4,280   | ..                | 247     | 7,343      |
| Greece          | 2016 | 30,408     | 9,116   | 18,066  | 2,635   | -173              | 18,996  | 1,790      |
|                 | 2017 | 31,961     | 9,633   | 18,961  | 3,172   | 252               | 19,209  | 1,817      |
|                 | 2018 | 32,968     | 9,627   | 19,975  | 3,326   | -76               | 19,370  | 1,841      |
|                 | 2019 | 30,375     | 9,595   | 18,100  | 3,711   | -197              | 18,356  | 1,753      |
| Hungary         | 2016 | 7,878      | 3,164   | 2,896   | 186     | 252               | 7,708   | 790        |
|                 | 2017 | 7,609      | 3,793   | 3,083   | 216     | 18                | 8,085   | 831        |
|                 | 2018 | 8,198      | 4,133   | 3,554   | 267     | -59               | 8,569   | 883        |
|                 | 2019 | 7,909      | 4,352   | 3,280   | 270     | 29                | 8,682   | 896        |
| Iceland         | 2016 | 16         | 928     | ..      | 349     | 10                | 585     | 1,762      |
|                 | 2017 | 18         | 963     | ..      | 431     | -2                | 552     | 1,650      |
|                 | 2018 | 21         | 1,111   | ..      | 484     | 61                | 588     | 1,745      |
|                 | 2019 | 21         | 881     | ..      | 368     | -40               | 574     | 1,693      |
| Ireland         | 2016 | 3,287      | 5,717   | 1,634   | 977     | -72               | 6,465   | 1,377      |
|                 | 2017 | 3,309      | 6,003   | 1,864   | 1,116   | 126               | 6,206   | 1,306      |
|                 | 2018 | 3,134      | 6,033   | 1,693   | 1,199   | -110              | 6,384   | 1,325      |
|                 | 2019 | 2,847      | 6,308   | 1,497   | 1,192   | -107              | 6,573   | 1,346      |
| Italy           | 2016 | 73,946     | 20,429  | 28,880  | 5,506   | -553              | 60,542  | 997        |
|                 | 2017 | 77,925     | 18,185  | 31,042  | 5,719   | -108              | 59,457  | 979        |
|                 | 2018 | 75,196     | 19,149  | 28,974  | 6,549   | 45                | 58,777  | 969        |
|                 | 2019 | 76,671     | 17,155  | 27,527  | 6,607   | 348               | 59,343  | 980        |
| Kosovo          | 2016 | ..         | 683     | 11      | 4       | ..                | 668     | 376        |
|                 | 2017 | ..         | 759     | 3       | 6       | ..                | 750     | 419        |
|                 | 2018 | ..         | 764     | 12      | 3       | ..                | 749     | 417        |
|                 | 2019 | ..         | 801     | 15      | 2       | ..                | 783     | 436        |

Table 25

## Production, trade and supply of oil products

Thousand metric tons and kilograms per capita

| Country or area     | Year | Production | Imports | Exports  | Bunkers | Changes in stocks | Supply  |            |
|---------------------|------|------------|---------|----------|---------|-------------------|---------|------------|
|                     |      |            |         |          |         |                   | Total   | Per capita |
| Latvia              | 2016 | 18         | 2,739   | 806      | 436     | 174               | 1,341   | 679        |
|                     | 2017 | 16         | 2,541   | 750      | 398     | 15                | 1,395   | 715        |
|                     | 2018 | 47         | 2,433   | 868      | 186     | -21               | 1,446   | 750        |
|                     | 2019 | 47         | 2,285   | 479      | 442     | 11                | 1,400   | 734        |
| Lithuania           | 2016 | 9,856      | 2,090   | 8,483    | 259     | 3                 | 3,201   | 1,108      |
|                     | 2017 | 10,095     | 1,336   | 8,216    | 281     | -103              | 3,037   | 1,067      |
|                     | 2018 | 9,894      | 1,092   | 7,532    | 328     | 34                | 3,093   | 1,104      |
|                     | 2019 | 9,718      | 1,096   | 7,464    | 318     | -42               | 3,072   | 1,113      |
| Luxembourg          | 2016 | ..         | 2,701   | 10       | 493     | 1                 | 2,197   | 3,793      |
|                     | 2017 | ..         | 2,852   | 25       | 558     | -7                | 2,277   | 3,846      |
|                     | 2018 | ..         | 3,001   | 3        | 597     | -8                | 2,409   | 3,987      |
|                     | 2019 | ..         | 3,066   | 5        | 583     | 11                | 2,467   | 4,007      |
| Malta               | 2016 | ..         | 2,690   | 273      | 1,935   | 43                | 439     | 1,007      |
|                     | 2017 | ..         | 2,928   | 152      | 2,346   | 106               | 324     | 741        |
|                     | 2018 | ..         | 3,014   | 354      | 2,436   | -66               | 290     | 659        |
|                     | 2019 | ..         | 3,133   | 382      | 2,500   | -67               | 318     | 721        |
| Montenegro          | 2016 | ..         | 357     | 15       | 19      | 16                | 307     | 489        |
|                     | 2017 | ..         | 400     | 33       | 20      | 9                 | 338     | 538        |
|                     | 2018 | ..         | 414     | 29       | 26      | -3                | 362     | 577        |
|                     | 2019 | ..         | 417     | 31       | 21      | -13               | 378     | 602        |
| Netherlands         | 2016 | 64,450     | 93,248  | 113,113  | 15,764  | -602              | 29,423  | 1,733      |
|                     | 2017 | 63,870     | 90,598  | 111,473  | 15,645  | -1,865            | 29,214  | 1,716      |
|                     | 2018 | 65,455     | 87,696  | 109,511  | 15,234  | -1,001            | 29,407  | 1,724      |
|                     | 2019 | 66,453     | 83,806  | 104,743  | 15,835  | 1,375             | 28,305  | 1,656      |
| North Macedonia     | 2016 | 0          | 1,213   | 110      | ..      | 22                | 1,081   | 519        |
|                     | 2017 | 0          | 1,117   | 99       | ..      | -4                | 1,022   | 491        |
|                     | 2018 | ..         | 1,096   | 124      | ..      | -8                | 979     | 470        |
|                     | 2019 | ..         | 1,251   | 159      | ..      | 21                | 1,071   | 514        |
| Norway              | 2016 | 22,654     | 5,760   | 16,943   | 574     | -344              | 11,241  | 2,141      |
|                     | 2017 | 26,427     | 6,038   | 19,092   | 672     | -186              | 12,887  | 2,433      |
|                     | 2018 | 26,156     | 5,750   | 19,393   | 726     | 189               | 11,598  | 2,173      |
|                     | 2019 | 23,705     | 6,300   | 19,160   | 683     | -145              | 10,307  | 1,916      |
| Poland              | 2016 | 28,280     | 7,416   | 7,125    | 847     | 145               | 27,579  | 726        |
|                     | 2017 | 28,105     | 9,763   | 5,195    | 1,092   | 324               | 31,256  | 824        |
|                     | 2018 | 29,896     | 9,263   | 5,915    | 1,247   | 142               | 31,855  | 840        |
|                     | 2019 | 30,207     | 8,799   | 5,242    | 1,320   | 124               | 32,319  | 853        |
| Portugal            | 2016 | 15,417     | 3,563   | 6,681    | 1,908   | 35                | 10,356  | 1,003      |
|                     | 2017 | 15,994     | 3,757   | 6,915    | 2,051   | -49               | 10,833  | 1,053      |
|                     | 2018 | 14,322     | 3,781   | 5,290    | 2,165   | 336               | 10,311  | 1,005      |
|                     | 2019 | 13,243     | 4,875   | 4,802    | 2,405   | -250              | 11,161  | 1,091      |
| Republic of Moldova | 2016 | 16         | 899     | 16       | 32      | 18                | 849     | 209        |
|                     | 2017 | 15         | 937     | 35       | 47      | -9                | 879     | 217        |
|                     | 2018 | 10         | 1,014   | 27       | 54      | 0                 | 943     | 233        |
|                     | 2019 | 5          | 1,016   | 9        | 48      | 8                 | 956     | 237        |
| Romania             | 2016 | 12,236     | 2,905   | 5,099    | 279     | 129               | 9,634   | 487        |
|                     | 2017 | 12,528     | 3,228   | 4,970    | 319     | 1                 | 10,466  | 533        |
|                     | 2018 | 12,650     | 3,257   | 5,283    | 137     | -151              | 10,638  | 545        |
|                     | 2019 | 13,377     | 3,280   | 5,393    | 164     | 28                | 11,071  | 572        |
| Russian Federation  | 2016 | 273,944    | 1,303   | *124,764 | 21,139  | 590               | 128,754 | 886        |
|                     | 2017 | 281,548    | 1,266   | *120,834 | 22,521  | 82                | 139,377 | 958        |
|                     | 2018 | 285,776    | 1,187   | *120,131 | *17,258 | 292               | 149,282 | 1,024      |
|                     | 2019 | 297,661    | 1,365   | 154,398  | 8,060   | 176               | 136,392 | 935        |

Table 25

## Production, trade and supply of oil products

Thousand metric tons and kilograms per capita

| Country or area | Year        | Production    | Imports       | Exports      | Bunkers      | Changes in stocks | Supply        |              |
|-----------------|-------------|---------------|---------------|--------------|--------------|-------------------|---------------|--------------|
|                 |             |               |               |              |              |                   | Total         | Per capita   |
| Serbia          | 2016        | 3,572         | 1,098         | 736          | 135          | -34               | 3,833         | 542          |
|                 | 2017        | 3,787         | 1,087         | 855          | 142          | 44                | 3,832         | 544          |
|                 | 2018        | 4,014         | 1,001         | 923          | 152          | 55                | 3,885         | 555          |
|                 | 2019        | 3,635         | 1,216         | 789          | 153          | -66               | 3,975         | 570          |
| Slovakia        | 2016        | 6,582         | 1,754         | 4,116        | 48           | 26                | 4,146         | 762          |
|                 | 2017        | 6,560         | 1,972         | 3,895        | 39           | -62               | 4,660         | 855          |
|                 | 2018        | 6,348         | 1,944         | 3,540        | 46           | 47                | 4,659         | 854          |
|                 | 2019        | 5,989         | 1,856         | 3,350        | 44           | 18                | 4,433         | 812          |
| Slovenia        | 2016        | 16            | 4,548         | 2,045        | 145          | 7                 | 2,367         | 1,141        |
|                 | 2017        | 24            | 4,720         | 2,080        | 183          | 81                | 2,399         | 1,155        |
|                 | 2018        | 74            | 4,752         | 2,112        | 263          | -19               | 2,470         | 1,189        |
|                 | 2019        | 102           | 4,882         | 2,306        | 220          | 36                | 2,422         | 1,165        |
| Spain           | 2016        | 66,288        | 21,295        | 25,130       | 11,680       | 468               | 50,305        | 1,079        |
|                 | 2017        | 67,341        | 23,204        | 27,578       | 11,191       | -1,296            | 53,072        | 1,138        |
|                 | 2018        | 69,592        | 20,871        | 25,500       | 11,706       | -347              | 53,604        | 1,148        |
|                 | 2019        | 67,166        | 21,186        | 23,865       | 11,950       | 408               | 52,129        | 1,115        |
| Sweden          | 2016        | 22,303        | 10,748        | 16,839       | 2,832        | 986               | 12,394        | 1,260        |
|                 | 2017        | 22,317        | 10,014        | 17,884       | 3,231        | -1,574            | 12,790        | 1,291        |
|                 | 2018        | 23,066        | 9,118         | 17,096       | 2,703        | -793              | 13,179        | 1,322        |
|                 | 2019        | 19,334        | 8,461         | 11,609       | 2,916        | 823               | 12,446        | 1,240        |
| Switzerland     | 2016        | 3,108         | 7,759         | 477          | 1,658        | 79                | 8,653         | 1,033        |
|                 | 2017        | 3,038         | 7,717         | 384          | 1,714        | -129              | 8,786         | 1,039        |
|                 | 2018        | 3,272         | 6,907         | 441          | 1,798        | -428              | 8,369         | 982          |
|                 | 2019        | 2,982         | 8,175         | 460          | 1,815        | 192               | 8,690         | 1,011        |
| Ukraine         | 2016        | 2,866         | 9,417         | 64           | *121         | 573               | 11,525        | 258          |
|                 | 2017        | 3,121         | 9,751         | 308          | 263          | -317              | 12,618        | 284          |
|                 | 2018        | 4,064         | 10,542        | 322          | ..           | -68               | 14,352        | 324          |
|                 | 2019        | *2,976        | 10,711        | 817          | ..           | -106              | 12,976        | 295          |
| United Kingdom  | 2016        | 63,921        | 41,495        | 25,844       | 13,216       | 33                | 66,323        | 1,000        |
|                 | 2017        | 63,825        | 41,088        | 24,583       | 13,579       | 184               | 66,568        | 998          |
|                 | 2018        | 62,192        | 41,866        | 24,180       | 13,872       | -297              | 66,304        | 988          |
|                 | 2019        | 62,657        | 38,980        | 22,718       | 13,856       | 537               | 64,525        | 956          |
| <b>Oceania</b>  | <b>2016</b> | <b>30,816</b> | <b>33,852</b> | <b>3,057</b> | <b>6,022</b> | <b>372</b>        | <b>55,217</b> | <b>1,366</b> |
|                 | <b>2017</b> | <b>29,731</b> | <b>34,786</b> | <b>3,602</b> | <b>6,513</b> | <b>-404</b>       | <b>54,806</b> | <b>1,337</b> |
|                 | <b>2018</b> | <b>30,353</b> | <b>37,656</b> | <b>3,628</b> | <b>6,889</b> | <b>1,377</b>      | <b>56,115</b> | <b>1,350</b> |
|                 | <b>2019</b> | <b>32,849</b> | <b>37,104</b> | <b>3,982</b> | <b>7,360</b> | <b>396</b>        | <b>58,214</b> | <b>1,382</b> |
| American Samoa  | 2016        | ..            | *112          | ..           | *14          | ..                | *98           | *1,765       |
|                 | 2017        | ..            | *113          | ..           | *14          | ..                | *99           | *1,771       |
|                 | 2018        | ..            | *112          | ..           | *14          | ..                | *98           | *1,774       |
|                 | 2019        | ..            | *112          | ..           | *14          | ..                | *98           | *1,779       |
| Australia       | 2016        | 23,749        | 27,295        | 2,059        | 4,388        | 393               | 44,204        | 1,822        |
|                 | 2017        | 22,825        | 28,227        | 2,635        | 4,762        | -288              | 43,942        | 1,787        |
|                 | 2018        | 23,668        | 30,129        | 2,733        | 5,041        | 1,010             | 45,014        | 1,808        |
|                 | 2019        | 25,394        | 29,888        | 3,125        | 5,503        | 361               | 46,293        | 1,837        |
| Cook Islands    | 2016        | ..            | *33           | ..           | *9           | ..                | *24           | *1,387       |
|                 | 2017        | ..            | *35           | ..           | *9           | ..                | *26           | *1,498       |
|                 | 2018        | ..            | *35           | ..           | *9           | ..                | *26           | *1,497       |
|                 | 2019        | ..            | *36           | ..           | *9           | ..                | *27           | *1,517       |
| Fiji            | 2016        | ..            | 764           | 345          | *75          | *-45              | 390           | 447          |
|                 | 2017        | ..            | 801           | 296          | *86          | *-14              | 433           | 493          |
|                 | 2018        | ..            | *899          | *330         | *96          | *25               | *449          | *508         |
|                 | 2019        | ..            | *887          | *337         | *91          | *10               | *450          | *506         |

Table 25

## Production, trade and supply of oil products

Thousand metric tons and kilograms per capita

| Country or area             | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|-----------------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                             |      |            |         |         |         |                   | Total  | Per capita |
| French Polynesia            | 2016 | ..         | 279     | ..      | ..      | -7                | 286    | 1,042      |
|                             | 2017 | ..         | 287     | ..      | ..      | 2                 | 285    | 1,034      |
|                             | 2018 | ..         | 298     | ..      | ..      | *10               | 288    | 1,037      |
|                             | 2019 | ..         | 295     | ..      | ..      | 6                 | 289    | 1,035      |
| Kiribati                    | 2016 | ..         | 19      | ..      | 0       | ..                | 18     | 161        |
|                             | 2017 | ..         | 24      | ..      | *1      | ..                | 23     | 203        |
|                             | 2018 | ..         | *24     | ..      | *1      | ..                | *23    | *201       |
|                             | 2019 | ..         | *24     | ..      | *1      | ..                | *23    | *199       |
| Marshall Islands            | 2016 | ..         | *49     | ..      | *2      | ..                | *47    | *809       |
|                             | 2017 | ..         | *50     | ..      | *2      | ..                | *48    | *820       |
|                             | 2018 | ..         | *50     | ..      | *2      | ..                | *48    | *823       |
|                             | 2019 | ..         | *51     | ..      | *2      | ..                | *49    | *825       |
| Micronesia (Fed. States of) | 2016 | ..         | *58     | ..      | *9      | ..                | *49    | *445       |
|                             | 2017 | ..         | *59     | ..      | *10     | ..                | *49    | *439       |
|                             | 2018 | ..         | *59     | ..      | *10     | ..                | *49    | *437       |
|                             | 2019 | ..         | *59     | ..      | *10     | ..                | *49    | *434       |
| Nauru                       | 2016 | ..         | *27     | ..      | *9      | 0                 | *17    | *1,638     |
|                             | 2017 | ..         | *26     | ..      | *8      | ..                | *18    | *1,725     |
|                             | 2018 | ..         | *25     | ..      | *8      | ..                | *18    | *1,646     |
|                             | 2019 | ..         | *25     | ..      | *8      | ..                | *17    | *1,603     |
| New Caledonia               | 2016 | ..         | 951     | ..      | 29      | -20               | 941    | 3,432      |
|                             | 2017 | ..         | 927     | ..      | 33      | 40                | 854    | 3,082      |
|                             | 2018 | ..         | 950     | ..      | 39      | -13               | 924    | 3,299      |
|                             | 2019 | ..         | 911     | ..      | 36      | 7                 | 868    | 3,068      |
| New Zealand                 | 2016 | 5,699      | 2,728   | 211     | 1,345   | 99                | 6,772  | 1,453      |
|                             | 2017 | 5,528      | 2,658   | 236     | 1,444   | -169              | 6,675  | 1,420      |
|                             | 2018 | 5,518      | 3,122   | 205     | 1,528   | 336               | 6,571  | 1,385      |
|                             | 2019 | 6,230      | 2,764   | 128     | 1,543   | 3                 | 7,320  | 1,530      |
| Niue                        | 2016 | ..         | *2      | ..      | *1      | ..                | *2     | *1,178     |
|                             | 2017 | ..         | *2      | ..      | 0       | ..                | *2     | *1,140     |
|                             | 2018 | ..         | *2      | ..      | 0       | ..                | *2     | *1,216     |
|                             | 2019 | ..         | *3      | ..      | 0       | ..                | *2     | *1,258     |
| Northern Mariana Islands    | 2016 | ..         | *190    | ..      | *20     | ..                | *170   | *3,026     |
|                             | 2017 | ..         | *206    | ..      | *26     | ..                | *180   | *3,183     |
|                             | 2018 | ..         | *199    | ..      | *23     | ..                | *176   | *3,094     |
|                             | 2019 | ..         | *200    | ..      | *23     | ..                | *177   | *3,094     |
| Palau                       | 2016 | ..         | *80     | ..      | *11     | ..                | *69    | *3,919     |
|                             | 2017 | ..         | *83     | ..      | *12     | ..                | *71    | *3,992     |
|                             | 2018 | ..         | *84     | ..      | *13     | ..                | *71    | *3,942     |
|                             | 2019 | ..         | *86     | ..      | *14     | ..                | *72    | *4,022     |
| Papua New Guinea            | 2016 | 1,368      | 949     | 442     | *72     | -48               | 1,851  | 224        |
|                             | 2017 | 1,378      | 955     | 434     | *67     | 11                | 1,821  | 216        |
|                             | 2018 | 1,167      | 1,332   | 360     | 66      | 8                 | 2,066  | 240        |
|                             | 2019 | *1,226     | *1,416  | *391    | *67     | *12               | *2,171 | *247       |
| Samoa                       | 2016 | ..         | 92      | 1       | 12      | *-1               | 80     | 410        |
|                             | 2017 | ..         | 102     | *1      | *12     | *6                | 83     | 427        |
|                             | 2018 | ..         | 95      | *1      | *12     | 0                 | 81     | 414        |
|                             | 2019 | ..         | 110     | *1      | *12     | *6                | 91     | 461        |
| Solomon Islands             | 2016 | ..         | *106    | ..      | *9      | ..                | *97    | *156       |
|                             | 2017 | ..         | *105    | ..      | *9      | ..                | *96    | *150       |
|                             | 2018 | ..         | *107    | ..      | *9      | ..                | *97    | *149       |
|                             | 2019 | ..         | *108    | ..      | *9      | ..                | *99    | *147       |

## Production, trade and supply of oil products

Thousand metric tons and kilograms per capita

| Country or area       | Year | Production | Imports | Exports | Bunkers | Changes in stocks | Supply |            |
|-----------------------|------|------------|---------|---------|---------|-------------------|--------|------------|
|                       |      |            |         |         |         |                   | Total  | Per capita |
| Tonga                 | 2016 | ..         | 46      | ..      | *3      | *1                | 41     | 407        |
|                       | 2017 | ..         | 55      | ..      | *5      | *7                | 43     | 426        |
|                       | 2018 | ..         | 49      | ..      | *4      | *1                | 44     | 427        |
|                       | 2019 | ..         | 47      | ..      | *4      | *-9               | 52     | 498        |
| Tuvalu                | 2016 | ..         | *3      | ..      | 0       | ..                | *2     | *211       |
|                       | 2017 | ..         | *3      | ..      | 0       | ..                | *2     | *216       |
|                       | 2018 | ..         | *3      | ..      | 0       | ..                | *3     | *245       |
|                       | 2019 | ..         | *3      | ..      | 0       | ..                | *3     | *242       |
| Vanuatu               | 2016 | ..         | 61      | ..      | *11     | 0                 | 50     | 181        |
|                       | 2017 | ..         | 59      | ..      | *12     | ..                | 47     | 165        |
|                       | 2018 | ..         | 71      | ..      | *13     | ..                | 59     | 201        |
|                       | 2019 | ..         | 69      | ..      | *13     | ..                | 55     | 185        |
| Wallis and Futuna Is. | 2016 | ..         | 9       | ..      | 1       | ..                | 8      | 676        |
|                       | 2017 | ..         | 9       | ..      | 1       | ..                | 8      | 675        |
|                       | 2018 | ..         | 9       | ..      | 1       | ..                | 8      | 702        |
|                       | 2019 | ..         | 10      | ..      | 1       | ..                | 8      | 738        |





### Production of natural gas liquids – by end use

Thousand metric tons

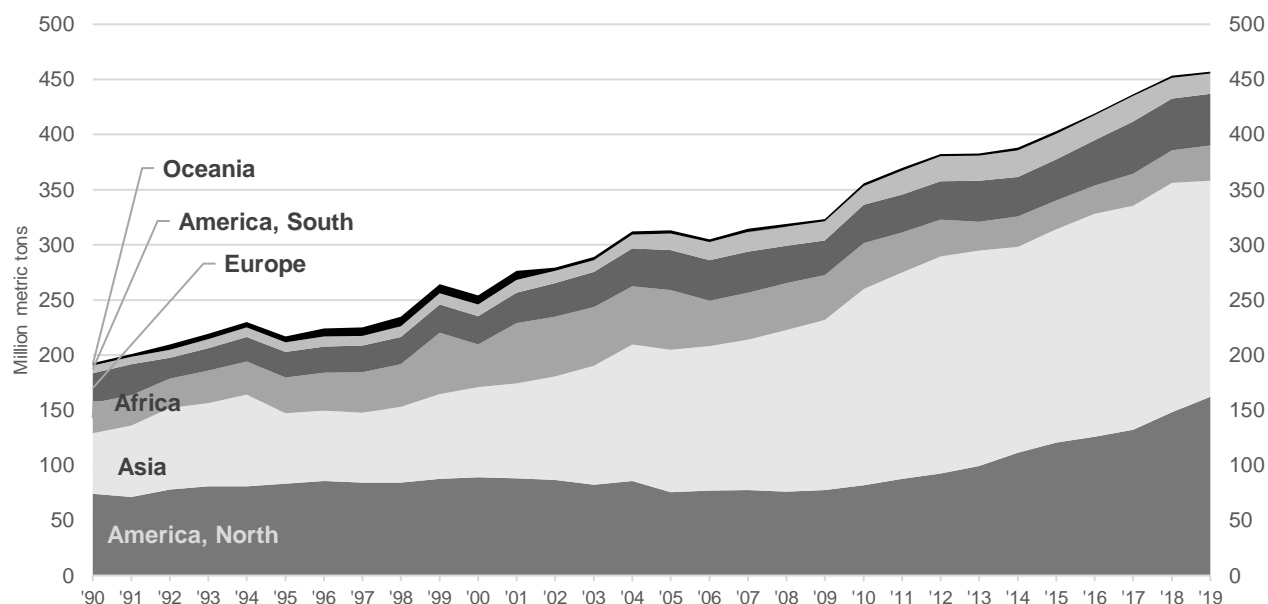
#### Table Notes

**Production** refers to production of natural gas liquids.

**End-use products** refers to the output of natural gas liquids plants, arranged by product.  
**Net imports** refers to imports minus exports.  
**Inputs of NGLs to refineries** refers to quantities of natural gas liquids that are transformed in oil refineries. Data may not add up due to statistical differences or the presence of other natural gas liquid flows such as stock changes, transfers or energy industries own use.

Please refer to the Definitions Section on pages ix to xv for the appropriate product description /classification, and xvi to xvii for the descriptions of relevant flows.

**Figure 66: Production of natural gas liquids by region, 1990-2019**



**Figure 67: Production of natural gas liquids by end-use product, 2019**

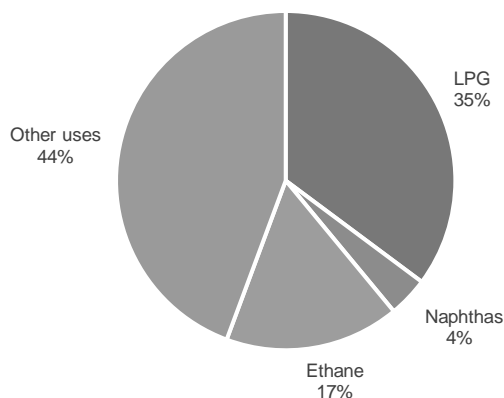


Table 26

## Production of natural gas liquids - by end use

Thousand metric tons

| Country or area   | Year        | Total production | End-use products |               |               |                | Net imports    | Inputs of NGLs to refineries |
|-------------------|-------------|------------------|------------------|---------------|---------------|----------------|----------------|------------------------------|
|                   |             |                  | LPG              | Naphthas      | Ethane        | Other products |                |                              |
| <b>World</b>      | <b>2016</b> | <b>419,291</b>   | <b>145,093</b>   | <b>8,913</b>  | <b>61,420</b> | <b>8,266</b>   | <b>-60,210</b> | <b>111,832</b>               |
|                   | <b>2017</b> | <b>436,602</b>   | <b>150,534</b>   | <b>5,976</b>  | <b>65,801</b> | <b>8,735</b>   | <b>-58,154</b> | <b>119,746</b>               |
|                   | <b>2018</b> | <b>453,362</b>   | <b>153,188</b>   | <b>6,425</b>  | <b>73,230</b> | <b>7,372</b>   | <b>-71,222</b> | <b>118,036</b>               |
|                   | <b>2019</b> | <b>457,064</b>   | <b>160,811</b>   | <b>17,452</b> | <b>76,160</b> | <b>7,727</b>   | <b>-79,661</b> | <b>111,630</b>               |
| <b>Africa</b>     | <b>2016</b> | <b>25,907</b>    | <b>11,162</b>    | <b>183</b>    | <b>0</b>      | <b>..</b>      | <b>-10,204</b> | <b>4,157</b>                 |
|                   | <b>2017</b> | <b>29,328</b>    | <b>11,764</b>    | <b>219</b>    | <b>..</b>     | <b>..</b>      | <b>-13,003</b> | <b>4,900</b>                 |
|                   | <b>2018</b> | <b>29,135</b>    | <b>11,516</b>    | <b>231</b>    | <b>..</b>     | <b>..</b>      | <b>-13,807</b> | <b>4,662</b>                 |
|                   | <b>2019</b> | <b>31,675</b>    | <b>11,478</b>    | <b>232</b>    | <b>..</b>     | <b>..</b>      | <b>-16,611</b> | <b>3,738</b>                 |
| Algeria           | 2016        | 17,924           | 8,593            | 101           | 0             | ..             | -5,209         | 4,097                        |
|                   | 2017        | 17,744           | 8,412            | 113           | ..            | ..             | -4,200         | 4,813                        |
|                   | 2018        | 17,220           | 8,314            | 81            | ..            | ..             | -4,290         | 4,574                        |
|                   | 2019        | 16,517           | 8,259            | 107           | ..            | ..             | -4,374         | 3,650                        |
| Angola            | 2016        | 904              | 225              | ..            | ..            | ..             | -810           | ..                           |
|                   | 2017        | 3,962            | 941              | ..            | ..            | ..             | -3,803         | ..                           |
|                   | 2018        | 4,091            | 822              | ..            | ..            | ..             | -4,341         | ..                           |
|                   | 2019        | 4,478            | 1,057            | ..            | ..            | ..             | -4,282         | ..                           |
| Cameroon          | 2016        | ..               | ..               | ..            | ..            | ..             | ..             | ..                           |
|                   | 2017        | ..               | ..               | ..            | ..            | ..             | ..             | ..                           |
|                   | 2018        | 16               | ..               | ..            | ..            | ..             | ..             | ..                           |
|                   | 2019        | 24               | ..               | ..            | ..            | ..             | ..             | ..                           |
| Congo             | 2016        | 301              | ..               | ..            | ..            | ..             | -280           | 21                           |
|                   | 2017        | 301              | ..               | ..            | ..            | ..             | -276           | 24                           |
|                   | 2018        | 301              | ..               | ..            | ..            | ..             | -276           | 25                           |
|                   | 2019        | 301              | ..               | ..            | ..            | ..             | -276           | 25                           |
| Côte d'Ivoire     | 2016        | 6                | 6                | ..            | ..            | ..             | ..             | ..                           |
|                   | 2017        | 6                | 6                | ..            | ..            | ..             | ..             | ..                           |
|                   | 2018        | 5                | 5                | ..            | ..            | ..             | ..             | ..                           |
|                   | 2019        | 6                | 6                | ..            | ..            | ..             | ..             | ..                           |
| Egypt             | 2016        | 1,312            | 1,312            | ..            | ..            | ..             | ..             | ..                           |
|                   | 2017        | 1,230            | 1,230            | ..            | ..            | ..             | ..             | ..                           |
|                   | 2018        | 1,299            | 1,299            | ..            | ..            | ..             | ..             | ..                           |
|                   | 2019        | 1,193            | 1,193            | ..            | ..            | ..             | ..             | ..                           |
| Equatorial Guinea | 2016        | 605              | 605              | ..            | ..            | ..             | ..             | ..                           |
|                   | 2017        | 660              | 660              | ..            | ..            | ..             | ..             | ..                           |
|                   | 2018        | 587              | 587              | ..            | ..            | ..             | ..             | ..                           |
|                   | 2019        | 512              | 512              | ..            | ..            | ..             | ..             | ..                           |
| Ghana             | 2016        | ..               | ..               | ..            | ..            | ..             | ..             | ..                           |
|                   | 2017        | 114              | 114              | ..            | ..            | ..             | ..             | ..                           |
|                   | 2018        | 80               | 80               | ..            | ..            | ..             | ..             | ..                           |
|                   | 2019        | 66               | 66               | ..            | ..            | ..             | ..             | ..                           |
| Libya             | 2016        | 1,832            | 281              | 82            | ..            | ..             | -1,469         | ..                           |
|                   | 2017        | 2,476            | 277              | 106           | ..            | ..             | -2,093         | ..                           |
|                   | 2018        | 2,870            | 292              | 150           | ..            | ..             | -2,428         | ..                           |
|                   | 2019        | 3,423            | 284              | 125           | ..            | ..             | -3,014         | ..                           |
| Mozambique        | 2016        | ..               | ..               | ..            | ..            | ..             | ..             | ..                           |
|                   | 2017        | 9                | ..               | ..            | ..            | ..             | -9             | ..                           |
|                   | 2018        | 8                | ..               | ..            | ..            | ..             | -8             | ..                           |
|                   | 2019        | 7                | ..               | ..            | ..            | ..             | -7             | ..                           |
| Nigeria           | 2016        | 2,747            | ..               | ..            | ..            | ..             | -2,366         | ..                           |
|                   | 2017        | 2,557            | ..               | ..            | ..            | ..             | -2,553         | ..                           |
|                   | 2018        | 2,424            | ..               | ..            | ..            | ..             | -2,413         | ..                           |
|                   | 2019        | 4,943            | ..               | ..            | ..            | ..             | -4,623         | ..                           |

Table 26

## Production of natural gas liquids - by end use

Thousand metric tons

| Country or area          | Year        | Total production | End-use products |            |               |                | Net imports    | Inputs of NGLs to refineries |
|--------------------------|-------------|------------------|------------------|------------|---------------|----------------|----------------|------------------------------|
|                          |             |                  | LPG              | Naphthas   | Ethane        | Other products |                |                              |
| South Africa             | 2016        | 39               | ..               | ..         | ..            | ..             | ..             | 39                           |
|                          | 2017        | 63               | ..               | ..         | ..            | ..             | ..             | 63                           |
|                          | 2018        | 63               | ..               | ..         | ..            | ..             | ..             | 63                           |
|                          | 2019        | 63               | ..               | ..         | ..            | ..             | ..             | 63                           |
| Tunisia                  | 2016        | 237              | 140              | ..         | ..            | ..             | -70            | ..                           |
|                          | 2017        | 206              | 123              | ..         | ..            | ..             | -69            | ..                           |
|                          | 2018        | 172              | 118              | ..         | ..            | ..             | -51            | ..                           |
|                          | 2019        | 142              | 102              | ..         | ..            | ..             | -34            | ..                           |
| <b>America, North</b>    | <b>2016</b> | <b>125,842</b>   | <b>47,279</b>    | ..         | <b>29,861</b> | <b>3,109</b>   | <b>-9,583</b>  | <b>20,166</b>                |
|                          | <b>2017</b> | <b>132,039</b>   | <b>49,954</b>    | ..         | <b>32,996</b> | <b>3,482</b>   | <b>-9,852</b>  | <b>20,936</b>                |
|                          | <b>2018</b> | <b>148,230</b>   | <b>56,383</b>    | ..         | <b>38,883</b> | <b>3,609</b>   | <b>-11,476</b> | <b>20,950</b>                |
|                          | <b>2019</b> | <b>162,134</b>   | <b>65,029</b>    | ..         | <b>41,214</b> | <b>4,558</b>   | <b>-13,110</b> | <b>19,259</b>                |
| Belize                   | 2016        | *1               | 1                | ..         | ..            | ..             | ..             | ..                           |
|                          | 2017        | *1               | 1                | ..         | ..            | ..             | ..             | ..                           |
|                          | 2018        | *1               | 1                | ..         | ..            | ..             | ..             | ..                           |
|                          | 2019        | *1               | 1                | ..         | ..            | ..             | ..             | ..                           |
| Canada                   | 2016        | 15,938           | ..               | ..         | ..            | ..             | -2,202         | 1,156                        |
|                          | 2017        | 15,946           | ..               | ..         | ..            | ..             | -3,348         | 1,400                        |
|                          | 2018        | 17,550           | ..               | ..         | ..            | ..             | -4,300         | 1,700                        |
|                          | 2019        | 18,587           | ..               | ..         | ..            | ..             | -6,362         | 1,109                        |
| Curaçao                  | 2016        | ..               | 51               | ..         | ..            | ..             | 51             | ..                           |
|                          | 2017        | ..               | 36               | ..         | ..            | ..             | 36             | ..                           |
|                          | 2018        | ..               | 27               | ..         | ..            | ..             | 27             | ..                           |
|                          | 2019        | ..               | 0                | ..         | ..            | ..             | 0              | ..                           |
| Mexico                   | 2016        | 8,691            | 4,181            | ..         | 2,216         | ..             | ..             | 2,110                        |
|                          | 2017        | 7,920            | 3,807            | ..         | 2,106         | ..             | ..             | 1,866                        |
|                          | 2018        | 6,764            | 3,357            | ..         | 1,767         | ..             | ..             | 1,549                        |
|                          | 2019        | 6,218            | 3,048            | ..         | 1,593         | ..             | ..             | 1,486                        |
| Trinidad and Tobago      | 2016        | 865              | 499              | ..         | ..            | 401            | ..             | ..                           |
|                          | 2017        | 921              | 547              | ..         | ..            | 406            | ..             | ..                           |
|                          | 2018        | 805              | 454              | ..         | ..            | 388            | ..             | ..                           |
|                          | 2019        | 801              | 436              | ..         | ..            | 408            | ..             | ..                           |
| United States            | 2016        | 100,347          | 42,547           | ..         | 27,645        | 2,708          | -7,432         | 16,900                       |
|                          | 2017        | 107,251          | 45,564           | ..         | 30,890        | 3,075          | -6,540         | 17,670                       |
|                          | 2018        | 123,109          | 52,545           | ..         | 37,116        | 3,221          | -7,202         | 17,701                       |
|                          | 2019        | 136,527          | 61,544           | ..         | 39,621        | 4,150          | -6,748         | 16,664                       |
| <b>America, South</b>    | <b>2016</b> | <b>22,640</b>    | <b>7,547</b>     | <b>108</b> | <b>1,022</b>  | <b>4,651</b>   | <b>-244</b>    | <b>7,445</b>                 |
|                          | <b>2017</b> | <b>22,943</b>    | <b>7,415</b>     | <b>108</b> | <b>980</b>    | <b>4,582</b>   | <b>-256</b>    | <b>6,260</b>                 |
|                          | <b>2018</b> | <b>19,255</b>    | <b>6,446</b>     | <b>20</b>  | <b>1,102</b>  | <b>3,277</b>   | <b>-263</b>    | <b>5,682</b>                 |
|                          | <b>2019</b> | <b>18,465</b>    | <b>6,246</b>     | <b>0</b>   | <b>1,074</b>  | <b>2,802</b>   | <b>-270</b>    | <b>4,846</b>                 |
| Argentina                | 2016        | 3,478            | 1,537            | ..         | 1,022         | 0              | -244           | 675                          |
|                          | 2017        | 3,435            | 1,573            | ..         | 980           | ..             | -256           | 626                          |
|                          | 2018        | 3,859            | 1,747            | ..         | 1,102         | ..             | -263           | 747                          |
|                          | 2019        | 4,106            | 1,995            | ..         | 1,074         | ..             | -270           | 767                          |
| Bolivia (Plur. State of) | 2016        | 1,047            | 421              | ..         | ..            | ..             | ..             | 564                          |
|                          | 2017        | 1,057            | 418              | ..         | ..            | ..             | ..             | 573                          |
|                          | 2018        | 1,032            | 443              | ..         | ..            | ..             | ..             | 527                          |
|                          | 2019        | 1,016            | 451              | ..         | ..            | ..             | ..             | 474                          |
| Brazil                   | 2016        | 5,349            | 1,450            | 108        | ..            | 1,462          | ..             | 1,206                        |
|                          | 2017        | 6,201            | 1,456            | 108        | ..            | 1,465          | ..             | 1,363                        |
|                          | 2018        | 5,517            | 1,334            | 20         | ..            | 1,580          | ..             | 1,664                        |
|                          | 2019        | 5,735            | 1,288            | 0          | ..            | 1,120          | ..             | 1,764                        |

Table 26

## Production of natural gas liquids - by end use

Thousand metric tons

| Country or area           | Year        | Total production | End-use products |               |               |                | Net imports    | Inputs of NGLs to refineries |
|---------------------------|-------------|------------------|------------------|---------------|---------------|----------------|----------------|------------------------------|
|                           |             |                  | LPG              | Naphthas      | Ethane        | Other products |                |                              |
| Chile                     | 2016        | 41               | ..               | ..            | ..            | ..             | ..             | ..                           |
|                           | 2017        | 108              | ..               | ..            | ..            | ..             | ..             | ..                           |
|                           | 2018        | 224              | ..               | ..            | ..            | ..             | ..             | ..                           |
|                           | 2019        | 307              | ..               | ..            | ..            | ..             | ..             | ..                           |
| Colombia                  | 2016        | 1,405            | 294              | ..            | ..            | 1,111          | ..             | ..                           |
|                           | 2017        | 1,521            | 362              | ..            | ..            | 1,159          | ..             | ..                           |
|                           | 2018        | 334              | 334              | ..            | ..            | 0              | ..             | ..                           |
|                           | 2019        | 372              | 372              | ..            | ..            | 0              | ..             | ..                           |
| Ecuador                   | 2016        | 176              | 97               | ..            | ..            | 79             | ..             | ..                           |
|                           | 2017        | 174              | 100              | ..            | ..            | 78             | ..             | ..                           |
|                           | 2018        | 125              | 145              | ..            | ..            | 71             | ..             | 0                            |
|                           | 2019        | 137              | 88               | ..            | ..            | 64             | ..             | 0                            |
| Peru                      | 2016        | 3,491            | 1,435            | ..            | ..            | 1,891          | ..             | ..                           |
|                           | 2017        | 3,336            | 1,351            | ..            | ..            | 1,773          | ..             | ..                           |
|                           | 2018        | 3,142            | 1,210            | ..            | ..            | 1,537          | ..             | ..                           |
|                           | 2019        | 3,188            | 1,262            | ..            | ..            | 1,534          | ..             | ..                           |
| Venezuela (Bolivar. Rep.) | 2016        | 7,653            | 2,313            | ..            | ..            | 108            | ..             | *5,000                       |
|                           | 2017        | 7,112            | 2,156            | ..            | ..            | 107            | ..             | 3,698                        |
|                           | 2018        | 5,022            | 1,233            | ..            | ..            | 89             | ..             | 2,744                        |
|                           | 2019        | 3,603            | 790              | ..            | ..            | 83             | ..             | 1,840                        |
| <b>Asia</b>               | <b>2016</b> | <b>202,180</b>   | <b>69,565</b>    | <b>7,461</b>  | <b>27,747</b> | <b>154</b>     | <b>-47,089</b> | <b>48,845</b>                |
|                           | <b>2017</b> | <b>203,262</b>   | <b>71,432</b>    | <b>4,559</b>  | <b>29,136</b> | <b>138</b>     | <b>-44,144</b> | <b>48,265</b>                |
|                           | <b>2018</b> | <b>208,143</b>   | <b>69,681</b>    | <b>5,235</b>  | <b>30,682</b> | <b>148</b>     | <b>-52,698</b> | <b>48,523</b>                |
|                           | <b>2019</b> | <b>196,187</b>   | <b>69,240</b>    | <b>16,377</b> | <b>32,038</b> | <b>178</b>     | <b>-52,955</b> | <b>47,465</b>                |
| Azerbaijan                | 2016        | 2,835            | 14               | 23            | ..            | ..             | -2,494         | 304                          |
|                           | 2017        | 2,688            | 12               | 20            | ..            | ..             | -2,357         | 299                          |
|                           | 2018        | 2,921            | 12               | 20            | ..            | ..             | -2,510         | 379                          |
|                           | 2019        | *3,940           | 12               | *24           | ..            | ..             | -3,534         | 370                          |
| Bahrain                   | 2016        | 356              | ..               | ..            | ..            | ..             | -367           | ..                           |
|                           | 2017        | 337              | ..               | ..            | ..            | ..             | -315           | ..                           |
|                           | 2018        | 385              | ..               | ..            | ..            | ..             | -365           | ..                           |
|                           | 2019        | 651              | ..               | ..            | ..            | ..             | -693           | ..                           |
| Bangladesh                | 2016        | 321              | 8                | ..            | ..            | 154            | ..             | 146                          |
|                           | 2017        | 409              | 6                | ..            | ..            | 138            | ..             | 256                          |
|                           | 2018        | 407              | 6                | ..            | ..            | 148            | ..             | 243                          |
|                           | 2019        | 392              | 7                | ..            | ..            | 178            | ..             | 189                          |
| Brunei Darussalam         | 2016        | 513              | 16               | ..            | ..            | ..             | -435           | 85                           |
|                           | 2017        | 544              | 17               | ..            | ..            | ..             | -464           | 81                           |
|                           | 2018        | 518              | 17               | ..            | ..            | ..             | -392           | 126                          |
|                           | 2019        | 524              | 18               | ..            | ..            | ..             | -406           | 100                          |
| India                     | 2016        | *4,295           | 358              | 2,339         | ..            | ..             | ..             | *1,598                       |
|                           | 2017        | *4,609           | 2,210            | 1,220         | ..            | ..             | ..             | *1,179                       |
|                           | 2018        | *4,932           | *2,086           | *1,250        | ..            | ..             | ..             | *1,596                       |
|                           | 2019        | *4,763           | *2,100           | *1,280        | ..            | ..             | ..             | *1,383                       |
| Indonesia                 | 2016        | 4,857            | 1,410            | ..            | ..            | ..             | 649            | ..                           |
|                           | 2017        | 4,285            | 1,162            | ..            | ..            | ..             | 423            | 185                          |
|                           | 2018        | 4,084            | 1,143            | ..            | ..            | ..             | 241            | 67                           |
|                           | 2019        | 3,945            | 1,140            | ..            | ..            | ..             | 1,583          | ..                           |
| Iran (Islamic Rep. of)    | 2016        | 26,429           | 2,749            | ..            | 8,658         | ..             | -16,438        | 2,243                        |
|                           | 2017        | 28,801           | 2,720            | ..            | 9,711         | ..             | -10,958        | 2,567                        |
|                           | 2018        | 30,432           | 2,656            | ..            | 10,479        | ..             | -11,578        | 2,633                        |
|                           | 2019        | 29,827           | 2,775            | ..            | 10,098        | ..             | -11,348        | 2,531                        |

## Production of natural gas liquids - by end use

Thousand metric tons

| Country or area      | Year | Total production | End-use products |          |         |                | Net imports | Inputs of NGLs to refineries |
|----------------------|------|------------------|------------------|----------|---------|----------------|-------------|------------------------------|
|                      |      |                  | LPG              | Naphthas | Ethane  | Other products |             |                              |
| Iraq                 | 2016 | 1,609            | 1,253            | ..       | ..      | ..             | 356         |                              |
|                      | 2017 | 1,861            | 1,449            | ..       | ..      | ..             | 412         |                              |
|                      | 2018 | 1,978            | 1,540            | ..       | ..      | ..             | 438         |                              |
|                      | 2019 | 2,018            | 1,571            | ..       | ..      | ..             | 446         |                              |
| Japan                | 2016 | 236              | ..               | ..       | ..      | 6,004          | 6,149       |                              |
|                      | 2017 | 240              | ..               | ..       | ..      | 2,049          | 2,054       |                              |
|                      | 2018 | 215              | ..               | ..       | ..      | 1,725          | 1,870       |                              |
|                      | 2019 | 198              | ..               | ..       | ..      | 2,232          | 2,390       |                              |
| Kazakhstan           | 2016 | 12,462           | *1,267           | ..       | ..      | -11,195        | ..          |                              |
|                      | 2017 | 13,270           | 1,238            | ..       | ..      | -12,032        | ..          |                              |
|                      | 2018 | 12,863           | 1,493            | ..       | ..      | -11,371        | ..          |                              |
|                      | 2019 | 11,912           | 1,552            | ..       | ..      | -10,360        | ..          |                              |
| Kuwait               | 2016 | 8,023            | 5,868            | ..       | 2,155   | ..             | ..          |                              |
|                      | 2017 | 8,843            | 6,688            | ..       | 2,155   | ..             | ..          |                              |
|                      | 2018 | 9,004            | 6,849            | ..       | 2,155   | ..             | ..          |                              |
|                      | 2019 | 8,026            | 5,871            | ..       | 2,155   | ..             | ..          |                              |
| Malaysia             | 2016 | 2,456            | 1,893            | ..       | ..      | ..             | ..          |                              |
|                      | 2017 | 2,338            | 1,838            | 243      | ..      | ..             | ..          |                              |
|                      | 2018 | 2,398            | 1,906            | 230      | ..      | ..             | ..          |                              |
|                      | 2019 | 1,789            | 1,837            | *191     | ..      | ..             | ..          |                              |
| Myanmar              | 2016 | 10               | 6                | 4        | ..      | ..             | ..          |                              |
|                      | 2017 | 12               | 8                | 4        | ..      | ..             | ..          |                              |
|                      | 2018 | 13               | 13               | 5        | ..      | ..             | ..          |                              |
|                      | 2019 | 13               | 7                | 4        | ..      | ..             | ..          |                              |
| Oman                 | 2016 | 254              | 254              | ..       | ..      | ..             | ..          |                              |
|                      | 2017 | 238              | 238              | ..       | ..      | ..             | ..          |                              |
|                      | 2018 | 239              | 239              | ..       | ..      | ..             | ..          |                              |
|                      | 2019 | 281              | 281              | ..       | ..      | ..             | ..          |                              |
| Pakistan             | 2016 | 489              | 489              | ..       | ..      | ..             | ..          |                              |
|                      | 2017 | 571              | *571             | ..       | ..      | ..             | ..          |                              |
|                      | 2018 | 564              | *564             | ..       | ..      | ..             | ..          |                              |
|                      | 2019 | 599              | *599             | ..       | ..      | ..             | ..          |                              |
| Qatar                | 2016 | 42,544           | 9,834            | ..       | 1,070   | -22,452        | 9,188       |                              |
|                      | 2017 | 41,876           | 9,687            | ..       | 960     | -18,840        | 12,390      |                              |
|                      | 2018 | 42,758           | 10,523           | ..       | 1,006   | -18,840        | 12,390      |                              |
|                      | 2019 | 40,268           | 8,031            | ..       | 1,007   | -18,840        | 12,390      |                              |
| Saudi Arabia         | 2016 | 47,837           | 27,829           | *865     | 12,408  | ..             | 9,473       |                              |
|                      | 2017 | 46,923           | 27,469           | *350     | 12,590  | 4,095          | 8,416       |                              |
|                      | 2018 | 47,596           | 25,264           | *961     | 13,356  | 4,341          | 8,494       |                              |
|                      | 2019 | 46,250           | *26,872          | *9,533   | *12,913 | *11,741        | *8,674      |                              |
| Syrian Arab Republic | 2016 | 76               | 76               | ..       | ..      | ..             | ..          |                              |
|                      | 2017 | 76               | 76               | ..       | ..      | ..             | ..          |                              |
|                      | 2018 | 76               | 76               | ..       | ..      | ..             | ..          |                              |
|                      | 2019 | 86               | 86               | ..       | ..      | ..             | ..          |                              |
| Thailand             | 2016 | 6,439            | 4,166            | ..       | 2,059   | -54            | ..          |                              |
|                      | 2017 | 6,804            | 4,235            | ..       | 2,333   | -33            | ..          |                              |
|                      | 2018 | 6,861            | 4,309            | ..       | 2,388   | -18            | ..          |                              |
|                      | 2019 | 6,673            | 4,238            | ..       | 2,220   | -33            | ..          |                              |
| Turkmenistan         | 2016 | 934              | 638              | ..       | ..      | ..             | 296         |                              |
|                      | 2017 | 943              | 655              | ..       | ..      | ..             | 288         |                              |
|                      | 2018 | 989              | 707              | ..       | ..      | ..             | 282         |                              |
|                      | 2019 | 1,015            | 736              | ..       | ..      | ..             | 279         |                              |

Table 26

## Production of natural gas liquids - by end use

Thousand metric tons

| Country or area      | Year        | Total production | End-use products |              |              |                | Net imports  | Inputs of NGLs to refineries |
|----------------------|-------------|------------------|------------------|--------------|--------------|----------------|--------------|------------------------------|
|                      |             |                  | LPG              | Naphthas     | Ethane       | Other products |              |                              |
| United Arab Emirates | 2016        | 36,712           | 11,090           | *4,230       | *1,397       | ..             | ..           | 17,169                       |
|                      | 2017        | 34,913           | 10,802           | *2,722       | 1,387        | ..             | -5,359       | 18,164                       |
|                      | 2018        | 35,981           | 9,886            | *2,769       | 1,298        | ..             | -13,540      | 17,861                       |
|                      | 2019        | 29,919           | 11,104           | 5,345        | *3,645       | ..             | -22,924      | 16,390                       |
| Uzbekistan           | 2016        | 1,747            | ..               | ..           | ..           | ..             | 91           | 1,839                        |
|                      | 2017        | 1,953            | ..               | ..           | ..           | ..             | 23           | 1,976                        |
|                      | 2018        | 2,145            | ..               | ..           | ..           | ..             | 0            | 2,145                        |
|                      | 2019        | 2,310            | ..               | ..           | ..           | ..             | 11           | 2,321                        |
| Viet Nam             | 2016        | 307              | 307              | ..           | ..           | ..             | ..           | ..                           |
|                      | 2017        | 317              | 317              | ..           | ..           | ..             | ..           | ..                           |
|                      | 2018        | 381              | 381              | ..           | ..           | ..             | ..           | ..                           |
|                      | 2019        | 391              | 391              | ..           | ..           | ..             | ..           | ..                           |
| Yemen                | 2016        | 41               | 41               | ..           | ..           | ..             | ..           | ..                           |
|                      | 2017        | 35               | 35               | ..           | ..           | ..             | ..           | ..                           |
|                      | 2018        | 12               | 12               | ..           | ..           | ..             | ..           | ..                           |
|                      | 2019        | 12               | 12               | ..           | ..           | ..             | ..           | ..                           |
| <b>Europe</b>        | <b>2016</b> | <b>40,901</b>    | <b>7,722</b>     | <b>1,161</b> | <b>2,790</b> | <b>352</b>     | <b>6,914</b> | <b>31,219</b>                |
|                      | <b>2017</b> | <b>47,308</b>    | <b>8,252</b>     | <b>1,091</b> | <b>2,689</b> | <b>533</b>     | <b>9,104</b> | <b>39,384</b>                |
|                      | <b>2018</b> | <b>46,943</b>    | <b>7,567</b>     | <b>939</b>   | <b>2,563</b> | <b>338</b>     | <b>7,024</b> | <b>38,220</b>                |
|                      | <b>2019</b> | <b>46,955</b>    | <b>7,230</b>     | <b>843</b>   | <b>1,835</b> | <b>190</b>     | <b>3,284</b> | <b>36,322</b>                |
| Austria              | 2016        | 6                | ..               | ..           | ..           | ..             | 0            | 6                            |
|                      | 2017        | 37               | ..               | ..           | ..           | ..             | ..           | 37                           |
|                      | 2018        | 18               | ..               | ..           | ..           | ..             | ..           | 18                           |
|                      | 2019        | 16               | ..               | ..           | ..           | ..             | ..           | 16                           |
| Belarus              | 2016        | 63               | 61               | ..           | ..           | 2              | ..           | ..                           |
|                      | 2017        | 74               | 71               | ..           | ..           | 3              | ..           | ..                           |
|                      | 2018        | 100              | 97               | ..           | ..           | 3              | ..           | ..                           |
|                      | 2019        | 102              | 98               | ..           | ..           | 4              | ..           | ..                           |
| Belgium              | 2016        | ..               | ..               | ..           | ..           | ..             | 58           | 46                           |
|                      | 2017        | ..               | ..               | ..           | ..           | ..             | 23           | 0                            |
|                      | 2018        | ..               | ..               | ..           | ..           | ..             | 21           | ..                           |
|                      | 2019        | ..               | ..               | ..           | ..           | ..             | ..           | ..                           |
| Croatia              | 2016        | 59               | 40               | ..           | ..           | ..             | ..           | 19                           |
|                      | 2017        | 64               | 42               | ..           | ..           | ..             | ..           | 22                           |
|                      | 2018        | 58               | 38               | ..           | ..           | ..             | ..           | 19                           |
|                      | 2019        | 59               | 40               | ..           | ..           | ..             | ..           | 13                           |
| Finland              | 2016        | ..               | ..               | ..           | ..           | ..             | 904          | 938                          |
|                      | 2017        | ..               | ..               | ..           | ..           | ..             | 1,367        | 1,272                        |
|                      | 2018        | ..               | ..               | ..           | ..           | ..             | 1,189        | 1,261                        |
|                      | 2019        | ..               | ..               | ..           | ..           | ..             | 549          | 673                          |
| France               | 2016        | 0                | ..               | ..           | ..           | 350            | 794          | 404                          |
|                      | 2017        | ..               | ..               | ..           | ..           | 530            | 626          | 136                          |
|                      | 2018        | ..               | ..               | ..           | ..           | 335            | 335          | ..                           |
|                      | 2019        | ..               | ..               | ..           | ..           | 186            | 186          | ..                           |
| Hungary              | 2016        | 260              | 121              | ..           | ..           | ..             | 0            | 117                          |
|                      | 2017        | 282              | 89               | ..           | ..           | ..             | -19          | 130                          |
|                      | 2018        | 242              | 75               | ..           | ..           | ..             | ..           | 159                          |
|                      | 2019        | 184              | 43               | ..           | ..           | ..             | ..           | 137                          |
| Montenegro           | 2016        | ..               | ..               | ..           | ..           | ..             | ..           | ..                           |
|                      | 2017        | ..               | ..               | ..           | ..           | ..             | ..           | ..                           |
|                      | 2018        | ..               | ..               | ..           | ..           | ..             | 4            | ..                           |
|                      | 2019        | ..               | ..               | ..           | ..           | ..             | 5            | ..                           |

## Production of natural gas liquids - by end use

Thousand metric tons

| Country or area    | Year        | Total production | End-use products |          |        |                | Net imports | Inputs of NGLs to refineries |
|--------------------|-------------|------------------|------------------|----------|--------|----------------|-------------|------------------------------|
|                    |             |                  | LPG              | Naphthas | Ethane | Other products |             |                              |
| Netherlands        | 2016        | 291              | ..               | ..       | ..     | ..             | 6,019       | 3,042                        |
|                    | 2017        | 240              | ..               | ..       | ..     | ..             | 6,919       | 4,141                        |
|                    | 2018        | 204              | ..               | ..       | ..     | ..             | 6,053       | 3,202                        |
|                    | 2019        | 132              | ..               | ..       | ..     | ..             | 4,678       | 2,284                        |
| Norway             | 2016        | 10,263           | 6,433            | 1,161    | 1,606  | ..             | ..          | ..                           |
|                    | 2017        | 10,504           | 6,902            | 1,091    | 1,457  | ..             | ..          | ..                           |
|                    | 2018        | 10,006           | 6,474            | 939      | 1,447  | ..             | ..          | ..                           |
|                    | 2019        | 9,061            | 6,074            | 843      | 1,098  | ..             | ..          | ..                           |
| Romania            | 2016        | 116              | ..               | ..       | ..     | ..             | -33         | 77                           |
|                    | 2017        | 96               | ..               | ..       | ..     | ..             | -24         | 66                           |
|                    | 2018        | 91               | ..               | ..       | ..     | ..             | -16         | 63                           |
|                    | 2019        | 129              | ..               | ..       | ..     | ..             | -30         | 78                           |
| Russian Federation | 2016        | 26,019           | ..               | ..       | ..     | ..             | -1,274      | 24,832                       |
|                    | 2017        | 31,862           | ..               | ..       | ..     | ..             | -1          | 31,874                       |
|                    | 2018        | 32,199           | ..               | ..       | ..     | ..             | -229        | 31,963                       |
|                    | 2019        | 33,431           | ..               | ..       | ..     | ..             | -1,838      | 31,589                       |
| Serbia             | 2016        | 33               | ..               | ..       | ..     | ..             | 60          | 93                           |
|                    | 2017        | 35               | ..               | ..       | ..     | ..             | 40          | 76                           |
|                    | 2018        | 34               | ..               | ..       | ..     | ..             | 2           | 36                           |
|                    | 2019        | 31               | ..               | ..       | ..     | ..             | 31          | 61                           |
| Slovakia           | 2016        | 2                | ..               | ..       | ..     | ..             | ..          | 2                            |
|                    | 2017        | 2                | ..               | ..       | ..     | ..             | ..          | 2                            |
|                    | 2018        | 2                | ..               | ..       | ..     | ..             | ..          | 2                            |
|                    | 2019        | 2                | ..               | ..       | ..     | ..             | ..          | 2                            |
| Slovenia           | 2016        | ..               | ..               | ..       | ..     | ..             | ..          | ..                           |
|                    | 2017        | 0                | ..               | ..       | ..     | ..             | 0           | ..                           |
|                    | 2018        | 1                | ..               | ..       | ..     | ..             | -1          | ..                           |
|                    | 2019        | 0                | ..               | ..       | ..     | ..             | 0           | ..                           |
| Ukraine            | 2016        | 650              | ..               | ..       | ..     | ..             | 14          | 665                          |
|                    | 2017        | 665              | ..               | ..       | ..     | ..             | 109         | 762                          |
|                    | 2018        | 669              | ..               | ..       | ..     | ..             | 44          | 704                          |
|                    | 2019        | 735              | ..               | ..       | ..     | ..             | 1           | 737                          |
| United Kingdom     | 2016        | 3,139            | 1,067            | ..       | 1,184  | ..             | 372         | 978                          |
|                    | 2017        | 3,446            | 1,148            | ..       | 1,232  | ..             | 65          | 867                          |
|                    | 2018        | 3,320            | 883              | ..       | 1,116  | ..             | -379        | 793                          |
|                    | 2019        | 3,074            | 975              | ..       | 736    | ..             | -297        | 733                          |
| <b>Oceania</b>     | <b>2016</b> | <b>1,821</b>     | <b>1,817</b>     | ..       | ..     | ..             | <b>-5</b>   | ..                           |
|                    | <b>2017</b> | <b>1,722</b>     | <b>1,717</b>     | ..       | ..     | ..             | <b>-2</b>   | ..                           |
|                    | <b>2018</b> | <b>1,656</b>     | <b>1,595</b>     | ..       | ..     | ..             | <b>-2</b>   | ..                           |
|                    | <b>2019</b> | <b>1,648</b>     | <b>1,588</b>     | ..       | ..     | ..             | ..          | ..                           |
| Australia          | 2016        | 1,644            | 1,644            | ..       | ..     | ..             | ..          | ..                           |
|                    | 2017        | 1,536            | 1,536            | ..       | ..     | ..             | ..          | ..                           |
|                    | 2018        | 1,472            | 1,411            | ..       | ..     | ..             | ..          | ..                           |
|                    | 2019        | 1,476            | 1,416            | ..       | ..     | ..             | ..          | ..                           |
| New Zealand        | 2016        | 177              | 173              | ..       | ..     | ..             | -5          | ..                           |
|                    | 2017        | 186              | 181              | ..       | ..     | ..             | -2          | ..                           |
|                    | 2018        | 184              | 184              | ..       | ..     | ..             | -2          | ..                           |
|                    | 2019        | 172              | 172              | ..       | ..     | ..             | ..          | ..                           |





### Production, trade and supply of natural gas

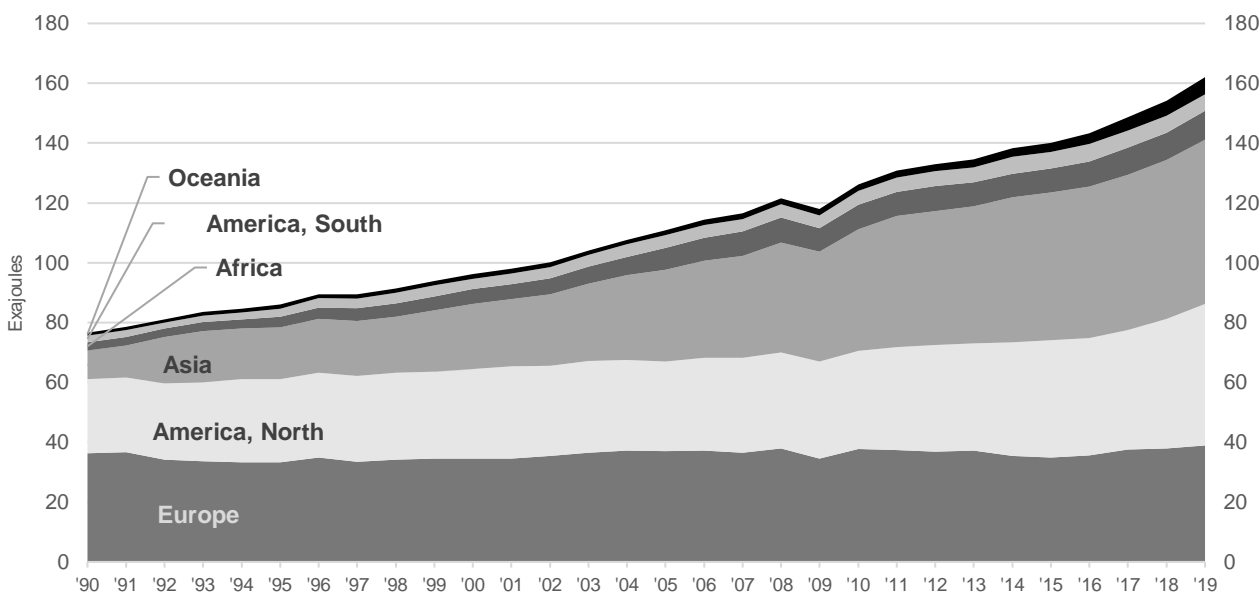
Terajoules

#### Table Notes

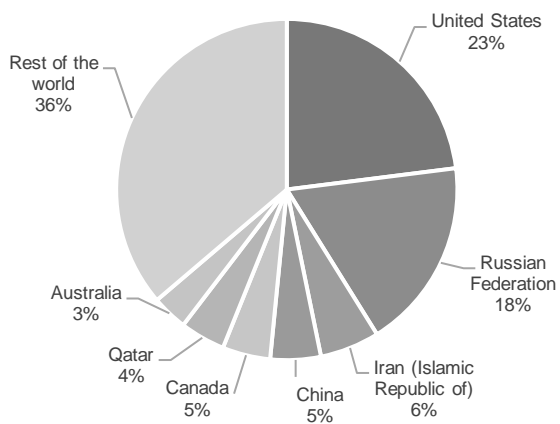
**Production** includes quantities from other sources, which would include any quantities of biogas, LPG or manufactured gas blended with natural gas.

Please refer to the Definitions Section on pages ix to xv for the appropriate product description /classification, and xvi to xvii for the descriptions of relevant flows.

**Figure 68: Production of natural gas by region, 1990-2019**



**Figure 69: Major natural gas producing countries, 2019**



**Figure 70: Major natural gas consuming countries, 2019**

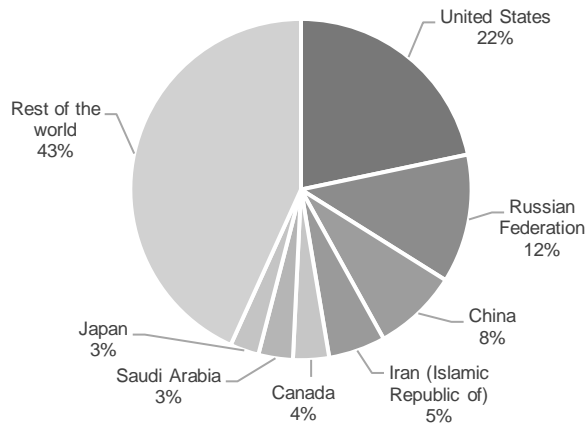


Table 27

## Production, trade and supply of natural gas

Terajoules and megajoules per capita

| Country or area        | Year | Production  | Imports    | Exports    | Bunkers | Changes in stocks | Supply      |            |
|------------------------|------|-------------|------------|------------|---------|-------------------|-------------|------------|
|                        |      |             |            |            |         |                   | Total       | Per capita |
| World                  | 2016 | 143,196,054 | 42,444,251 | 42,877,643 | 2,302   | -990,070          | 143,750,431 | 19,259     |
|                        | 2017 | 148,622,411 | 45,892,235 | 46,746,305 | 4,880   | 390,700           | 147,372,761 | 19,525     |
|                        | 2018 | 154,066,401 | 46,391,601 | 46,024,570 | 5,643   | -789,962          | 155,217,751 | 20,340     |
|                        | 2019 | 162,030,993 | 47,971,887 | 48,948,191 | 10,696  | 1,709,938         | 159,334,056 | 20,657     |
| Africa                 | 2016 | 8,442,037   | 680,453    | 3,638,868  | ..      | ..                | 5,483,622   | 4,525      |
|                        | 2017 | 9,119,012   | 636,010    | 3,971,997  | ..      | 2,888             | 5,780,137   | 4,650      |
|                        | 2018 | 9,114,044   | 595,423    | 3,863,894  | ..      | 2,068             | 5,843,505   | 4,584      |
|                        | 2019 | 9,621,511   | 377,463    | 3,729,506  | ..      | 1,366             | 6,268,103   | 4,796      |
| Algeria                | 2016 | 3,705,161   | ..         | 2,105,807  | ..      | ..                | 1,599,354   | 39,440     |
|                        | 2017 | 3,784,257   | ..         | 2,107,290  | ..      | 2,888             | 1,674,079   | 40,447     |
|                        | 2018 | 3,815,473   | ..         | 2,006,499  | ..      | 2,068             | 1,806,906   | 42,789     |
|                        | 2019 | 3,525,508   | ..         | 1,669,162  | ..      | 1,366             | 1,854,980   | 43,086     |
| Angola                 | 2016 | 64,980      | ..         | 34,580     | ..      | ..                | 30,400      | 1,054      |
|                        | 2017 | 220,400     | ..         | 188,480    | ..      | ..                | 31,920      | 1,071      |
|                        | 2018 | 235,220     | ..         | 202,540    | ..      | ..                | 32,680      | 1,061      |
|                        | 2019 | 258,400     | ..         | 209,000    | ..      | ..                | 49,400      | 1,552      |
| Benin                  | 2016 | ..          | 76         | ..         | ..      | ..                | 76          | 7          |
|                        | 2017 | ..          | 1,526      | ..         | ..      | ..                | 1,526       | 137        |
|                        | 2018 | ..          | 750        | ..         | ..      | ..                | 750         | 65         |
|                        | 2019 | ..          | 2,194      | ..         | ..      | ..                | 2,194       | 186        |
| Cameroon               | 2016 | 20,520      | ..         | ..         | ..      | ..                | 20,520      | 858        |
|                        | 2017 | 22,800      | ..         | ..         | ..      | ..                | 22,800      | 928        |
|                        | 2018 | 60,800      | ..         | 31,160     | ..      | ..                | 29,640      | 1,175      |
|                        | 2019 | 89,680      | ..         | 62,700     | ..      | ..                | 26,980      | 1,043      |
| Congo                  | 2016 | 22,868      | ..         | ..         | ..      | ..                | 22,868      | 4,591      |
|                        | 2017 | 24,045      | ..         | ..         | ..      | ..                | 24,045      | 4,705      |
|                        | 2018 | 27,316      | ..         | ..         | ..      | ..                | 27,316      | 5,209      |
|                        | 2019 | 38,328      | ..         | ..         | ..      | ..                | 38,328      | 7,124      |
| Côte d'Ivoire          | 2016 | 97,045      | ..         | ..         | ..      | ..                | 97,045      | 4,074      |
|                        | 2017 | 87,679      | ..         | ..         | ..      | ..                | 87,679      | 3,588      |
|                        | 2018 | 79,833      | ..         | ..         | ..      | ..                | 79,833      | 3,185      |
|                        | 2019 | 86,558      | ..         | ..         | ..      | ..                | 86,558      | 3,366      |
| Dem. Rep. of the Congo | 2016 | 14          | ..         | ..         | ..      | ..                | 14          | 0          |
|                        | 2017 | 12          | ..         | ..         | ..      | ..                | 12          | 0          |
|                        | 2018 | 12          | ..         | ..         | ..      | ..                | 12          | 0          |
|                        | 2019 | ..          | ..         | ..         | ..      | ..                | ..          | ..         |
| Egypt                  | 2016 | 1,616,921   | 363,005    | 52,356     | ..      | ..                | 1,927,570   | 20,409     |
|                        | 2017 | 1,994,593   | 299,840    | 90,707     | ..      | ..                | 2,203,726   | 22,850     |
|                        | 2018 | 1,909,150   | 218,726    | 40,195     | ..      | ..                | 2,087,681   | 21,211     |
|                        | 2019 | 2,643,004   | ..         | 193,035    | ..      | ..                | 2,449,969   | 24,405     |
| Equatorial Guinea      | 2016 | 307,313     | ..         | 196,433    | ..      | ..                | 110,880     | 91,246     |
|                        | 2017 | 321,430     | ..         | 196,432    | ..      | ..                | 124,998     | 99,047     |
|                        | 2018 | 302,441     | ..         | 214,952    | ..      | ..                | 87,489      | 66,838     |
|                        | 2019 | 243,285     | ..         | 182,582    | ..      | ..                | 60,704      | 44,767     |
| Gabon                  | 2016 | 20,773      | ..         | ..         | ..      | ..                | 20,773      | 10,346     |
|                        | 2017 | 18,360      | ..         | ..         | ..      | ..                | 18,360      | 8,892      |
|                        | 2018 | 17,872      | ..         | ..         | ..      | ..                | 17,872      | 8,433      |
|                        | 2019 | 18,685      | ..         | ..         | ..      | ..                | 18,685      | 8,600      |
| Ghana                  | 2016 | 24,765      | 4,223      | ..         | ..      | ..                | 28,988      | 1,018      |
|                        | 2017 | 35,607      | 12,358     | ..         | ..      | ..                | 47,965      | 1,647      |
|                        | 2018 | 41,224      | 27,470     | ..         | ..      | ..                | 68,693      | 2,308      |
|                        | 2019 | 58,367      | 25,073     | ..         | ..      | ..                | 83,440      | 2,743      |

Table 27

## Production, trade and supply of natural gas

Terajoules and megajoules per capita

| Country or area         | Year        | Production        | Imports          | Exports          | Bunkers      | Changes in stocks | Supply            |               |
|-------------------------|-------------|-------------------|------------------|------------------|--------------|-------------------|-------------------|---------------|
|                         |             |                   |                  |                  |              |                   | Total             | Per capita    |
| Guinea                  | 2016        | 3                 | ..               | ..               | ..           | ..                | 3                 | 0             |
|                         | 2017        | 3                 | ..               | ..               | ..           | ..                | 3                 | 0             |
|                         | 2018        | 4                 | ..               | ..               | ..           | ..                | 4                 | 0             |
|                         | 2019        | 4                 | ..               | ..               | ..           | ..                | 4                 | 0             |
| Libya                   | 2016        | 591,678           | ..               | 182,400          | ..           | ..                | 409,278           | 63,042        |
|                         | 2017        | 543,752           | ..               | 174,800          | ..           | ..                | 368,952           | 56,066        |
|                         | 2018        | 527,439           | ..               | 171,000          | ..           | ..                | 356,439           | 53,371        |
|                         | 2019        | 539,207           | ..               | 216,600          | ..           | ..                | 322,607           | 47,600        |
| Morocco                 | 2016        | 2,836             | 45,198           | ..               | ..           | ..                | 48,034            | 1,347         |
|                         | 2017        | 2,870             | 44,819           | ..               | ..           | ..                | 47,689            | 1,320         |
|                         | 2018        | 3,069             | 39,927           | ..               | ..           | ..                | 42,996            | 1,175         |
|                         | 2019        | 3,491             | 37,215           | ..               | ..           | ..                | 40,705            | 1,099         |
| Mozambique              | 2016        | 194,225           | ..               | 163,008          | ..           | ..                | 31,217            | 1,122         |
|                         | 2017        | 191,690           | ..               | 158,909          | ..           | ..                | 32,781            | 1,144         |
|                         | 2018        | 191,890           | ..               | 159,007          | ..           | ..                | 32,883            | 1,115         |
|                         | 2019        | 190,410           | ..               | 155,227          | ..           | ..                | 35,183            | 1,159         |
| Nigeria                 | 2016        | 1,603,600         | ..               | 903,640          | ..           | ..                | 699,960           | 3,764         |
|                         | 2017        | 1,713,800         | ..               | 1,054,880        | ..           | ..                | 658,920           | 3,452         |
|                         | 2018        | 1,736,600         | ..               | 1,038,540        | ..           | ..                | 698,060           | 3,564         |
|                         | 2019        | 1,754,840         | ..               | 1,041,200        | ..           | ..                | 713,640           | 3,551         |
| Rwanda                  | 2016        | *1,700            | ..               | ..               | ..           | ..                | *1,700            | *146          |
|                         | 2017        | *1,700            | ..               | ..               | ..           | ..                | *1,700            | *142          |
|                         | 2018        | *1,900            | ..               | ..               | ..           | ..                | *1,900            | *154          |
|                         | 2019        | *1,870            | ..               | ..               | ..           | ..                | *1,870            | *148          |
| Senegal                 | 2016        | 878               | ..               | ..               | ..           | ..                | 878               | 59            |
|                         | 2017        | 736               | ..               | ..               | ..           | ..                | 736               | 48            |
|                         | 2018        | 461               | ..               | ..               | ..           | ..                | 461               | 29            |
|                         | 2019        | 559               | ..               | ..               | ..           | ..                | 559               | 34            |
| South Africa            | 2016        | 28,338            | 131,146          | 644              | ..           | ..                | 158,840           | 2,826         |
|                         | 2017        | 25,571            | 124,124          | 499              | ..           | ..                | 149,196           | 2,617         |
|                         | 2018        | 39,122            | 146,278          | ..               | ..           | ..                | 185,400           | 3,208         |
|                         | 2019        | 44,827            | 140,242          | ..               | ..           | ..                | 185,069           | 3,160         |
| Togo                    | 2016        | ..                | *262             | ..               | ..           | ..                | *262              | *35           |
|                         | 2017        | ..                | 0                | ..               | ..           | ..                | 0                 | 0             |
|                         | 2018        | ..                | 1,767            | ..               | ..           | ..                | 1,767             | 224           |
|                         | 2019        | ..                | 3,876            | ..               | ..           | ..                | 3,876             | 480           |
| Tunisia                 | 2016        | 106,061           | 136,543          | ..               | ..           | ..                | 242,604           | 21,462        |
|                         | 2017        | 99,519            | 153,343          | ..               | ..           | ..                | 252,862           | 22,116        |
|                         | 2018        | 95,274            | 160,505          | ..               | ..           | ..                | 255,779           | 22,116        |
|                         | 2019        | 86,422            | 168,864          | ..               | ..           | ..                | 255,286           | 21,829        |
| United Rep. of Tanzania | 2016        | 32,357            | ..               | ..               | ..           | ..                | 32,357            | 610           |
|                         | 2017        | 30,188            | ..               | ..               | ..           | ..                | 30,188            | 552           |
|                         | 2018        | 28,943            | ..               | ..               | ..           | ..                | 28,943            | 514           |
|                         | 2019        | 38,065            | ..               | ..               | ..           | ..                | 38,065            | 656           |
| <b>America, North</b>   | <b>2016</b> | <b>39,178,173</b> | <b>5,874,970</b> | <b>6,335,804</b> | <b>2</b>     | <b>-490,113</b>   | <b>39,207,451</b> | <b>68,463</b> |
|                         | <b>2017</b> | <b>39,928,156</b> | <b>6,031,457</b> | <b>7,398,633</b> | <b>1,482</b> | <b>-392,361</b>   | <b>38,951,859</b> | <b>67,455</b> |
|                         | <b>2018</b> | <b>43,259,182</b> | <b>6,196,606</b> | <b>7,745,273</b> | <b>1,201</b> | <b>-341,873</b>   | <b>42,051,187</b> | <b>72,239</b> |
|                         | <b>2019</b> | <b>47,373,399</b> | <b>6,048,788</b> | <b>8,786,941</b> | <b>1,596</b> | <b>462,334</b>    | <b>44,171,316</b> | <b>75,288</b> |
| Barbados                | 2016        | 829               | ..               | ..               | ..           | ..                | 829               | 2,901         |
|                         | 2017        | 859               | ..               | ..               | ..           | ..                | 859               | 3,002         |
|                         | 2018        | 1,126             | ..               | ..               | ..           | ..                | 1,126             | 3,929         |
|                         | 2019        | 1,002             | ..               | ..               | ..           | ..                | 1,002             | 3,491         |

Table 27

## Production, trade and supply of natural gas

Terajoules and megajoules per capita

| Country or area       | Year        | Production       | Imports          | Exports        | Bunkers   | Changes in stocks | Supply           |               |
|-----------------------|-------------|------------------|------------------|----------------|-----------|-------------------|------------------|---------------|
|                       |             |                  |                  |                |           |                   | Total            | Per capita    |
| Belize                | 2016        | 81               | ..               | ..             | ..        | *-13              | 94               | 256           |
|                       | 2017        | 63               | ..               | ..             | ..        | *-20              | 82               | 219           |
|                       | 2018        | 51               | ..               | ..             | ..        | *-3               | 54               | 141           |
|                       | 2019        | 41               | ..               | ..             | ..        | 15                | 26               | 66            |
| Canada                | 2016        | 7,174,269        | 873,403          | 3,305,089      | ..        | -75,208           | 4,817,791        | 132,419       |
|                       | 2017        | 7,440,401        | 990,926          | 3,338,603      | ..        | -84,119           | 5,176,843        | 140,935       |
|                       | 2018        | 7,678,327        | 908,924          | 3,128,628      | ..        | 26,633            | 5,431,990        | 146,515       |
|                       | 2019        | 7,362,910        | 1,022,538        | 3,005,352      | ..        | -58,153           | 5,438,249        | 145,365       |
| Cuba                  | 2016        | 46,255           | ..               | ..             | ..        | ..                | 46,255           | 4,081         |
|                       | 2017        | 41,003           | ..               | ..             | ..        | ..                | 41,003           | 3,616         |
|                       | 2018        | 37,854           | ..               | ..             | ..        | ..                | 37,854           | 3,339         |
|                       | 2019        | 37,113           | ..               | ..             | ..        | ..                | 37,113           | 3,275         |
| Curaçao               | 2016        | ..               | *5,600           | ..             | ..        | ..                | *5,600           | *34,771       |
|                       | 2017        | ..               | *2,800           | ..             | ..        | ..                | *2,800           | *17,285       |
|                       | 2018        | ..               | *2,100           | ..             | ..        | ..                | *2,100           | *12,903       |
|                       | 2019        | ..               | 0                | ..             | ..        | ..                | 0                | 0             |
| Dominican Republic    | 2016        | ..               | 38,507           | ..             | 2         | -338              | 38,843           | 3,736         |
|                       | 2017        | ..               | 46,107           | ..             | 1,482     | 81                | 44,544           | 4,237         |
|                       | 2018        | ..               | 45,029           | ..             | 1,201     | -581              | 44,409           | 4,179         |
|                       | 2019        | ..               | 52,335           | ..             | 1,596     | 523               | 50,217           | 4,676         |
| Jamaica               | 2016        | ..               | 355              | ..             | ..        | ..                | 355              | 122           |
|                       | 2017        | ..               | 4,089            | ..             | ..        | ..                | 4,089            | 1,400         |
|                       | 2018        | ..               | 3,789            | ..             | ..        | ..                | 3,789            | 1,291         |
|                       | 2019        | ..               | 8,353            | ..             | ..        | -1,277            | 9,630            | 3,266         |
| Mexico                | 2016        | 1,426,626        | 1,653,977        | 1,017          | ..        | -10,064           | 3,089,650        | 25,051        |
|                       | 2017        | 1,237,433        | 1,661,018        | 662            | ..        | -15,877           | 2,913,666        | 23,351        |
|                       | 2018        | 1,314,583        | 2,054,753        | 484            | ..        | -13,452           | 3,382,304        | 26,803        |
|                       | 2019        | 1,285,121        | 1,908,243        | 436            | ..        | -10,100           | 3,203,028        | 25,107        |
| Panama                | 2016        | ..               | ..               | ..             | ..        | ..                | ..               | ..            |
|                       | 2017        | ..               | ..               | ..             | ..        | ..                | ..               | ..            |
|                       | 2018        | ..               | 10,180           | ..             | ..        | ..                | 10,180           | 2,437         |
|                       | 2019        | ..               | 31,663           | ..             | ..        | ..                | 31,663           | 7,456         |
| Puerto Rico           | 2016        | ..               | 67,732           | ..             | ..        | ..                | 67,732           | 20,630        |
|                       | 2017        | ..               | 51,276           | ..             | ..        | ..                | 51,276           | 16,208        |
|                       | 2018        | ..               | 66,555           | ..             | ..        | ..                | 66,555           | 21,896        |
|                       | 2019        | ..               | 75,889           | ..             | ..        | ..                | 75,889           | 25,871        |
| Trinidad and Tobago   | 2016        | 1,294,768        | ..               | 579,166        | ..        | ..                | 715,602          | 519,470       |
|                       | 2017        | 1,299,510        | ..               | 596,636        | ..        | ..                | 702,874          | 507,835       |
|                       | 2018        | 1,400,178        | ..               | 672,949        | ..        | ..                | 727,229          | 523,246       |
|                       | 2019        | 1,421,840        | ..               | 681,576        | ..        | ..                | 740,265          | 530,668       |
| United States         | 2016        | 29,235,344       | 3,235,397        | 2,450,532      | ..        | -404,490          | 30,424,699       | 94,189        |
|                       | 2017        | 29,908,887       | 3,275,241        | 3,462,732      | ..        | -292,426          | 30,013,822       | 92,326        |
|                       | 2018        | 32,827,062       | 3,105,277        | 3,943,212      | ..        | -354,470          | 32,343,597       | 98,881        |
|                       | 2019        | 37,265,372       | 2,949,767        | 5,099,577      | ..        | 531,326           | 34,584,236       | 105,099       |
| <b>America, South</b> | <b>2016</b> | <b>5,842,505</b> | <b>1,012,496</b> | <b>877,139</b> | <b>..</b> | <b>1,183</b>      | <b>5,976,680</b> | <b>14,371</b> |
|                       | <b>2017</b> | <b>5,778,718</b> | <b>982,547</b>   | <b>834,225</b> | <b>..</b> | <b>260</b>        | <b>5,926,779</b> | <b>14,124</b> |
|                       | <b>2018</b> | <b>5,582,526</b> | <b>898,611</b>   | <b>770,585</b> | <b>..</b> | <b>696</b>        | <b>5,709,856</b> | <b>13,489</b> |
|                       | <b>2019</b> | <b>5,449,627</b> | <b>797,838</b>   | <b>692,892</b> | <b>..</b> | <b>1,439</b>      | <b>5,553,134</b> | <b>13,008</b> |
| Argentina             | 2016        | 1,574,580        | 385,560          | 2,170          | ..        | 350               | 1,957,620        | 44,994        |
|                       | 2017        | 1,561,420        | 401,380          | 2,662          | ..        | -350              | 1,960,488        | 44,620        |
|                       | 2018        | 1,644,456        | 324,728          | 14,845         | ..        | 318               | 1,954,021        | 44,048        |
|                       | 2019        | 1,725,250        | 226,780          | 9,194          | ..        | -716              | 1,943,553        | 43,402        |

Table 27

## Production, trade and supply of natural gas

Terajoules and megajoules per capita

| Country or area           | Year        | Production        | Imports           | Exports           | Bunkers | Changes in stocks | Supply            |               |
|---------------------------|-------------|-------------------|-------------------|-------------------|---------|-------------------|-------------------|---------------|
|                           |             |                   |                   |                   |         |                   | Total             | Per capita    |
| Bolivia (Plur. State of)  | 2016        | 805,891           | ..                | 619,873           | ..      | ..                | 186,018           | 16,862        |
|                           | 2017        | 781,424           | ..                | 593,964           | ..      | ..                | 187,460           | 16,748        |
|                           | 2018        | 729,113           | ..                | 539,064           | ..      | ..                | 190,049           | 16,740        |
|                           | 2019        | 639,675           | ..                | 459,443           | ..      | ..                | 180,231           | 15,654        |
| Brazil                    | 2016        | 888,729           | 454,181           | ..                | ..      | ..                | 1,342,910         | 6,514         |
|                           | 2017        | 996,545           | 415,166           | ..                | ..      | ..                | 1,411,711         | 6,792         |
|                           | 2018        | 940,384           | 410,360           | ..                | ..      | ..                | 1,350,744         | 6,448         |
|                           | 2019        | 962,178           | 379,714           | ..                | ..      | ..                | 1,341,892         | 6,358         |
| Chile                     | 2016        | 47,202            | 170,076           | 14,084            | ..      | 833               | 202,361           | 11,113        |
|                           | 2017        | 47,932            | 163,040           | 8,236             | ..      | 610               | 202,125           | 10,943        |
|                           | 2018        | 48,866            | 160,701           | 6,270             | ..      | 377               | 202,920           | 10,834        |
|                           | 2019        | 59,692            | 187,447           | ..                | ..      | 2,155             | 244,984           | 12,927        |
| Colombia                  | 2016        | 912,786           | 504               | 0                 | ..      | ..                | 913,291           | 18,958        |
|                           | 2017        | 864,547           | 505               | ..                | ..      | ..                | 865,052           | 17,687        |
|                           | 2018        | 829,799           | 506               | ..                | ..      | ..                | 830,305           | 16,719        |
|                           | 2019        | 794,188           | 507               | ..                | ..      | ..                | 794,695           | 15,787        |
| Ecuador                   | 2016        | 33,658            | ..                | ..                | ..      | ..                | 33,658            | 2,041         |
|                           | 2017        | 31,263            | ..                | ..                | ..      | ..                | 31,263            | 1,862         |
|                           | 2018        | 27,626            | ..                | ..                | ..      | ..                | 27,626            | 1,617         |
|                           | 2019        | 24,668            | ..                | ..                | ..      | ..                | 24,668            | 1,420         |
| Falkland Is. (Malvinas)   | 2016        | ..                | 4                 | ..                | ..      | ..                | 4                 | 1,426         |
|                           | 2017        | ..                | 4                 | ..                | ..      | ..                | 4                 | 1,378         |
|                           | 2018        | ..                | 4                 | ..                | ..      | ..                | 4                 | 1,254         |
|                           | 2019        | ..                | 4                 | ..                | ..      | ..                | 4                 | 1,224         |
| Peru                      | 2016        | 588,387           | ..                | 241,012           | ..      | ..                | 347,375           | 11,232        |
|                           | 2017        | 523,266           | ..                | 229,363           | ..      | ..                | 293,903           | 9,347         |
|                           | 2018        | 514,329           | ..                | 210,406           | ..      | ..                | 303,923           | 9,501         |
|                           | 2019        | 542,941           | ..                | 224,255           | ..      | ..                | 318,686           | 9,803         |
| Suriname                  | 2016        | 136               | ..                | ..                | ..      | ..                | 136               | 241           |
|                           | 2017        | 136               | ..                | ..                | ..      | ..                | 136               | 239           |
|                           | 2018        | 195               | ..                | ..                | ..      | ..                | 195               | 339           |
|                           | 2019        | 232               | ..                | ..                | ..      | ..                | 232               | 400           |
| Uruguay                   | 2016        | ..                | 2,171             | ..                | ..      | ..                | 2,171             | 634           |
|                           | 2017        | ..                | 2,451             | ..                | ..      | ..                | 2,451             | 713           |
|                           | 2018        | ..                | 2,311             | ..                | ..      | ..                | 2,311             | 670           |
|                           | 2019        | ..                | 3,384             | ..                | ..      | ..                | 3,384             | 978           |
| Venezuela (Bolivar. Rep.) | 2016        | 991,136           | 0                 | ..                | ..      | ..                | 991,136           | 33,202        |
|                           | 2017        | 972,186           | 0                 | ..                | ..      | ..                | 972,186           | 33,065        |
|                           | 2018        | 847,757           | ..                | ..                | ..      | ..                | 847,757           | 29,347        |
|                           | 2019        | 700,803           | ..                | ..                | ..      | ..                | 700,803           | 24,576        |
| <b>Asia</b>               | <b>2016</b> | <b>50,640,681</b> | <b>16,291,224</b> | <b>13,149,618</b> | ..      | <b>-103,729</b>   | <b>53,886,017</b> | <b>12,037</b> |
|                           | <b>2017</b> | <b>51,740,760</b> | <b>17,936,711</b> | <b>13,545,261</b> | ..      | <b>107,786</b>    | <b>56,024,425</b> | <b>12,397</b> |
|                           | <b>2018</b> | <b>53,190,702</b> | <b>19,495,331</b> | <b>13,963,706</b> | ..      | <b>54,822</b>     | <b>58,667,505</b> | <b>12,864</b> |
|                           | <b>2019</b> | <b>54,890,440</b> | <b>20,087,778</b> | <b>14,090,378</b> | ..      | <b>-55,425</b>    | <b>60,943,264</b> | <b>13,245</b> |
| Afghanistan               | 2016        | 6,450             | ..                | ..                | ..      | ..                | 6,450             | 182           |
|                           | 2017        | 6,091             | ..                | ..                | ..      | ..                | 6,091             | 168           |
|                           | 2018        | 5,978             | ..                | ..                | ..      | ..                | 5,978             | 161           |
|                           | 2019        | 5,022             | ..                | ..                | ..      | ..                | 5,022             | 132           |
| Armenia                   | 2016        | ..                | 86,065            | ..                | ..      | -73               | 86,138            | 29,337        |
|                           | 2017        | ..                | 91,554            | ..                | ..      | 904               | 90,650            | 30,783        |
|                           | 2018        | ..                | 94,283            | ..                | ..      | -796              | 95,079            | 32,211        |
|                           | 2019        | ..                | 98,638            | ..                | ..      | -721              | 99,359            | 33,593        |

Table 27

## Production, trade and supply of natural gas

Terajoules and megajoules per capita

| Country or area        | Year | Production | Imports    | Exports | Bunkers | Changes in stocks | Supply     |            |
|------------------------|------|------------|------------|---------|---------|-------------------|------------|------------|
|                        |      |            |            |         |         |                   | Total      | Per capita |
| Azerbaijan             | 2016 | 731,110    | 11,656     | 314,398 | ..      | -8,859            | 437,226    | 44,908     |
|                        | 2017 | 710,345    | 82,413     | 345,951 | ..      | 22,143            | 424,664    | 43,134     |
|                        | 2018 | 750,229    | 70,238     | 387,155 | ..      | 680               | 432,633    | 43,483     |
|                        | 2019 | 957,529    | 0          | 462,197 | ..      | 4,949             | 490,383    | 48,805     |
| Bahrain                | 2016 | 552,332    | ..         | ..      | ..      | -3                | 552,335    | 387,388    |
|                        | 2017 | 568,359    | ..         | ..      | ..      | -636              | 568,995    | 380,834    |
|                        | 2018 | 577,458    | ..         | ..      | ..      | 1                 | 577,457    | 367,938    |
|                        | 2019 | 673,471    | ..         | ..      | ..      | ..                | 673,471    | 410,362    |
| Bangladesh             | 2016 | 1,075,390  | ..         | ..      | ..      | -13,176           | 1,088,566  | 6,891      |
|                        | 2017 | 1,070,946  | ..         | ..      | ..      | -19,967           | 1,090,912  | 6,832      |
|                        | 2018 | 1,070,345  | ..         | ..      | ..      | -14,689           | 1,085,034  | 6,724      |
|                        | 2019 | 1,058,953  | 127,731    | ..      | ..      | ..                | 1,186,684  | 7,278      |
| Brunei Darussalam      | 2016 | 422,384    | ..         | 315,089 | ..      | -1,260            | 108,555    | 258,593    |
|                        | 2017 | 462,777    | ..         | 327,214 | ..      | -3,125            | 138,688    | 326,724    |
|                        | 2018 | 452,350    | ..         | 307,980 | ..      | 1,567             | 142,803    | 332,905    |
|                        | 2019 | 426,639    | ..         | 304,995 | ..      | 247               | 121,396    | 280,169    |
| China                  | 2016 | 5,794,619  | 2,910,967  | 132,671 | ..      | ..                | 8,572,914  | 6,063      |
|                        | 2017 | 6,333,108  | 3,691,387  | 137,744 | ..      | ..                | 9,886,751  | 6,957      |
|                        | 2018 | 6,965,249  | 4,862,017  | 131,111 | ..      | ..                | 11,696,155 | 8,193      |
|                        | 2019 | 7,753,473  | 5,197,597  | 140,866 | ..      | ..                | 12,810,204 | 8,935      |
| China, Hong Kong SAR   | 2016 | ..         | 126,743    | ..      | ..      | ..                | 126,743    | 17,497     |
|                        | 2017 | ..         | 126,387    | ..      | ..      | ..                | 126,387    | 17,298     |
|                        | 2018 | ..         | 123,197    | ..      | ..      | ..                | 123,197    | 16,712     |
|                        | 2019 | ..         | 127,799    | ..      | ..      | ..                | 127,799    | 17,186     |
| China, Macao SAR       | 2016 | ..         | 370        | ..      | ..      | -1                | 371        | 605        |
|                        | 2017 | ..         | 6,847      | ..      | ..      | 2                 | 6,845      | 10,995     |
|                        | 2018 | ..         | 3,634      | ..      | ..      | ..                | 3,634      | 5,753      |
|                        | 2019 | ..         | 5,218      | ..      | ..      | ..                | 5,218      | 8,147      |
| Georgia                | 2016 | 254        | 90,502     | 0       | ..      | ..                | 90,756     | 22,602     |
|                        | 2017 | 333        | 95,263     | ..      | ..      | ..                | 95,596     | 23,847     |
|                        | 2018 | 403        | 94,744     | ..      | ..      | ..                | 95,147     | 23,769     |
|                        | 2019 | 385        | 107,419    | ..      | ..      | ..                | 107,804    | 26,973     |
| India                  | 2016 | 1,228,788  | 717,628    | ..      | ..      | ..                | 1,946,416  | 1,470      |
|                        | 2017 | 1,257,639  | 765,392    | ..      | ..      | ..                | 2,023,031  | 1,511      |
|                        | 2018 | 1,282,737  | 1,121,464  | ..      | ..      | ..                | 2,404,201  | 1,777      |
|                        | 2019 | *1,179,996 | *1,401,333 | ..      | ..      | ..                | *2,581,329 | *1,889     |
| Indonesia              | 2016 | 2,605,595  | ..         | 751,961 | ..      | ..                | 1,853,634  | 7,087      |
|                        | 2017 | 2,496,383  | ..         | 781,916 | ..      | ..                | 1,714,467  | 6,478      |
|                        | 2018 | 2,541,308  | ..         | 830,711 | ..      | ..                | 1,710,597  | 6,391      |
|                        | 2019 | 2,374,248  | ..         | 587,224 | ..      | ..                | 1,787,024  | 6,603      |
| Iran (Islamic Rep. of) | 2016 | 7,864,956  | 230,942    | 356,898 | ..      | ..                | 7,739,000  | 97,268     |
|                        | 2017 | 8,489,798  | 151,954    | 520,558 | ..      | ..                | 8,121,194  | 100,667    |
|                        | 2018 | 8,865,103  | 62,642     | 611,589 | ..      | ..                | 8,316,156  | 101,664    |
|                        | 2019 | 9,156,549  | 42,049     | 600,349 | ..      | ..                | 8,598,248  | 103,701    |
| Iraq                   | 2016 | 290,397    | ..         | ..      | ..      | ..                | 290,397    | 7,932      |
|                        | 2017 | 329,997    | 60,800     | ..      | ..      | ..                | 390,797    | 10,407     |
|                        | 2018 | 448,795    | 171,000    | ..      | ..      | ..                | 619,795    | 16,126     |
|                        | 2019 | 464,635    | 231,800    | ..      | ..      | ..                | 696,435    | 17,717     |
| Israel                 | 2016 | 307,025    | 11,885     | ..      | ..      | ..                | 318,910    | 39,328     |
|                        | 2017 | 324,522    | 17,167     | 2,410   | ..      | ..                | 339,279    | 41,155     |
|                        | 2018 | 335,461    | 27,969     | ..      | ..      | ..                | 363,431    | 43,361     |
|                        | 2019 | 336,263    | 28,994     | ..      | ..      | ..                | 365,257    | 42,874     |

Table 27

## Production, trade and supply of natural gas

Terajoules and megajoules per capita

| Country or area    | Year | Production | Imports   | Exports   | Bunkers | Changes in stocks | Supply    |            |
|--------------------|------|------------|-----------|-----------|---------|-------------------|-----------|------------|
|                    |      |            |           |           |         |                   | Total     | Per capita |
| Japan              | 2016 | 184,027    | 4,615,551 | ..        | ..      | -1,435            | 4,801,013 | 37,577     |
|                    | 2017 | 196,211    | 4,568,890 | ..        | ..      | -5,578            | 4,770,679 | 37,416     |
|                    | 2018 | 182,015    | 4,406,588 | ..        | ..      | -18,072           | 4,606,674 | 36,215     |
|                    | 2019 | 175,021    | 4,185,466 | ..        | ..      | -897              | 4,361,384 | 34,379     |
| Jordan             | 2016 | 3,610      | 167,080   | 28,789    | ..      | ..                | 141,900   | 14,852     |
|                    | 2017 | 3,847      | 202,013   | 42,584    | ..      | ..                | 163,276   | 16,685     |
|                    | 2018 | 3,624      | 167,881   | 11,588    | ..      | ..                | 159,917   | 16,047     |
|                    | 2019 | 3,464      | 167,883   | 11,589    | ..      | ..                | 159,759   | 15,815     |
| Kazakhstan         | 2016 | 1,630,883  | 267,676   | 577,495   | ..      | -15,419           | 1,336,483 | 74,953     |
|                    | 2017 | 1,847,913  | 244,878   | 693,785   | ..      | 11,338            | 1,387,668 | 76,751     |
|                    | 2018 | 1,567,135  | 387,839   | 1,071,740 | ..      | 17,083            | 866,151   | 47,280     |
|                    | 2019 | 1,339,839  | 647,078   | 1,050,070 | ..      | 755               | 936,092   | 50,459     |
| Korea, Republic of | 2016 | 6,441      | 1,842,548 | ..        | ..      | -72,900           | 1,921,889 | 37,696     |
|                    | 2017 | 14,203     | 2,029,463 | ..        | ..      | 33,352            | 2,010,314 | 39,344     |
|                    | 2018 | 12,147     | 2,309,420 | ..        | ..      | 110,789           | 2,210,777 | 43,203     |
|                    | 2019 | 9,990      | 2,241,985 | ..        | ..      | -21,454           | 2,273,429 | 44,381     |
| Kuwait             | 2016 | 657,058    | 188,480   | ..        | ..      | ..                | 845,538   | 213,689    |
|                    | 2017 | 649,866    | 210,140   | ..        | ..      | ..                | 860,006   | 212,028    |
|                    | 2018 | 674,036    | 189,240   | ..        | ..      | ..                | 863,276   | 208,656    |
|                    | 2019 | 742,900    | 197,600   | ..        | ..      | ..                | 940,500   | 223,552    |
| Kyrgyzstan         | 2016 | 1,043      | 10,087    | ..        | ..      | ..                | 11,130    | 1,832      |
|                    | 2017 | 939        | 10,866    | ..        | ..      | ..                | 11,805    | 1,907      |
|                    | 2018 | 985        | 12,016    | ..        | ..      | ..                | 13,001    | 2,062      |
|                    | 2019 | 880        | 11,714    | ..        | ..      | ..                | 12,594    | 1,963      |
| Malaysia           | 2016 | 2,393,324  | 286,035   | 1,184,751 | ..      | ..                | 1,494,608 | 48,709     |
|                    | 2017 | 2,430,873  | 292,784   | 1,292,015 | ..      | ..                | 1,431,642 | 46,027     |
|                    | 2018 | 2,565,169  | 291,035   | 1,143,335 | ..      | ..                | 1,712,869 | 54,328     |
|                    | 2019 | 2,826,167  | 345,084   | 1,335,928 | ..      | ..                | 1,835,323 | 57,444     |
| Myanmar            | 2016 | 744,589    | ..        | 580,338   | ..      | ..                | 164,251   | 3,096      |
|                    | 2017 | 710,324    | ..        | *538,261  | ..      | ..                | 172,063   | 3,223      |
|                    | 2018 | 645,644    | ..        | 480,667   | ..      | ..                | 164,977   | 3,072      |
|                    | 2019 | 738,693    | ..        | 576,441   | ..      | ..                | 162,252   | 3,002      |
| Oman               | 2016 | 1,343,097  | 81,558    | 443,688   | ..      | ..                | 980,967   | 219,004    |
|                    | 2017 | 1,348,927  | 81,558    | 464,955   | ..      | ..                | 965,530   | 206,932    |
|                    | 2018 | 1,523,605  | 66,240    | 547,104   | ..      | ..                | 1,042,741 | 215,912    |
|                    | 2019 | 1,541,267  | 82,800    | 560,031   | ..      | ..                | 1,064,036 | 213,877    |
| Other Asia         | 2016 | 11,964     | 826,652   | ..        | ..      | -2,505            | 841,121   | 35,613     |
|                    | 2017 | 9,888      | 919,914   | ..        | ..      | 4,956             | 924,846   | 39,065     |
|                    | 2018 | 7,353      | 939,132   | ..        | ..      | 12,831            | 933,654   | 39,351     |
|                    | 2019 | 6,223      | 924,169   | ..        | ..      | 10,701            | 919,692   | 38,685     |
| Pakistan           | 2016 | 1,274,671  | 153,081   | ..        | ..      | *-1,246           | 1,428,998 | 7,018      |
|                    | 2017 | 1,263,942  | 246,283   | ..        | ..      | ..                | 1,510,225 | 7,264      |
|                    | 2018 | 1,250,705  | 289,828   | ..        | ..      | ..                | 1,540,533 | 7,259      |
|                    | 2019 | 1,231,511  | 292,634   | ..        | ..      | ..                | 1,524,145 | 7,038      |
| Philippines        | 2016 | 155,132    | ..        | ..        | ..      | ..                | 155,132   | 1,496      |
|                    | 2017 | 153,033    | ..        | ..        | ..      | ..                | 153,033   | 1,455      |
|                    | 2018 | 170,850    | ..        | ..        | ..      | ..                | 170,850   | 1,602      |
|                    | 2019 | 172,032    | ..        | ..        | ..      | ..                | 172,032   | 1,591      |
| Qatar              | 2016 | 6,917,940  | ..        | 5,275,602 | ..      | ..                | 1,642,338 | 618,728    |
|                    | 2017 | 6,893,100  | ..        | 5,122,836 | ..      | ..                | 1,770,264 | 649,703    |
|                    | 2018 | 6,855,840  | ..        | 5,084,334 | ..      | ..                | 1,771,506 | 636,847    |
|                    | 2019 | 6,939,054  | ..        | 5,161,752 | ..      | ..                | 1,777,302 | 627,563    |

Table 27

## Production, trade and supply of natural gas

Terajoules and megajoules per capita

| Country or area      | Year        | Production        | Imports           | Exports           | Bunkers      | Changes in stocks | Supply            |               |
|----------------------|-------------|-------------------|-------------------|-------------------|--------------|-------------------|-------------------|---------------|
|                      |             |                   |                   |                   |              |                   | Total             | Per capita    |
| Saudi Arabia         | 2016        | 4,916,646         | ..                | ..                | ..           | ..                | 4,916,646         | 151,545       |
|                      | 2017        | 5,033,709         | ..                | ..                | ..           | ..                | 5,033,709         | 152,070       |
|                      | 2018        | 5,228,814         | ..                | ..                | ..           | ..                | 5,228,814         | 155,145       |
|                      | 2019        | 5,202,670         | ..                | ..                | ..           | ..                | 5,202,670         | 151,821       |
| Singapore            | 2016        | ..                | 405,303           | ..                | ..           | -2,160            | 407,464           | 72,071        |
|                      | 2017        | ..                | 413,313           | ..                | ..           | 3,598             | 409,714           | 71,778        |
|                      | 2018        | ..                | 416,980           | ..                | ..           | -1,438            | 418,418           | 72,674        |
|                      | 2019        | ..                | 424,860           | ..                | ..           | 218               | 424,642           | 73,159        |
| Syrian Arab Republic | 2016        | 141,375           | ..                | ..                | ..           | ..                | 141,375           | 8,094         |
|                      | 2017        | 139,490           | ..                | ..                | ..           | ..                | 139,490           | 8,159         |
|                      | 2018        | 138,736           | ..                | ..                | ..           | ..                | 138,736           | 8,187         |
|                      | 2019        | 133,081           | ..                | ..                | ..           | ..                | 133,081           | 7,796         |
| Tajikistan           | 2016        | 118               | ..                | ..                | ..           | ..                | 118               | 14            |
|                      | 2017        | 81                | ..                | ..                | ..           | ..                | 81                | 9             |
|                      | 2018        | 24                | 2,184             | ..                | ..           | ..                | 2,208             | 243           |
|                      | 2019        | 28                | 5,600             | ..                | ..           | ..                | 5,628             | 604           |
| Thailand             | 2016        | 1,176,806         | 541,690           | ..                | ..           | ..                | 1,718,496         | 24,916        |
|                      | 2017        | 1,098,964         | 576,394           | ..                | ..           | ..                | 1,675,358         | 24,207        |
|                      | 2018        | 1,063,777         | 588,243           | ..                | ..           | ..                | 1,652,020         | 23,795        |
|                      | 2019        | 1,122,001         | 582,542           | ..                | ..           | ..                | 1,704,544         | 24,482        |
| Timor-Leste          | 2016        | 227,868           | ..                | 227,868           | ..           | ..                | 0                 | 0             |
|                      | 2017        | 205,686           | ..                | 205,686           | ..           | ..                | 0                 | 0             |
|                      | 2018        | 209,443           | ..                | 209,443           | ..           | ..                | 0                 | 0             |
|                      | 2019        | 183,311           | ..                | 183,311           | ..           | ..                | 0                 | 0             |
| Turkey               | 2016        | 14,068            | 1,775,476         | 25,923            | ..           | -16,318           | 1,779,939         | 22,297        |
|                      | 2017        | 13,564            | 2,116,077         | 24,158            | ..           | 47,789            | 2,057,694         | 25,367        |
|                      | 2018        | 16,343            | 1,925,967         | 25,789            | ..           | 8,384             | 1,908,137         | 23,174        |
|                      | 2019        | 18,129            | 1,731,656         | 29,216            | ..           | -2,750            | 1,723,319         | 20,656        |
| Turkmenistan         | 2016        | 3,022,406         | ..                | 2,029,190         | ..           | ..                | 993,216           | 175,406       |
|                      | 2017        | 3,050,065         | ..                | 2,056,859         | ..           | ..                | 993,205           | 172,501       |
|                      | 2018        | 3,199,347         | ..                | 2,206,142         | ..           | ..                | 993,205           | 169,752       |
|                      | 2019        | 3,284,976         | ..                | 2,258,531         | ..           | ..                | 1,026,445         | 172,741       |
| United Arab Emirates | 2016        | 2,383,547         | 874,070           | 515,077           | ..           | ..                | 2,742,540         | 292,976       |
|                      | 2017        | 2,110,436         | 873,619           | 545,500           | ..           | ..                | 2,438,555         | 257,036       |
|                      | 2018        | 1,871,750         | 871,551           | 353,193           | ..           | ..                | 2,390,108         | 248,169       |
|                      | 2019        | 2,149,940         | 878,129           | 365,783           | ..           | ..                | 2,662,286         | 272,481       |
| Uzbekistan           | 2016        | 2,120,712         | 69,180            | 389,879           | ..           | 31,626            | 1,768,387         | 56,243        |
|                      | 2017        | 2,139,984         | 61,356            | 442,828           | ..           | 13,008            | 1,745,504         | 54,616        |
|                      | 2018        | 2,326,745         | 0                 | 561,825           | ..           | -61,518           | 1,826,438         | 56,239        |
|                      | 2019        | 2,293,741         | ..                | 462,095           | ..           | -46,473           | 1,878,120         | 56,944        |
| Viet Nam             | 2016        | 414,013           | ..                | ..                | ..           | ..                | 414,013           | 4,421         |
|                      | 2017        | 363,390           | ..                | ..                | ..           | ..                | 363,390           | 3,841         |
|                      | 2018        | 377,189           | ..                | ..                | ..           | ..                | 377,189           | 3,948         |
|                      | 2019        | 384,348           | ..                | ..                | ..           | ..                | 384,348           | 3,984         |
| Yemen                | 2016        | 20,045            | ..                | ..                | ..           | ..                | 20,045            | 738           |
|                      | 2017        | 12,027            | ..                | ..                | ..           | ..                | 12,027            | 432           |
|                      | 2018        | 4,009             | ..                | ..                | ..           | ..                | 4,009             | 141           |
|                      | 2019        | 4,009             | ..                | ..                | ..           | ..                | 4,009             | 137           |
| <b>Europe</b>        | <b>2016</b> | <b>35,559,832</b> | <b>18,358,665</b> | <b>16,755,004</b> | <b>2,300</b> | <b>-398,377</b>   | <b>37,559,570</b> | <b>50,319</b> |
|                      | <b>2017</b> | <b>37,628,534</b> | <b>20,098,992</b> | <b>18,031,095</b> | <b>3,398</b> | <b>675,249</b>    | <b>39,017,783</b> | <b>52,191</b> |
|                      | <b>2018</b> | <b>37,928,264</b> | <b>19,019,115</b> | <b>16,205,207</b> | <b>4,442</b> | <b>-498,844</b>   | <b>41,236,574</b> | <b>55,084</b> |
|                      | <b>2019</b> | <b>38,906,391</b> | <b>20,458,047</b> | <b>17,453,715</b> | <b>9,100</b> | <b>1,300,893</b>  | <b>40,600,730</b> | <b>54,177</b> |



Table 27

## Production, trade and supply of natural gas

Terajoules and megajoules per capita

| Country or area        | Year | Production | Imports   | Exports   | Bunkers | Changes in stocks | Supply    |            |
|------------------------|------|------------|-----------|-----------|---------|-------------------|-----------|------------|
|                        |      |            |           |           |         |                   | Total     | Per capita |
| Albania                | 2016 | 3,308      | ..        | ..        | ..      | ..                | 3,308     | 1,146      |
|                        | 2017 | 3,422      | ..        | ..        | ..      | ..                | 3,422     | 1,187      |
|                        | 2018 | 3,076      | ..        | ..        | ..      | ..                | 3,076     | 1,067      |
|                        | 2019 | 2,682      | ..        | ..        | ..      | ..                | 2,682     | 931        |
| Austria                | 2016 | 45,333     | 557,058   | 267,651   | ..      | -2,193            | 336,933   | 38,518     |
|                        | 2017 | 48,516     | 536,865   | 210,482   | ..      | 13,139            | 361,760   | 41,016     |
|                        | 2018 | 39,964     | 503,400   | 201,444   | ..      | -587              | 342,507   | 38,521     |
|                        | 2019 | 35,819     | 547,204   | 108,491   | ..      | 117,417           | 357,115   | 39,878     |
| Belarus                | 2016 | 6,488      | 719,914   | ..        | ..      | -5,677            | 732,079   | 77,504     |
|                        | 2017 | 5,793      | 734,359   | ..        | ..      | -8,999            | 749,151   | 79,273     |
|                        | 2018 | 5,948      | 785,185   | ..        | ..      | -3,553            | 794,686   | 84,070     |
|                        | 2019 | 5,952      | 753,709   | ..        | ..      | 221               | 759,440   | 80,344     |
| Belgium                | 2016 | ..         | 692,529   | 26,955    | 46      | 3,700             | 661,828   | 58,288     |
|                        | 2017 | ..         | 678,562   | 12,355    | 327     | -10,758           | 676,638   | 59,252     |
|                        | 2018 | 2          | 755,632   | 52,994    | 430     | 3,850             | 698,359   | 60,821     |
|                        | 2019 | 149        | 894,306   | 174,004   | 459     | 12,850            | 707,142   | 61,281     |
| Bosnia and Herzegovina | 2016 | ..         | 8,592     | ..        | ..      | ..                | 8,592     | 2,537      |
|                        | 2017 | ..         | 9,292     | ..        | ..      | ..                | 9,292     | 2,772      |
|                        | 2018 | ..         | 9,261     | ..        | ..      | 1                 | 9,260     | 2,786      |
|                        | 2019 | ..         | 8,745     | ..        | ..      | ..                | 8,745     | 2,649      |
| Bulgaria               | 2016 | 3,566      | 120,650   | 107       | ..      | -868              | 124,977   | 17,475     |
|                        | 2017 | 3,082      | 126,673   | 1,246     | ..      | 9                 | 128,500   | 18,092     |
|                        | 2018 | 1,328      | 120,455   | 482       | ..      | -217              | 121,517   | 17,233     |
|                        | 2019 | 1,506      | 114,341   | 296       | ..      | 1,958             | 113,593   | 16,227     |
| Croatia                | 2016 | 63,692     | 48,902    | 15,057    | ..      | -3,437            | 100,974   | 23,992     |
|                        | 2017 | 57,197     | 70,106    | 7,700     | ..      | 3,617             | 115,987   | 27,729     |
|                        | 2018 | 47,345     | 61,167    | 4,361     | ..      | -2,483            | 106,633   | 25,655     |
|                        | 2019 | 39,601     | 77,109    | 2,783     | ..      | 2,001             | 111,926   | 27,099     |
| Czechia                | 2016 | 8,384      | 312,387   | ..        | ..      | -5,628            | 326,399   | 30,738     |
|                        | 2017 | 8,768      | 341,211   | ..        | ..      | 14,989            | 334,990   | 31,481     |
|                        | 2018 | 8,355      | 307,194   | ..        | ..      | -1,676            | 317,225   | 29,743     |
|                        | 2019 | 8,026      | 365,476   | ..        | ..      | 40,504            | 332,999   | 31,153     |
| Denmark                | 2016 | 192,046    | 30,045    | 88,240    | ..      | -5,071            | 138,922   | 24,324     |
|                        | 2017 | 208,080    | 23,188    | 93,373    | ..      | 2,809             | 135,086   | 23,566     |
|                        | 2018 | 180,146    | 17,718    | 64,077    | ..      | -7                | 133,795   | 23,260     |
|                        | 2019 | 139,274    | 48,007    | 54,936    | ..      | 2,510             | 129,835   | 22,494     |
| Estonia                | 2016 | ..         | 19,923    | ..        | ..      | ..                | 19,923    | 15,133     |
|                        | 2017 | ..         | 18,885    | ..        | ..      | ..                | 18,885    | 14,313     |
|                        | 2018 | ..         | 19,241    | ..        | ..      | ..                | 19,241    | 14,544     |
|                        | 2019 | ..         | 18,642    | ..        | 947     | ..                | 17,695    | 13,348     |
| Finland                | 2016 | 327        | 95,787    | 15        | 10      | ..                | 96,089    | 17,478     |
|                        | 2017 | 400        | 89,099    | ..        | 219     | -1,000            | 90,280    | 16,381     |
|                        | 2018 | 407        | 101,361   | ..        | 58      | 256               | 101,454   | 18,371     |
|                        | 2019 | 382        | 99,553    | ..        | 20      | 559               | 99,356    | 17,960     |
| France                 | 2016 | 1,611      | 1,918,226 | 155,205   | ..      | -17,340           | 1,781,972 | 26,650     |
|                        | 2017 | 2,120      | 2,007,600 | 252,252   | ..      | -34,622           | 1,792,090 | 26,723     |
|                        | 2018 | 2,930      | 2,041,798 | 247,462   | ..      | 81,161            | 1,716,105 | 25,526     |
|                        | 2019 | 5,114      | 2,275,007 | 450,534   | ..      | 78,659            | 1,750,929 | 25,982     |
| Germany                | 2016 | 304,749    | 3,796,620 | 899,143   | ..      | -69,540           | 3,271,766 | 39,806     |
|                        | 2017 | 280,465    | 4,453,882 | 1,251,405 | ..      | -21,906           | 3,504,848 | 42,402     |
|                        | 2018 | 219,329    | 3,281,120 | ..        | ..      | 78,810            | 3,421,640 | 41,163     |
|                        | 2019 | 203,460    | 3,520,265 | ..        | ..      | 205,863           | 3,517,861 | 42,121     |

Table 27

## Production, trade and supply of natural gas

Terajoules and megajoules per capita

| Country or area | Year | Production | Imports   | Exports   | Bunkers | Changes in stocks | Supply    |            |
|-----------------|------|------------|-----------|-----------|---------|-------------------|-----------|------------|
|                 |      |            |           |           |         |                   | Total     | Per capita |
| Gibraltar       | 2016 | ..         | ..        | ..        | ..      | ..                | ..        | ..         |
|                 | 2017 | ..         | ..        | ..        | ..      | ..                | ..        | ..         |
|                 | 2018 | ..         | ..        | ..        | ..      | ..                | ..        | ..         |
|                 | 2019 | ..         | 2,691     | ..        | ..      | 1,959             | 732       | 21,728     |
| Greece          | 2016 | 446        | 161,072   | ..        | ..      | -824              | 162,342   | 15,293     |
|                 | 2017 | 422        | 196,550   | ..        | ..      | 1,417             | 195,555   | 18,502     |
|                 | 2018 | 589        | 192,807   | ..        | ..      | 1,863             | 191,534   | 18,203     |
|                 | 2019 | 445        | 207,358   | 634       | ..      | -1,672            | 208,840   | 19,940     |
| Hungary         | 2016 | 66,468     | 336,120   | 41,533    | ..      | -12,394           | 373,449   | 38,291     |
|                 | 2017 | 65,834     | 519,322   | 136,859   | ..      | 50,724            | 397,573   | 40,861     |
|                 | 2018 | 68,457     | 494,127   | 194,125   | ..      | -16,643           | 385,102   | 39,671     |
|                 | 2019 | 62,010     | 724,785   | 271,148   | ..      | 121,663           | 393,984   | 40,681     |
| Ireland         | 2016 | 115,739    | 79,082    | ..        | ..      | -2,734            | 197,555   | 42,071     |
|                 | 2017 | 132,498    | 65,565    | ..        | ..      | -2,557            | 200,621   | 42,207     |
|                 | 2018 | 127,802    | 80,961    | ..        | ..      | ..                | 208,763   | 43,324     |
|                 | 2019 | 99,654     | 112,418   | ..        | ..      | ..                | 212,072   | 43,435     |
| Isle of Man     | 2016 | ..         | 4,768     | ..        | ..      | ..                | 4,768     | 57,242     |
|                 | 2017 | ..         | 4,748     | ..        | ..      | ..                | 4,748     | 56,787     |
|                 | 2018 | ..         | 4,642     | ..        | ..      | ..                | 4,642     | 55,214     |
|                 | 2019 | ..         | 5,454     | ..        | ..      | ..                | 5,454     | 64,476     |
| Italy           | 2016 | 220,409    | 2,487,320 | 8,077     | ..      | -2,210            | 2,701,862 | 44,514     |
|                 | 2017 | 211,346    | 2,653,666 | 10,385    | ..      | -8,968            | 2,863,596 | 47,170     |
|                 | 2018 | 208,644    | 2,585,940 | 14,878    | ..      | 10,067            | 2,769,640 | 45,658     |
|                 | 2019 | 184,780    | 2,707,586 | 12,399    | ..      | 42,713            | 2,837,254 | 46,832     |
| Latvia          | 2016 | ..         | 42,930    | ..        | ..      | -8,860            | 51,790    | 26,233     |
|                 | 2017 | ..         | 47,111    | ..        | ..      | 919               | 46,192    | 23,675     |
|                 | 2018 | ..         | 53,750    | ..        | ..      | -634              | 54,384    | 28,201     |
|                 | 2019 | ..         | 51,343    | ..        | ..      | 17                | 51,327    | 26,919     |
| Liechtenstein   | 2016 | ..         | 1,012     | ..        | ..      | ..                | 1,012     | 26,865     |
|                 | 2017 | ..         | 1,061     | ..        | ..      | ..                | 1,061     | 28,073     |
|                 | 2018 | ..         | 986       | ..        | ..      | ..                | 986       | 25,990     |
|                 | 2019 | ..         | 998       | ..        | ..      | ..                | 998       | 26,255     |
| Lithuania       | 2016 | ..         | 87,896    | 1,707     | ..      | 518               | 85,671    | 29,649     |
|                 | 2017 | ..         | 96,757    | 7,980     | ..      | -608              | 89,385    | 31,414     |
|                 | 2018 | ..         | 88,715    | 7,001     | ..      | -892              | 82,606    | 29,489     |
|                 | 2019 | ..         | 106,877   | 20,175    | ..      | -30               | 86,732    | 31,429     |
| Luxembourg      | 2016 | 218        | 32,988    | ..        | ..      | ..                | 33,206    | 57,324     |
|                 | 2017 | 248        | 32,245    | ..        | ..      | ..                | 32,492    | 54,894     |
|                 | 2018 | 231        | 31,803    | ..        | ..      | ..                | 32,034    | 53,014     |
|                 | 2019 | 144        | 31,822    | ..        | ..      | ..                | 31,966    | 51,916     |
| Malta           | 2016 | ..         | ..        | ..        | ..      | ..                | ..        | ..         |
|                 | 2017 | ..         | 11,829    | ..        | ..      | 584               | 11,245    | 25,677     |
|                 | 2018 | ..         | 14,919    | ..        | ..      | 1,292             | 13,627    | 31,023     |
|                 | 2019 | ..         | 14,761    | ..        | ..      | 516               | 14,245    | 32,346     |
| Netherlands     | 2016 | 1,776,159  | 1,538,076 | 1,996,314 | 49      | -83,729           | 1,401,601 | 82,538     |
|                 | 2017 | 1,522,317  | 1,808,156 | 1,871,169 | 175     | 10,288            | 1,448,840 | 85,119     |
|                 | 2018 | 1,298,310  | 2,030,149 | 1,816,180 | 549     | 76,761            | 1,434,969 | 84,115     |
|                 | 2019 | 1,120,426  | 1,976,604 | 1,589,052 | 2,766   | 7,865             | 1,497,346 | 87,579     |
| North Macedonia | 2016 | ..         | 7,371     | ..        | ..      | -1                | 7,372     | 3,543      |
|                 | 2017 | ..         | 9,487     | ..        | ..      | 7                 | 9,480     | 4,553      |
|                 | 2018 | ..         | 8,749     | ..        | ..      | 5                 | 8,744     | 4,198      |
|                 | 2019 | ..         | 10,218    | ..        | ..      | -3                | 10,222    | 4,906      |

Table 27

## Production, trade and supply of natural gas

Terajoules and megajoules per capita

| Country or area     | Year | Production | Imports   | Exports   | Bunkers | Changes in stocks | Supply     |            |
|---------------------|------|------------|-----------|-----------|---------|-------------------|------------|------------|
|                     |      |            |           |           |         |                   | Total      | Per capita |
| Norway              | 2016 | 4,760,715  | 0         | 4,501,580 | 2,195   | -902              | 257,842    | 49,104     |
|                     | 2017 | 5,057,651  | 0         | 4,837,764 | 1,756   | 4,279             | 213,852    | 40,377     |
|                     | 2018 | 4,966,982  | 361       | 4,710,681 | 2,326   | -1,990            | 256,327    | 48,020     |
|                     | 2019 | 4,692,286  | 778       | 4,446,185 | 2,446   | -2,540            | 246,972    | 45,915     |
| Poland              | 2016 | 165,272    | 566,852   | 33,294    | ..      | 18,084            | 680,746    | 17,919     |
|                     | 2017 | 163,373    | 606,014   | 47,232    | ..      | 3,664             | 718,491    | 18,931     |
|                     | 2018 | 161,378    | 608,367   | 26,278    | ..      | -6,627            | 750,093    | 19,780     |
|                     | 2019 | 159,408    | 681,197   | 26,958    | ..      | 26,313            | 787,334    | 20,781     |
| Portugal            | 2016 | ..         | 198,228   | ..        | ..      | -2,873            | 201,101    | 19,476     |
|                     | 2017 | ..         | 252,977   | ..        | ..      | 1,053             | 251,925    | 24,486     |
|                     | 2018 | ..         | 236,115   | ..        | ..      | 2,469             | 233,646    | 22,781     |
|                     | 2019 | ..         | 245,615   | ..        | ..      | -171              | 245,786    | 24,035     |
| Republic of Moldova | 2016 | 4          | 35,159    | ..        | ..      | 58                | 35,105     | 8,634      |
|                     | 2017 | 4          | 35,006    | ..        | ..      | -52               | 35,062     | 8,637      |
|                     | 2018 | 4          | 38,250    | ..        | ..      | 97                | 38,157     | 9,417      |
|                     | 2019 | 3          | 35,201    | ..        | ..      | -52               | 35,256     | 8,720      |
| Romania             | 2016 | 362,111    | 54,722    | 44        | ..      | -2,995            | 419,784    | 21,205     |
|                     | 2017 | 396,451    | 44,318    | 965       | ..      | -7,291            | 447,095    | 22,748     |
|                     | 2018 | 394,323    | 56,210    | 1,143     | ..      | -8,504            | 457,894    | 23,474     |
|                     | 2019 | 381,054    | 99,373    | 487       | ..      | 54,604            | 425,336    | 21,965     |
| Russian Federation  | 2016 | 25,046,466 | 341,547   | 8,146,589 | ..      | -32,037           | 17,273,461 | 118,902    |
|                     | 2017 | 27,025,965 | 335,736   | 8,725,080 | ..      | 571,303           | 18,065,317 | 124,135    |
|                     | 2018 | 27,755,267 | 358,750   | 8,433,194 | ..      | -706,326          | 20,387,149 | 139,893    |
|                     | 2019 | 29,376,729 | 348,390   | 9,934,021 | ..      | 344,146           | 19,446,951 | 133,315    |
| Serbia              | 2016 | 19,381     | 66,499    | ..        | ..      | -2,106            | 87,986     | 12,434     |
|                     | 2017 | 18,117     | 80,849    | ..        | ..      | 474               | 98,491     | 13,993     |
|                     | 2018 | 16,653     | 81,431    | ..        | ..      | -1,091            | 99,175     | 14,156     |
|                     | 2019 | 16,247     | 83,812    | ..        | ..      | 7,333             | 92,726     | 13,288     |
| Slovakia            | 2016 | 3,562      | 168,251   | ..        | ..      | -9,398            | 181,211    | 33,299     |
|                     | 2017 | 5,433      | 203,191   | ..        | ..      | 16,185            | 192,439    | 35,323     |
|                     | 2018 | 3,609      | 169,857   | ..        | ..      | -16,199           | 189,665    | 34,782     |
|                     | 2019 | 4,795      | 259,722   | ..        | ..      | 74,428            | 190,089    | 34,834     |
| Slovenia            | 2016 | 199        | 32,600    | ..        | ..      | ..                | 32,799     | 15,813     |
|                     | 2017 | 334        | 34,170    | 143       | ..      | ..                | 34,361     | 16,549     |
|                     | 2018 | 634        | 33,515    | 436       | ..      | ..                | 33,714     | 16,225     |
|                     | 2019 | 190        | 34,027    | 66        | ..      | ..                | 34,150     | 16,429     |
| Spain               | 2016 | 2,231      | 1,311,571 | 161,381   | ..      | -12,427           | 1,164,848  | 24,978     |
|                     | 2017 | 1,439      | 1,401,449 | 116,586   | 35      | 17,502            | 1,268,765  | 27,199     |
|                     | 2018 | 3,850      | 1,409,177 | 131,408   | 84      | 21,391            | 1,260,144  | 26,988     |
|                     | 2019 | 5,767      | 1,506,011 | 45,514    | 1,657   | 26,924            | 1,437,683  | 30,761     |
| Sweden              | 2016 | ..         | 38,064    | ..        | ..      | ..                | 38,064     | 3,870      |
|                     | 2017 | ..         | 43,870    | 205       | 886     | ..                | 42,779     | 4,319      |
|                     | 2018 | ..         | 48,205    | 661       | 995     | ..                | 46,549     | 4,668      |
|                     | 2019 | ..         | 45,695    | 1,039     | 804     | ..                | 43,851     | 4,369      |
| Switzerland         | 2016 | 1,109      | 139,395   | ..        | ..      | ..                | 140,504    | 16,767     |
|                     | 2017 | 1,203      | 139,993   | ..        | ..      | ..                | 141,197    | 16,698     |
|                     | 2018 | 1,300      | 132,791   | ..        | ..      | ..                | 134,091    | 15,728     |
|                     | 2019 | 1,443      | 136,238   | ..        | ..      | ..                | 137,681    | 16,026     |
| Ukraine             | 2016 | 705,926    | 409,787   | ..        | ..      | -75,351           | 1,191,064  | 26,638     |
|                     | 2017 | 719,737    | 523,927   | ..        | ..      | 101,424           | 1,142,240  | 25,675     |
|                     | 2018 | 766,963    | 393,516   | ..        | ..      | -32,894           | 1,193,373  | 26,971     |
|                     | 2019 | 759,092    | 442,225   | ..        | ..      | 113,552           | 1,087,764  | 24,725     |

Table 27

## Production, trade and supply of natural gas

Terajoules and megajoules per capita

| Country or area  | Year        | Production       | Imports        | Exports          | Bunkers | Changes in stocks | Supply           |               |
|------------------|-------------|------------------|----------------|------------------|---------|-------------------|------------------|---------------|
|                  |             |                  |                |                  |         |                   | Total            | Per capita    |
| United Kingdom   | 2016        | 1,683,913        | 1,896,723      | 412,112          | ..      | -62,142           | 3,230,666        | 48,730        |
|                  | 2017        | 1,688,318        | 1,861,272      | 447,913          | ..      | -42,376           | 3,144,053        | 47,118        |
|                  | 2018        | 1,644,438        | 1,861,490      | 298,401          | ..      | 23,456            | 3,184,069        | 47,423        |
|                  | 2019        | 1,599,954        | 1,864,485      | 314,994          | ..      | 20,785            | 3,128,659        | 46,330        |
| <b>Oceania</b>   | <b>2016</b> | <b>3,532,827</b> | <b>226,441</b> | <b>2,121,210</b> | ..      | <b>966</b>        | <b>1,637,092</b> | <b>40,488</b> |
|                  | <b>2017</b> | <b>4,427,231</b> | <b>206,519</b> | <b>2,965,094</b> | ..      | <b>-3,122</b>     | <b>1,671,778</b> | <b>40,770</b> |
|                  | <b>2018</b> | <b>4,991,684</b> | <b>186,515</b> | <b>3,475,905</b> | ..      | <b>-6,830</b>     | <b>1,709,124</b> | <b>41,115</b> |
|                  | <b>2019</b> | <b>5,789,625</b> | <b>201,973</b> | <b>4,194,759</b> | ..      | <b>-669</b>       | <b>1,797,508</b> | <b>42,669</b> |
| Australia        | 2016        | 3,216,042        | 226,441        | 2,018,675        | ..      | ..                | 1,423,808        | 58,683        |
|                  | 2017        | 4,106,757        | 206,519        | 2,857,996        | ..      | ..                | 1,455,280        | 59,195        |
|                  | 2018        | 4,707,645        | 186,515        | 3,379,860        | ..      | ..                | 1,514,300        | 60,820        |
|                  | 2019        | 5,486,750        | 201,973        | 4,093,912        | ..      | ..                | 1,594,811        | 63,278        |
| New Zealand      | 2016        | 196,791          | ..             | ..               | ..      | 966               | 195,825          | 42,029        |
|                  | 2017        | 194,413          | ..             | ..               | ..      | -3,122            | 197,535          | 42,011        |
|                  | 2018        | 172,251          | ..             | ..               | ..      | -6,830            | 179,081          | 37,756        |
|                  | 2019        | 185,498          | ..             | ..               | ..      | -669              | 186,167          | 38,922        |
| Papua New Guinea | 2016        | 119,994          | ..             | 102,535          | ..      | ..                | 17,459           | 2,111         |
|                  | 2017        | 126,061          | ..             | 107,098          | ..      | ..                | 18,963           | 2,247         |
|                  | 2018        | 111,788          | ..             | 96,045           | ..      | ..                | 15,743           | 1,829         |
|                  | 2019        | *117,377         | ..             | *100,847         | ..      | ..                | *16,530          | *1,884        |



Table 28

**International trade of natural gas  
(Principal importers/exporters)**

Terajoules

**2018**

| Importers            | Exporters |         |           |           |           |                        |            |          |
|----------------------|-----------|---------|-----------|-----------|-----------|------------------------|------------|----------|
|                      | World     | Algeria | Australia | Canada    | Indonesia | Iran (Islamic Rep. of) | Kazakhstan | Malaysia |
| Argentina            | 324,728   | 3,040   | ..        | ..        | ..        | ..                     | ..         | ..       |
| Austria              | 503,400   | ..      | ..        | ..        | ..        | ..                     | ..         | ..       |
| Belarus              | 785,185   | ..      | ..        | ..        | ..        | ..                     | ..         | ..       |
| Belgium              | 755,632   | ..      | ..        | ..        | ..        | ..                     | ..         | ..       |
| Brazil               | 410,360   | ..      | ..        | ..        | ..        | ..                     | ..         | ..       |
| Canada               | 908,924   | ..      | ..        | ..        | ..        | ..                     | ..         | ..       |
| China                | 4,862,017 | 3,698   | 1,129,631 | 64        | *120,525  | ..                     | 191,500    | 312,816  |
| Czechia              | 307,194   | ..      | ..        | ..        | ..        | ..                     | ..         | ..       |
| France               | 2,041,798 | 143,956 | ..        | ..        | ..        | ..                     | ..         | ..       |
| Germany              | 3,281,120 | ..      | ..        | ..        | ..        | ..                     | ..         | ..       |
| Hungary              | 494,127   | ..      | ..        | ..        | ..        | ..                     | ..         | ..       |
| India                | 1,121,464 | 12,387  | 90,446    | ..        | ..        | ..                     | ..         | 14,440   |
| Italy                | 2,585,940 | 684,669 | ..        | ..        | ..        | ..                     | ..         | ..       |
| Japan                | 4,406,588 | ..      | 1,527,586 | ..        | 260,353   | ..                     | ..         | 544,857  |
| Kazakhstan           | 387,839   | ..      | ..        | ..        | ..        | ..                     | ..         | ..       |
| Korea, Republic of   | 2,309,420 | ..      | 407,564   | ..        | 186,632   | ..                     | ..         | 187,283  |
| Malaysia             | 291,035   | ..      | 20,641    | ..        | *118,453  | ..                     | ..         | ..       |
| Mexico               | 2,054,753 | ..      | ..        | ..        | 16,700    | ..                     | ..         | ..       |
| Netherlands          | 2,030,149 | 5,239   | ..        | ..        | ..        | ..                     | ..         | ..       |
| Poland               | 608,367   | ..      | ..        | ..        | ..        | ..                     | ..         | ..       |
| Portugal             | 236,115   | 62,981  | ..        | ..        | ..        | ..                     | ..         | ..       |
| Russian Federation   | 358,750   | ..      | ..        | ..        | ..        | ..                     | 358,750    | ..       |
| Singapore            | 416,980   | ..      | 121,615   | ..        | *118,548  | ..                     | ..         | 39,792   |
| Slovakia             | 169,857   | ..      | ..        | ..        | ..        | ..                     | ..         | ..       |
| Spain                | 1,409,177 | 723,416 | ..        | ..        | ..        | ..                     | ..         | ..       |
| Thailand             | 588,243   | ..      | 8,228     | ..        | 9,500     | ..                     | ..         | 26,790   |
| Turkey               | 1,925,967 | 173,090 | ..        | ..        | ..        | 301,179                | ..         | ..       |
| Ukraine              | 393,516   | ..      | ..        | ..        | ..        | ..                     | ..         | ..       |
| United Arab Emirates | 871,551   | 13,110  | 3,839     | ..        | ..        | ..                     | ..         | ..       |
| United Kingdom       | 1,861,490 | 8,769   | ..        | ..        | ..        | ..                     | ..         | ..       |
| United States        | 3,105,277 | ..      | ..        | 3,022,199 | ..        | ..                     | ..         | ..       |

**International trade of natural gas  
(Principal importers/exporters)**

Terajoules

**2018**

| Exporters   |         |           |         |                    |                     |              |               |
|-------------|---------|-----------|---------|--------------------|---------------------|--------------|---------------|
| Netherlands | Nigeria | Norway    | Qatar   | Russian Federation | Trinidad and Tobago | Turkmenistan | United States |
| ..          | 18,694  | ..        | 60,338  | 1,900              | 20,244              | ..           | 30,125        |
| ..          | ..      | ..        | ..      | ..                 | ..                  | ..           | ..            |
| ..          | ..      | ..        | ..      | 785,185            | ..                  | ..           | ..            |
| 331,761     | ..      | 293,721   | 79,894  | 12,997             | ..                  | ..           | ..            |
| 4,219       | 9,857   | ..        | 3,667   | 17,100             | 18,445              | ..           | 38,963        |
| 3,327       | ..      | 3,196     | ..      | ..                 | 16,720              | ..           | 885,681       |
| 14,016      | 58,477  | 14,309    | 502,570 | *58,901            | 19,665              | 1,287,542    | 98,895        |
| ..          | ..      | 1,522     | ..      | 305,672            | ..                  | ..           | ..            |
| 198,580     | 136,143 | 789,088   | 57,202  | 409,786            | ..                  | ..           | 6,672         |
| ..          | ..      | 95,922    | ..      | 1,680,697          | ..                  | ..           | ..            |
| ..          | ..      | ..        | ..      | 469,421            | ..                  | ..           | ..            |
| 12,871      | 149,826 | 3,678     | 602,779 | 21,020             | 19,130              | ..           | 62,999        |
| 51,031      | 3,391   | 120,364   | 248,978 | 1,251,487          | ..                  | ..           | 24,546        |
| ..          | 57,601  | 3,455     | 530,194 | 349,353            | ..                  | ..           | 154,738       |
| ..          | ..      | ..        | ..      | 183,601            | ..                  | ..           | ..            |
| 6,865       | 27,900  | 6,536     | 743,049 | 90,948             | 9,436               | ..           | 253,018       |
| ..          | ..      | ..        | ..      | ..                 | ..                  | ..           | ..            |
| ..          | 140,825 | ..        | ..      | ..                 | 27,383              | ..           | 1,854,197     |
| ..          | ..      | 952,394   | ..      | 566,882            | ..                  | ..           | 20,023        |
| 69          | ..      | 13,493    | 90,364  | 373,635            | ..                  | ..           | 3,325         |
| ..          | 95,948  | 3,345     | 27,471  | ..                 | ..                  | ..           | 19,912        |
| ..          | ..      | ..        | ..      | ..                 | ..                  | ..           | ..            |
| 4,511       | ..      | ..        | 19,680  | ..                 | 2,508               | ..           | 4,021         |
| ..          | ..      | ..        | ..      | 169,857            | ..                  | ..           | ..            |
| 54          | 165,483 | 128,917   | 135,672 | 35,138             | 87,270              | ..           | 12,090        |
| ..          | 46,191  | ..        | 97,541  | 2,911              | 18,853              | ..           | ..            |
| ..          | 82,230  | 3,381     | 114,169 | 905,629            | 15,937              | ..           | 17,007        |
| ..          | ..      | ..        | ..      | ..                 | ..                  | ..           | ..            |
| 5,744       | 3,040   | ..        | 702,136 | ..                 | ..                  | ..           | 3,977         |
| 108,345     | 3,068   | 1,355,792 | 114,118 | 60,064             | 24,130              | ..           | 47,544        |
| ..          | 3,350   | ..        | ..      | ..                 | 72,987              | ..           | ..            |

Table 28

**International trade of natural gas  
(Principal importers/exporters)**

Terajoules

**2019**

| Importers            | Exporters |         |           |           |           |                        |            |          |
|----------------------|-----------|---------|-----------|-----------|-----------|------------------------|------------|----------|
|                      | World     | Algeria | Australia | Canada    | Indonesia | Iran (Islamic Rep. of) | Kazakhstan | Malaysia |
| Argentina            | 226,780   | ..      | ..        | ..        | ..        | ..                     | ..         | ..       |
| Austria              | 547,204   | ..      | ..        | ..        | ..        | ..                     | ..         | ..       |
| Belarus              | 753,709   | ..      | ..        | ..        | ..        | ..                     | ..         | ..       |
| Belgium              | 894,306   | ..      | ..        | ..        | ..        | ..                     | ..         | ..       |
| Brazil               | 379,714   | ..      | ..        | ..        | ..        | ..                     | ..         | ..       |
| Canada               | 1,022,538 | ..      | ..        | ..        | ..        | ..                     | ..         | ..       |
| China                | 5,197,597 | 3,080   | 1,493,112 | 501       | *99,673   | ..                     | 203,397    | 389,648  |
| Czechia              | 365,476   | ..      | ..        | ..        | ..        | ..                     | ..         | ..       |
| France               | 2,275,007 | 151,626 | ..        | ..        | ..        | ..                     | ..         | ..       |
| Germany              | 3,520,265 | ..      | ..        | ..        | ..        | ..                     | ..         | ..       |
| Hungary              | 724,785   | ..      | ..        | ..        | ..        | ..                     | ..         | ..       |
| India                | 1,401,333 | 11,746  | 70,671    | ..        | ..        | ..                     | ..         | 22,085   |
| Italy                | 2,707,586 | 509,230 | ..        | ..        | ..        | ..                     | ..         | ..       |
| Japan                | 4,185,466 | ..      | 1,639,762 | ..        | 184,305   | ..                     | ..         | 543,767  |
| Kazakhstan           | 647,078   | ..      | ..        | ..        | ..        | ..                     | ..         | ..       |
| Korea, Republic of   | 2,241,985 | ..      | 418,774   | ..        | 120,847   | ..                     | ..         | 268,306  |
| Malaysia             | 345,084   | ..      | 79,096    | ..        | *69,795   | ..                     | ..         | ..       |
| Mexico               | 1,908,243 | ..      | ..        | ..        | 23,546    | ..                     | ..         | ..       |
| Netherlands          | 1,976,604 | 8,990   | ..        | ..        | ..        | ..                     | ..         | ..       |
| Poland               | 681,197   | ..      | ..        | ..        | ..        | ..                     | ..         | ..       |
| Portugal             | 245,615   | 18,163  | ..        | ..        | ..        | ..                     | ..         | ..       |
| Russian Federation   | 348,390   | ..      | ..        | ..        | ..        | ..                     | 348,390    | ..       |
| Singapore            | 424,860   | 494     | 109,158   | ..        | *75,596   | ..                     | ..         | 37,600   |
| Slovakia             | 259,722   | ..      | ..        | ..        | ..        | ..                     | ..         | ..       |
| Spain                | 1,506,011 | 498,221 | ..        | ..        | ..        | ..                     | ..         | ..       |
| Thailand             | 582,542   | ..      | 35,740    | ..        | 13,463    | ..                     | ..         | 64,275   |
| Turkey               | 1,731,656 | 217,504 | ..        | ..        | ..        | 296,331                | ..         | ..       |
| Ukraine              | 442,225   | ..      | ..        | ..        | ..        | ..                     | ..         | ..       |
| United Arab Emirates | 878,129   | ..      | 7,500     | ..        | ..        | ..                     | ..         | ..       |
| United Kingdom       | 1,864,485 | 38,878  | ..        | ..        | ..        | ..                     | ..         | ..       |
| United States        | 2,949,767 | ..      | ..        | 2,889,099 | ..        | ..                     | ..         | ..       |



**International trade of natural gas  
(Principal importers/exporters)**

Terajoules

**2019**

| Exporters   |         |           |         |                    |                     |              |               |
|-------------|---------|-----------|---------|--------------------|---------------------|--------------|---------------|
| Netherlands | Nigeria | Norway    | Qatar   | Russian Federation | Trinidad and Tobago | Turkmenistan | United States |
| ..          | ..      | ..        | ..      | ..                 | 24,566              | ..           | 43,033        |
| ..          | ..      | ..        | ..      | ..                 | ..                  | ..           | ..            |
| ..          | ..      | ..        | ..      | 753,709            | ..                  | ..           | ..            |
| 300,415     | ..      | 266,881   | 180,556 | 72,083             | ..                  | ..           | 7,180         |
| ..          | 10,488  | ..        | ..      | ..                 | 21,899              | ..           | 59,467        |
| ..          | ..      | ..        | ..      | ..                 | 16,862              | ..           | 1,002,110     |
| 3,677       | 102,394 | 3,677     | 459,288 | 157,372            | 40,888              | 1,103,723    | 7,503         |
| ..          | ..      | 981       | ..      | 364,495            | ..                  | ..           | ..            |
| 172,865     | 189,713 | 826,387   | 88,611  | 444,079            | ..                  | ..           | 72,133        |
| ..          | ..      | 102,913   | ..      | 1,803,194          | ..                  | ..           | ..            |
| ..          | ..      | ..        | ..      | 688,546            | ..                  | ..           | ..            |
| ..          | *52,496 | ..        | 531,866 | 10,756             | 7,694               | ..           | 100,189       |
| 65,521      | 6,627   | 233,957   | 249,558 | 1,274,422          | 53,827              | ..           | 61,475        |
| ..          | 58,128  | ..        | 470,178 | 345,513            | ..                  | ..           | 227,961       |
| ..          | ..      | ..        | ..      | 493,928            | ..                  | ..           | ..            |
| ..          | 34,208  | ..        | 619,583 | 130,340            | 3,846               | ..           | 291,932       |
| ..          | 3,140   | ..        | ..      | ..                 | ..                  | ..           | 4,050         |
| ..          | 140,179 | ..        | ..      | ..                 | 57,866              | ..           | 1,640,344     |
| ..          | 20,429  | 827,841   | 4,944   | 540,220            | 3,119               | ..           | 77,051        |
| 15          | ..      | 8,075     | 90,285  | 368,961            | ..                  | ..           | 36,933        |
| 3,580       | 131,413 | ..        | 26,490  | 3,931              | 4,849               | ..           | 52,560        |
| ..          | ..      | ..        | ..      | ..                 | ..                  | ..           | ..            |
| ..          | 3,040   | ..        | 5,320   | ..                 | 6,080               | ..           | 34,433        |
| ..          | ..      | ..        | ..      | 259,722            | ..                  | ..           | ..            |
| ..          | 172,596 | 98,104    | 172,475 | 128,226            | 113,077             | ..           | 166,055       |
| ..          | ..      | ..        | 97,650  | 3,412              | 2,402               | ..           | 7,267         |
| ..          | 92,691  | 3,356     | 94,174  | 582,050            | 7,093               | ..           | 46,688        |
| ..          | ..      | ..        | ..      | ..                 | ..                  | ..           | ..            |
| ..          | 6,574   | ..        | 698,969 | 6,658              | 3,534               | ..           | 22,518        |
| 66,028      | 13,391  | 1,078,491 | 351,612 | 123,990            | 32,800              | ..           | 117,535       |
| ..          | 3,694   | ..        | ..      | ..                 | 51,977              | ..           | ..            |



### Production of manufactured and recovered gases - by type

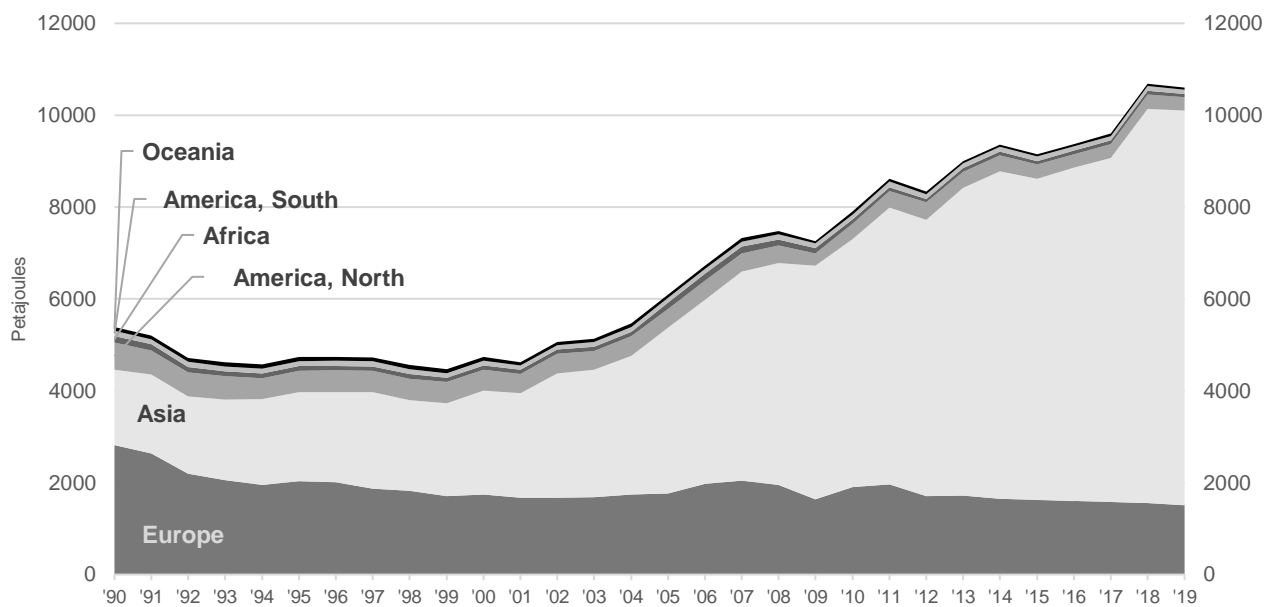
Terajoules

**Table Notes**

**Production** refers to gasworks gas, coke oven gas, blast furnace gas and other recovered gases.

Please refer to the Definitions Section on pages ix to xv for the appropriate product description /classification, and xvi to xvii for the descriptions of relevant flows.

**Figure 71: Production of manufactured and recovered gases by region, 1990-2019**



**Figure 72: World production of manufactured and recovered gases by type, 2019**

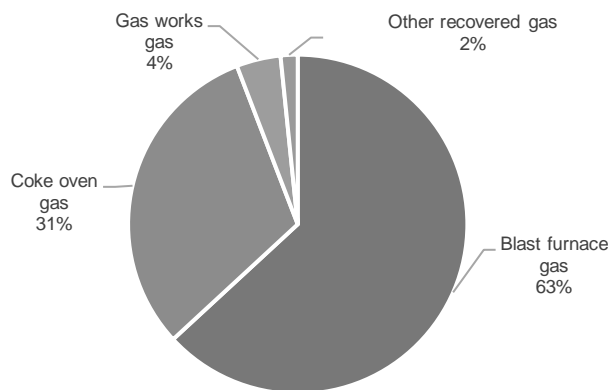


Table 29

## Production of manufactured and recovered gases - by type

Terajoules

| Country or area       | Year        | Total             | Gas works gas  | Coke oven gas    | Blast furnace gas | Other recovered gas |
|-----------------------|-------------|-------------------|----------------|------------------|-------------------|---------------------|
| <b>World</b>          | <b>2016</b> | <b>9,370,888</b>  | <b>621,825</b> | <b>3,109,654</b> | <b>5,448,922</b>  | <b>190,487</b>      |
|                       | <b>2017</b> | <b>9,599,869</b>  | <b>652,609</b> | <b>3,135,159</b> | <b>5,628,827</b>  | <b>183,273</b>      |
|                       | <b>2018</b> | <b>10,684,376</b> | <b>703,593</b> | <b>3,231,004</b> | <b>6,577,451</b>  | <b>172,327</b>      |
|                       | <b>2019</b> | <b>10,600,474</b> | <b>446,909</b> | <b>3,288,716</b> | <b>6,692,812</b>  | <b>172,037</b>      |
| <b>Africa</b>         | <b>2016</b> | <b>75,468</b>     | <b>23,460</b>  | <b>24,595</b>    | <b>27,413</b>     | <b>..</b>           |
|                       | <b>2017</b> | <b>76,445</b>     | <b>21,688</b>  | <b>24,045</b>    | <b>30,712</b>     | <b>..</b>           |
|                       | <b>2018</b> | <b>80,764</b>     | <b>22,812</b>  | <b>25,439</b>    | <b>32,513</b>     | <b>..</b>           |
|                       | <b>2019</b> | <b>67,711</b>     | <b>20,600</b>  | <b>21,181</b>    | <b>25,930</b>     | <b>..</b>           |
| Algeria               | 2016        | 0                 | ..             | ..               | 0                 | ..                  |
|                       | 2017        | 3,614             | ..             | ..               | 3,614             | ..                  |
|                       | 2018        | 5,844             | ..             | ..               | 5,844             | ..                  |
|                       | 2019        | 5,108             | ..             | ..               | 5,108             | ..                  |
| Egypt                 | 2016        | *4,534            | 82             | ..               | *4,452            | ..                  |
|                       | 2017        | 4,268             | 131            | ..               | 4,137             | ..                  |
|                       | 2018        | 4,764             | 88             | ..               | 4,676             | ..                  |
|                       | 2019        | 2,825             | 128            | ..               | 2,697             | ..                  |
| South Africa          | 2016        | 69,596            | 23,378         | 23,257           | 22,961            | ..                  |
|                       | 2017        | 67,775            | 21,557         | 23,257           | 22,961            | ..                  |
|                       | 2018        | 69,208            | 22,724         | 24,491           | 21,993            | ..                  |
|                       | 2019        | 58,780            | 20,472         | 20,183           | 18,125            | ..                  |
| Zimbabwe              | 2016        | 1,338             | ..             | 1,338            | ..                | ..                  |
|                       | 2017        | 788               | ..             | 788              | ..                | ..                  |
|                       | 2018        | 948               | ..             | 948              | ..                | ..                  |
|                       | 2019        | 997               | ..             | 997              | ..                | ..                  |
| <b>America, North</b> | <b>2016</b> | <b>295,773</b>    | <b>56,271</b>  | <b>93,099</b>    | <b>146,403</b>    | <b>..</b>           |
|                       | <b>2017</b> | <b>298,124</b>    | <b>61,479</b>  | <b>92,773</b>    | <b>143,872</b>    | <b>..</b>           |
|                       | <b>2018</b> | <b>312,440</b>    | <b>63,886</b>  | <b>99,324</b>    | <b>149,230</b>    | <b>..</b>           |
|                       | <b>2019</b> | <b>291,580</b>    | <b>55,792</b>  | <b>94,485</b>    | <b>141,303</b>    | <b>..</b>           |
| Canada                | 2016        | 43,624            | ..             | 22,037           | 21,587            | ..                  |
|                       | 2017        | 43,992            | ..             | 22,057           | 21,935            | ..                  |
|                       | 2018        | 46,322            | ..             | 24,703           | 21,619            | ..                  |
|                       | 2019        | 43,928            | ..             | 23,888           | 20,040            | ..                  |
| Cuba                  | 2016        | 3,707             | 3,696          | ..               | 11                | ..                  |
|                       | 2017        | 3,473             | 3,467          | ..               | 6                 | ..                  |
|                       | 2018        | 3,333             | 3,319          | ..               | 14                | ..                  |
|                       | 2019        | 3,275             | 3,261          | ..               | 14                | ..                  |
| Mexico                | 2016        | 31,637            | ..             | 11,252           | 20,385            | ..                  |
|                       | 2017        | 30,293            | ..             | 10,653           | 19,640            | ..                  |
|                       | 2018        | 27,357            | ..             | 9,707            | 17,650            | ..                  |
|                       | 2019        | 23,981            | ..             | 8,158            | 15,823            | ..                  |
| United States         | 2016        | 216,805           | 52,575         | 59,810           | 104,420           | ..                  |
|                       | 2017        | 220,366           | 58,012         | 60,063           | 102,291           | ..                  |
|                       | 2018        | 235,428           | 60,567         | 64,914           | 109,947           | ..                  |
|                       | 2019        | 220,396           | 52,531         | 62,439           | 105,426           | ..                  |
| <b>America, South</b> | <b>2016</b> | <b>89,678</b>     | <b>213</b>     | <b>77,860</b>    | <b>11,605</b>     | <b>..</b>           |
|                       | <b>2017</b> | <b>98,947</b>     | <b>79</b>      | <b>86,859</b>    | <b>12,009</b>     | <b>..</b>           |
|                       | <b>2018</b> | <b>102,649</b>    | <b>73</b>      | <b>90,051</b>    | <b>12,525</b>     | <b>..</b>           |
|                       | <b>2019</b> | <b>92,656</b>     | <b>..</b>      | <b>81,469</b>    | <b>11,187</b>     | <b>..</b>           |
| Argentina             | 2016        | 11,403            | ..             | 3,875            | 7,528             | ..                  |
|                       | 2017        | 12,411            | ..             | 4,312            | 8,099             | ..                  |
|                       | 2018        | 13,374            | ..             | 4,788            | 8,586             | ..                  |
|                       | 2019        | 10,470            | ..             | 3,276            | 7,194             | ..                  |

## Production of manufactured and recovered gases - by type

Terajoules

| Country or area        | Year        | Total            | Gas works gas  | Coke oven gas    | Blast furnace gas | Other recovered gas |
|------------------------|-------------|------------------|----------------|------------------|-------------------|---------------------|
| Brazil                 | 2016        | 68,715           | ..             | 68,715           | ..                | ..                  |
|                        | 2017        | 77,783           | ..             | 77,783           | ..                | ..                  |
|                        | 2018        | 80,329           | ..             | 80,329           | ..                | ..                  |
|                        | 2019        | 73,223           | ..             | 73,223           | ..                | ..                  |
| Chile                  | 2016        | 6,980            | 213            | 3,820            | 2,947             | ..                  |
|                        | 2017        | 6,425            | 79             | 3,456            | 2,890             | ..                  |
|                        | 2018        | 6,727            | 73             | 3,745            | 2,909             | ..                  |
|                        | 2019        | 6,944            | ..             | 3,772            | 3,172             | ..                  |
| Colombia               | 2016        | 2,580            | ..             | 1,450            | 1,130             | ..                  |
|                        | 2017        | 2,328            | ..             | 1,308            | 1,020             | ..                  |
|                        | 2018        | 2,220            | ..             | 1,189            | 1,031             | ..                  |
|                        | 2019        | 2,019            | ..             | 1,198            | 821               | ..                  |
| <b>Asia</b>            | <b>2016</b> | <b>7,259,172</b> | <b>521,466</b> | <b>2,195,243</b> | <b>4,436,008</b>  | <b>106,456</b>      |
|                        | <b>2017</b> | <b>7,491,244</b> | <b>550,352</b> | <b>2,233,550</b> | <b>4,605,547</b>  | <b>101,796</b>      |
|                        | <b>2018</b> | <b>8,578,984</b> | <b>599,543</b> | <b>2,356,079</b> | <b>5,522,744</b>  | <b>100,618</b>      |
|                        | <b>2019</b> | <b>8,592,510</b> | <b>354,562</b> | <b>2,448,030</b> | <b>5,688,877</b>  | <b>101,042</b>      |
| China                  | 2016        | 5,194,695        | 491,659        | 1,465,528        | 3,237,508         | ..                  |
|                        | 2017        | 5,406,600        | 520,243        | 1,484,702        | 3,401,656         | ..                  |
|                        | 2018        | 6,443,917        | 568,826        | 1,586,583        | 4,288,508         | ..                  |
|                        | 2019        | 6,457,947        | 324,677        | 1,680,918        | 4,452,352         | ..                  |
| China, Hong Kong SAR   | 2016        | 28,814           | 28,814         | ..               | ..                | ..                  |
|                        | 2017        | 29,049           | 29,049         | ..               | ..                | ..                  |
|                        | 2018        | 29,550           | 29,550         | ..               | ..                | ..                  |
|                        | 2019        | 28,712           | 28,712         | ..               | ..                | ..                  |
| India                  | 2016        | *535,132         | *993           | *165,364         | *368,775          | ..                  |
|                        | 2017        | 567,891          | *1,060         | *181,607         | 385,224           | ..                  |
|                        | 2018        | *620,684         | *1,167         | *193,217         | *426,300          | ..                  |
|                        | 2019        | *639,222         | *1,173         | 203,658          | *434,391          | ..                  |
| Iran (Islamic Rep. of) | 2016        | 26,853           | ..             | 8,508            | 18,345            | ..                  |
|                        | 2017        | 24,809           | ..             | 9,782            | 15,027            | ..                  |
|                        | 2018        | 26,319           | ..             | 10,414           | 15,905            | ..                  |
|                        | 2019        | 24,847           | ..             | 8,674            | 16,173            | ..                  |
| Japan                  | 2016        | 804,534          | ..             | 299,255          | 438,870           | 66,409              |
|                        | 2017        | 787,616          | ..             | 295,706          | 429,842           | 62,068              |
|                        | 2018        | 779,347          | ..             | 295,366          | 423,160           | 60,820              |
|                        | 2019        | 765,977          | ..             | 294,493          | 412,431           | 59,053              |
| Kazakhstan             | 2016        | 40,578           | ..             | 16,909           | 23,669            | ..                  |
|                        | 2017        | 43,921           | ..             | 17,490           | 26,431            | ..                  |
|                        | 2018        | 39,530           | ..             | 16,668           | 22,862            | ..                  |
|                        | 2019        | 35,479           | ..             | 14,455           | 21,025            | ..                  |
| Korea, Dem.Ppl's.Rep.  | 2016        | 1,838            | ..             | ..               | 1,838             | ..                  |
|                        | 2017        | 1,645            | ..             | ..               | 1,645             | ..                  |
|                        | 2018        | 1,222            | ..             | ..               | 1,222             | ..                  |
|                        | 2019        | 1,026            | ..             | ..               | 1,026             | ..                  |
| Korea, Republic of     | 2016        | 394,580          | ..             | 147,900          | 217,967           | 28,713              |
|                        | 2017        | 400,458          | ..             | 153,969          | 217,678           | 28,812              |
|                        | 2018        | 401,861          | ..             | 157,103          | 215,927           | 28,831              |
|                        | 2019        | 407,029          | ..             | 149,818          | 225,779           | 31,432              |
| Other Asia             | 2016        | 143,488          | ..             | 59,839           | 72,315            | 11,334              |
|                        | 2017        | 138,256          | ..             | 57,186           | 70,153            | 10,917              |
|                        | 2018        | 144,239          | ..             | 60,470           | 72,802            | 10,967              |
|                        | 2019        | 143,456          | ..             | 60,468           | 72,432            | 10,556              |

Table 29

## Production of manufactured and recovered gases - by type

Terajoules

| Country or area        | Year        | Total            | Gas works gas | Coke oven gas  | Blast furnace gas | Other recovered gas |
|------------------------|-------------|------------------|---------------|----------------|-------------------|---------------------|
| Philippines            | 2016        | 3,790            | ..            | ..             | 3,790             | ..                  |
|                        | 2017        | 3,313            | ..            | ..             | 3,313             | ..                  |
|                        | 2018        | 3,466            | ..            | ..             | 3,466             | ..                  |
|                        | 2019        | 3,010            | ..            | ..             | 3,010             | ..                  |
| Syrian Arab Republic   | 2016        | 3                | ..            | ..             | 3                 | ..                  |
|                        | 2017        | 3                | ..            | ..             | 3                 | ..                  |
|                        | 2018        | 3                | ..            | ..             | 3                 | ..                  |
|                        | 2019        | 3                | ..            | ..             | 3                 | ..                  |
| Thailand               | 2016        | 496              | ..            | ..             | 496               | ..                  |
|                        | 2017        | 622              | ..            | ..             | 622               | ..                  |
|                        | 2018        | 589              | ..            | ..             | 589               | ..                  |
|                        | 2019        | 390              | ..            | ..             | 390               | ..                  |
| Turkey                 | 2016        | 84,371           | ..            | 31,939         | 52,432            | ..                  |
|                        | 2017        | 87,062           | ..            | 33,109         | 53,953            | ..                  |
|                        | 2018        | 88,258           | ..            | 36,258         | 52,000            | ..                  |
|                        | 2019        | 85,411           | ..            | 35,546         | 49,865            | ..                  |
| <b>Europe</b>          | <b>2016</b> | <b>1,600,374</b> | <b>20,377</b> | <b>693,594</b> | <b>802,636</b>    | <b>83,767</b>       |
|                        | <b>2017</b> | <b>1,582,625</b> | <b>18,967</b> | <b>672,041</b> | <b>810,439</b>    | <b>81,178</b>       |
|                        | <b>2018</b> | <b>1,560,110</b> | <b>17,241</b> | <b>635,096</b> | <b>836,361</b>    | <b>71,412</b>       |
|                        | <b>2019</b> | <b>1,507,224</b> | <b>15,917</b> | <b>618,677</b> | <b>801,937</b>    | <b>70,692</b>       |
| Austria                | 2016        | 42,585           | ..            | 9,954          | 28,812            | 3,819               |
|                        | 2017        | 45,236           | ..            | 10,154         | 30,765            | 4,317               |
|                        | 2018        | 38,954           | ..            | 10,321         | 25,239            | 3,393               |
|                        | 2019        | 39,970           | ..            | 8,629          | 27,616            | 3,725               |
| Belgium                | 2016        | 37,373           | ..            | 10,320         | 23,522            | 3,531               |
|                        | 2017        | 37,903           | ..            | 10,062         | 24,077            | 3,765               |
|                        | 2018        | 37,292           | ..            | 10,020         | 23,607            | 3,665               |
|                        | 2019        | 37,978           | ..            | 9,906          | 24,319            | 3,754               |
| Bosnia and Herzegovina | 2016        | 11,247           | ..            | 6,867          | 4,380             | ..                  |
|                        | 2017        | 10,724           | ..            | 6,527          | 4,197             | ..                  |
|                        | 2018        | 12,246           | ..            | 7,632          | 4,614             | ..                  |
|                        | 2019        | 12,060           | ..            | 6,978          | 5,082             | ..                  |
| Czechia                | 2016        | 61,160           | 16,933        | 17,859         | 20,643            | 5,725               |
|                        | 2017        | 59,003           | 15,177        | 20,320         | 18,064            | 5,442               |
|                        | 2018        | 60,382           | 13,932        | 20,673         | 19,796            | 5,982               |
|                        | 2019        | 55,016           | 12,670        | 18,950         | 17,571            | 5,824               |
| Estonia                | 2016        | 12,733           | 3,430         | 9,303          | ..                | ..                  |
|                        | 2017        | 15,028           | 3,790         | 11,238         | ..                | ..                  |
|                        | 2018        | 14,186           | 3,309         | 10,877         | ..                | ..                  |
|                        | 2019        | 14,829           | 3,247         | 11,582         | ..                | ..                  |
| Finland                | 2016        | 24,076           | ..            | 8,731          | 11,529            | 3,816               |
|                        | 2017        | 22,678           | ..            | 8,197          | 11,071            | 3,410               |
|                        | 2018        | 23,649           | ..            | 8,277          | 11,526            | 3,846               |
|                        | 2019        | 20,213           | ..            | 7,719          | 8,413             | 4,081               |
| France                 | 2016        | 66,458           | ..            | 23,920         | 35,565            | 6,973               |
|                        | 2017        | 87,583           | ..            | 28,143         | 50,502            | 8,938               |
|                        | 2018        | 86,218           | ..            | ..             | 86,218            | ..                  |
|                        | 2019        | 81,667           | ..            | ..             | 81,667            | ..                  |
| Germany                | 2016        | 259,995          | ..            | 77,811         | 159,763           | 22,421              |
|                        | 2017        | 254,151          | ..            | 68,044         | 162,818           | 23,289              |
|                        | 2018        | 250,530          | ..            | 64,646         | 160,885           | 24,999              |
|                        | 2019        | 241,116          | ..            | 64,151         | 151,471           | 25,494              |

## Production of manufactured and recovered gases - by type

Terajoules

| Country or area    | Year | Total   | Gas works gas | Coke oven gas | Blast furnace gas | Other recovered gas |
|--------------------|------|---------|---------------|---------------|-------------------|---------------------|
| Hungary            | 2016 | 13,259  | ..            | 8,198         | 5,061             | ..                  |
|                    | 2017 | 16,996  | ..            | 9,126         | 7,870             | ..                  |
|                    | 2018 | 17,669  | ..            | 9,109         | 8,560             | ..                  |
|                    | 2019 | 15,242  | ..            | 8,162         | 7,080             | ..                  |
| Italy              | 2016 | 43,550  | ..            | 14,439        | 23,709            | 5,402               |
|                    | 2017 | 35,981  | ..            | 15,132        | 16,990            | 3,859               |
|                    | 2018 | 34,808  | ..            | 15,150        | 18,007            | 1,651               |
|                    | 2019 | 33,246  | ..            | 14,586        | 17,071            | 1,590               |
| Netherlands        | 2016 | 53,103  | ..            | 17,472        | 35,631            | ..                  |
|                    | 2017 | 54,912  | ..            | 17,917        | 36,995            | ..                  |
|                    | 2018 | 54,663  | ..            | 18,118        | 36,545            | ..                  |
|                    | 2019 | 51,719  | ..            | 17,657        | 34,062            | ..                  |
| Norway             | 2016 | 3,222   | ..            | ..            | 3,222             | ..                  |
|                    | 2017 | 4,012   | ..            | ..            | 4,012             | ..                  |
|                    | 2018 | 4,197   | ..            | ..            | 4,197             | ..                  |
|                    | 2019 | 3,611   | ..            | ..            | 3,611             | ..                  |
| Poland             | 2016 | 108,838 | 0             | 78,303        | 25,158            | 5,377               |
|                    | 2017 | 107,602 | ..            | 76,852        | 27,164            | 3,585               |
|                    | 2018 | 107,821 | ..            | 78,254        | 26,377            | 3,191               |
|                    | 2019 | 102,427 | ..            | 74,779        | 24,327            | 3,322               |
| Romania            | 2016 | 9,990   | ..            | ..            | 9,990             | ..                  |
|                    | 2017 | 9,408   | ..            | ..            | 9,408             | ..                  |
|                    | 2018 | 10,137  | ..            | ..            | 10,137            | ..                  |
|                    | 2019 | 10,354  | ..            | ..            | 10,354            | ..                  |
| Russian Federation | 2016 | 487,419 | ..            | 270,873       | 216,546           | ..                  |
|                    | 2017 | 490,758 | ..            | 262,407       | 228,351           | ..                  |
|                    | 2018 | 481,163 | ..            | 261,597       | 219,566           | ..                  |
|                    | 2019 | 477,585 | ..            | 260,383       | 217,202           | ..                  |
| Serbia             | 2016 | 9,549   | ..            | ..            | 9,549             | ..                  |
|                    | 2017 | 10,609  | ..            | ..            | 10,609            | ..                  |
|                    | 2018 | 12,281  | ..            | ..            | 12,281            | ..                  |
|                    | 2019 | 12,231  | ..            | ..            | 12,231            | ..                  |
| Slovakia           | 2016 | 39,159  | ..            | 13,679        | 21,068            | 4,412               |
|                    | 2017 | 39,567  | ..            | 12,688        | 22,124            | 4,755               |
|                    | 2018 | 40,606  | ..            | 13,427        | 22,696            | 4,483               |
|                    | 2019 | 31,861  | ..            | 11,619        | 17,065            | 3,177               |
| Spain              | 2016 | 34,728  | 14            | 12,463        | 22,251            | ..                  |
|                    | 2017 | 30,325  | ..            | 10,927        | 19,398            | ..                  |
|                    | 2018 | 30,055  | ..            | 10,510        | 19,545            | ..                  |
|                    | 2019 | 26,696  | ..            | 9,424         | 17,272            | ..                  |
| Sweden             | 2016 | 23,880  | ..            | 9,138         | 12,791            | 1,951               |
|                    | 2017 | 23,856  | ..            | 8,890         | 12,974            | 1,992               |
|                    | 2018 | 21,732  | ..            | 7,692         | 12,149            | 1,891               |
|                    | 2019 | 22,895  | ..            | 8,096         | 13,448            | 1,351               |
| Ukraine            | 2016 | 207,944 | ..            | 90,483        | 97,121            | 20,340              |
|                    | 2017 | 177,103 | ..            | 81,374        | 77,902            | 17,827              |
|                    | 2018 | 175,545 | ..            | 75,559        | 81,674            | 18,312              |
|                    | 2019 | 168,849 | ..            | 72,116        | 78,358            | 18,375              |
| United Kingdom     | 2016 | 50,106  | ..            | 13,781        | 36,325            | ..                  |
|                    | 2017 | 49,190  | ..            | 14,042        | 35,148            | ..                  |
|                    | 2018 | 45,975  | ..            | 13,234        | 32,741            | ..                  |
|                    | 2019 | 47,658  | ..            | 13,941        | 33,717            | ..                  |

**Table 29****Production of manufactured and recovered gases - by type**

Terajoules

| Country or area | Year        | Total         | Gas works gas | Coke oven gas | Blast furnace gas | Other recovered gas |
|-----------------|-------------|---------------|---------------|---------------|-------------------|---------------------|
| <b>Oceania</b>  | <b>2016</b> | <b>50,423</b> | <b>39</b>     | <b>25,263</b> | <b>24,857</b>     | <b>264</b>          |
|                 | <b>2017</b> | <b>52,484</b> | <b>45</b>     | <b>25,891</b> | <b>26,249</b>     | <b>299</b>          |
|                 | <b>2018</b> | <b>49,429</b> | <b>38</b>     | <b>25,016</b> | <b>24,078</b>     | <b>296</b>          |
|                 | <b>2019</b> | <b>48,793</b> | <b>38</b>     | <b>24,874</b> | <b>23,578</b>     | <b>303</b>          |
| Australia       | 2016        | 39,302        | 39            | 21,127        | 18,136            | ..                  |
|                 | 2017        | 40,718        | 45            | 21,506        | 19,167            | ..                  |
|                 | 2018        | 38,161        | 38            | 20,687        | 17,436            | ..                  |
|                 | 2019        | 35,774        | 38            | 19,023        | 16,713            | ..                  |
| New Zealand     | 2016        | 11,121        | ..            | 4,136         | 6,721             | 264                 |
|                 | 2017        | 11,766        | ..            | 4,385         | 7,082             | 299                 |
|                 | 2018        | 11,268        | ..            | 4,329         | 6,642             | 296                 |
|                 | 2019        | 13,019        | ..            | 5,851         | 6,865             | 303                 |







## Net installed capacity of electric plants - by type

Megawatts

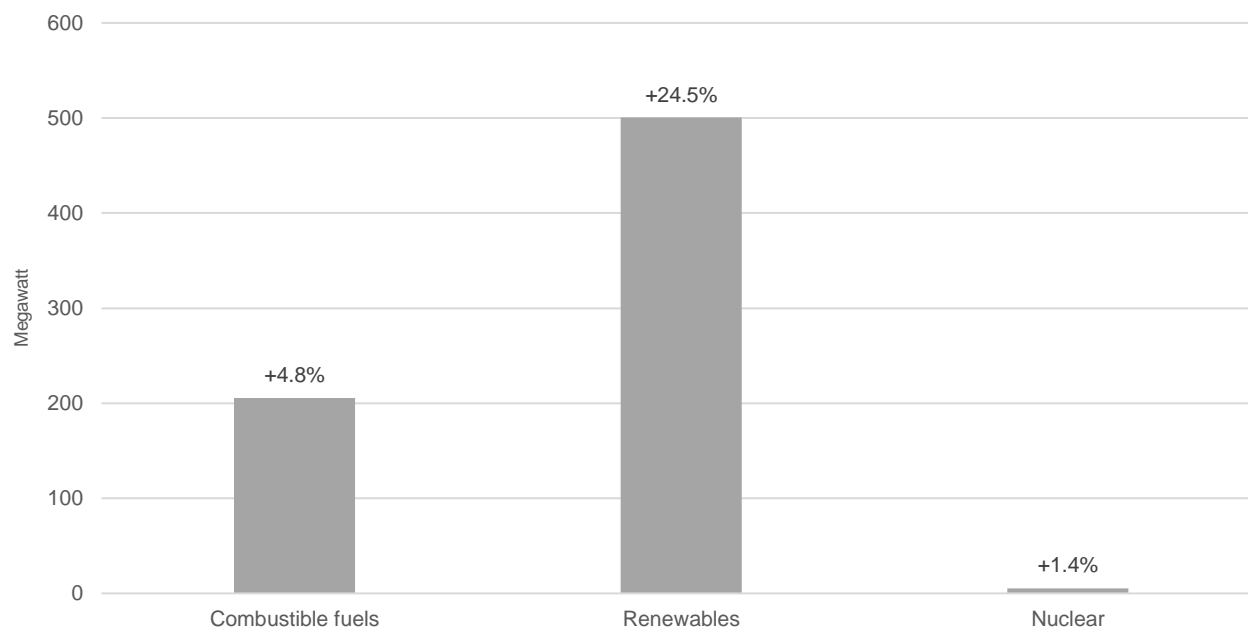
### Table Notes

Electricity capacity broken down by source, and main activity producers against autoproducers. For total producers, **Other** refers to geothermal, tide, wave, marine and other non-specified net installed capacity. For autoproducers, **Other** refers to nuclear (if any), wind, solar, geothermal, tide, wave, marine and other non-specified net installed capacity. For main activity producers, **Other** refers to wind, solar, geothermal, tide, wave, marine and other non-specified net installed capacity.

For Austria data are given in gross maximum capacity.

Please refer to the Definitions Section on pages ix to xv for the appropriate product description /classification, and xvi to xvii for the descriptions of relevant flows.

**Figure 73: Change in net installed capacity of electricity generating plants\* by source, 2016-2019**



\* Renewable includes capacity from hydro, wind, solar and other sources

Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Country or area      | Year | Total producers |                   |           |         |         |         |        |
|----------------------|------|-----------------|-------------------|-----------|---------|---------|---------|--------|
|                      |      | Total           | Combustible fuels | Hydro     | Nuclear | Wind    | Solar   | Other  |
| World                | 2016 | 6,686,743       | 4,243,796         | 1,240,405 | 399,333 | 473,794 | 301,640 | 27,776 |
|                      | 2017 | 6,889,456       | 4,275,751         | 1,265,367 | 398,782 | 519,720 | 399,730 | 30,106 |
|                      | 2018 | 7,173,361       | 4,393,172         | 1,285,209 | 406,291 | 567,648 | 486,810 | 34,231 |
|                      | 2019 | 7,398,116       | 4,449,334         | 1,302,836 | 404,823 | 624,429 | 581,338 | 35,356 |
| Africa               | 2016 | 195,079         | 152,367           | 32,630    | 1,860   | 4,660   | 2,880   | 682    |
|                      | 2017 | 210,042         | 163,918           | 35,159    | 1,940   | 4,790   | 3,545   | 689    |
|                      | 2018 | 225,252         | 176,091           | 36,204    | 1,940   | 5,474   | 4,879   | 664    |
|                      | 2019 | 234,211         | 183,064           | 36,528    | 1,940   | 5,729   | 6,040   | 911    |
| Algeria              | 2016 | 19,031          | 18,549            | 228       | ..      | 10      | 244     | ..     |
|                      | 2017 | 19,555          | 18,892            | 228       | ..      | 10      | 425     | ..     |
|                      | 2018 | 21,166          | 20,480            | 228       | ..      | 10      | 448     | ..     |
|                      | 2019 | *21,653         | *20,967           | 228       | ..      | 10      | 448     | ..     |
| Angola               | 2016 | *2,886          | *1,284            | *1,589    | ..      | ..      | 13      | ..     |
|                      | 2017 | *4,422          | *2,067            | *2,342    | ..      | ..      | 13      | ..     |
|                      | 2018 | 5,010           | *2,298            | 2,699     | ..      | ..      | 13      | ..     |
|                      | 2019 | *6,156          | *3,444            | 2,699     | ..      | ..      | 13      | ..     |
| Benin                | 2016 | *381            | *312              | *66       | ..      | ..      | 3       | ..     |
|                      | 2017 | *381            | *312              | *66       | ..      | ..      | 3       | ..     |
|                      | 2018 | *381            | *312              | *66       | ..      | ..      | 3       | ..     |
|                      | 2019 | *508            | *439              | *66       | ..      | ..      | 3       | ..     |
| Botswana             | 2016 | 621             | 620               | ..        | ..      | ..      | 1       | ..     |
|                      | 2017 | 753             | 752               | ..        | ..      | ..      | 1       | ..     |
|                      | 2018 | 796             | 795               | ..        | ..      | ..      | 1       | ..     |
|                      | 2019 | 761             | 760               | ..        | ..      | ..      | 1       | ..     |
| Burkina Faso         | 2016 | 325             | 293               | 32        | ..      | ..      | ..      | ..     |
|                      | 2017 | 329             | 293               | 32        | ..      | ..      | *4      | ..     |
|                      | 2018 | 349             | 293               | 32        | ..      | ..      | *24     | ..     |
|                      | 2019 | 390             | 295               | 32        | ..      | ..      | 62      | ..     |
| Burundi              | 2016 | 64              | *9                | 51        | ..      | ..      | 4       | ..     |
|                      | 2017 | 70              | *17               | 48        | ..      | ..      | 5       | ..     |
|                      | 2018 | 87              | 34                | 48        | ..      | ..      | 5       | ..     |
|                      | 2019 | 87              | *34               | 48        | ..      | ..      | 5       | ..     |
| Cabo Verde           | 2016 | *169            | *136              | ..        | ..      | 26      | 8       | ..     |
|                      | 2017 | *200            | *166              | ..        | ..      | 27      | 8       | ..     |
|                      | 2018 | *209            | *169              | ..        | ..      | *31     | *9      | ..     |
|                      | 2019 | *221            | *181              | ..        | ..      | *31     | *9      | ..     |
| Cameroon             | 2016 | *1,944          | *1,200            | *732      | ..      | ..      | *12     | ..     |
|                      | 2017 | 2,054           | *1,265            | 777       | ..      | ..      | *12     | ..     |
|                      | 2018 | 1,669           | *918              | 732       | ..      | ..      | *19     | ..     |
|                      | 2019 | 1,669           | *918              | 732       | ..      | ..      | *19     | ..     |
| Central African Rep. | 2016 | *44             | *19               | *25       | ..      | ..      | 0       | ..     |
|                      | 2017 | *44             | *19               | *25       | ..      | ..      | 0       | ..     |
|                      | 2018 | *44             | *19               | *25       | ..      | ..      | 0       | ..     |
|                      | 2019 | *44             | *19               | *25       | ..      | ..      | 0       | ..     |
| Chad                 | 2016 | *86             | *86               | ..        | ..      | ..      | ..      | ..     |
|                      | 2017 | *86             | *86               | ..        | ..      | ..      | ..      | ..     |
|                      | 2018 | *86             | *86               | ..        | ..      | ..      | ..      | ..     |
|                      | 2019 | *86             | *86               | ..        | ..      | ..      | ..      | ..     |
| Comoros              | 2016 | *27             | *26               | 1         | ..      | ..      | ..      | ..     |
|                      | 2017 | *35             | *34               | 1         | ..      | ..      | ..      | ..     |
|                      | 2018 | *35             | *34               | 1         | ..      | ..      | ..      | ..     |
|                      | 2019 | *35             | *34               | 1         | ..      | ..      | ..      | ..     |
| Congo                | 2016 | *600            | *391              | *209      | ..      | ..      | 0       | ..     |
|                      | 2017 | *606            | *391              | 214       | ..      | ..      | 1       | ..     |
|                      | 2018 | *606            | *391              | 214       | ..      | ..      | 1       | ..     |
|                      | 2019 | *606            | *391              | 214       | ..      | ..      | 1       | ..     |

Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Total   | Autoproducers     |        |         | Main activity producers |                   |           |         |           |
|---------|-------------------|--------|---------|-------------------------|-------------------|-----------|---------|-----------|
|         | Combustible fuels | Hydro  | Other   | Total                   | Combustible fuels | Hydro     | Nuclear | Other     |
| 601,109 | 472,776           | 19,421 | 108,912 | 6,085,635               | 3,771,020         | 1,220,984 | 399,333 | 694,298   |
| 572,201 | 430,580           | 19,243 | 122,378 | 6,317,256               | 3,845,171         | 1,246,125 | 398,782 | 827,178   |
| 630,428 | 471,145           | 21,137 | 138,145 | 6,542,933               | 3,922,027         | 1,264,071 | 406,291 | 950,544   |
| 674,660 | 494,809           | 21,295 | 158,556 | 6,723,456               | 3,954,525         | 1,281,541 | 404,823 | 1,082,567 |
| 26,267  | 21,188            | 700    | 4,379   | 168,813                 | 131,179           | 31,930    | 1,860   | 3,844     |
| 24,677  | 19,299            | 683    | 4,694   | 185,365                 | 144,619           | 34,476    | 1,940   | 4,331     |
| 28,006  | 21,642            | 705    | 5,659   | 197,246                 | 154,449           | 35,499    | 1,940   | 5,358     |
| 28,160  | 22,148            | 750    | 5,261   | 206,052                 | 160,915           | 35,778    | 1,940   | 7,418     |
| 4,314   | 4,314             | ..     | ..      | 14,717                  | 14,235            | 228       | ..      | 254       |
| 4,314   | 4,314             | ..     | ..      | 15,241                  | 14,578            | 228       | ..      | 435       |
| 6,079   | 6,079             | ..     | ..      | 15,087                  | 14,401            | 228       | ..      | 458       |
| *6,567  | *6,567            | ..     | ..      | *15,086                 | *14,400           | 228       | ..      | 458       |
| *217    | *217              | ..     | ..      | *2,669                  | *1,067            | *1,589    | ..      | 13        |
| *250    | *250              | ..     | ..      | *4,172                  | *1,817            | *2,342    | ..      | 13        |
| *250    | *250              | ..     | ..      | 4,760                   | *2,048            | 2,699     | ..      | 13        |
| *300    | *300              | ..     | ..      | *5,856                  | *3,144            | 2,699     | ..      | 13        |
| *45     | *45               | ..     | ..      | *336                    | *267              | *66       | ..      | 3         |
| *45     | *45               | ..     | ..      | *336                    | *267              | *66       | ..      | 3         |
| *45     | *45               | ..     | ..      | *336                    | *267              | *66       | ..      | 3         |
| *45     | *45               | ..     | ..      | *463                    | *394              | *66       | ..      | 3         |
| 20      | 20                | ..     | ..      | 601                     | 600               | ..        | ..      | 1         |
| 20      | 20                | ..     | ..      | 733                     | 732               | ..        | ..      | 1         |
| ..      | ..                | ..     | ..      | 796                     | 795               | ..        | ..      | 1         |
| ..      | ..                | ..     | ..      | 761                     | 760               | ..        | ..      | 1         |
| ..      | ..                | ..     | ..      | 325                     | 293               | 32        | ..      | ..        |
| ..      | ..                | ..     | ..      | 329                     | 293               | 32        | ..      | *4        |
| ..      | ..                | ..     | ..      | 349                     | 293               | 32        | ..      | *24       |
| ..      | ..                | ..     | ..      | 390                     | 295               | 32        | ..      | 62        |
| *2      | *2                | ..     | ..      | 62                      | *7                | 51        | ..      | 4         |
| *3      | *3                | ..     | ..      | 67                      | *14               | 48        | ..      | 5         |
| *3      | *3                | ..     | ..      | 84                      | 31                | 48        | ..      | 5         |
| *3      | *3                | ..     | ..      | 84                      | *31               | 48        | ..      | 5         |
| *1      | *1                | ..     | ..      | *168                    | *135              | ..        | ..      | 33        |
| *1      | *1                | ..     | ..      | *200                    | *165              | ..        | ..      | 35        |
| *1      | *1                | ..     | ..      | *209                    | *168              | ..        | ..      | *40       |
| *1      | *1                | ..     | ..      | *221                    | *181              | ..        | ..      | *40       |
| *650    | *650              | ..     | ..      | *1,294                  | *550              | *732      | ..      | *12       |
| *650    | *650              | ..     | ..      | 1,404                   | 615               | 777       | ..      | *12       |
| *650    | *650              | ..     | ..      | 1,019                   | 268               | 732       | ..      | *19       |
| *650    | *650              | ..     | ..      | 1,019                   | 268               | 732       | ..      | *19       |
| ..      | ..                | ..     | ..      | *44                     | *19               | *25       | ..      | 0         |
| ..      | ..                | ..     | ..      | *44                     | *19               | *25       | ..      | 0         |
| ..      | ..                | ..     | ..      | *44                     | *19               | *25       | ..      | 0         |
| ..      | ..                | ..     | ..      | *44                     | *19               | *25       | ..      | 0         |
| ..      | ..                | ..     | ..      | *86                     | *86               | ..        | ..      | ..        |
| ..      | ..                | ..     | ..      | *86                     | *86               | ..        | ..      | ..        |
| ..      | ..                | ..     | ..      | *86                     | *86               | ..        | ..      | ..        |
| ..      | ..                | ..     | ..      | *86                     | *86               | ..        | ..      | ..        |
| 1       | ..                | 1      | ..      | *26                     | *26               | ..        | ..      | ..        |
| 1       | ..                | 1      | ..      | *34                     | *34               | ..        | ..      | ..        |
| 1       | ..                | 1      | ..      | *34                     | *34               | ..        | ..      | ..        |
| 1       | ..                | 1      | ..      | *34                     | *34               | ..        | ..      | ..        |
| *350    | *350              | ..     | ..      | *250                    | *41               | *209      | ..      | 0         |
| *350    | *350              | ..     | ..      | 256                     | *41               | 214       | ..      | 1         |
| *350    | *350              | ..     | ..      | 256                     | *41               | 214       | ..      | 1         |
| *350    | *350              | ..     | ..      | 256                     | *41               | 214       | ..      | 1         |

Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Country or area        | Year | Total producers |                   |        |         |       |       |       |
|------------------------|------|-----------------|-------------------|--------|---------|-------|-------|-------|
|                        |      | Total           | Combustible fuels | Hydro  | Nuclear | Wind  | Solar | Other |
| Côte d'Ivoire          | 2016 | 1,914           | 1,305             | 604    | ..      | ..    | 5     | ..    |
|                        | 2017 | 2,203           | 1,316             | 879    | ..      | ..    | 8     | ..    |
|                        | 2018 | 2,192           | 1,305             | 879    | ..      | ..    | 8     | ..    |
|                        | 2019 | 2,233           | 1,346             | 879    | ..      | ..    | 8     | ..    |
| Dem. Rep. of the Congo | 2016 | *2,677          | *135              | *2,542 | ..      | ..    | ..    | ..    |
|                        | 2017 | 3,120           | 122               | 2,998  | ..      | ..    | ..    | ..    |
|                        | 2018 | 3,179           | 155               | 3,005  | ..      | ..    | 19    | ..    |
|                        | 2019 | *3,190          | *155              | *3,015 | ..      | ..    | 20    | ..    |
| Djibouti               | 2016 | 130             | 130               | ..     | ..      | ..    | ..    | ..    |
|                        | 2017 | 130             | 130               | ..     | ..      | ..    | ..    | ..    |
|                        | 2018 | *130            | *130              | ..     | ..      | ..    | ..    | ..    |
|                        | 2019 | *130            | *130              | ..     | ..      | ..    | ..    | ..    |
| Egypt                  | 2016 | 40,905          | 37,218            | 2,800  | ..      | 747   | 140   | ..    |
|                        | 2017 | 47,056          | 43,369            | 2,800  | ..      | 747   | 140   | ..    |
|                        | 2018 | 56,574          | 52,585            | 2,832  | ..      | 967   | 190   | ..    |
|                        | 2019 | 58,353          | 53,394            | 2,832  | ..      | 1,127 | 1,000 | ..    |
| Equatorial Guinea      | 2016 | 349             | 222               | 127    | ..      | ..    | ..    | ..    |
|                        | 2017 | 554             | 222               | 327    | ..      | ..    | 5     | ..    |
|                        | 2018 | *554            | *222              | *327   | ..      | ..    | *5    | ..    |
|                        | 2019 | *554            | *222              | *327   | ..      | ..    | *5    | ..    |
| Eritrea                | 2016 | *161            | *159              | ..     | ..      | 1     | *1    | ..    |
|                        | 2017 | *216            | *205              | ..     | ..      | 1     | *10   | ..    |
|                        | 2018 | *226            | *205              | ..     | ..      | 1     | *20   | ..    |
|                        | 2019 | *226            | *205              | ..     | ..      | 1     | *20   | ..    |
| Eswatini               | 2016 | *188            | *115              | 73     | ..      | ..    | ..    | ..    |
|                        | 2017 | *188            | *115              | *73    | ..      | ..    | 0     | ..    |
|                        | 2018 | 192             | 119               | *73    | ..      | ..    | 0     | ..    |
|                        | 2019 | 193             | 119               | *73    | ..      | ..    | 1     | ..    |
| Ethiopia               | 2016 | 4,289           | 136               | 3,808  | ..      | 324   | 14    | 7     |
|                        | 2017 | 4,298           | 141               | 3,814  | ..      | 324   | 12    | 7     |
|                        | 2018 | 4,297           | 141               | 3,814  | ..      | 324   | 11    | 7     |
|                        | 2019 | 4,300           | 141               | 3,817  | ..      | 324   | 11    | 7     |
| Gabon                  | 2016 | 523             | 352               | 170    | ..      | ..    | *1    | ..    |
|                        | 2017 | 533             | 359               | 173    | ..      | ..    | *1    | ..    |
|                        | 2018 | 751             | 418               | 332    | ..      | ..    | *1    | ..    |
|                        | 2019 | *784            | *451              | 332    | ..      | ..    | *1    | ..    |
| Gambia                 | 2016 | *121            | *117              | ..     | ..      | 1     | 2     | ..    |
|                        | 2017 | *121            | *118              | ..     | ..      | 1     | 2     | ..    |
|                        | 2018 | *126            | *123              | ..     | ..      | 1     | *2    | ..    |
|                        | 2019 | *137            | *134              | ..     | ..      | 1     | *2    | ..    |
| Ghana                  | 2016 | 4,005           | 2,402             | 1,580  | ..      | ..    | 23    | 0     |
|                        | 2017 | 4,609           | 3,006             | 1,580  | ..      | ..    | 23    | 0     |
|                        | 2018 | 5,099           | 3,476             | 1,580  | ..      | ..    | 43    | 0     |
|                        | 2019 | 5,382           | 3,759             | 1,580  | ..      | ..    | 43    | 0     |
| Guinea                 | 2016 | 593             | 226               | 367    | ..      | ..    | ..    | ..    |
|                        | 2017 | 610             | *243              | 367    | ..      | ..    | ..    | ..    |
|                        | 2018 | 615             | *248              | 367    | ..      | ..    | ..    | ..    |
|                        | 2019 | 621             | *254              | 367    | ..      | ..    | ..    | ..    |
| Guinea-Bissau          | 2016 | *27             | *27               | ..     | ..      | ..    | ..    | ..    |
|                        | 2017 | *27             | *26               | ..     | ..      | ..    | 1     | ..    |
|                        | 2018 | *27             | *26               | ..     | ..      | ..    | 1     | ..    |
|                        | 2019 | *28             | *27               | ..     | ..      | ..    | 1     | ..    |
| Kenya                  | 2016 | 2,255           | 786               | 798    | ..      | 26    | 1     | 644   |
|                        | 2017 | 2,271           | 766               | 826    | ..      | 26    | 1     | 652   |
|                        | 2018 | 3,043           | 1,209             | 821    | ..      | 336   | 51    | 627   |
|                        | 2019 | 3,155           | 1,113             | 826    | ..      | 336   | 51    | 828   |

Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Autoproducers |                   |       |       | Main activity producers |                   |        |         |       |
|---------------|-------------------|-------|-------|-------------------------|-------------------|--------|---------|-------|
| Total         | Combustible fuels | Hydro | Other | Total                   | Combustible fuels | Hydro  | Nuclear | Other |
| *23           | *23               | ..    | ..    | 1,891                   | 1,282             | 604    | ..      | 5     |
| *23           | *23               | ..    | ..    | 2,180                   | 1,293             | 879    | ..      | 8     |
| *23           | *23               | ..    | ..    | 2,169                   | 1,282             | 879    | ..      | 8     |
| *23           | *23               | ..    | ..    | 2,210                   | 1,323             | 879    | ..      | 8     |
| *567          | *25               | *542  | ..    | *2,110                  | *110              | *2,000 | ..      | ..    |
| 581           | 93                | 488   | ..    | 2,539                   | 29                | 2,510  | ..      | ..    |
| 601           | 123               | 478   | ..    | 2,578                   | 32                | 2,527  | ..      | 19    |
| 611           | *123              | 488   | ..    | *2,579                  | *32               | *2,527 | ..      | 20    |
| ..            | ..                | ..    | ..    | 130                     | 130               | ..     | ..      | ..    |
| ..            | ..                | ..    | ..    | 130                     | 130               | ..     | ..      | ..    |
| ..            | ..                | ..    | ..    | *130                    | *130              | ..     | ..      | ..    |
| ..            | ..                | ..    | ..    | *130                    | *130              | ..     | ..      | ..    |
| 2,048         | 2,048             | ..    | ..    | 38,857                  | 35,170            | 2,800  | ..      | 887   |
| 2,048         | 2,048             | ..    | ..    | 45,008                  | 41,321            | 2,800  | ..      | 887   |
| 2,048         | 2,048             | ..    | ..    | 54,526                  | 50,537            | 2,832  | ..      | 1,157 |
| 2,048         | 2,048             | ..    | ..    | 56,305                  | 51,346            | 2,832  | ..      | 2,127 |
| ..            | ..                | ..    | ..    | 349                     | 222               | 127    | ..      | ..    |
| ..            | ..                | ..    | ..    | 554                     | 222               | 327    | ..      | 5     |
| ..            | ..                | ..    | ..    | *554                    | *222              | *327   | ..      | *5    |
| ..            | ..                | ..    | ..    | *554                    | *222              | *327   | ..      | *5    |
| *10           | *10               | ..    | ..    | *151                    | *149              | ..     | ..      | 2     |
| *10           | *10               | ..    | ..    | *206                    | *195              | ..     | ..      | *11   |
| *10           | *10               | ..    | ..    | *216                    | *195              | ..     | ..      | *21   |
| *10           | *10               | ..    | ..    | *216                    | *195              | ..     | ..      | *21   |
| *110          | *106              | *4    | ..    | 79                      | 10                | 69     | ..      | ..    |
| *110          | *106              | *4    | 0     | *79                     | *10               | *69    | ..      | ..    |
| 113           | 109               | *4    | 0     | *79                     | *10               | *69    | ..      | ..    |
| 113           | 109               | *4    | 0     | *79                     | *10               | *69    | ..      | 1     |
| *37           | *37               | ..    | ..    | 4,252                   | 99                | 3,808  | ..      | 345   |
| *37           | *37               | ..    | ..    | 4,261                   | 104               | 3,814  | ..      | 343   |
| *37           | *37               | ..    | ..    | 4,260                   | 104               | 3,814  | ..      | 342   |
| *37           | *37               | ..    | ..    | 4,263                   | 104               | 3,817  | ..      | 342   |
| *71           | *70               | ..    | *1    | 452                     | 282               | 170    | ..      | ..    |
| *73           | *70               | *2    | *1    | 460                     | 289               | 171    | ..      | ..    |
| 88            | 85                | *2    | *1    | 663                     | 333               | 330    | ..      | ..    |
| *88           | *85               | *2    | *1    | *696                    | *366              | 330    | ..      | ..    |
| *35           | *35               | ..    | ..    | *86                     | *82               | ..     | ..      | 3     |
| *36           | *36               | ..    | ..    | *86                     | *82               | ..     | ..      | 3     |
| *36           | *36               | ..    | ..    | *90                     | *87               | ..     | ..      | *3    |
| *36           | *36               | ..    | ..    | *101                    | *98               | ..     | ..      | *3    |
| *210          | *210              | ..    | ..    | 3,795                   | 2,192             | 1,580  | ..      | 23    |
| *210          | *210              | ..    | ..    | 4,399                   | 2,796             | 1,580  | ..      | 23    |
| *210          | *210              | ..    | ..    | 4,889                   | 3,266             | 1,580  | ..      | 43    |
| *210          | *210              | ..    | ..    | 5,172                   | 3,549             | 1,580  | ..      | 43    |
| 150           | 150               | ..    | ..    | 444                     | 77                | 367    | ..      | ..    |
| *150          | *150              | ..    | ..    | 460                     | *93               | 367    | ..      | ..    |
| *148          | *148              | ..    | ..    | 467                     | *100              | 367    | ..      | ..    |
| *150          | *150              | ..    | ..    | 471                     | *104              | 367    | ..      | ..    |
| *5            | *5                | ..    | ..    | *21                     | *21               | ..     | ..      | ..    |
| *6            | *6                | ..    | ..    | *22                     | *21               | ..     | ..      | 1     |
| *5            | *5                | ..    | ..    | *22                     | *21               | ..     | ..      | 1     |
| *5            | *5                | ..    | ..    | *22                     | *21               | ..     | ..      | 1     |
| ..            | ..                | ..    | ..    | 2,255                   | 786               | 798    | ..      | 671   |
| ..            | ..                | ..    | ..    | 2,271                   | 766               | 826    | ..      | 679   |
| 364           | 364               | ..    | ..    | 2,679                   | 845               | 821    | ..      | 1,014 |
| 364           | 364               | ..    | ..    | 2,791                   | 749               | 826    | ..      | 1,216 |

Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Country or area | Year | Total producers |                   |        |         |       |       |       |
|-----------------|------|-----------------|-------------------|--------|---------|-------|-------|-------|
|                 |      | Total           | Combustible fuels | Hydro  | Nuclear | Wind  | Solar | Other |
| Lesotho         | 2016 | 81              | *1                | 80     | ..      | ..    | 0     | ..    |
|                 | 2017 | 75              | *1                | 74     | ..      | ..    | 0     | ..    |
|                 | 2018 | 75              | 1                 | 74     | ..      | ..    | 0     | ..    |
|                 | 2019 | 75              | 1                 | 74     | ..      | ..    | 0     | ..    |
| Liberia         | 2016 | *107            | *98               | *9     | ..      | ..    | 0     | ..    |
|                 | 2017 | *111            | *100              | *9     | ..      | ..    | *2    | ..    |
|                 | 2018 | *195            | *100              | *92    | ..      | ..    | *3    | ..    |
|                 | 2019 | *195            | *100              | *92    | ..      | ..    | *3    | ..    |
| Libya           | 2016 | 10,249          | 10,244            | ..     | ..      | ..    | 5     | ..    |
|                 | 2017 | 10,243          | 10,238            | ..     | ..      | ..    | 5     | ..    |
|                 | 2018 | 10,516          | 10,511            | ..     | ..      | ..    | 5     | ..    |
|                 | 2019 | 10,516          | 10,511            | ..     | ..      | ..    | 5     | ..    |
| Madagascar      | 2016 | 536             | 366               | 159    | ..      | 0     | 11    | ..    |
|                 | 2017 | 675             | 496               | 166    | ..      | 0     | 13    | ..    |
|                 | 2018 | 658             | 473               | 165    | ..      | 0     | 20    | ..    |
|                 | 2019 | 546             | 361               | 165    | ..      | 0     | 20    | ..    |
| Malawi          | 2016 | 579             | *211              | 356    | ..      | ..    | 12    | ..    |
|                 | 2017 | 586             | *211              | 356    | ..      | ..    | 19    | ..    |
|                 | 2018 | 601             | *211              | 367    | ..      | ..    | 23    | ..    |
|                 | 2019 | 603             | *211              | 369    | ..      | ..    | 23    | ..    |
| Mali            | 2016 | *941            | *490              | *450   | ..      | ..    | *1    | ..    |
|                 | 2017 | *1,012          | *560              | *450   | ..      | ..    | *2    | ..    |
|                 | 2018 | *1,012          | *560              | *450   | ..      | ..    | *2    | ..    |
|                 | 2019 | *1,015          | *560              | *450   | ..      | ..    | *5    | ..    |
| Mauritania      | 2016 | *461            | *392              | ..     | ..      | 34    | 35    | ..    |
|                 | 2017 | *506            | *421              | ..     | ..      | 35    | 50    | ..    |
|                 | 2018 | *570            | *449              | ..     | ..      | 34    | 87    | ..    |
|                 | 2019 | *608            | *486              | ..     | ..      | 34    | 88    | ..    |
| Mauritius       | 2016 | 847             | 749               | 61     | ..      | 11    | 27    | ..    |
|                 | 2017 | 836             | 736               | 60     | ..      | 11    | 29    | ..    |
|                 | 2018 | 873             | 735               | 60     | ..      | 11    | 67    | ..    |
|                 | 2019 | 844             | 684               | 60     | ..      | 11    | 89    | ..    |
| Morocco         | 2016 | 11,561          | 8,732             | 1,770  | ..      | 898   | 161   | ..    |
|                 | 2017 | 12,120          | 9,128             | 1,770  | ..      | 1,017 | 205   | ..    |
|                 | 2018 | 12,350          | 9,151             | 1,770  | ..      | 1,168 | 261   | ..    |
|                 | 2019 | 13,977          | 10,276            | 1,770  | ..      | 1,220 | 711   | ..    |
| Mozambique      | 2016 | 2,491           | 412               | 2,078  | ..      | ..    | 1     | ..    |
|                 | 2017 | *2,741          | *415              | *2,311 | ..      | ..    | *15   | ..    |
|                 | 2018 | *2,744          | *440              | *2,264 | ..      | ..    | *40   | ..    |
|                 | 2019 | *2,814          | *480              | *2,264 | ..      | ..    | *70   | ..    |
| Namibia         | 2016 | 529             | 143               | 350    | ..      | 0     | 36    | ..    |
|                 | 2017 | 565             | 143               | 347    | ..      | 5     | 70    | ..    |
|                 | 2018 | 582             | 143               | 347    | ..      | 5     | 88    | ..    |
|                 | 2019 | 600             | 113               | 347    | ..      | 5     | 135   | ..    |
| Niger           | 2016 | 288             | 280               | ..     | ..      | ..    | 8     | ..    |
|                 | 2017 | 290             | 281               | ..     | ..      | ..    | 9     | ..    |
|                 | 2018 | 311             | 291               | ..     | ..      | ..    | 20    | ..    |
|                 | 2019 | *324            | *297              | ..     | ..      | ..    | 27    | ..    |
| Nigeria         | 2016 | *12,535         | *10,403           | *2,111 | ..      | 3     | 18    | ..    |
|                 | 2017 | *12,275         | *10,142           | *2,111 | ..      | 3     | 19    | ..    |
|                 | 2018 | *12,275         | *10,142           | *2,111 | ..      | 3     | 19    | ..    |
|                 | 2019 | 11,681          | 9,539             | *2,111 | ..      | 3     | 28    | ..    |
| Rwanda          | 2016 | 193             | 99                | 84     | ..      | ..    | 9     | ..    |
|                 | 2017 | 209             | 111               | 86     | ..      | ..    | 12    | ..    |
|                 | 2018 | 226             | 121               | 92     | ..      | ..    | 12    | ..    |
|                 | 2019 | 228             | 122               | 95     | ..      | ..    | 12    | ..    |



Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Autoproducers |                   |       |       | Main activity producers |                   |        |         |       |
|---------------|-------------------|-------|-------|-------------------------|-------------------|--------|---------|-------|
| Total         | Combustible fuels | Hydro | Other | Total                   | Combustible fuels | Hydro  | Nuclear | Other |
| ..            | ..                | ..    | ..    | 81                      | *1                | 80     | ..      | 0     |
| ..            | ..                | ..    | ..    | 75                      | *1                | 74     | ..      | 0     |
| ..            | ..                | ..    | ..    | 75                      | 1                 | 74     | ..      | 0     |
| ..            | ..                | ..    | ..    | 75                      | 1                 | 74     | ..      | 0     |
| *70           | *70               | ..    | ..    | 37                      | 28                | *9     | ..      | 0     |
| *70           | *70               | ..    | ..    | *41                     | *30               | *9     | ..      | *2    |
| *70           | *70               | ..    | ..    | *125                    | *30               | *92    | ..      | *3    |
| *70           | *70               | ..    | ..    | *125                    | *30               | *92    | ..      | *3    |
| ..            | ..                | ..    | ..    | 10,249                  | 10,244            | ..     | ..      | 5     |
| ..            | ..                | ..    | ..    | 10,243                  | 10,238            | ..     | ..      | 5     |
| ..            | ..                | ..    | ..    | 10,516                  | 10,511            | ..     | ..      | 5     |
| ..            | ..                | ..    | ..    | 10,516                  | 10,511            | ..     | ..      | 5     |
| *40           | *40               | ..    | ..    | 496                     | 326               | 159    | ..      | 11    |
| *60           | *60               | ..    | ..    | 615                     | 436               | 166    | ..      | 13    |
| *60           | *60               | ..    | ..    | 598                     | 413               | 165    | ..      | 20    |
| *60           | *60               | ..    | ..    | 486                     | 301               | 165    | ..      | 20    |
| *215          | *210              | *5    | ..    | 364                     | *1                | 351    | ..      | 12    |
| *215          | *210              | *5    | ..    | 371                     | *1                | 351    | ..      | 19    |
| *215          | *210              | *5    | ..    | 386                     | *1                | 362    | ..      | 23    |
| *215          | *210              | *5    | ..    | 388                     | *1                | 364    | ..      | 23    |
| *200          | *200              | ..    | ..    | *741                    | *290              | *450   | ..      | *1    |
| *260          | *260              | ..    | ..    | *752                    | *300              | *450   | ..      | *2    |
| *260          | *260              | ..    | ..    | *752                    | *300              | *450   | ..      | *2    |
| *260          | *260              | ..    | ..    | *755                    | *300              | *450   | ..      | *5    |
| *80           | *80               | ..    | ..    | *381                    | *312              | ..     | ..      | 69    |
| *80           | *80               | ..    | ..    | *426                    | *341              | ..     | ..      | 85    |
| *85           | *85               | ..    | ..    | *485                    | *364              | ..     | ..      | 121   |
| *90           | *90               | ..    | ..    | *518                    | *396              | ..     | ..      | 122   |
| 348           | 312               | ..    | 36    | 499                     | 437               | 61     | ..      | 1     |
| 323           | 285               | ..    | 38    | 513                     | 452               | 60     | ..      | 1     |
| 361           | 285               | ..    | 76    | 512                     | 450               | 60     | ..      | 1     |
| 332           | 234               | ..    | 98    | 512                     | 450               | 60     | ..      | 1     |
| *3,300        | *3,300            | ..    | ..    | 8,261                   | 5,432             | 1,770  | ..      | 1,059 |
| *3,300        | *3,300            | ..    | ..    | 8,820                   | 5,828             | 1,770  | ..      | 1,222 |
| *3,300        | *3,300            | ..    | ..    | 9,050                   | 5,851             | 1,770  | ..      | 1,429 |
| *3,300        | *3,300            | ..    | ..    | 10,677                  | 6,976             | 1,770  | ..      | 1,931 |
| *31           | *27               | *3    | 1     | 2,460                   | 385               | 2,075  | ..      | ..    |
| *30           | *30               | ..    | ..    | *2,711                  | *385              | *2,311 | ..      | *15   |
| *30           | *30               | ..    | ..    | *2,714                  | *410              | *2,264 | ..      | *40   |
| *40           | *40               | ..    | ..    | *2,774                  | *440              | *2,264 | ..      | *70   |
| ..            | ..                | ..    | ..    | 529                     | 143               | 350    | ..      | 36    |
| ..            | ..                | ..    | ..    | 565                     | 143               | 347    | ..      | 75    |
| ..            | ..                | ..    | ..    | 582                     | 143               | 347    | ..      | 93    |
| ..            | ..                | ..    | ..    | 600                     | 113               | 347    | ..      | 140   |
| 61            | 53                | ..    | 8     | 226                     | 226               | ..     | ..      | ..    |
| 62            | 53                | ..    | 9     | 228                     | 228               | ..     | ..      | ..    |
| 73            | 53                | ..    | 20    | 238                     | 238               | ..     | ..      | ..    |
| *80           | *53               | ..    | 27    | *244                    | *244              | ..     | ..      | ..    |
| *3,323        | *3,262            | *40   | 21    | *9,212                  | *7,141            | *2,071 | ..      | ..    |
| *3,242        | *3,180            | *40   | 22    | *9,033                  | *6,962            | *2,071 | ..      | ..    |
| *3,242        | *3,180            | *40   | 22    | *9,033                  | *6,962            | *2,071 | ..      | ..    |
| *3,251        | *3,180            | *40   | 31    | 8,430                   | 6,359             | *2,071 | ..      | ..    |
| *1            | *1                | ..    | ..    | 192                     | 98                | 84     | ..      | 9     |
| *1            | *1                | ..    | ..    | 208                     | 110               | 86     | ..      | 12    |
| *1            | *1                | ..    | ..    | 225                     | 120               | 92     | ..      | 12    |
| *1            | *1                | ..    | ..    | 227                     | 121               | 95     | ..      | 12    |

Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Country or area         | Year | Total producers |                   |        |         |        |       |       |
|-------------------------|------|-----------------|-------------------|--------|---------|--------|-------|-------|
|                         |      | Total           | Combustible fuels | Hydro  | Nuclear | Wind   | Solar | Other |
| Sao Tome and Principe   | 2016 | *27             | *25               | 2      | ..      | ..     | 0     | ..    |
|                         | 2017 | *29             | *26               | 2      | ..      | ..     | 0     | ..    |
|                         | 2018 | *29             | *26               | 2      | ..      | ..     | 0     | ..    |
|                         | 2019 | *29             | *26               | 2      | ..      | ..     | 0     | ..    |
| Senegal                 | 2016 | *893            | *840              | ..     | ..      | ..     | 22    | *31   |
|                         | 2017 | 1,016           | 884               | ..     | ..      | ..     | 102   | 30    |
|                         | 2018 | 1,174           | 1,001             | ..     | ..      | ..     | 143   | *30   |
|                         | 2019 | 1,432           | 1,141             | ..     | ..      | 50     | *166  | *75   |
| Seychelles              | 2016 | *137            | *129              | ..     | ..      | 6      | 2     | ..    |
|                         | 2017 | 155             | 146               | ..     | ..      | 7      | 3     | ..    |
|                         | 2018 | *155            | *146              | ..     | ..      | 6      | 4     | ..    |
|                         | 2019 | *157            | *147              | ..     | ..      | 6      | 4     | ..    |
| Sierra Leone            | 2016 | 139             | 78                | 60     | ..      | ..     | 1     | ..    |
|                         | 2017 | *142            | *78               | *60    | ..      | ..     | 4     | ..    |
|                         | 2018 | *137            | *76               | *57    | ..      | ..     | 4     | ..    |
|                         | 2019 | *143            | *78               | *60    | ..      | ..     | *4    | ..    |
| Somalia                 | 2016 | 87              | 80                | ..     | ..      | 3      | 5     | ..    |
|                         | 2017 | 90              | 80                | ..     | ..      | 4      | 7     | ..    |
|                         | 2018 | 91              | 80                | ..     | ..      | 4      | 7     | ..    |
|                         | 2019 | 91              | 80                | ..     | ..      | 4      | 7     | ..    |
| South Africa            | 2016 | *51,889         | *42,581           | *3,146 | 1,860   | *2,328 | 1,974 | ..    |
|                         | 2017 | *55,432         | *45,497           | 3,479  | 1,940   | *2,330 | 2,186 | ..    |
|                         | 2018 | *56,205         | *45,497           | 3,479  | 1,940   | *2,330 | 2,959 | ..    |
|                         | 2019 | *58,683         | *48,380           | *3,479 | 1,940   | *2,323 | 2,561 | ..    |
| South Sudan             | 2016 | *84             | *80               | *3     | ..      | ..     | *1    | ..    |
|                         | 2017 | *131            | *120              | *3     | ..      | ..     | *8    | ..    |
|                         | 2018 | *131            | *120              | *3     | ..      | ..     | *8    | ..    |
|                         | 2019 | *131            | *120              | *3     | ..      | ..     | *8    | ..    |
| St. Helena and Depend.  | 2016 | 11              | 8                 | ..     | ..      | 2      | 1     | ..    |
|                         | 2017 | 11              | 8                 | ..     | ..      | *3     | 1     | ..    |
|                         | 2018 | 12              | 8                 | ..     | ..      | 3      | 2     | ..    |
|                         | 2019 | 12              | 8                 | ..     | ..      | *3     | *2    | ..    |
| Sudan                   | 2016 | 3,540           | 1,935             | 1,593  | ..      | ..     | 12    | ..    |
|                         | 2017 | 3,770           | 2,004             | 1,753  | ..      | ..     | 13    | ..    |
|                         | 2018 | 3,933           | 2,013             | 1,907  | ..      | ..     | 13    | ..    |
|                         | 2019 | *4,138          | *2,213            | 1,907  | ..      | ..     | 18    | ..    |
| Togo                    | 2016 | 213             | 158               | 55     | ..      | ..     | ..    | ..    |
|                         | 2017 | 227             | 158               | 67     | ..      | ..     | 3     | ..    |
|                         | 2018 | 227             | 157               | 67     | ..      | ..     | 4     | ..    |
|                         | 2019 | 230             | 158               | 67     | ..      | ..     | 5     | ..    |
| Tunisia                 | 2016 | 5,240           | 4,901             | 62     | ..      | 240    | 37    | ..    |
|                         | 2017 | 5,085           | 4,734             | 62     | ..      | 240    | 49    | ..    |
|                         | 2018 | 4,922           | 4,474             | 62     | ..      | 240    | 146   | ..    |
|                         | 2019 | 5,526           | 5,068             | 62     | ..      | 240    | 156   | ..    |
| Uganda                  | 2016 | 872             | 166               | 695    | ..      | ..     | 11    | ..    |
|                         | 2017 | 913             | 178               | 712    | ..      | ..     | 22    | ..    |
|                         | 2018 | 984             | 198               | 744    | ..      | ..     | 42    | ..    |
|                         | 2019 | 1,256           | 199               | 1,004  | ..      | ..     | 52    | ..    |
| United Rep. of Tanzania | 2016 | 1,394           | 808               | 567    | ..      | ..     | 18    | ..    |
|                         | 2017 | 1,412           | 829               | 562    | ..      | ..     | 22    | ..    |
|                         | 2018 | 1,607           | 1,015             | 567    | ..      | ..     | 25    | ..    |
|                         | 2019 | 1,530           | 931               | 574    | ..      | ..     | 26    | ..    |
| Zambia                  | 2016 | 2,827           | 439               | 2,388  | ..      | ..     | 0     | ..    |
|                         | 2017 | 2,897           | 498               | 2,398  | ..      | ..     | 1     | ..    |
|                         | 2018 | 2,898           | 499               | 2,398  | ..      | ..     | 1     | ..    |
|                         | 2019 | 2,981           | 494               | 2,399  | ..      | ..     | 89    | ..    |

Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Total  | Autoproducers     |       |        | Main activity producers |                   |        |         |       |
|--------|-------------------|-------|--------|-------------------------|-------------------|--------|---------|-------|
|        | Combustible fuels | Hydro | Other  | Total                   | Combustible fuels | Hydro  | Nuclear | Other |
| ..     | ..                | ..    | ..     | *27                     | *25               | 2      | ..      | 0     |
| ..     | ..                | ..    | ..     | *29                     | *26               | 2      | ..      | 0     |
| ..     | ..                | ..    | ..     | *29                     | *26               | 2      | ..      | 0     |
| ..     | ..                | ..    | ..     | *29                     | *26               | 2      | ..      | 0     |
| *383   | *330              | ..    | *53    | *510                    | *510              | ..     | ..      | ..    |
| *462   | *330              | ..    | 132    | 554                     | 554               | ..     | ..      | ..    |
| 503    | 330               | ..    | 173    | 671                     | 671               | ..     | ..      | ..    |
| 461    | 330               | ..    | *131   | 971                     | 811               | ..     | ..      | *160  |
| *28    | *28               | ..    | ..     | *108                    | *100              | ..     | ..      | 8     |
| *29    | *29               | ..    | ..     | 126                     | 116               | ..     | ..      | 10    |
| *29    | *29               | ..    | ..     | *126                    | *116              | ..     | ..      | 10    |
| *29    | *29               | ..    | ..     | *127                    | *118              | ..     | ..      | 10    |
| *1     | *1                | ..    | ..     | 138                     | 77                | 60     | ..      | 1     |
| *1     | *1                | ..    | ..     | *141                    | *77               | *60    | ..      | 4     |
| *1     | *1                | ..    | ..     | *136                    | *75               | *57    | ..      | 4     |
| *1     | *1                | ..    | ..     | *142                    | *77               | *60    | ..      | *4    |
| ..     | ..                | ..    | ..     | 87                      | 80                | ..     | ..      | 7     |
| ..     | ..                | ..    | ..     | 90                      | 80                | ..     | ..      | 10    |
| ..     | ..                | ..    | ..     | 91                      | 80                | ..     | ..      | 11    |
| ..     | ..                | ..    | ..     | 91                      | 80                | ..     | ..      | 11    |
| *8,633 | *4,391            | 40    | *4,202 | *43,256                 | *38,190           | *3,106 | 1,860   | *100  |
| *6,877 | *2,400            | 61    | *4,416 | *48,555                 | *43,097           | 3,418  | 1,940   | 100   |
| *7,650 | *2,400            | *61   | 5,189  | *48,555                 | *43,097           | 3,418  | 1,940   | *100  |
| *7,245 | *2,400            | *61   | 4,784  | *51,438                 | *45,980           | *3,418 | 1,940   | *100  |
| *41    | *40               | ..    | *1     | *43                     | *40               | *3     | ..      | 0     |
| *41    | *40               | ..    | *1     | *90                     | *80               | *3     | ..      | *7    |
| *41    | *40               | ..    | *1     | *90                     | *80               | *3     | ..      | *7    |
| *41    | *40               | ..    | *1     | *90                     | *80               | *3     | ..      | *7    |
| ..     | ..                | ..    | ..     | 11                      | 8                 | ..     | ..      | 3     |
| ..     | ..                | ..    | ..     | 11                      | 8                 | ..     | ..      | *3    |
| ..     | ..                | ..    | ..     | 12                      | 8                 | ..     | ..      | 4     |
| ..     | ..                | ..    | ..     | 12                      | 8                 | ..     | ..      | *4    |
| 190    | 190               | ..    | ..     | 3,350                   | 1,745             | 1,593  | ..      | 12    |
| 190    | 190               | ..    | ..     | 3,580                   | 1,814             | 1,753  | ..      | 13    |
| 199    | 199               | ..    | ..     | 3,734                   | 1,814             | 1,907  | ..      | 13    |
| *200   | *200              | ..    | ..     | *3,938                  | *2,013            | 1,907  | ..      | 18    |
| *8     | *8                | ..    | ..     | 205                     | 150               | 55     | ..      | ..    |
| *11    | *8                | ..    | 3      | 217                     | 150               | 67     | ..      | ..    |
| *12    | *8                | ..    | 4      | 216                     | 149               | 67     | ..      | ..    |
| *13    | *8                | ..    | 5      | 217                     | 150               | 67     | ..      | ..    |
| *235   | *198              | ..    | 37     | 5,005                   | 4,703             | 62     | ..      | 240   |
| *247   | *198              | ..    | 49     | 4,838                   | 4,536             | 62     | ..      | 240   |
| *344   | *198              | ..    | 146    | 4,578                   | 4,276             | 62     | ..      | 240   |
| *353   | *198              | ..    | 155    | 5,173                   | 4,870             | 62     | ..      | 241   |
| 130    | 65                | 65    | ..     | 742                     | 102               | 630    | ..      | 11    |
| 160    | 76                | 82    | 2      | 752                     | 102               | 630    | ..      | 21    |
| 212    | 96                | 114   | *2     | 772                     | 102               | 630    | ..      | 41    |
| 248    | 97                | 149   | *2     | 1,007                   | 102               | 855    | ..      | 51    |
| *38    | *20               | ..    | 18     | 1,356                   | 788               | 567    | ..      | ..    |
| 54     | 32                | ..    | 22     | 1,358                   | 796               | 562    | ..      | ..    |
| 211    | 186               | ..    | 25     | 1,396                   | 829               | 567    | ..      | ..    |
| *212   | *186              | ..    | 26     | 1,318                   | 745               | 574    | ..      | ..    |
| ..     | ..                | ..    | ..     | 2,827                   | 439               | 2,388  | ..      | 0     |
| ..     | ..                | ..    | ..     | 2,897                   | 498               | 2,398  | ..      | 1     |
| ..     | ..                | ..    | ..     | 2,898                   | 499               | 2,398  | ..      | 1     |
| ..     | ..                | ..    | ..     | 2,981                   | 494               | 2,399  | ..      | 89    |

Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Country or area             | Year        | Total producers  |                   |                |                |                |               |              |
|-----------------------------|-------------|------------------|-------------------|----------------|----------------|----------------|---------------|--------------|
|                             |             | Total            | Combustible fuels | Hydro          | Nuclear        | Wind           | Solar         | Other        |
| Zimbabwe                    | 2016        | 2,015            | 1,265             | 750            | ..             | ..             | ..            | ..           |
|                             | 2017        | 2,015            | 1,265             | 750            | ..             | ..             | ..            | ..           |
|                             | 2018        | 2,315            | 1,265             | 1,050          | ..             | ..             | ..            | ..           |
|                             | 2019        | *2,346           | *1,265            | 1,081          | ..             | ..             | ..            | ..           |
| <b>America, North</b>       | <b>2016</b> | <b>1,347,408</b> | <b>885,490</b>    | <b>203,516</b> | <b>115,206</b> | <b>99,088</b>  | <b>38,703</b> | <b>5,404</b> |
|                             | <b>2017</b> | <b>1,363,541</b> | <b>884,428</b>    | <b>204,007</b> | <b>115,270</b> | <b>105,610</b> | <b>47,978</b> | <b>6,247</b> |
|                             | <b>2018</b> | <b>1,399,114</b> | <b>896,152</b>    | <b>204,924</b> | <b>115,100</b> | <b>114,925</b> | <b>58,863</b> | <b>9,148</b> |
|                             | <b>2019</b> | <b>1,413,810</b> | <b>890,813</b>    | <b>205,560</b> | <b>113,873</b> | <b>125,070</b> | <b>68,935</b> | <b>9,558</b> |
| Anguilla                    | 2016        | 35               | 33                | ..             | ..             | ..             | 2             | ..           |
|                             | 2017        | 26               | 24                | ..             | ..             | ..             | 2             | ..           |
|                             | 2018        | 25               | 24                | ..             | ..             | ..             | 1             | ..           |
|                             | 2019        | 26               | 24                | ..             | ..             | ..             | 2             | ..           |
| Antigua and Barbuda         | 2016        | *117             | *111              | ..             | ..             | ..             | 6             | ..           |
|                             | 2017        | *119             | *113              | ..             | ..             | ..             | 6             | ..           |
|                             | 2018        | 91               | 82                | ..             | ..             | ..             | 9             | ..           |
|                             | 2019        | *118             | *109              | ..             | ..             | ..             | 9             | ..           |
| Aruba                       | 2016        | 288              | 258               | ..             | ..             | 30             | ..            | ..           |
|                             | 2017        | 288              | 258               | ..             | ..             | 30             | ..            | ..           |
|                             | 2018        | 288              | 258               | ..             | ..             | 30             | ..            | ..           |
|                             | 2019        | 288              | 258               | ..             | ..             | 30             | ..            | ..           |
| Bahamas                     | 2016        | 576              | 576               | ..             | ..             | ..             | ..            | ..           |
|                             | 2017        | 576              | 576               | ..             | ..             | ..             | ..            | ..           |
|                             | 2018        | 576              | 576               | ..             | ..             | ..             | ..            | ..           |
|                             | 2019        | 576              | 576               | ..             | ..             | ..             | ..            | ..           |
| Barbados                    | 2016        | 268              | 249               | ..             | ..             | ..             | 19            | ..           |
|                             | 2017        | 281              | 262               | ..             | ..             | ..             | 19            | ..           |
|                             | 2018        | 259              | 234               | ..             | ..             | ..             | 25            | ..           |
|                             | 2019        | 301              | 261               | ..             | ..             | ..             | 40            | ..           |
| Belize                      | 2016        | 146              | 94                | 51             | ..             | ..             | 0             | ..           |
|                             | 2017        | 165              | 113               | 51             | ..             | ..             | 0             | ..           |
|                             | 2018        | 165              | 113               | 51             | ..             | ..             | 0             | ..           |
|                             | 2019        | 158              | 100               | 55             | ..             | ..             | 3             | ..           |
| Bermuda                     | 2016        | *173             | *171              | ..             | ..             | ..             | *2            | ..           |
|                             | 2017        | *174             | *171              | ..             | ..             | ..             | *3            | ..           |
|                             | 2018        | *176             | *172              | ..             | ..             | ..             | 4             | ..           |
|                             | 2019        | *176             | *172              | ..             | ..             | ..             | 4             | ..           |
| Bonaire, St Eustatius, Saba | 2016        | 33               | 20                | ..             | ..             | 11             | 2             | ..           |
|                             | 2017        | *33              | *20               | ..             | ..             | 11             | 2             | ..           |
|                             | 2018        | *37              | *20               | ..             | ..             | 11             | 6             | ..           |
|                             | 2019        | *37              | *20               | ..             | ..             | 11             | 6             | ..           |
| British Virgin Islands      | 2016        | 45               | 44                | ..             | ..             | 1              | 1             | ..           |
|                             | 2017        | *32              | *31               | ..             | ..             | *1             | *1            | ..           |
|                             | 2018        | *33              | *32               | ..             | ..             | *1             | 0             | ..           |
|                             | 2019        | *33              | *32               | ..             | ..             | *1             | 0             | ..           |
| Canada                      | 2016        | 146,601          | 37,557            | 80,304         | 14,033         | 11,973         | 2,665         | *69          |
|                             | 2017        | 147,449          | 37,307            | 80,831         | 14,033         | 12,250         | 2,932         | *96          |
|                             | 2018        | 148,762          | 37,322            | 81,396         | 14,033         | 12,816         | 3,095         | *100         |
|                             | 2019        | 149,594          | 37,322            | 81,399         | 14,033         | 13,413         | 3,327         | *100         |
| Cayman Islands              | 2016        | 161              | 161               | ..             | ..             | ..             | ..            | ..           |
|                             | 2017        | 161              | 161               | ..             | ..             | ..             | ..            | ..           |
|                             | 2018        | 161              | 161               | ..             | ..             | ..             | ..            | ..           |
|                             | 2019        | 161              | 161               | ..             | ..             | ..             | ..            | ..           |
| Costa Rica                  | 2016        | 4,003            | 617               | 2,538          | ..             | 619            | 21            | 207          |
|                             | 2017        | 3,566            | 617               | 2,328          | ..             | 378            | 36            | 207          |
|                             | 2018        | 3,648            | 629               | 2,360          | ..             | 408            | 44            | 207          |
|                             | 2019        | 3,626            | 550               | 2,344          | ..             | 411            | 59            | 262          |

Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Autoproducers |                   |              |               | Main activity producers |                   |                |                |                |
|---------------|-------------------|--------------|---------------|-------------------------|-------------------|----------------|----------------|----------------|
| Total         | Combustible fuels | Hydro        | Other         | Total                   | Combustible fuels | Hydro          | Nuclear        | Other          |
| *45           | *45               | ..           | ..            | 1,970                   | 1,220             | 750            | ..             | ..             |
| *45           | *45               | ..           | ..            | 1,970                   | 1,220             | 750            | ..             | ..             |
| *45           | *45               | ..           | ..            | 2,270                   | 1,220             | 1,050          | ..             | ..             |
| *45           | *45               | ..           | ..            | *2,301                  | *1,220            | 1,081          | ..             | ..             |
| <b>77,644</b> | <b>51,958</b>     | <b>6,011</b> | <b>19,675</b> | <b>1,269,764</b>        | <b>833,532</b>    | <b>197,505</b> | <b>115,206</b> | <b>123,521</b> |
| <b>80,930</b> | <b>51,684</b>     | <b>5,811</b> | <b>23,435</b> | <b>1,282,611</b>        | <b>832,744</b>    | <b>198,196</b> | <b>115,270</b> | <b>136,401</b> |
| <b>81,265</b> | <b>47,509</b>     | <b>5,774</b> | <b>27,981</b> | <b>1,317,849</b>        | <b>848,643</b>    | <b>199,150</b> | <b>115,100</b> | <b>154,956</b> |
| <b>84,412</b> | <b>46,475</b>     | <b>5,778</b> | <b>32,159</b> | <b>1,329,397</b>        | <b>844,338</b>    | <b>199,782</b> | <b>113,873</b> | <b>171,404</b> |
| ..            | ..                | ..           | ..            | 35                      | 33                | ..             | ..             | 2              |
| ..            | ..                | ..           | ..            | 26                      | 24                | ..             | ..             | 2              |
| ..            | ..                | ..           | ..            | 25                      | 24                | ..             | ..             | 1              |
| ..            | ..                | ..           | ..            | 26                      | 24                | ..             | ..             | 2              |
| *1            | *1                | ..           | ..            | *116                    | *110              | ..             | ..             | 6              |
| *1            | *1                | ..           | ..            | *118                    | *112              | ..             | ..             | 6              |
| *1            | *1                | ..           | ..            | 90                      | 81                | ..             | ..             | 9              |
| *1            | *1                | ..           | ..            | *117                    | *108              | ..             | ..             | 9              |
| ..            | ..                | ..           | ..            | 288                     | 258               | ..             | ..             | 30             |
| ..            | ..                | ..           | ..            | 288                     | 258               | ..             | ..             | 30             |
| ..            | ..                | ..           | ..            | 288                     | 258               | ..             | ..             | 30             |
| ..            | ..                | ..           | ..            | 288                     | 258               | ..             | ..             | 30             |
| *39           | *39               | ..           | ..            | 537                     | 537               | ..             | ..             | ..             |
| *39           | *39               | ..           | ..            | 537                     | 537               | ..             | ..             | ..             |
| *39           | *39               | ..           | ..            | 537                     | 537               | ..             | ..             | ..             |
| *39           | *39               | ..           | ..            | 537                     | 537               | ..             | ..             | ..             |
| *10           | *10               | ..           | ..            | 258                     | 239               | ..             | ..             | 19             |
| *10           | *10               | ..           | ..            | 271                     | 252               | ..             | ..             | 19             |
| *10           | *10               | ..           | ..            | 249                     | 224               | ..             | ..             | 25             |
| *10           | *10               | ..           | ..            | 291                     | 251               | ..             | ..             | 40             |
| *34           | *34               | ..           | ..            | 112                     | 60                | 51             | ..             | 0              |
| *45           | *45               | ..           | ..            | 120                     | 68                | 51             | ..             | 0              |
| *45           | *45               | ..           | ..            | 120                     | 68                | 51             | ..             | 0              |
| *45           | *45               | ..           | ..            | 113                     | 55                | 55             | ..             | 3              |
| *6            | *4                | ..           | *2            | *167                    | *167              | ..             | ..             | ..             |
| *7            | *4                | ..           | *3            | *167                    | *167              | ..             | ..             | ..             |
| 9             | 5                 | ..           | 4             | *167                    | *167              | ..             | ..             | ..             |
| 9             | 5                 | ..           | 4             | *167                    | *167              | ..             | ..             | ..             |
| ..            | ..                | ..           | ..            | 33                      | 20                | ..             | ..             | 13             |
| ..            | ..                | ..           | ..            | *33                     | *20               | ..             | ..             | 13             |
| ..            | ..                | ..           | ..            | *37                     | *20               | ..             | ..             | 17             |
| ..            | ..                | ..           | ..            | *37                     | *20               | ..             | ..             | 17             |
| ..            | ..                | ..           | ..            | 45                      | 44                | ..             | ..             | 1              |
| ..            | ..                | ..           | ..            | *32                     | *31               | ..             | ..             | *1             |
| ..            | ..                | ..           | ..            | *33                     | *32               | ..             | ..             | *1             |
| ..            | ..                | ..           | ..            | *33                     | *32               | ..             | ..             | *1             |
| 11,947        | 5,684             | 5,123        | 1,140         | 134,654                 | 31,873            | 75,181         | 14,033         | 13,567         |
| 12,071        | 5,559             | 5,132        | 1,380         | 135,378                 | 31,748            | 75,699         | 14,033         | 13,898         |
| 12,412        | 5,674             | 5,175        | 1,563         | 136,350                 | 31,648            | 76,221         | 14,033         | 14,448         |
| 12,525        | 5,674             | 5,175        | 1,676         | 137,069                 | 31,648            | 76,224         | 14,033         | 15,164         |
| ..            | ..                | ..           | ..            | 161                     | 161               | ..             | ..             | ..             |
| ..            | ..                | ..           | ..            | 161                     | 161               | ..             | ..             | ..             |
| ..            | ..                | ..           | ..            | 161                     | 161               | ..             | ..             | ..             |
| ..            | ..                | ..           | ..            | 161                     | 161               | ..             | ..             | ..             |
| *576          | 45                | 210          | *320          | 3,427                   | 572               | 2,328          | ..             | 527            |
| 76            | 45                | 0            | 30            | 3,490                   | 572               | 2,328          | ..             | 590            |
| 97            | 58                | 0            | 39            | 3,551                   | 572               | 2,359          | ..             | 620            |
| 130           | 76                | 0            | 54            | 3,495                   | 474               | 2,343          | ..             | 678            |

Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Country or area    | Year | Total producers |                   |        |         |       |       |       |
|--------------------|------|-----------------|-------------------|--------|---------|-------|-------|-------|
|                    |      | Total           | Combustible fuels | Hydro  | Nuclear | Wind  | Solar | Other |
| Cuba               | 2016 | 6,454           | 6,341             | 66     | ..      | *16   | *30   | ..    |
|                    | 2017 | 6,476           | 6,325             | 66     | ..      | *22   | *63   | ..    |
|                    | 2018 | 6,661           | 6,458             | 64     | ..      | *36   | *103  | ..    |
|                    | 2019 | 6,508           | 6,285             | 64     | ..      | *41   | *118  | ..    |
| Curaçao            | 2016 | *307            | *262              | ..     | ..      | 30    | *15   | ..    |
|                    | 2017 | *257            | *200              | ..     | ..      | 47    | 11    | ..    |
|                    | 2018 | *257            | *200              | ..     | ..      | 45    | 12    | ..    |
|                    | 2019 | *216            | *159              | ..     | ..      | 45    | 12    | ..    |
| Dominica           | 2016 | 42              | 35                | 7      | ..      | 0     | 1     | ..    |
|                    | 2017 | 42              | 35                | 7      | ..      | 0     | 1     | ..    |
|                    | 2018 | 40              | 35                | 5      | ..      | 0     | 0     | ..    |
|                    | 2019 | 40              | 35                | 5      | ..      | 0     | 0     | ..    |
| Dominican Republic | 2016 | 5,202           | 4,382             | 617    | ..      | 135   | 69    | ..    |
|                    | 2017 | 5,132           | 4,276             | 617    | ..      | 135   | 103   | ..    |
|                    | 2018 | 5,275           | 4,271             | 617    | ..      | 183   | 203   | ..    |
|                    | 2019 | 6,194           | 4,995             | 625    | ..      | 370   | *204  | ..    |
| El Salvador        | 2016 | *1,748          | *1,037            | 495    | ..      | ..    | 12    | 204   |
|                    | 2017 | 1,943           | 1,055             | 574    | ..      | ..    | 110   | 204   |
|                    | 2018 | 2,025           | 1,079             | 575    | ..      | ..    | 167   | 204   |
|                    | 2019 | 2,263           | 1,079             | 574    | ..      | ..    | 406   | 204   |
| Greenland          | 2016 | 187             | *96               | 91     | ..      | ..    | ..    | ..    |
|                    | 2017 | 187             | 96                | 91     | ..      | ..    | ..    | ..    |
|                    | 2018 | *187            | *96               | *91    | ..      | ..    | ..    | ..    |
|                    | 2019 | 187             | *96               | 91     | ..      | ..    | ..    | ..    |
| Grenada            | 2016 | 50              | 48                | ..     | ..      | ..    | 2     | ..    |
|                    | 2017 | 52              | 50                | ..     | ..      | ..    | 2     | ..    |
|                    | 2018 | 54              | 52                | ..     | ..      | ..    | 2     | ..    |
|                    | 2019 | 55              | 52                | ..     | ..      | ..    | 3     | ..    |
| Guatemala          | 2016 | 3,442           | 1,942             | 1,306  | ..      | 76    | 85    | 34    |
|                    | 2017 | 3,356           | 1,845             | 1,311  | ..      | 75    | 92    | 34    |
|                    | 2018 | 3,499           | 1,770             | 1,492  | ..      | 107   | 92    | 39    |
|                    | 2019 | 4,042           | 2,234             | 1,560  | ..      | 107   | 93    | 49    |
| Haiti              | 2016 | *336            | *274              | 61     | ..      | ..    | 1     | ..    |
|                    | 2017 | *344            | *282              | 61     | ..      | ..    | 1     | ..    |
|                    | 2018 | *352            | *290              | 61     | ..      | ..    | 1     | ..    |
|                    | 2019 | *471            | *390              | 78     | ..      | ..    | 3     | ..    |
| Honduras           | 2016 | 2,456           | 1,209             | 663    | ..      | 175   | 409   | ..    |
|                    | 2017 | 2,663           | 1,267             | 685    | ..      | 225   | 451   | 35    |
|                    | 2018 | 2,740           | 1,254             | 715    | ..      | 225   | 511   | 35    |
|                    | 2019 | 2,770           | 1,257             | 730    | ..      | 235   | 513   | 35    |
| Jamaica            | 2016 | 1,031           | 871               | 29     | ..      | 101   | 30    | ..    |
|                    | 2017 | 1,041           | 871               | 29     | ..      | 101   | 40    | ..    |
|                    | 2018 | 1,045           | 874               | 29     | ..      | 102   | 40    | ..    |
|                    | 2019 | *1,150          | *962              | 29     | ..      | *102  | 57    | ..    |
| Mexico             | 2016 | 72,574          | 53,047            | 12,580 | 1,608   | 4,051 | 362   | 926   |
|                    | 2017 | 74,431          | 54,388            | 12,628 | 1,608   | 4,180 | 642   | 985   |
|                    | 2018 | 89,351          | 62,010            | 12,643 | 1,634   | 5,887 | 2,579 | 4,598 |
|                    | 2019 | 92,286          | 63,521            | 13,301 | 1,721   | 6,073 | 2,838 | 4,832 |
| Montserrat         | 2016 | 5               | 5                 | ..     | ..      | ..    | ..    | ..    |
|                    | 2017 | 5               | 5                 | ..     | ..      | ..    | ..    | ..    |
|                    | 2018 | 5               | 5                 | ..     | ..      | ..    | ..    | ..    |
|                    | 2019 | 6               | 5                 | ..     | ..      | ..    | 0     | ..    |
| Nicaragua          | 2016 | 1,396           | 912               | 142    | ..      | 186   | 1     | 155   |
|                    | 2017 | 1,482           | 985               | 142    | ..      | 186   | 14    | 155   |
|                    | 2018 | 1,482           | 985               | 142    | ..      | 186   | 14    | 155   |
|                    | 2019 | 1,621           | 1,107             | 158    | ..      | 186   | 16    | 153   |

Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Total  | Autoproducers     |       |       | Main activity producers |                   |        |         |       |
|--------|-------------------|-------|-------|-------------------------|-------------------|--------|---------|-------|
|        | Combustible fuels | Hydro | Other | Total                   | Combustible fuels | Hydro  | Nuclear | Other |
| 494    | 494               | ..    | ..    | 5,960                   | 5,847             | 66     | ..      | *47   |
| 531    | 531               | ..    | ..    | 5,945                   | 5,794             | 66     | ..      | *85   |
| 553    | 553               | ..    | ..    | 6,108                   | 5,905             | 64     | ..      | *139  |
| 459    | 459               | ..    | ..    | 6,049                   | 5,826             | 64     | ..      | *159  |
| *146   | *146              | ..    | ..    | *161                    | *116              | ..     | ..      | 45    |
| *84    | *84               | ..    | ..    | *173                    | *116              | ..     | ..      | 57    |
| *84    | *84               | ..    | ..    | *173                    | *116              | ..     | ..      | 57    |
| *33    | *33               | ..    | ..    | *183                    | *126              | ..     | ..      | 57    |
| 15     | 15                | ..    | ..    | 28                      | 20                | 7      | ..      | 1     |
| 15     | 15                | ..    | ..    | 28                      | 20                | 7      | ..      | 1     |
| *15    | *15               | ..    | ..    | 25                      | 20                | 5      | ..      | 1     |
| *15    | *15               | ..    | ..    | 25                      | 20                | 5      | ..      | 1     |
| 1,393  | 1,353             | 1     | 39    | 3,809                   | 3,028             | 616    | ..      | 165   |
| 1,294  | 1,219             | 1     | 73    | 3,838                   | 3,057             | 616    | ..      | 165   |
| 1,306  | 1,189             | 2     | 116   | 3,969                   | 3,082             | 616    | ..      | 271   |
| 1,373  | 1,255             | *2    | *116  | 4,822                   | 3,740             | 623    | ..      | 458   |
| *314   | *280              | 23    | 12    | *1,434                  | *757              | 473    | ..      | 204   |
| *363   | *291              | 22    | 50    | 1,580                   | 764               | 552    | ..      | 264   |
| *451   | *322              | 22    | 107   | 1,574                   | 757               | 553    | ..      | 264   |
| *555   | *322              | 21    | 212   | 1,708                   | 757               | 553    | ..      | 398   |
| *16    | *16               | ..    | ..    | 171                     | *80               | 91     | ..      | ..    |
| 16     | 16                | ..    | ..    | 171                     | 80                | 91     | ..      | ..    |
| *16    | *16               | ..    | ..    | *171                    | *80               | *91    | ..      | ..    |
| *16    | *16               | ..    | ..    | 171                     | *80               | 91     | ..      | ..    |
| 0      | 0                 | ..    | ..    | 50                      | 48                | ..     | ..      | 2     |
| 0      | 0                 | ..    | ..    | 52                      | 50                | ..     | ..      | 2     |
| 0      | 0                 | ..    | ..    | 54                      | 52                | ..     | ..      | 2     |
| 0      | 0                 | ..    | ..    | 55                      | 52                | ..     | ..      | 3     |
| 705    | 701               | 4     | ..    | 2,737                   | 1,241             | 1,302  | ..      | 194   |
| 679    | 675               | 4     | ..    | 2,677                   | 1,170             | 1,307  | ..      | 200   |
| 652    | 647               | 5     | ..    | 2,846                   | 1,122             | 1,487  | ..      | 237   |
| *655   | *650              | *5    | ..    | 3,387                   | 1,584             | 1,555  | ..      | 249   |
| *96    | *96               | ..    | ..    | *240                    | *178              | 61     | ..      | 1     |
| *99    | *99               | ..    | ..    | *245                    | *183              | 61     | ..      | 1     |
| *102   | *102              | ..    | ..    | *250                    | *188              | 61     | ..      | 1     |
| *137   | *137              | ..    | ..    | *333                    | *253              | 78     | ..      | 3     |
| 364    | 364               | ..    | ..    | 2,092                   | 845               | 663    | ..      | 584   |
| 394    | 394               | ..    | ..    | 2,269                   | 873               | 685    | ..      | 711   |
| 369    | 369               | ..    | ..    | 2,371                   | 885               | 715    | ..      | 771   |
| 354    | 354               | ..    | ..    | 2,416                   | 903               | 730    | ..      | 783   |
| 370    | 262               | ..    | 108   | 661                     | 609               | 29     | ..      | 23    |
| 380    | 262               | ..    | 118   | 661                     | 609               | 29     | ..      | 23    |
| 380    | 262               | ..    | 118   | 665                     | 612               | 29     | ..      | 24    |
| *485   | *350              | ..    | *135  | *665                    | *612              | 29     | ..      | *24   |
| 16,670 | 12,767            | 232   | 3,671 | 55,904                  | 40,280            | 12,348 | 1,608   | 1,668 |
| 16,895 | 12,772            | 233   | 3,890 | 57,536                  | 41,616            | 12,395 | 1,608   | 1,917 |
| 12,928 | 8,047             | 225   | 4,656 | 76,423                  | 53,963            | 12,418 | 1,634   | 8,408 |
| 11,813 | 6,698             | 225   | 4,890 | 80,473                  | 56,823            | 13,076 | 1,721   | 8,853 |
| ..     | ..                | ..    | ..    | 5                       | 5                 | ..     | ..      | ..    |
| ..     | ..                | ..    | ..    | 5                       | 5                 | ..     | ..      | ..    |
| ..     | ..                | ..    | ..    | 5                       | 5                 | ..     | ..      | ..    |
| ..     | ..                | ..    | ..    | 6                       | 5                 | ..     | ..      | 0     |
| 178    | 177               | 1     | ..    | 1,219                   | 735               | 142    | ..      | 342   |
| 178    | 177               | 1     | ..    | 1,305                   | 809               | 142    | ..      | 355   |
| 178    | 177               | 1     | ..    | 1,305                   | 809               | 142    | ..      | 355   |
| 219    | 218               | 1     | ..    | 1,402                   | 888               | 157    | ..      | 356   |

Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Country or area           | Year        | Total producers |                   |                |              |               |              |           |
|---------------------------|-------------|-----------------|-------------------|----------------|--------------|---------------|--------------|-----------|
|                           |             | Total           | Combustible fuels | Hydro          | Nuclear      | Wind          | Solar        | Other     |
| Panama                    | 2016        | 3,371           | 1,235             | 1,769          | ..           | 270           | 89           | 8         |
|                           | 2017        | 3,423           | 1,225             | 1,777          | ..           | 270           | 143          | 8         |
|                           | 2018        | 4,055           | 1,811             | 1,777          | ..           | 270           | 189          | 8         |
|                           | 2019        | 4,091           | 1,819             | 1,796          | ..           | 270           | 198          | 8         |
| Puerto Rico               | 2016        | 6,257           | 5,900             | 99             | ..           | 125           | 133          | ..        |
|                           | 2017        | *6,264          | *5,900            | 99             | ..           | 101           | 165          | ..        |
|                           | 2018        | 5,830           | 5,466             | 99             | ..           | 101           | 165          | ..        |
|                           | 2019        | 6,173           | 5,808             | 99             | ..           | 102           | 165          | ..        |
| Sint Maarten (Dutch part) | 2016        | 97              | 97                | ..             | ..           | ..            | ..           | ..        |
|                           | 2017        | *88             | *88               | ..             | ..           | ..            | ..           | ..        |
|                           | 2018        | *92             | *92               | ..             | ..           | ..            | ..           | ..        |
|                           | 2019        | *96             | *96               | ..             | ..           | ..            | ..           | ..        |
| St. Kitts-Nevis           | 2016        | 65              | 60                | ..             | ..           | 2             | 2            | ..        |
|                           | 2017        | 65              | 60                | ..             | ..           | 2             | 2            | ..        |
|                           | 2018        | 71              | 67                | ..             | ..           | 2             | 2            | ..        |
|                           | 2019        | *71             | *67               | ..             | ..           | 2             | 2            | ..        |
| St. Lucia                 | 2016        | 88              | 88                | ..             | ..           | ..            | ..           | ..        |
|                           | 2017        | 88              | 88                | ..             | ..           | ..            | ..           | ..        |
|                           | 2018        | 91              | 88                | ..             | ..           | ..            | 3            | ..        |
|                           | 2019        | 91              | 88                | ..             | ..           | ..            | 3            | ..        |
| St. Pierre-Miquelon       | 2016        | 25              | 25                | ..             | ..           | 0             | ..           | ..        |
|                           | 2017        | 25              | 25                | ..             | ..           | 0             | ..           | ..        |
|                           | 2018        | 26              | 26                | ..             | ..           | 0             | ..           | ..        |
|                           | 2019        | 26              | 26                | ..             | ..           | 0             | ..           | ..        |
| St. Vincent-Grenadines    | 2016        | 53              | 46                | 6              | ..           | ..            | 1            | ..        |
|                           | 2017        | 48              | 41                | 6              | ..           | ..            | 1            | ..        |
|                           | 2018        | 46              | 38                | 6              | ..           | ..            | 2            | ..        |
|                           | 2019        | 48              | 40                | 6              | ..           | ..            | 2            | ..        |
| Trinidad and Tobago       | 2016        | 2,505           | 2,502             | ..             | ..           | ..            | 3            | ..        |
|                           | 2017        | 2,509           | 2,506             | ..             | ..           | 0             | 3            | ..        |
|                           | 2018        | 2,156           | 2,153             | ..             | ..           | 0             | 3            | ..        |
|                           | 2019        | 2,118           | 2,115             | ..             | ..           | 0             | 3            | ..        |
| Turks and Caicos Islands  | 2016        | 82              | 82                | ..             | ..           | ..            | ..           | ..        |
|                           | 2017        | 82              | 82                | ..             | ..           | ..            | ..           | ..        |
|                           | 2018        | 85              | 84                | ..             | ..           | ..            | 1            | ..        |
|                           | 2019        | 85              | 84                | ..             | ..           | ..            | 1            | ..        |
| United States             | 2016        | 1,086,849       | 764,787           | 102,692        | 99,565       | 81,287        | 34,716       | 3,802     |
|                           | 2017        | 1,100,333       | 762,765           | 102,703        | 99,629       | 87,597        | 43,115       | 4,524     |
|                           | 2018        | 1,119,131       | 767,009           | 102,801        | 99,433       | 94,516        | 51,570       | 3,802     |
|                           | 2019        | 1,127,772       | 758,593           | 102,649        | 98,119       | 103,670       | 60,827       | 3,914     |
| United States Virgin Is.  | 2016        | 340             | 316               | ..             | ..           | 0             | *24          | ..        |
|                           | 2017        | 336             | 316               | ..             | ..           | 0             | *20          | ..        |
|                           | 2018        | 336             | 316               | ..             | ..           | 0             | *20          | ..        |
|                           | 2019        | *336            | *316              | ..             | ..           | 0             | *20          | ..        |
| <b>America, South</b>     | <b>2016</b> | <b>302,343</b>  | <b>122,808</b>    | <b>161,283</b> | <b>3,753</b> | <b>13,043</b> | <b>1,454</b> | <b>1</b>  |
|                           | <b>2017</b> | <b>314,718</b>  | <b>125,540</b>    | <b>166,210</b> | <b>3,745</b> | <b>15,782</b> | <b>3,417</b> | <b>25</b> |
|                           | <b>2018</b> | <b>326,986</b>  | <b>127,635</b>    | <b>171,006</b> | <b>3,745</b> | <b>18,934</b> | <b>5,625</b> | <b>40</b> |
|                           | <b>2019</b> | <b>337,663</b>  | <b>128,574</b>    | <b>175,767</b> | <b>3,745</b> | <b>21,069</b> | <b>8,468</b> | <b>40</b> |
| Argentina                 | 2016        | 37,430          | 25,314            | 10,127         | 1,763        | 217           | 9            | ..        |
|                           | 2017        | 39,764          | 26,510            | 11,262         | 1,755        | 229           | 8            | ..        |
|                           | 2018        | 42,128          | 28,122            | 11,308         | 1,755        | 752           | 191          | ..        |
|                           | 2019        | 43,272          | 28,137            | 11,330         | 1,755        | 1,611         | 439          | ..        |
| Bolivia (Plur. State of)  | 2016        | *2,447          | *1,919            | 496            | ..           | 27            | 5            | ..        |
|                           | 2017        | *2,611          | *1,953            | 620            | ..           | 27            | 11           | ..        |
|                           | 2018        | *2,773          | *1,983            | 692            | ..           | 27            | 71           | ..        |
|                           | 2019        | 3,692           | 2,783             | 761            | ..           | 27            | 121          | ..        |



Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Autoproducers |                   |              |              | Main activity producers |                   |                |              |               |
|---------------|-------------------|--------------|--------------|-------------------------|-------------------|----------------|--------------|---------------|
| Total         | Combustible fuels | Hydro        | Other        | Total                   | Combustible fuels | Hydro          | Nuclear      | Other         |
| 232           | 172               | 60           | ..           | 3,139                   | 1,063             | 1,709          | ..           | 367           |
| 232           | 172               | 60           | ..           | 3,191                   | 1,053             | 1,717          | ..           | 421           |
| 232           | 172               | 60           | ..           | 3,823                   | 1,639             | 1,717          | ..           | 467           |
| 522           | 462               | 60           | ..           | 3,569                   | 1,357             | 1,736          | ..           | 476           |
| *61           | *61               | ..           | ..           | 6,196                   | 5,839             | 99             | ..           | 258           |
| *61           | *61               | ..           | ..           | *6,203                  | *5,839            | 99             | ..           | 266           |
| *60           | *60               | ..           | ..           | 5,770                   | 5,406             | 99             | ..           | 266           |
| 60            | 60                | ..           | ..           | 6,113                   | 5,748             | 99             | ..           | 267           |
| ..            | ..                | ..           | ..           | 97                      | 97                | ..             | ..           | ..            |
| ..            | ..                | ..           | ..           | *88                     | *88               | ..             | ..           | ..            |
| ..            | ..                | ..           | ..           | *92                     | *92               | ..             | ..           | ..            |
| ..            | ..                | ..           | ..           | *96                     | *96               | ..             | ..           | ..            |
| *4            | *4                | ..           | ..           | 61                      | 56                | ..             | ..           | 4             |
| *4            | *4                | ..           | ..           | 61                      | 56                | ..             | ..           | 4             |
| *4            | *4                | ..           | ..           | 67                      | 63                | ..             | ..           | 4             |
| *4            | *4                | ..           | ..           | *67                     | *63               | ..             | ..           | 4             |
| ..            | ..                | ..           | ..           | 88                      | 88                | ..             | ..           | ..            |
| ..            | ..                | ..           | ..           | 88                      | 88                | ..             | ..           | ..            |
| ..            | ..                | ..           | ..           | 91                      | 88                | ..             | ..           | 3             |
| ..            | ..                | ..           | ..           | 91                      | 88                | ..             | ..           | 3             |
| ..            | ..                | ..           | ..           | 25                      | 25                | ..             | ..           | 0             |
| ..            | ..                | ..           | ..           | 25                      | 25                | ..             | ..           | 0             |
| ..            | ..                | ..           | ..           | 26                      | 26                | ..             | ..           | 0             |
| ..            | ..                | ..           | ..           | 26                      | 26                | ..             | ..           | 0             |
| 0             | ..                | ..           | 0            | 53                      | 46                | 6              | ..           | 1             |
| 0             | ..                | ..           | 0            | 48                      | 41                | 6              | ..           | 1             |
| 0             | ..                | ..           | 0            | 45                      | 38                | 6              | ..           | 2             |
| 0             | ..                | ..           | 0            | 48                      | 40                | 6              | ..           | 2             |
| *100          | *100              | ..           | ..           | 2,405                   | 2,402             | ..             | ..           | 3             |
| *104          | *104              | ..           | ..           | 2,405                   | 2,402             | ..             | ..           | 3             |
| *107          | *107              | ..           | ..           | 2,049                   | 2,046             | ..             | ..           | 3             |
| *96           | *96               | ..           | ..           | 2,022                   | 2,019             | ..             | ..           | 3             |
| ..            | ..                | ..           | ..           | 82                      | 82                | ..             | ..           | ..            |
| ..            | ..                | ..           | ..           | 82                      | 82                | ..             | ..           | ..            |
| ..            | ..                | ..           | ..           | 85                      | 84                | ..             | ..           | 1             |
| ..            | ..                | ..           | ..           | 85                      | 84                | ..             | ..           | 1             |
| 43,858        | 29,133            | 357          | 14,368       | 1,042,991               | 735,654           | 102,335        | 99,565       | 105,437       |
| 47,338        | 29,106            | 357          | 17,875       | 1,052,995               | 733,659           | 102,346        | 99,629       | 117,361       |
| 51,200        | 29,552            | 284          | 21,364       | 1,067,931               | 737,457           | 102,517        | 99,433       | 128,524       |
| 54,842        | 29,496            | 289          | 25,057       | 1,072,930               | 729,097           | 102,360        | 98,119       | 143,354       |
| *15           | 0                 | ..           | *15          | 325                     | 316               | ..             | ..           | 9             |
| *15           | 0                 | ..           | *15          | 321                     | 316               | ..             | ..           | 5             |
| *15           | ..                | ..           | *15          | 321                     | 316               | ..             | ..           | 5             |
| *15           | ..                | ..           | *15          | *321                    | *316              | ..             | ..           | 5             |
| <b>36,608</b> | <b>30,881</b>     | <b>5,533</b> | <b>194</b>   | <b>265,735</b>          | <b>91,927</b>     | <b>155,750</b> | <b>3,753</b> | <b>14,304</b> |
| <b>38,733</b> | <b>32,741</b>     | <b>5,638</b> | <b>354</b>   | <b>275,985</b>          | <b>92,799</b>     | <b>160,572</b> | <b>3,745</b> | <b>18,869</b> |
| <b>39,933</b> | <b>33,500</b>     | <b>5,732</b> | <b>701</b>   | <b>287,053</b>          | <b>94,136</b>     | <b>165,274</b> | <b>3,745</b> | <b>23,898</b> |
| <b>40,037</b> | <b>32,781</b>     | <b>5,739</b> | <b>1,517</b> | <b>297,626</b>          | <b>95,794</b>     | <b>170,028</b> | <b>3,745</b> | <b>28,060</b> |
| 3,614         | 3,592             | 20           | 2            | 33,816                  | 21,722            | 10,107         | 1,763        | 224           |
| 3,614         | 3,592             | 20           | 2            | 36,150                  | 22,918            | 11,242         | 1,755        | 235           |
| 3,614         | 3,592             | 20           | 2            | 38,514                  | 24,530            | 11,288         | 1,755        | 941           |
| 3,614         | 3,592             | 20           | 2            | 39,658                  | 24,545            | 11,310         | 1,755        | 2,048         |
| *188          | *187              | *1           | ..           | *2,259                  | *1,732            | 495            | ..           | 32            |
| *196          | *195              | *1           | ..           | *2,415                  | *1,758            | 619            | ..           | 38            |
| 129           | 128               | *2           | ..           | *2,644                  | *1,856            | 690            | ..           | 98            |
| *155          | *153              | *2           | ..           | 3,537                   | 2,630             | 759            | ..           | 148           |

Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Country or area           | Year        | Total producers  |                   |                |                |                |                |               |
|---------------------------|-------------|------------------|-------------------|----------------|----------------|----------------|----------------|---------------|
|                           |             | Total            | Combustible fuels | Hydro          | Nuclear        | Wind           | Solar          | Other         |
| Brazil                    | 2016        | 150,422          | 41,286            | 96,931         | 1,990          | 10,129         | 86             | ..            |
|                           | 2017        | 157,579          | 41,881            | 100,319        | 1,990          | 12,293         | 1,096          | ..            |
|                           | 2018        | 163,509          | 40,561            | 104,198        | 1,990          | 14,400         | 2,360          | ..            |
|                           | 2019        | 172,280          | 41,281            | 109,155        | 1,990          | 15,388         | 4,466          | ..            |
| Chile                     | 2016        | 24,530           | 15,695            | 6,671          | ..             | 1,039          | 1,125          | 0             |
|                           | 2017        | 26,207           | 16,500            | 6,656          | ..             | 1,302          | 1,724          | 24            |
|                           | 2018        | 27,534           | 16,877            | 6,627          | ..             | 1,692          | 2,298          | 40            |
|                           | 2019        | 27,644           | 16,544            | 6,341          | ..             | 1,999          | 2,720          | 40            |
| Colombia                  | 2016        | 17,691           | 5,972             | 11,700         | ..             | 18             | ..             | 0             |
|                           | 2017        | 17,931           | 6,084             | 11,820         | ..             | 18             | 10             | 0             |
|                           | 2018        | 18,889           | 6,854             | 11,931         | ..             | 18             | *86            | 0             |
|                           | 2019        | 19,009           | 6,890             | 12,011         | ..             | 18             | *90            | 0             |
| Ecuador                   | 2016        | 8,697            | 4,105             | 4,545          | ..             | 21             | 26             | ..            |
|                           | 2017        | 8,644            | 3,934             | 4,663          | ..             | 21             | 26             | ..            |
|                           | 2018        | 9,365            | 4,054             | 5,264          | ..             | 21             | 27             | ..            |
|                           | 2019        | 9,418            | 4,096             | 5,274          | ..             | 21             | 27             | ..            |
| Falkland Is. (Malvinas)   | 2016        | 11               | 9                 | ..             | ..             | 2              | 0              | ..            |
|                           | 2017        | 11               | 9                 | ..             | ..             | 2              | 0              | ..            |
|                           | 2018        | 11               | 9                 | ..             | ..             | 2              | 0              | ..            |
|                           | 2019        | 11               | 9                 | ..             | ..             | 2              | 0              | ..            |
| Guyana                    | 2016        | 360              | 356               | ..             | ..             | 0              | 3              | ..            |
|                           | 2017        | 348              | 343               | ..             | ..             | 0              | 5              | ..            |
|                           | 2018        | 348              | 340               | ..             | ..             | 0              | 8              | ..            |
|                           | 2019        | 335              | 327               | ..             | ..             | 0              | 8              | ..            |
| Paraguay                  | 2016        | 8,761            | 1                 | 8,760          | ..             | ..             | ..             | ..            |
|                           | 2017        | 8,761            | 1                 | 8,760          | ..             | ..             | ..             | ..            |
|                           | 2018        | 8,761            | 1                 | 8,760          | ..             | ..             | ..             | ..            |
|                           | 2019        | 8,761            | 1                 | 8,760          | ..             | ..             | ..             | ..            |
| Peru                      | 2016        | 14,517           | 8,988             | 5,189          | ..             | 240            | 100            | ..            |
|                           | 2017        | 14,775           | 9,005             | 5,246          | ..             | 240            | 284            | ..            |
|                           | 2018        | 15,214           | 9,154             | 5,363          | ..             | 372            | 325            | ..            |
|                           | 2019        | 15,162           | 9,062             | 5,397          | ..             | 372            | 331            | ..            |
| Suriname                  | 2016        | 508              | 313               | 189            | ..             | ..             | 6              | ..            |
|                           | 2017        | 529              | 334               | 189            | ..             | ..             | 6              | ..            |
|                           | 2018        | 532              | 336               | 189            | ..             | ..             | 7              | ..            |
|                           | 2019        | *539             | 343               | *189           | ..             | ..             | 7              | ..            |
| Uruguay                   | 2016        | 3,913            | 1,075             | 1,538          | ..             | 1,212          | 89             | ..            |
|                           | 2017        | 4,546            | 1,255             | 1,538          | ..             | 1,511          | 243            | ..            |
|                           | 2018        | 4,912            | 1,615             | 1,538          | ..             | 1,511          | 248            | ..            |
|                           | 2019        | 4,920            | 1,615             | 1,538          | ..             | 1,514          | 254            | ..            |
| Venezuela (Bolivar. Rep.) | 2016        | 33,058           | 17,777            | 15,137         | ..             | 138            | 5              | 1             |
|                           | 2017        | 33,013           | 17,732            | 15,137         | ..             | 138            | 5              | *1            |
|                           | 2018        | 33,012           | 17,732            | 15,137         | ..             | 138            | 4              | *1            |
|                           | 2019        | 32,620           | 17,487            | 15,011         | ..             | 116            | 5              | *1            |
| <b>Asia</b>               | <b>2016</b> | <b>3,359,956</b> | <b>2,327,973</b>  | <b>559,878</b> | <b>112,342</b> | <b>196,341</b> | <b>145,690</b> | <b>17,731</b> |
|                           | <b>2017</b> | <b>3,502,391</b> | <b>2,354,019</b>  | <b>574,928</b> | <b>111,923</b> | <b>217,488</b> | <b>224,968</b> | <b>19,065</b> |
|                           | <b>2018</b> | <b>3,688,802</b> | <b>2,435,750</b>  | <b>586,682</b> | <b>118,698</b> | <b>240,255</b> | <b>287,195</b> | <b>20,223</b> |
|                           | <b>2019</b> | <b>3,855,085</b> | <b>2,504,581</b>  | <b>596,916</b> | <b>118,583</b> | <b>269,157</b> | <b>345,132</b> | <b>20,717</b> |
| Afghanistan               | 2016        | *519             | *135              | *384           | ..             | ..             | ..             | ..            |
|                           | 2017        | *519             | *135              | *384           | ..             | ..             | ..             | ..            |
|                           | 2018        | *519             | *135              | *384           | ..             | ..             | ..             | ..            |
|                           | 2019        | *531             | *135              | *384           | ..             | ..             | *12            | ..            |
| Armenia                   | 2016        | 3,564            | 1,840             | 1,312          | 408            | 3              | 1              | ..            |
|                           | 2017        | 3,582            | 1,840             | 1,327          | 408            | 3              | 4              | ..            |
|                           | 2018        | 3,591            | 1,827             | 1,336          | 408            | 3              | 18             | ..            |
|                           | 2019        | 3,621            | 1,827             | 1,340          | 408            | 4              | 43             | ..            |

Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Autoproducers  |                   |              |               | Main activity producers |                   |                |                |                |
|----------------|-------------------|--------------|---------------|-------------------------|-------------------|----------------|----------------|----------------|
| Total          | Combustible fuels | Hydro        | Other         | Total                   | Combustible fuels | Hydro          | Nuclear        | Other          |
| 24,199         | 19,185            | 4,949        | 65            | 126,223                 | 22,101            | 91,982         | 1,990          | 10,150         |
| 24,941         | 19,751            | 5,019        | 171           | 132,638                 | 22,130            | 95,300         | 1,990          | 13,218         |
| 25,498         | 19,925            | 5,061        | 512           | 138,011                 | 20,636            | 99,137         | 1,990          | 16,248         |
| 26,482         | 20,129            | 5,068        | 1,285         | 145,798                 | 21,152            | 104,087        | 1,990          | 18,569         |
| 2,486          | 2,448             | 36           | 2             | 22,044                  | 13,247            | 6,635          | ..             | 2,162          |
| 3,669          | 3,658             | 8            | 3             | 22,538                  | 12,842            | 6,648          | ..             | 3,047          |
| 4,241          | 4,225             | 9            | 7             | 23,293                  | 12,652            | 6,619          | ..             | 4,023          |
| 3,357          | 3,310             | 9            | 38            | 24,288                  | 13,234            | 6,333          | ..             | 4,721          |
| *1,624         | *1,530            | *94          | ..            | 16,067                  | 4,442             | 11,606         | ..             | 18             |
| *1,624         | *1,530            | *94          | ..            | 16,307                  | 4,554             | 11,726         | ..             | 28             |
| 1,624          | 1,530             | 94           | ..            | 17,265                  | 5,324             | 11,837         | ..             | *104           |
| 1,624          | 1,530             | 94           | ..            | 17,385                  | 5,360             | 11,917         | ..             | *108           |
| 1,090          | 963               | 127          | ..            | 7,607                   | 3,142             | 4,418          | ..             | 47             |
| 1,209          | 1,033             | 177          | ..            | 7,435                   | 2,902             | 4,486          | ..             | 47             |
| 1,317          | 1,090             | 227          | ..            | 8,048                   | 2,964             | 5,036          | ..             | 48             |
| 1,346          | 1,118             | 227          | ..            | 8,073                   | 2,978             | 5,047          | ..             | 48             |
| *2             | *2                | ..           | ..            | 9                       | 7                 | ..             | ..             | 2              |
| *2             | *2                | ..           | ..            | 9                       | 7                 | ..             | ..             | 2              |
| *2             | *2                | ..           | ..            | 9                       | 7                 | ..             | ..             | 2              |
| *2             | *2                | ..           | ..            | 9                       | 7                 | ..             | ..             | 2              |
| 54             | 54                | ..           | ..            | 306                     | 302               | ..             | ..             | 3              |
| 50             | 50                | ..           | ..            | 298                     | 293               | ..             | ..             | 5              |
| 51             | 51                | ..           | ..            | 297                     | 289               | ..             | ..             | 8              |
| 42             | 42                | ..           | ..            | 293                     | 285               | ..             | ..             | 8              |
| ..             | ..                | ..           | ..            | 8,761                   | 1                 | 8,760          | ..             | ..             |
| ..             | ..                | ..           | ..            | 8,761                   | 1                 | 8,760          | ..             | ..             |
| ..             | ..                | ..           | ..            | 8,761                   | 1                 | 8,760          | ..             | ..             |
| ..             | ..                | ..           | ..            | 8,761                   | 1                 | 8,760          | ..             | ..             |
| 1,473          | 1,356             | 117          | ..            | 13,044                  | 7,632             | 5,072          | ..             | 340            |
| 1,536          | 1,366             | 130          | *40           | 13,239                  | 7,639             | 5,116          | ..             | 484            |
| 1,563          | 1,392             | 131          | *40           | 13,651                  | 7,762             | 5,232          | ..             | 657            |
| 1,512          | 1,339             | 131          | *42           | 13,650                  | 7,723             | 5,266          | ..             | 661            |
| 312            | *123              | 189          | ..            | 196                     | 190               | ..             | ..             | 6              |
| 312            | *123              | 189          | ..            | 217                     | 211               | ..             | ..             | 6              |
| 312            | *123              | 189          | ..            | 220                     | 213               | ..             | ..             | 7              |
| *312           | *123              | *189         | ..            | 227                     | 220               | ..             | ..             | 7              |
| 466            | 432               | ..           | 34            | 3,447                   | 643               | 1,538          | ..             | 1,266          |
| 480            | 432               | ..           | 48            | 4,066                   | 823               | 1,538          | ..             | 1,705          |
| 483            | 433               | ..           | 51            | 4,428                   | 1,182             | 1,538          | ..             | 1,708          |
| 491            | 433               | ..           | 59            | 4,429                   | 1,182             | 1,538          | ..             | 1,709          |
| *1,101         | *1,010            | ..           | 91            | 31,957                  | 16,767            | 15,137         | ..             | 53             |
| *1,100         | *1,010            | ..           | 90            | 31,913                  | 16,722            | 15,137         | ..             | 54             |
| *1,099         | *1,010            | ..           | 89            | 31,913                  | 16,722            | 15,137         | ..             | 54             |
| *1,101         | *1,010            | ..           | 91            | 31,519                  | 16,477            | 15,011         | ..             | 31             |
| <b>328,722</b> | <b>273,844</b>    | <b>3,645</b> | <b>51,233</b> | <b>3,031,234</b>        | <b>2,054,129</b>  | <b>556,233</b> | <b>112,342</b> | <b>308,530</b> |
| <b>292,077</b> | <b>230,519</b>    | <b>3,617</b> | <b>57,941</b> | <b>3,210,314</b>        | <b>2,123,500</b>  | <b>571,311</b> | <b>111,923</b> | <b>403,580</b> |
| <b>337,704</b> | <b>267,708</b>    | <b>5,448</b> | <b>64,547</b> | <b>3,351,099</b>        | <b>2,168,042</b>  | <b>581,234</b> | <b>118,698</b> | <b>483,126</b> |
| <b>370,351</b> | <b>291,678</b>    | <b>5,529</b> | <b>73,143</b> | <b>3,484,734</b>        | <b>2,212,903</b>  | <b>591,387</b> | <b>118,583</b> | <b>561,862</b> |
| *195           | *65               | *130         | ..            | *324                    | *70               | *254           | ..             | ..             |
| *195           | *65               | *130         | ..            | *324                    | *70               | *254           | ..             | ..             |
| *195           | *65               | *130         | ..            | *324                    | *70               | *254           | ..             | ..             |
| *195           | *65               | *130         | ..            | *336                    | *70               | *254           | ..             | *12            |
| ..             | ..                | ..           | ..            | 3,564                   | 1,840             | 1,312          | 408            | 4              |
| 2              | ..                | ..           | 2             | 3,580                   | 1,840             | 1,327          | 408            | 5              |
| 10             | ..                | ..           | 10            | 3,581                   | 1,827             | 1,336          | 408            | 11             |
| 33             | ..                | ..           | 33            | 3,588                   | 1,827             | 1,340          | 408            | 14             |

Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Country or area        | Year | Total producers |                   |         |         |         |         |        |
|------------------------|------|-----------------|-------------------|---------|---------|---------|---------|--------|
|                        |      | Total           | Combustible fuels | Hydro   | Nuclear | Wind    | Solar   | Other  |
| Azerbaijan             | 2016 | 7,910           | 6,765             | 1,105   | ..      | 16      | 25      | ..     |
|                        | 2017 | 7,942           | 6,791             | 1,106   | ..      | 16      | 28      | ..     |
|                        | 2018 | 7,829           | 6,597             | 1,131   | ..      | 66      | 35      | ..     |
|                        | 2019 | 7,642           | 6,395             | 1,145   | ..      | 66      | 35      | ..     |
| Bahrain                | 2016 | 6,977           | 6,971             | ..      | ..      | 1       | 5       | ..     |
|                        | 2017 | 6,977           | 6,971             | ..      | ..      | *1      | *5      | ..     |
|                        | 2018 | 6,977           | 6,971             | ..      | ..      | *1      | *5      | ..     |
|                        | 2019 | *6,977          | *6,971            | ..      | ..      | *1      | *5      | ..     |
| Bangladesh             | 2016 | 11,866          | 11,495            | 230     | ..      | *1      | 140     | ..     |
|                        | 2017 | 12,213          | 11,817            | 230     | ..      | *1      | 165     | ..     |
|                        | 2018 | *15,293         | *14,927           | 230     | ..      | *1      | 135     | ..     |
|                        | 2019 | 18,291          | 17,922            | 230     | ..      | *1      | 138     | ..     |
| Bhutan                 | 2016 | 1,624           | 9                 | 1,614   | ..      | 1       | 0       | ..     |
|                        | 2017 | 1,623           | 8                 | 1,614   | ..      | 1       | 0       | ..     |
|                        | 2018 | 1,624           | 8                 | 1,614   | ..      | 1       | 1       | ..     |
|                        | 2019 | 2,343           | 7                 | 2,334   | ..      | 1       | 1       | ..     |
| Brunei Darussalam      | 2016 | *820            | *819              | ..      | ..      | ..      | *1      | ..     |
|                        | 2017 | 993             | 992               | ..      | ..      | ..      | 1       | ..     |
|                        | 2018 | 993             | 992               | ..      | ..      | ..      | 1       | ..     |
|                        | 2019 | 1,109           | 1,108             | ..      | ..      | ..      | 1       | ..     |
| Cambodia               | 2016 | 1,683           | 751               | 930     | ..      | ..      | *2      | ..     |
|                        | 2017 | 1,878           | 888               | 980     | ..      | ..      | 10      | ..     |
|                        | 2018 | 2,187           | 847               | 1,330   | ..      | ..      | 10      | ..     |
|                        | 2019 | 2,443           | 1,007             | 1,330   | ..      | ..      | 105     | ..     |
| China                  | 2016 | 1,749,872       | 1,160,274         | 332,071 | 33,642  | 147,472 | 76,313  | *100   |
|                        | 2017 | 1,824,130       | 1,149,480         | 344,110 | 35,820  | 164,000 | 130,420 | *300   |
|                        | 2018 | 1,952,048       | 1,195,998         | 352,590 | 44,660  | 184,270 | 174,330 | *200   |
|                        | 2019 | 2,064,680       | 1,244,540         | 358,040 | 48,740  | 209,150 | 204,180 | *30    |
| China, Hong Kong SAR   | 2016 | 12,625          | 12,625            | ..      | ..      | ..      | ..      | ..     |
|                        | 2017 | 12,492          | 12,492            | ..      | ..      | ..      | ..      | ..     |
|                        | 2018 | 12,282          | 12,282            | ..      | ..      | ..      | ..      | ..     |
|                        | 2019 | 12,225          | 12,225            | ..      | ..      | ..      | ..      | ..     |
| China, Macao SAR       | 2016 | 501             | 501               | ..      | ..      | ..      | ..      | ..     |
|                        | 2017 | 437             | 437               | ..      | ..      | ..      | ..      | ..     |
|                        | 2018 | 437             | 437               | ..      | ..      | ..      | ..      | ..     |
|                        | 2019 | 437             | 437               | ..      | ..      | ..      | ..      | ..     |
| Cyprus                 | 2016 | 1,756           | 1,515             | ..      | ..      | 158     | 84      | ..     |
|                        | 2017 | 1,782           | 1,515             | ..      | ..      | 158     | 110     | ..     |
|                        | 2018 | 1,794           | 1,517             | ..      | ..      | 158     | 119     | ..     |
|                        | 2019 | 1,819           | 1,510             | ..      | ..      | 158     | 151     | ..     |
| Georgia                | 2016 | 3,299           | 849               | 2,430   | ..      | 20      | ..      | ..     |
|                        | 2017 | 3,592           | 849               | 2,723   | ..      | 20      | ..      | ..     |
|                        | 2018 | 3,591           | 876               | 2,695   | ..      | 20      | ..      | ..     |
|                        | 2019 | 3,712           | 1,108             | 2,583   | ..      | 21      | ..      | ..     |
| India                  | 2016 | 374,795         | 267,129           | 44,597  | 6,780   | 35,480  | 12,514  | 8,295  |
|                        | 2017 | 400,455         | 276,062           | 45,344  | 6,780   | 38,186  | 24,538  | 9,545  |
|                        | 2018 | 427,794         | 298,316           | 45,502  | 6,780   | 38,825  | 28,455  | 9,916  |
|                        | 2019 | 442,297         | 305,307           | 45,807  | 6,780   | 40,490  | 33,912  | 10,001 |
| Indonesia              | 2016 | 59,305          | 52,622            | 4,868   | ..      | *7      | 13      | *1,795 |
|                        | 2017 | *60,980         | *53,517           | *5,190  | ..      | *7      | *17     | *2,249 |
|                        | 2018 | 64,417          | 56,383            | 5,741   | ..      | *143    | *24     | *2,126 |
|                        | 2019 | 66,845          | 58,600            | 5,858   | ..      | *154    | *105    | *2,128 |
| Iran (Islamic Rep. of) | 2016 | 74,106          | 61,262            | 11,578  | 1,020   | 191     | 43      | 12     |
|                        | 2017 | *76,569         | *63,145           | 11,949  | 1,020   | 259     | 184     | 12     |
|                        | 2018 | *78,794         | *65,241           | 11,953  | 1,020   | 282     | 286     | 12     |
|                        | 2019 | *80,467         | *66,740           | 12,026  | 1,020   | 302     | 367     | 12     |

Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Autoproducers |                   |        |        | Main activity producers |                   |         |         |         |
|---------------|-------------------|--------|--------|-------------------------|-------------------|---------|---------|---------|
| Total         | Combustible fuels | Hydro  | Other  | Total                   | Combustible fuels | Hydro   | Nuclear | Other   |
| 744           | 736               | ..     | 8      | 7,167                   | 6,029             | 1,105   | ..      | 33      |
| 770           | 762               | ..     | 8      | 7,172                   | 6,029             | 1,106   | ..      | 36      |
| 852           | 852               | ..     | 0      | 6,977                   | 5,746             | 1,131   | ..      | 101     |
| 848           | 848               | ..     | 0      | 6,794                   | 5,548             | 1,145   | ..      | 101     |
| *3,050        | *3,050            | ..     | ..     | 3,927                   | 3,921             | ..      | ..      | 6       |
| *3,050        | *3,050            | ..     | ..     | 3,927                   | 3,921             | ..      | ..      | *6      |
| *3,050        | *3,050            | ..     | ..     | 3,927                   | 3,921             | ..      | ..      | *6      |
| *3,050        | *3,050            | ..     | ..     | *3,927                  | *3,921            | ..      | ..      | *6      |
| 2,279         | 2,279             | ..     | ..     | 9,587                   | 9,216             | 230     | ..      | 141     |
| 2,404         | 2,404             | ..     | ..     | 9,809                   | 9,413             | 230     | ..      | 166     |
| *4,636        | *4,636            | ..     | ..     | *10,657                 | *10,291           | 230     | ..      | 136     |
| 7,332         | 7,332             | ..     | ..     | 10,959                  | 10,590            | 230     | ..      | 139     |
| ..            | ..                | ..     | ..     | 1,624                   | 9                 | 1,614   | ..      | 1       |
| ..            | ..                | ..     | ..     | 1,623                   | 8                 | 1,614   | ..      | 1       |
| ..            | ..                | ..     | ..     | 1,624                   | 8                 | 1,614   | ..      | 2       |
| ..            | ..                | ..     | ..     | 2,343                   | 7                 | 2,334   | ..      | 2       |
| *110          | *110              | ..     | ..     | *709                    | *708              | ..      | ..      | *1      |
| 117           | 117               | ..     | ..     | 876                     | 875               | ..      | ..      | 1       |
| 117           | 117               | ..     | ..     | 876                     | 875               | ..      | ..      | 1       |
| *234          | *234              | ..     | ..     | 875                     | 874               | ..      | ..      | 1       |
| ..            | ..                | ..     | ..     | 1,683                   | 751               | 930     | ..      | *2      |
| ..            | ..                | ..     | ..     | 1,878                   | 888               | 980     | ..      | 10      |
| ..            | ..                | ..     | ..     | 2,187                   | 847               | 1,330   | ..      | 10      |
| ..            | ..                | ..     | ..     | 2,443                   | 1,007             | 1,330   | ..      | 105     |
| *99,330       | *99,330           | ..     | ..     | 1,650,542               | 1,060,944         | 332,071 | 33,642  | 223,885 |
| *44,530       | *44,530           | ..     | ..     | 1,779,600               | 1,104,950         | 344,110 | 35,820  | 294,720 |
| *51,190       | *51,190           | ..     | ..     | 1,900,858               | 1,144,808         | 352,590 | 44,660  | 358,800 |
| 54,970        | 54,970            | ..     | ..     | 2,009,710               | 1,189,570         | 358,040 | 48,740  | 413,360 |
| ..            | ..                | ..     | ..     | 12,625                  | 12,625            | ..      | ..      | ..      |
| ..            | ..                | ..     | ..     | 12,492                  | 12,492            | ..      | ..      | ..      |
| ..            | ..                | ..     | ..     | 12,282                  | 12,282            | ..      | ..      | ..      |
| ..            | ..                | ..     | ..     | 12,225                  | 12,225            | ..      | ..      | ..      |
| 29            | 29                | ..     | ..     | 472                     | 472               | ..      | ..      | ..      |
| 29            | 29                | ..     | ..     | 408                     | 408               | ..      | ..      | ..      |
| 29            | 29                | ..     | ..     | 408                     | 408               | ..      | ..      | ..      |
| 29            | 29                | ..     | ..     | 408                     | 408               | ..      | ..      | ..      |
| 67            | 37                | ..     | 30     | 1,689                   | 1,478             | ..      | ..      | 212     |
| 72            | 37                | ..     | 35     | 1,710                   | 1,478             | ..      | ..      | 233     |
| 78            | 37                | ..     | 41     | 1,716                   | 1,481             | ..      | ..      | 236     |
| 93            | 30                | ..     | 63     | 1,726                   | 1,481             | ..      | ..      | 246     |
| ..            | ..                | ..     | ..     | 3,299                   | 849               | 2,430   | ..      | 20      |
| ..            | ..                | ..     | ..     | 3,592                   | 849               | 2,723   | ..      | 20      |
| ..            | ..                | ..     | ..     | 3,591                   | 876               | 2,695   | ..      | 20      |
| ..            | ..                | ..     | ..     | 3,712                   | 1,108             | 2,583   | ..      | 21      |
| 52,289        | 48,799            | 65     | *3,425 | 322,506                 | 218,330           | 44,532  | 6,780   | 52,864  |
| 56,631        | 53,155            | 51     | *3,425 | 343,824                 | 222,907           | 45,293  | 6,780   | 68,844  |
| 75,615        | 72,037            | 103    | *3,475 | 352,179                 | 226,279           | 45,399  | 6,780   | 73,721  |
| 78,000        | 74,707            | 108    | *3,185 | 364,297                 | 230,600           | 45,699  | 6,780   | 81,218  |
| *19,325       | *17,000           | *1,300 | *1,025 | 39,980                  | 35,622            | 3,568   | ..      | 790     |
| *19,881       | *17,289           | *1,386 | *1,206 | *41,099                 | *36,228           | *3,804  | ..      | *1,067  |
| 21,188        | 18,863            | 2,159  | *166   | 43,229                  | 37,520            | 3,582   | ..      | *2,127  |
| 21,455        | 18,926            | 2,275  | *254   | 45,390                  | 39,674            | 3,583   | ..      | *2,133  |
| 5,581         | 5,581             | ..     | ..     | 68,525                  | 55,681            | 11,578  | 1,020   | 246     |
| *5,753        | *5,753            | ..     | ..     | *70,816                 | *57,392           | 11,949  | 1,020   | 455     |
| *5,905        | *5,905            | ..     | ..     | *72,889                 | *59,336           | 11,953  | 1,020   | 580     |
| *6,000        | *6,000            | ..     | ..     | *74,467                 | *60,740           | 12,026  | 1,020   | 681     |

Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Country or area        | Year | Total producers |                   |        |         |       |        |        |
|------------------------|------|-----------------|-------------------|--------|---------|-------|--------|--------|
|                        |      | Total           | Combustible fuels | Hydro  | Nuclear | Wind  | Solar  | Other  |
| Iraq                   | 2016 | 32,214          | 29,664            | 2,513  | ..      | ..    | 37     | ..     |
|                        | 2017 | 26,133          | 24,300            | 1,796  | ..      | ..    | 37     | ..     |
|                        | 2018 | 27,412          | 25,400            | 1,796  | ..      | ..    | 216    | ..     |
|                        | 2019 | 27,412          | 25,400            | 1,796  | ..      | ..    | 216    | ..     |
| Israel                 | 2016 | 17,585          | 16,689            | 7      | ..      | 27    | 862    | ..     |
|                        | 2017 | 17,827          | 16,813            | 9      | ..      | 27    | 978    | ..     |
|                        | 2018 | 18,019          | 16,617            | 9      | ..      | 35    | 1,358  | ..     |
|                        | 2019 | 19,493          | 17,192            | 9      | ..      | 35    | 2,257  | ..     |
| Japan                  | 2016 | 338,210         | 198,299           | 50,117 | 41,482  | 3,246 | 42,040 | *3,026 |
|                        | 2017 | 342,197         | 197,092           | 50,014 | 39,132  | 3,483 | 49,499 | *2,977 |
|                        | 2018 | 347,178         | 196,656           | 50,037 | 38,042  | 3,497 | 56,162 | *2,784 |
|                        | 2019 | 346,474         | 193,414           | 50,033 | 33,083  | 3,951 | 63,192 | *2,801 |
| Jordan                 | 2016 | 4,475           | 3,969             | 12     | ..      | 198   | 296    | ..     |
|                        | 2017 | 4,506           | 3,890             | 12     | ..      | 198   | 406    | ..     |
|                        | 2018 | 4,846           | 3,745             | 12     | ..      | 280   | 809    | ..     |
|                        | 2019 | 5,227           | 3,745             | 12     | ..      | 370   | 1,101  | ..     |
| Kazakhstan             | 2016 | *25,452         | *22,500           | 2,696  | ..      | 98    | 158    | ..     |
|                        | 2017 | *25,514         | *22,500           | 2,726  | ..      | 112   | 176    | ..     |
|                        | 2018 | 25,270          | 21,902            | 2,756  | ..      | 121   | 491    | ..     |
|                        | 2019 | 23,965          | 20,079            | 2,778  | ..      | 284   | 824    | ..     |
| Korea, Dem.Ppl's.Rep.  | 2016 | 7,671           | 2,960             | 4,701  | ..      | ..    | *10    | ..     |
|                        | 2017 | 7,731           | 2,960             | 4,761  | ..      | ..    | *10    | ..     |
|                        | 2018 | 8,160           | 3,360             | 4,790  | ..      | ..    | *10    | ..     |
|                        | 2019 | 8,160           | 3,360             | 4,790  | ..      | ..    | *10    | ..     |
| Korea, Republic of     | 2016 | 111,203         | 75,559            | 6,485  | 23,116  | 1,067 | 4,502  | 474    |
|                        | 2017 | 122,950         | 86,377            | 6,489  | 22,529  | 1,215 | 5,834  | 506    |
|                        | 2018 | 127,475         | 89,013            | 6,490  | 21,850  | 1,420 | 8,099  | 603    |
|                        | 2019 | 132,104         | 88,174            | 6,508  | 23,250  | 1,494 | 11,952 | 726    |
| Kuwait                 | 2016 | 18,892          | 18,890            | ..     | ..      | ..    | *2     | ..     |
|                        | 2017 | 18,765          | 18,763            | ..     | ..      | ..    | *2     | ..     |
|                        | 2018 | 18,867          | 18,863            | ..     | ..      | ..    | *4     | ..     |
|                        | 2019 | 19,371          | 19,266            | ..     | ..      | 12    | 93     | ..     |
| Kyrgyzstan             | 2016 | *3,786          | *722              | *3,064 | ..      | ..    | ..     | ..     |
|                        | 2017 | 3,869           | *734              | 3,135  | ..      | ..    | ..     | ..     |
|                        | 2018 | *3,869          | *734              | *3,135 | ..      | ..    | ..     | ..     |
|                        | 2019 | 3,869           | 734               | 3,135  | ..      | ..    | ..     | ..     |
| Lao People's Dem. Rep. | 2016 | 6,460           | 1,918             | 4,538  | ..      | ..    | 4      | ..     |
|                        | 2017 | 6,931           | 1,903             | 5,006  | ..      | ..    | 22     | ..     |
|                        | 2018 | 7,187           | 1,909             | 5,256  | ..      | ..    | 22     | ..     |
|                        | 2019 | 8,014           | *1,909            | 6,083  | ..      | ..    | 22     | ..     |
| Lebanon                | 2016 | 3,662           | 3,359             | 280    | ..      | ..    | 23     | ..     |
|                        | 2017 | 3,698           | 3,409             | *253   | ..      | ..    | 36     | ..     |
|                        | 2018 | 3,704           | 3,409             | *253   | ..      | ..    | 42     | ..     |
|                        | 2019 | 3,741           | 3,409             | *253   | ..      | ..    | 79     | ..     |
| Malaysia               | 2016 | 33,090          | 25,732            | 6,137  | ..      | ..    | 280    | 940    |
|                        | 2017 | 33,334          | 26,848            | 6,128  | ..      | ..    | 358    | ..     |
|                        | 2018 | 34,389          | 26,432            | 6,168  | ..      | ..    | 1,004  | 786    |
|                        | 2019 | *34,153         | *26,260           | 6,245  | ..      | ..    | 882    | 766    |
| Maldives               | 2016 | 274             | 266               | ..     | ..      | 1     | 7      | ..     |
|                        | 2017 | *277            | *266              | ..     | ..      | 1     | 10     | ..     |
|                        | 2018 | *376            | *365              | ..     | ..      | 1     | 10     | ..     |
|                        | 2019 | 544             | 529               | ..     | ..      | 1     | 14     | ..     |
| Mongolia               | 2016 | *1,199          | *1,103            | 29     | ..      | 52    | 15     | ..     |
|                        | 2017 | 1,311           | 1,132             | 29     | ..      | 102   | 48     | ..     |
|                        | 2018 | *1,461          | *1,210            | 31     | ..      | 156   | 64     | ..     |
|                        | 2019 | *1,486          | *1,210            | 31     | ..      | 156   | 89     | ..     |

Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Total  | Autoproducers     |       |        | Main activity producers |                   |        |         |        |
|--------|-------------------|-------|--------|-------------------------|-------------------|--------|---------|--------|
|        | Combustible fuels | Hydro | Other  | Total                   | Combustible fuels | Hydro  | Nuclear | Other  |
| 37     | ..                | ..    | 37     | 32,177                  | 29,664            | 2,513  | ..      | ..     |
| 37     | ..                | ..    | 37     | 26,096                  | 24,300            | 1,796  | ..      | ..     |
| 216    | ..                | ..    | 216    | 27,196                  | 25,400            | 1,796  | ..      | ..     |
| 216    | ..                | ..    | 216    | 27,196                  | 25,400            | 1,796  | ..      | ..     |
| 1,387  | 523               | 2     | 862    | 16,198                  | 16,166            | 5      | ..      | 27     |
| 1,591  | 608               | 5     | 978    | 16,236                  | 16,205            | 4      | ..      | 27     |
| 2,018  | 653               | 7     | 1,358  | 16,001                  | 15,964            | 2      | ..      | 35     |
| 2,918  | 654               | 7     | 2,257  | 16,575                  | 16,538            | 2      | ..      | 35     |
| 63,756 | 23,907            | 596   | 39,253 | 274,454                 | 174,392           | 49,521 | 41,482  | 9,059  |
| 69,366 | 23,831            | 452   | 45,083 | 272,831                 | 173,261           | 49,562 | 39,132  | 10,876 |
| 75,535 | 25,187            | 455   | 49,893 | 271,643                 | 171,469           | 49,582 | 38,042  | 12,550 |
| 80,404 | 24,654            | 398   | 55,352 | 266,070                 | 168,760           | 49,635 | 33,083  | 14,592 |
| *199   | *199              | ..    | ..     | 4,276                   | 3,770             | 12     | ..      | 494    |
| *199   | *199              | ..    | ..     | 4,307                   | 3,691             | 12     | ..      | 604    |
| *199   | *199              | ..    | ..     | 4,647                   | 3,546             | 12     | ..      | 1,089  |
| *199   | *199              | ..    | ..     | 5,028                   | 3,546             | 12     | ..      | 1,470  |
| *1     | ..                | ..    | *1     | *25,451                 | *22,500           | 2,696  | ..      | 255    |
| *1     | ..                | ..    | *1     | *25,513                 | *22,500           | 2,726  | ..      | 287    |
| *1     | ..                | ..    | *1     | 25,269                  | 21,902            | 2,756  | ..      | 611    |
| *1     | ..                | ..    | *1     | 23,964                  | 20,079            | 2,778  | ..      | 1,107  |
| ..     | ..                | ..    | ..     | 7,671                   | 2,960             | 4,701  | ..      | *10    |
| ..     | ..                | ..    | ..     | 7,731                   | 2,960             | 4,761  | ..      | *10    |
| ..     | ..                | ..    | ..     | 8,160                   | 3,360             | 4,790  | ..      | *10    |
| ..     | ..                | ..    | ..     | 8,160                   | 3,360             | 4,790  | ..      | *10    |
| 7,461  | 6,656             | ..    | 805    | 103,742                 | 68,903            | 6,485  | 23,116  | 5,238  |
| 9,037  | 8,247             | ..    | 790    | 113,913                 | 78,130            | 6,489  | 22,529  | 6,765  |
| 9,862  | 8,875             | ..    | 987    | 117,613                 | 80,138            | 6,490  | 21,850  | 9,135  |
| 9,203  | 7,963             | ..    | 1,240  | 122,901                 | 80,211            | 6,508  | 23,250  | 12,932 |
| 22     | 20                | ..    | *2     | 18,870                  | 18,870            | ..     | ..      | ..     |
| 22     | 20                | ..    | *2     | 18,743                  | 18,743            | ..     | ..      | ..     |
| 74     | 70                | ..    | *4     | 18,793                  | 18,793            | ..     | ..      | ..     |
| 175    | *70               | ..    | 105    | 19,196                  | 19,196            | ..     | ..      | ..     |
| *6     | *6                | ..    | ..     | *3,780                  | *716              | *3,064 | ..      | ..     |
| *6     | *6                | ..    | ..     | 3,863                   | *728              | 3,135  | ..      | ..     |
| *6     | *6                | ..    | ..     | *3,863                  | *728              | *3,135 | ..      | ..     |
| 6      | 6                 | ..    | ..     | 3,863                   | 728               | 3,135  | ..      | ..     |
| ..     | ..                | ..    | ..     | 6,460                   | 1,918             | 4,538  | ..      | 4      |
| ..     | ..                | ..    | ..     | 6,931                   | 1,903             | 5,006  | ..      | 22     |
| ..     | ..                | ..    | ..     | 7,187                   | 1,909             | 5,256  | ..      | 22     |
| ..     | ..                | ..    | ..     | 8,014                   | *1,909            | 6,083  | ..      | 22     |
| *1,073 | *1,050            | ..    | 23     | 2,589                   | 2,309             | 280    | ..      | ..     |
| *1,136 | *1,100            | ..    | 36     | 2,562                   | 2,309             | *253   | ..      | ..     |
| *1,142 | *1,100            | ..    | 42     | 2,562                   | 2,309             | *253   | ..      | ..     |
| *1,179 | *1,100            | ..    | 79     | 2,562                   | 2,309             | *253   | ..      | ..     |
| 3,301  | 2,506             | 2     | 793    | 29,789                  | 23,226            | 6,135  | ..      | 427    |
| 2,442  | 2,438             | 2     | 2      | 30,892                  | 24,410            | 6,126  | ..      | 356    |
| 2,676  | 1,952             | 0     | 723    | 31,714                  | 24,479            | 6,168  | ..      | 1,066  |
| 2,454  | 1,762             | 0     | 692    | *31,699                 | *24,498           | 6,245  | ..      | 956    |
| 125    | 125               | ..    | ..     | 149                     | 141               | ..     | ..      | 8      |
| *125   | *125              | ..    | ..     | *152                    | *141              | ..     | ..      | 11     |
| *125   | *125              | ..    | ..     | *251                    | *240              | ..     | ..      | 11     |
| 210    | 210               | ..    | ..     | 334                     | 319               | ..     | ..      | 15     |
| 39     | *10               | 29    | ..     | *1,160                  | *1,093            | ..     | ..      | 67     |
| 39     | *10               | 29    | ..     | 1,272                   | 1,122             | ..     | ..      | 150    |
| 41     | *10               | 31    | ..     | *1,420                  | *1,200            | ..     | ..      | 220    |
| 41     | *10               | 31    | ..     | *1,445                  | *1,200            | ..     | ..      | 245    |

Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Country or area      | Year | Total producers |                   |        |         |        |        |       |
|----------------------|------|-----------------|-------------------|--------|---------|--------|--------|-------|
|                      |      | Total           | Combustible fuels | Hydro  | Nuclear | Wind   | Solar  | Other |
| Myanmar              | 2016 | 5,390           | 2,135             | 3,255  | ..      | ..     | ..     | ..    |
|                      | 2017 | 5,642           | 2,387             | 3,255  | ..      | ..     | ..     | ..    |
|                      | 2018 | 5,838           | 2,536             | 3,262  | ..      | ..     | 40     | ..    |
|                      | 2019 | 7,129           | 3,827             | 3,262  | ..      | ..     | 40     | ..    |
| Nepal                | 2016 | 979             | 53                | 919    | ..      | *6     | *1     | ..    |
|                      | 2017 | *1,142          | 53                | *1,081 | ..      | *6     | *1     | ..    |
|                      | 2018 | 1,190           | 53                | 1,129  | ..      | *6     | *1     | ..    |
|                      | 2019 | 1,198           | 53                | 1,129  | ..      | *14    | *1     | ..    |
| Oman                 | 2016 | 8,165           | 8,163             | ..     | ..      | ..     | 2      | ..    |
|                      | 2017 | 8,228           | 8,220             | ..     | ..      | ..     | 8      | ..    |
|                      | 2018 | 8,450           | 8,442             | ..     | ..      | ..     | 8      | ..    |
|                      | 2019 | 8,501           | 8,442             | ..     | ..      | 50     | 9      | ..    |
| Other Asia           | 2016 | 49,618          | 37,544            | 4,691  | 5,144   | 976    | 1,263  | ..    |
|                      | 2017 | *51,183         | *38,576           | 4,691  | 5,144   | 986    | 1,786  | ..    |
|                      | 2018 | 52,484          | 39,510            | 4,694  | 4,508   | 1,016  | 2,756  | 0     |
|                      | 2019 | 55,958          | 41,960            | 4,695  | 3,872   | 1,157  | 4,274  | 0     |
| Pakistan             | 2016 | 26,698          | 17,874            | 7,115  | 750     | 340    | 400    | 219   |
|                      | 2017 | 31,246          | 21,518            | 7,115  | 1,090   | 792    | 400    | 331   |
|                      | 2018 | 34,875          | 24,325            | 7,270  | 1,430   | 1,042  | 436    | 372   |
|                      | 2019 | 37,681          | 24,386            | 9,757  | 1,430   | 1,242  | 436    | 430   |
| Philippines          | 2016 | 21,869          | 15,127            | 3,634  | ..      | 427    | 765    | 1,916 |
|                      | 2017 | 23,341          | 16,470            | 3,643  | ..      | 427    | 885    | 1,916 |
|                      | 2018 | 24,464          | 17,480            | 3,717  | ..      | 427    | 896    | 1,944 |
|                      | 2019 | 26,187          | 19,135            | 3,776  | ..      | 427    | 921    | 1,928 |
| Qatar                | 2016 | *8,559          | *8,559            | ..     | ..      | ..     | ..     | ..    |
|                      | 2017 | *10,170         | *10,170           | ..     | ..      | ..     | ..     | ..    |
|                      | 2018 | *10,590         | *10,590           | ..     | ..      | ..     | ..     | ..    |
|                      | 2019 | *10,590         | *10,590           | ..     | ..      | ..     | ..     | ..    |
| Saudi Arabia         | 2016 | 74,726          | 74,702            | ..     | ..      | 0      | 24     | ..    |
|                      | 2017 | 80,508          | 80,471            | ..     | ..      | 3      | 34     | ..    |
|                      | 2018 | *77,028         | *76,941           | ..     | ..      | 3      | 84     | ..    |
|                      | 2019 | *76,785         | *76,373           | ..     | ..      | 3      | 409    | ..    |
| Singapore            | 2016 | 13,445          | 13,348            | ..     | ..      | ..     | 97     | ..    |
|                      | 2017 | 13,612          | 13,500            | ..     | ..      | ..     | 112    | ..    |
|                      | 2018 | 13,614          | 13,500            | ..     | ..      | ..     | 115    | ..    |
|                      | 2019 | 12,563          | 12,292            | ..     | ..      | ..     | 271    | ..    |
| Sri Lanka            | 2016 | 4,010           | 2,088             | 1,722  | ..      | 129    | 71     | ..    |
|                      | 2017 | 4,094           | 2,144             | 1,720  | ..      | 128    | 102    | ..    |
|                      | 2018 | 4,124           | 2,069             | 1,793  | ..      | 128    | 134    | ..    |
|                      | 2019 | *4,334          | *2,182            | 1,809  | ..      | 128    | *215   | ..    |
| State of Palestine   | 2016 | 185             | 160               | ..     | ..      | ..     | 25     | ..    |
|                      | 2017 | 190             | 160               | ..     | ..      | ..     | 30     | ..    |
|                      | 2018 | 200             | 160               | ..     | ..      | ..     | 40     | ..    |
|                      | 2019 | 240             | 160               | ..     | ..      | ..     | 80     | ..    |
| Syrian Arab Republic | 2016 | 9,687           | 8,192             | 1,494  | ..      | 1      | ..     | ..    |
|                      | 2017 | *9,691          | *8,199            | 1,490  | ..      | 1      | 1      | ..    |
|                      | 2018 | 10,059          | 8,567             | 1,490  | ..      | 1      | 1      | ..    |
|                      | 2019 | 10,060          | 8,567             | 1,490  | ..      | 1      | 2      | ..    |
| Tajikistan           | 2016 | 6,577           | 719               | 5,858  | ..      | ..     | ..     | ..    |
|                      | 2017 | *6,577          | *719              | *5,858 | ..      | ..     | ..     | ..    |
|                      | 2018 | *6,577          | *719              | *5,858 | ..      | ..     | ..     | ..    |
|                      | 2019 | 6,451           | 718               | 5,733  | ..      | ..     | ..     | ..    |
| Thailand             | 2016 | 43,147          | 34,721            | 3,467  | ..      | *507   | *4,451 | 0     |
|                      | 2017 | 44,024          | 35,226            | 3,467  | ..      | *628   | *4,702 | 0     |
|                      | 2018 | 45,179          | 35,426            | *3,682 | ..      | *1,103 | *4,967 | 0     |
|                      | 2019 | 45,260          | 35,082            | *3,682 | ..      | *1,507 | *4,988 | 0     |



Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Autoproducers |                   |       |        | Main activity producers |                   |        |         |        |
|---------------|-------------------|-------|--------|-------------------------|-------------------|--------|---------|--------|
| Total         | Combustible fuels | Hydro | Other  | Total                   | Combustible fuels | Hydro  | Nuclear | Other  |
| 800           | 628               | 172   | ..     | 4,590                   | 1,507             | 3,083  | ..      | ..     |
| 1,354         | 1,182             | 172   | ..     | 4,288                   | 1,205             | 3,083  | ..      | ..     |
| 2,694         | 1,543             | 1,111 | 40     | 3,144                   | 993               | 2,151  | ..      | ..     |
| 3,719         | 2,568             | 1,111 | 40     | 3,410                   | 1,259             | 2,151  | ..      | ..     |
| *100          | ..                | *100  | ..     | 879                     | 53                | 819    | ..      | *7     |
| *100          | ..                | *100  | 0      | *1,041                  | 53                | *981   | ..      | *7     |
| *124          | ..                | *124  | 0      | 1,065                   | 53                | 1,005  | ..      | *7     |
| *124          | ..                | *124  | 0      | 1,074                   | 53                | 1,005  | ..      | *15    |
| ..            | ..                | ..    | ..     | 8,165                   | 8,163             | ..     | ..      | 2      |
| ..            | ..                | ..    | ..     | 8,228                   | 8,220             | ..     | ..      | 8      |
| ..            | ..                | ..    | ..     | 8,450                   | 8,442             | ..     | ..      | 8      |
| ..            | ..                | ..    | ..     | 8,501                   | 8,442             | ..     | ..      | 59     |
| 17,113        | 15,186            | ..    | 1,927  | 32,505                  | 22,358            | 4,691  | 5,144   | 312    |
| 17,536        | 15,076            | ..    | 2,460  | *33,647                 | *23,500           | 4,691  | 5,144   | 312    |
| 19,028        | 15,577            | ..    | 3,451  | 33,456                  | 23,933            | 4,694  | 4,508   | 321    |
| 20,529        | 15,534            | ..    | 4,995  | 35,429                  | 26,426            | 4,695  | 3,872   | 436    |
| 686           | 467               | ..    | 219    | 26,012                  | 17,407            | 7,115  | 750     | 740    |
| 812           | 481               | ..    | 331    | 30,434                  | 21,037            | 7,115  | 1,090   | 1,192  |
| 863           | 491               | ..    | 372    | 34,012                  | 23,834            | 7,270  | 1,430   | 1,478  |
| 920           | 490               | ..    | 430    | 36,761                  | 23,896            | 9,757  | 1,430   | 1,678  |
| *444          | *428              | *16   | ..     | 21,425                  | 14,699            | 3,618  | ..      | 3,108  |
| *613          | *597              | *16   | ..     | 22,728                  | 15,873            | 3,627  | ..      | 3,228  |
| *649          | *633              | *16   | ..     | 23,815                  | 16,847            | 3,701  | ..      | 3,267  |
| *656          | *640              | *16   | ..     | 25,531                  | 18,495            | 3,760  | ..      | 3,276  |
| *7,275        | *7,275            | ..    | ..     | *1,284                  | *1,284            | ..     | ..      | ..     |
| *8,644        | *8,644            | ..    | ..     | *1,526                  | *1,526            | ..     | ..      | ..     |
| *9,038        | *9,038            | ..    | ..     | *1,553                  | *1,553            | ..     | ..      | ..     |
| *9,038        | *9,038            | ..    | ..     | *1,553                  | *1,553            | ..     | ..      | ..     |
| 12,124        | 12,124            | ..    | ..     | 62,602                  | 62,578            | ..     | ..      | 24     |
| 14,626        | 14,626            | ..    | ..     | 65,882                  | 65,845            | ..     | ..      | 37     |
| *19,235       | *19,235           | ..    | ..     | *57,793                 | *57,706           | ..     | ..      | 87     |
| *33,600       | *33,600           | ..    | ..     | *43,185                 | *42,773           | ..     | ..      | 412    |
| 418           | 418               | ..    | ..     | 13,027                  | 12,931            | ..     | ..      | 97     |
| 569           | 569               | ..    | ..     | 13,043                  | 12,931            | ..     | ..      | 112    |
| 569           | 569               | ..    | ..     | 13,046                  | 12,931            | ..     | ..      | 115    |
| 552           | 552               | ..    | ..     | 12,011                  | 11,740            | ..     | ..      | 271    |
| 412           | 24                | 338   | 50     | 3,598                   | 2,064             | 1,384  | ..      | 150    |
| 436           | 29                | 356   | 51     | 3,658                   | 2,115             | 1,364  | ..      | 179    |
| 482           | *32               | 394   | *56    | 3,642                   | 2,037             | 1,399  | ..      | 206    |
| 534           | *34               | 410   | *90    | *3,800                  | *2,148            | 1,399  | ..      | 253    |
| 33            | 20                | ..    | 13     | 153                     | 140               | ..     | ..      | 13     |
| 35            | 20                | ..    | 15     | 155                     | 140               | ..     | ..      | 15     |
| 40            | 20                | ..    | 20     | 160                     | 140               | ..     | ..      | 20     |
| 60            | 20                | ..    | 40     | 180                     | 140               | ..     | ..      | 40     |
| 912           | 912               | ..    | ..     | 8,775                   | 7,280             | 1,494  | ..      | 1      |
| *912          | *912              | ..    | ..     | *8,779                  | *7,287            | 1,490  | ..      | 2      |
| 972           | 972               | ..    | ..     | 9,087                   | 7,595             | 1,490  | ..      | 2      |
| 972           | 972               | ..    | ..     | 9,088                   | 7,595             | 1,490  | ..      | 3      |
| ..            | ..                | ..    | ..     | 6,577                   | 719               | 5,858  | ..      | ..     |
| ..            | ..                | ..    | ..     | *6,577                  | *719              | *5,858 | ..      | ..     |
| ..            | ..                | ..    | ..     | *6,577                  | *719              | *5,858 | ..      | ..     |
| ..            | ..                | ..    | ..     | 6,451                   | 718               | 5,733  | ..      | ..     |
| *16,964       | *14,949           | *15   | *2,000 | 26,183                  | 19,772            | 3,452  | ..      | *2,958 |
| *16,964       | *14,949           | *15   | *2,000 | 27,060                  | 20,277            | 3,452  | ..      | *3,330 |
| *16,964       | *14,949           | *15   | *2,000 | 28,215                  | 20,477            | *3,667 | ..      | *4,071 |
| 16,964        | 14,949            | *15   | *2,000 | 28,296                  | 20,133            | *3,667 | ..      | *4,495 |

Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Country or area        | Year        | Total producers  |                   |                |                |                |                |              |
|------------------------|-------------|------------------|-------------------|----------------|----------------|----------------|----------------|--------------|
|                        |             | Total            | Combustible fuels | Hydro          | Nuclear        | Wind           | Solar          | Other        |
| Timor-Leste            | 2016        | 283              | 283               | 0              | ..             | ..             | 1              | ..           |
|                        | 2017        | 283              | 283               | 0              | ..             | ..             | 1              | ..           |
|                        | 2018        | 283              | 283               | 0              | ..             | ..             | 1              | ..           |
|                        | 2019        | 283              | 283               | 0              | ..             | ..             | 1              | ..           |
| Turkey                 | 2016        | 78,497           | 44,278            | 26,681         | ..             | 5,751          | 833            | 954          |
|                        | 2017        | 85,201           | 46,762            | 27,273         | ..             | 6,516          | 3,421          | 1,229        |
|                        | 2018        | 88,551           | 46,712            | 28,291         | ..             | 7,006          | 5,062          | 1,480        |
|                        | 2019        | 91,267           | 47,284            | 28,503         | ..             | 7,591          | 5,995          | 1,894        |
| Turkmenistan           | 2016        | 4,675            | 4,674             | 1              | ..             | ..             | ..             | ..           |
|                        | 2017        | 5,201            | 5,200             | 1              | ..             | ..             | ..             | ..           |
|                        | 2018        | 5,201            | 5,200             | 1              | ..             | ..             | ..             | ..           |
|                        | 2019        | *5,201           | *5,200            | 1              | ..             | ..             | ..             | ..           |
| United Arab Emirates   | 2016        | 28,761           | 28,638            | ..             | ..             | ..             | 123            | ..           |
|                        | 2017        | 30,371           | 30,048            | ..             | ..             | ..             | 323            | ..           |
|                        | 2018        | *30,934          | *30,349           | ..             | ..             | ..             | 585            | ..           |
|                        | 2019        | *33,042          | *31,287           | ..             | ..             | ..             | 1,755          | ..           |
| Uzbekistan             | 2016        | 14,104           | 12,222            | 1,880          | ..             | ..             | 2              | ..           |
|                        | 2017        | 14,378           | 12,516            | 1,858          | ..             | 1              | 3              | ..           |
|                        | 2018        | 14,196           | 12,276            | 1,915          | ..             | 1              | 4              | ..           |
|                        | 2019        | 15,948           | 14,032            | 1,908          | ..             | *5             | 4              | ..           |
| Viet Nam               | 2016        | *43,416          | *25,783           | 17,461         | ..             | 166            | 6              | ..           |
|                        | 2017        | *44,334          | *25,953           | 18,161         | ..             | 211            | 9              | ..           |
|                        | 2018        | *44,815          | *26,125           | 18,341         | ..             | 243            | 106            | ..           |
|                        | 2019        | 55,187           | 30,690            | 18,421         | ..             | 381            | 5,695          | ..           |
| Yemen                  | 2016        | 1,769            | 1,519             | ..             | ..             | ..             | *250           | ..           |
|                        | 2017        | *1,769           | *1,519            | ..             | ..             | ..             | *250           | ..           |
|                        | 2018        | *1,769           | *1,519            | ..             | ..             | ..             | *250           | ..           |
|                        | 2019        | *1,769           | *1,519            | ..             | ..             | ..             | 250            | ..           |
| <b>Europe</b>          | <b>2016</b> | <b>1,402,025</b> | <b>702,347</b>    | <b>268,919</b> | <b>166,172</b> | <b>155,585</b> | <b>106,059</b> | <b>2,943</b> |
|                        | <b>2017</b> | <b>1,419,304</b> | <b>696,723</b>    | <b>270,875</b> | <b>165,905</b> | <b>170,470</b> | <b>112,267</b> | <b>3,065</b> |
|                        | <b>2018</b> | <b>1,451,263</b> | <b>706,203</b>    | <b>271,914</b> | <b>166,808</b> | <b>181,849</b> | <b>121,372</b> | <b>3,118</b> |
|                        | <b>2019</b> | <b>1,470,652</b> | <b>691,460</b>    | <b>273,574</b> | <b>166,682</b> | <b>196,355</b> | <b>139,487</b> | <b>3,094</b> |
| Albania                | 2016        | 1,925            | *123              | 1,801          | ..             | ..             | 1              | ..           |
|                        | 2017        | 2,172            | 123               | 2,048          | ..             | ..             | 1              | ..           |
|                        | 2018        | 2,229            | 123               | 2,105          | ..             | ..             | 1              | ..           |
|                        | 2019        | 2,361            | 123               | 2,223          | ..             | ..             | 15             | ..           |
| Andorra                | 2016        | 51               | 5                 | 46             | ..             | ..             | 0              | ..           |
|                        | 2017        | 52               | 5                 | 46             | ..             | ..             | 1              | ..           |
|                        | 2018        | 53               | 5                 | 46             | ..             | ..             | 2              | ..           |
|                        | 2019        | 53               | 5                 | 46             | ..             | ..             | 2              | ..           |
| Austria                | 2016        | 25,217           | 7,273             | 14,117         | ..             | 2,730          | 1,096          | 1            |
|                        | 2017        | 24,920           | 6,613             | 14,150         | ..             | 2,887          | 1,269          | 1            |
|                        | 2018        | 25,637           | 6,532             | 14,516         | ..             | 3,133          | 1,455          | 1            |
|                        | 2019        | 25,901           | 6,377             | 14,597         | ..             | 3,224          | 1,702          | 1            |
| Belarus                | 2016        | 10,007           | 9,826             | 72             | ..             | 62             | 47             | ..           |
|                        | 2017        | 10,146           | 9,884             | 98             | ..             | 84             | 80             | ..           |
|                        | 2018        | 10,151           | 9,808             | 97             | ..             | 92             | 154            | ..           |
|                        | 2019        | 10,183           | 9,820             | 97             | ..             | 112            | 154            | ..           |
| Belgium                | 2016        | 21,670           | 8,629             | 1,425          | 5,913          | 2,370          | 3,329          | 4            |
|                        | 2017        | 22,226           | 8,478             | 1,417          | 5,918          | 2,788          | 3,621          | 4            |
|                        | 2018        | 22,805           | 8,197             | 1,418          | 5,918          | 3,268          | 4,000          | 4            |
|                        | 2019        | 24,061           | 8,213             | 1,414          | 5,930          | 3,863          | 4,637          | 4            |
| Bosnia and Herzegovina | 2016        | 4,364            | 2,200             | 2,155          | ..             | ..             | 9              | ..           |
|                        | 2017        | 4,522            | 2,295             | 2,211          | ..             | ..             | 16             | ..           |
|                        | 2018        | 4,440            | 2,135             | 2,236          | ..             | 51             | 18             | ..           |
|                        | 2019        | 4,485            | 2,137             | 2,239          | ..             | 87             | 22             | ..           |

Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Autoproducers  |                   |              |               | Main activity producers |                   |                |                |                |
|----------------|-------------------|--------------|---------------|-------------------------|-------------------|----------------|----------------|----------------|
| Total          | Combustible fuels | Hydro        | Other         | Total                   | Combustible fuels | Hydro          | Nuclear        | Other          |
| ..             | ..                | ..           | ..            | 283                     | 283               | 0              | ..             | 1              |
| ..             | ..                | ..           | ..            | 283                     | 283               | 0              | ..             | 1              |
| ..             | ..                | ..           | ..            | 283                     | 283               | 0              | ..             | 1              |
| ..             | ..                | ..           | ..            | 283                     | 283               | 0              | ..             | 1              |
| 5,277          | 4,223             | 550          | 504           | 73,220                  | 40,055            | 26,131         | ..             | 7,034          |
| 6,190          | 4,417             | 551          | 1,222         | 79,011                  | 42,345            | 26,722         | ..             | 9,944          |
| 6,437          | 4,450             | 551          | 1,436         | 82,114                  | 42,262            | 27,740         | ..             | 12,112         |
| 7,588          | 5,222             | 552          | 1,814         | 83,679                  | 42,062            | 27,951         | ..             | 13,666         |
| ..             | ..                | ..           | ..            | 4,675                   | 4,674             | 1              | ..             | ..             |
| ..             | ..                | ..           | ..            | 5,201                   | 5,200             | 1              | ..             | ..             |
| ..             | ..                | ..           | ..            | 5,201                   | 5,200             | 1              | ..             | ..             |
| ..             | ..                | ..           | ..            | *5,201                  | *5,200            | 1              | ..             | ..             |
| ..             | ..                | ..           | ..            | 28,761                  | 28,638            | ..             | ..             | 123            |
| ..             | ..                | ..           | ..            | 30,371                  | 30,048            | ..             | ..             | 323            |
| ..             | ..                | ..           | ..            | *30,934                 | *30,349           | ..             | ..             | 585            |
| ..             | ..                | ..           | ..            | *33,042                 | *31,287           | ..             | ..             | 1,755          |
| ..             | ..                | ..           | ..            | 14,104                  | 12,222            | 1,880          | ..             | 2              |
| ..             | ..                | ..           | ..            | 14,378                  | 12,516            | 1,858          | ..             | 4              |
| ..             | ..                | ..           | ..            | 14,196                  | 12,276            | 1,915          | ..             | 4              |
| ..             | ..                | ..           | ..            | 15,948                  | 14,032            | 1,908          | ..             | *9             |
| *5,391         | *5,055            | *330         | *6            | *38,025                 | *20,728           | 17,131         | ..             | 166            |
| *5,483         | *5,125            | *352         | *6            | *38,851                 | *20,828           | 17,809         | ..             | 214            |
| *5,483         | *5,125            | *352         | *6            | *39,332                 | *21,000           | 17,989         | ..             | 343            |
| *5,483         | *5,125            | *352         | *6            | 49,704                  | 25,565            | 18,069         | ..             | 6,070          |
| *367           | *117              | ..           | *250          | 1,402                   | 1,402             | ..             | ..             | ..             |
| *367           | *117              | ..           | *250          | *1,402                  | *1,402            | ..             | ..             | ..             |
| *367           | *117              | ..           | *250          | *1,402                  | *1,402            | ..             | ..             | ..             |
| 367            | *117              | ..           | 250           | *1,402                  | *1,402            | ..             | ..             | ..             |
| <b>119,726</b> | <b>89,261</b>     | <b>3,426</b> | <b>27,039</b> | <b>1,282,299</b>        | <b>613,086</b>    | <b>265,493</b> | <b>166,172</b> | <b>237,549</b> |
| <b>123,132</b> | <b>90,782</b>     | <b>3,394</b> | <b>28,956</b> | <b>1,296,172</b>        | <b>605,942</b>    | <b>267,480</b> | <b>165,905</b> | <b>256,846</b> |
| <b>130,148</b> | <b>94,932</b>     | <b>3,380</b> | <b>31,836</b> | <b>1,321,115</b>        | <b>611,270</b>    | <b>268,534</b> | <b>166,808</b> | <b>274,503</b> |
| <b>136,221</b> | <b>95,508</b>     | <b>3,400</b> | <b>37,313</b> | <b>1,334,431</b>        | <b>595,952</b>    | <b>270,174</b> | <b>166,682</b> | <b>301,623</b> |
| *25            | *25               | ..           | ..            | 1,900                   | *98               | 1,801          | ..             | 1              |
| 25             | 25                | ..           | ..            | 2,147                   | 98                | 2,048          | ..             | 1              |
| 25             | 25                | ..           | ..            | 2,204                   | 98                | 2,105          | ..             | 1              |
| 25             | 25                | ..           | ..            | 2,336                   | 98                | 2,223          | ..             | 15             |
| ..             | ..                | ..           | ..            | 51                      | 5                 | 46             | ..             | 0              |
| ..             | ..                | ..           | ..            | 52                      | 5                 | 46             | ..             | 1              |
| ..             | ..                | ..           | ..            | 53                      | 5                 | 46             | ..             | 2              |
| ..             | ..                | ..           | ..            | 53                      | 5                 | 46             | ..             | 2              |
| 2,258          | 1,712             | 546          | ..            | 22,959                  | 5,561             | 13,571         | ..             | 3,827          |
| 1,773          | 1,341             | 432          | ..            | 23,147                  | 5,272             | 13,718         | ..             | 4,157          |
| 1,716          | 1,288             | 428          | ..            | 23,921                  | 5,244             | 14,088         | ..             | 4,589          |
| 2,219          | 1,784             | 435          | ..            | 23,682                  | 4,593             | 14,162         | ..             | 4,927          |
| 852            | 841               | 4            | 7             | 9,155                   | 8,985             | 68             | ..             | 102            |
| 817            | 806               | 3            | 8             | 9,329                   | 9,078             | 95             | ..             | 156            |
| 969            | 899               | 2            | 68            | 9,182                   | 8,909             | 95             | ..             | 178            |
| 977            | 897               | 2            | 78            | 9,206                   | 8,923             | 95             | ..             | 188            |
| 4,819          | 1,467             | ..           | 3,352         | 16,851                  | 7,162             | 1,425          | 5,913          | 2,351          |
| 5,109          | 1,456             | ..           | 3,653         | 17,117                  | 7,022             | 1,417          | 5,918          | 2,760          |
| 5,561          | 1,529             | ..           | 4,032         | 17,244                  | 6,668             | 1,418          | 5,918          | 3,240          |
| 6,405          | 1,735             | ..           | 4,670         | 17,656                  | 6,478             | 1,414          | 5,930          | 3,834          |
| *230           | *230              | ..           | ..            | 4,134                   | 1,970             | 2,155          | ..             | 9              |
| *230           | *230              | ..           | ..            | 4,292                   | 2,065             | 2,211          | ..             | 16             |
| 70             | 70                | ..           | ..            | 4,370                   | 2,065             | 2,236          | ..             | 69             |
| 71             | 71                | ..           | ..            | 4,414                   | 2,066             | 2,239          | ..             | 109            |

Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Country or area | Year | Total producers |                   |        |         |        |        |       |
|-----------------|------|-----------------|-------------------|--------|---------|--------|--------|-------|
|                 |      | Total           | Combustible fuels | Hydro  | Nuclear | Wind   | Solar  | Other |
| Bulgaria        | 2016 | 10,904          | 3,822             | 3,223  | 1,967   | 699    | 1,028  | 165   |
|                 | 2017 | 11,069          | 3,785             | 3,372  | 1,967   | 698    | 1,036  | 211   |
|                 | 2018 | 11,530          | 4,220             | 3,379  | 2,008   | 699    | 1,033  | 191   |
|                 | 2019 | 11,433          | 4,097             | 3,378  | 2,006   | 703    | 1,048  | *200  |
| Croatia         | 2016 | 4,794           | 2,082             | 2,175  | ..      | 482    | 56     | ..    |
|                 | 2017 | 4,970           | 2,141             | 2,193  | ..      | 576    | 60     | ..    |
|                 | 2018 | 5,006           | 2,142             | 2,200  | ..      | 586    | 68     | 10    |
|                 | 2019 | 4,712           | 1,771             | 2,200  | ..      | 646    | 85     | 10    |
| Czechia         | 2016 | 21,989          | 13,087            | 2,262  | 4,290   | 282    | 2,068  | ..    |
|                 | 2017 | 22,267          | 13,334            | 2,265  | 4,290   | 308    | 2,070  | ..    |
|                 | 2018 | 22,295          | 13,350            | 2,264  | 4,290   | 316    | 2,075  | ..    |
|                 | 2019 | 22,011          | 13,031            | 2,265  | 4,290   | 339    | 2,086  | ..    |
| Denmark         | 2016 | 14,226          | 8,120             | 9      | ..      | 5,246  | 851    | ..    |
|                 | 2017 | 14,318          | 7,916             | 7      | ..      | 5,489  | 906    | ..    |
|                 | 2018 | 14,984          | 7,864             | 7      | ..      | 6,115  | 998    | ..    |
|                 | 2019 | 15,166          | 7,976             | 7      | ..      | 6,103  | 1,080  | ..    |
| Estonia         | 2016 | 2,577           | 2,251             | 6      | ..      | 310    | 10     | ..    |
|                 | 2017 | 2,542           | 2,208             | 7      | ..      | 312    | 15     | ..    |
|                 | 2018 | 2,819           | 2,470             | 7      | ..      | 310    | 32     | ..    |
|                 | 2019 | 2,746           | 2,303             | 6      | ..      | 316    | 121    | ..    |
| Faeroe Islands  | 2016 | 120             | 67                | 38     | ..      | 14     | ..     | ..    |
|                 | 2017 | 121             | 69                | 38     | ..      | 14     | ..     | ..    |
|                 | 2018 | 121             | 69                | 38     | ..      | 14     | ..     | ..    |
|                 | 2019 | 131             | 78                | 38     | ..      | 14     | 0      | ..    |
| Finland         | 2016 | 16,289          | 8,672             | 3,249  | 2,764   | 1,565  | 39     | ..    |
|                 | 2017 | 17,174          | 8,997             | 3,272  | 2,779   | 2,044  | 82     | ..    |
|                 | 2018 | 17,154          | 8,902             | 3,287  | 2,784   | 2,041  | 140    | ..    |
|                 | 2019 | 17,472          | 8,899             | 3,273  | 2,794   | 2,284  | 222    | ..    |
| France          | 2016 | 133,151         | 24,895            | 25,621 | 63,130  | 11,567 | 7,702  | 236   |
|                 | 2017 | 133,089         | 21,907            | 25,707 | 63,130  | 13,499 | 8,610  | 235   |
|                 | 2018 | 135,104         | 21,422            | 25,727 | 63,130  | 14,900 | 9,691  | 234   |
|                 | 2019 | 136,242         | 19,791            | 25,869 | 63,130  | 16,427 | 10,795 | 230   |
| Germany         | 2016 | 208,217         | 95,716            | 11,207 | 10,799  | 49,435 | 40,679 | 381   |
|                 | 2017 | 215,326         | 95,134            | 11,120 | 10,799  | 55,580 | 42,293 | 400   |
|                 | 2018 | 228,795         | 103,030           | 10,684 | 10,799  | 58,721 | 45,158 | 403   |
|                 | 2019 | 231,821         | 101,389           | 10,733 | 9,525   | 60,721 | 49,047 | 406   |
| Gibraltar       | 2016 | *43             | *43               | ..     | ..      | ..     | ..     | 0     |
|                 | 2017 | *43             | *43               | ..     | ..      | ..     | ..     | 0     |
|                 | 2018 | *43             | *43               | ..     | ..      | ..     | ..     | 0     |
|                 | 2019 | *43             | *43               | ..     | ..      | ..     | ..     | 0     |
| Greece          | 2016 | 19,165          | 10,799            | 3,392  | ..      | 2,370  | 2,604  | ..    |
|                 | 2017 | 19,427          | 10,805            | 3,392  | ..      | 2,624  | 2,606  | ..    |
|                 | 2018 | 19,582          | 10,644            | 3,409  | ..      | 2,877  | 2,652  | ..    |
|                 | 2019 | 20,479          | 10,644            | 3,412  | ..      | 3,589  | 2,834  | ..    |
| Guernsey        | 2016 | *115            | *115              | ..     | ..      | ..     | ..     | ..    |
|                 | 2017 | *132            | *132              | ..     | ..      | ..     | ..     | ..    |
|                 | 2018 | *132            | *132              | ..     | ..      | ..     | 0      | ..    |
|                 | 2019 | *132            | *132              | ..     | ..      | ..     | 0      | ..    |
| Hungary         | 2016 | 8,758           | 6,100             | 57     | 2,000   | 329    | 235    | 37    |
|                 | 2017 | 8,860           | 6,090             | 57     | 2,000   | 329    | 344    | 40    |
|                 | 2018 | 9,256           | 6,088             | 57     | 2,013   | 329    | 728    | 41    |
|                 | 2019 | 9,914           | 6,079             | 58     | 2,013   | 323    | 1,400  | 41    |
| Iceland         | 2016 | 2,772           | 117               | 1,987  | ..      | 3      | ..     | 665   |
|                 | 2017 | 2,823           | 116               | 1,995  | ..      | 2      | ..     | 710   |
|                 | 2018 | 2,973           | 116               | 2,099  | ..      | 2      | ..     | 756   |
|                 | 2019 | 2,979           | 116               | 2,104  | ..      | 2      | ..     | 756   |

Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Autoproducers |                   |       |       | Main activity producers |                   |        |         |         |
|---------------|-------------------|-------|-------|-------------------------|-------------------|--------|---------|---------|
| Total         | Combustible fuels | Hydro | Other | Total                   | Combustible fuels | Hydro  | Nuclear | Other   |
| 352           | 187               | ..    | 165   | 10,552                  | 3,635             | 3,223  | 1,967   | 1,727   |
| 445           | 234               | ..    | 211   | 10,624                  | 3,551             | 3,372  | 1,967   | 1,734   |
| 425           | 234               | ..    | 191   | 11,105                  | 3,986             | 3,379  | 2,008   | 1,732   |
| *361          | 161               | ..    | *200  | 11,072                  | 3,936             | 3,378  | 2,006   | 1,751   |
| *167          | *165              | *2    | ..    | 4,627                   | 1,917             | 2,173  | ..      | 537     |
| 160           | 157               | 3     | ..    | 4,811                   | 1,984             | 2,190  | ..      | 636     |
| 165           | 162               | 3     | ..    | 4,841                   | 1,980             | 2,197  | ..      | 664     |
| 165           | 162               | 3     | ..    | 4,547                   | 1,609             | 2,197  | ..      | 741     |
| 1,893         | 1,702             | 191   | ..    | 20,096                  | 11,385            | 2,071  | 4,290   | 2,350   |
| 1,936         | 1,752             | 184   | ..    | 20,331                  | 11,582            | 2,081  | 4,290   | 2,378   |
| 1,928         | 1,745             | 183   | ..    | 20,367                  | 11,605            | 2,081  | 4,290   | 2,391   |
| 1,925         | 1,741             | 184   | ..    | 20,086                  | 11,290            | 2,081  | 4,290   | 2,425   |
| 1,470         | 619               | ..    | 851   | 12,756                  | 7,501             | 9      | ..      | 5,246   |
| 1,536         | 630               | ..    | 906   | 12,782                  | 7,286             | 7      | ..      | 5,489   |
| 1,639         | 641               | ..    | 998   | 13,345                  | 7,223             | 7      | ..      | 6,115   |
| 1,672         | 592               | ..    | 1,080 | 13,494                  | 7,384             | 7      | ..      | 6,103   |
| 31            | 25                | ..    | 6     | 2,546                   | 2,226             | 6      | ..      | 314     |
| 27            | 25                | ..    | 2     | 2,515                   | 2,183             | 7      | ..      | 325     |
| 26            | 25                | ..    | 1     | 2,793                   | 2,445             | 7      | ..      | 341     |
| 24            | 23                | ..    | 1     | 2,722                   | 2,280             | 6      | ..      | 436     |
| ..            | ..                | ..    | ..    | 120                     | 67                | 38     | ..      | 14      |
| ..            | ..                | ..    | ..    | 121                     | 69                | 38     | ..      | 14      |
| ..            | ..                | ..    | ..    | 121                     | 69                | 38     | ..      | 14      |
| ..            | ..                | ..    | ..    | 131                     | 78                | 38     | ..      | 14      |
| 2,068         | 1,846             | 186   | 36    | 14,221                  | 6,826             | 3,063  | 2,764   | 1,568   |
| 2,306         | 2,039             | 188   | 79    | 14,868                  | 6,958             | 3,084  | 2,779   | 2,047   |
| 2,364         | 2,038             | 189   | 137   | 14,790                  | 6,864             | 3,098  | 2,784   | 2,044   |
| 2,462         | 2,035             | 208   | 219   | 15,010                  | 6,864             | 3,065  | 2,794   | 2,287   |
| 6,314         | 3,830             | 186   | 2,298 | 126,837                 | 21,065            | 25,435 | 63,130  | 17,207  |
| 6,467         | 3,703             | 190   | 2,575 | 126,622                 | 18,204            | 25,517 | 63,130  | 19,770  |
| 7,700         | 4,587             | 185   | 2,929 | 127,404                 | 16,836            | 25,542 | 63,130  | 21,896  |
| 8,206         | 4,725             | 194   | 3,287 | 128,036                 | 15,066            | 25,674 | 63,130  | 24,166  |
| 10,588        | 10,307            | 43    | 238   | 197,629                 | 85,409            | 11,164 | 10,799  | 90,257  |
| 11,579        | 11,310            | 42    | 227   | 203,747                 | 83,824            | 11,078 | 10,799  | 98,046  |
| 11,988        | 11,729            | 32    | 227   | 216,807                 | 91,301            | 10,652 | 10,799  | 104,055 |
| 12,034        | 11,819            | 35    | 180   | 219,787                 | 89,570            | 10,698 | 9,525   | 109,994 |
| ..            | ..                | ..    | ..    | *43                     | *43               | ..     | ..      | 0       |
| ..            | ..                | ..    | ..    | *43                     | *43               | ..     | ..      | 0       |
| ..            | ..                | ..    | ..    | *43                     | *43               | ..     | ..      | 0       |
| ..            | ..                | ..    | ..    | *43                     | *43               | ..     | ..      | 0       |
| 568           | 568               | ..    | ..    | 18,597                  | 10,231            | 3,392  | ..      | 4,974   |
| 571           | 571               | ..    | ..    | 18,856                  | 10,234            | 3,392  | ..      | 5,230   |
| 568           | 568               | ..    | ..    | 19,014                  | 10,076            | 3,409  | ..      | 5,529   |
| 568           | 568               | ..    | ..    | 19,911                  | 10,076            | 3,412  | ..      | 6,423   |
| ..            | ..                | ..    | ..    | *115                    | *115              | ..     | ..      | ..      |
| ..            | ..                | ..    | ..    | *132                    | *132              | ..     | ..      | ..      |
| ..            | ..                | ..    | ..    | *132                    | *132              | ..     | ..      | 0       |
| ..            | ..                | ..    | ..    | *132                    | *132              | ..     | ..      | 0       |
| 468           | 222               | ..    | 246   | 8,290                   | 5,878             | 57     | 2,000   | 355     |
| 592           | 253               | ..    | 339   | 8,268                   | 5,837             | 57     | 2,000   | 374     |
| 735           | 251               | ..    | 484   | 8,521                   | 5,837             | 57     | 2,013   | 614     |
| 1,025         | 286               | ..    | 739   | 8,889                   | 5,793             | 58     | 2,013   | 1,025   |
| ..            | ..                | ..    | ..    | 2,772                   | 117               | 1,987  | ..      | 668     |
| ..            | ..                | ..    | ..    | 2,823                   | 116               | 1,995  | ..      | 712     |
| ..            | ..                | ..    | ..    | 2,973                   | 116               | 2,099  | ..      | 758     |
| ..            | ..                | ..    | ..    | 2,979                   | 116               | 2,104  | ..      | 758     |

Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Country or area | Year | Total producers |                   |        |         |        |        |       |
|-----------------|------|-----------------|-------------------|--------|---------|--------|--------|-------|
|                 |      | Total           | Combustible fuels | Hydro  | Nuclear | Wind   | Solar  | Other |
| Ireland         | 2016 | 10,017          | 6,696             | 529    | ..      | 2,786  | 6      | ..    |
|                 | 2017 | 10,608          | 6,745             | 529    | ..      | 3,318  | 16     | ..    |
|                 | 2018 | 10,982          | 6,752             | 529    | ..      | 3,676  | 24     | ..    |
|                 | 2019 | 11,137          | 6,417             | 529    | ..      | 4,160  | 31     | ..    |
| Isle of Man     | 2016 | 184             | 183               | 1      | ..      | ..     | ..     | ..    |
|                 | 2017 | 187             | 186               | 1      | ..      | ..     | ..     | ..    |
|                 | 2018 | 187             | 186               | 1      | ..      | ..     | ..     | ..    |
|                 | 2019 | 187             | 186               | 1      | ..      | ..     | ..     | ..    |
| Italy           | 2016 | 114,162         | 62,096            | 22,298 | ..      | 9,384  | 19,283 | 1,101 |
|                 | 2017 | 114,240         | 61,289            | 22,426 | ..      | 9,737  | 19,682 | 1,106 |
|                 | 2018 | 115,220         | 61,276            | 22,498 | ..      | 10,230 | 20,108 | 1,108 |
|                 | 2019 | 116,435         | 61,284            | 22,541 | ..      | 10,679 | 20,865 | 1,066 |
| Jersey          | 2016 | 78              | 78                | ..     | ..      | ..     | ..     | ..    |
|                 | 2017 | 78              | 78                | ..     | ..      | ..     | ..     | ..    |
|                 | 2018 | 78              | 78                | ..     | ..      | ..     | ..     | ..    |
|                 | 2019 | *78             | *78               | ..     | ..      | ..     | ..     | ..    |
| Kosovo          | 2016 | 1,009           | 915               | 86     | ..      | 1      | 7      | ..    |
|                 | 2017 | 1,409           | 1,288             | 80     | ..      | 34     | 7      | ..    |
|                 | 2018 | 1,409           | 1,288             | 80     | ..      | 34     | 7      | ..    |
|                 | 2019 | *1,602          | *1,288            | 213    | ..      | 91     | 11     | ..    |
| Latvia          | 2016 | 2,927           | 1,292             | 1,564  | ..      | 70     | 1      | 0     |
|                 | 2017 | 2,941           | 1,299             | 1,564  | ..      | 77     | 1      | ..    |
|                 | 2018 | 2,915           | 1,270             | 1,565  | ..      | 78     | 2      | ..    |
|                 | 2019 | 2,938           | 1,270             | 1,587  | ..      | 78     | 3      | ..    |
| Liechtenstein   | 2016 | *23             | *1                | *10    | ..      | ..     | *12    | ..    |
|                 | 2017 | *24             | *1                | *10    | ..      | ..     | *13    | ..    |
|                 | 2018 | *26             | *1                | *10    | ..      | ..     | *15    | ..    |
|                 | 2019 | *27             | *1                | *10    | ..      | ..     | *16    | ..    |
| Lithuania       | 2016 | 3,665           | 2,184             | 877    | ..      | 509    | 70     | 25    |
|                 | 2017 | 3,326           | 1,832             | 877    | ..      | 518    | 74     | 25    |
|                 | 2018 | 3,354           | 1,837             | 877    | ..      | 533    | 82     | 25    |
|                 | 2019 | 3,378           | 1,839             | 877    | ..      | 534    | 103    | 25    |
| Luxembourg      | 2016 | 1,710           | 138               | 1,330  | ..      | 120    | 122    | ..    |
|                 | 2017 | 1,709           | 130               | 1,331  | ..      | 120    | 128    | ..    |
|                 | 2018 | 1,715           | 131               | 1,330  | ..      | 123    | 131    | ..    |
|                 | 2019 | 1,778           | 152               | 1,330  | ..      | 136    | 160    | ..    |
| Malta           | 2016 | 573             | 480               | ..     | ..      | 0      | 94     | ..    |
|                 | 2017 | 706             | 595               | ..     | ..      | 0      | 112    | ..    |
|                 | 2018 | 726             | 595               | ..     | ..      | 0      | 131    | ..    |
|                 | 2019 | 748             | 595               | ..     | ..      | 0      | 154    | ..    |
| Montenegro      | 2016 | 870             | 219               | 651    | ..      | ..     | ..     | ..    |
|                 | 2017 | 949             | 225               | 652    | ..      | 72     | ..     | ..    |
|                 | 2018 | 999             | 225               | 652    | ..      | 118    | 3      | ..    |
|                 | 2019 | 1,001           | 225               | 652    | ..      | 118    | 5      | ..    |
| Netherlands     | 2016 | 34,262          | 27,266            | 37     | 485     | 4,257  | 2,135  | 82    |
|                 | 2017 | 33,822          | 26,105            | 37     | 485     | 4,202  | 2,911  | 82    |
|                 | 2018 | 35,110          | 25,505            | 37     | 485     | 4,393  | 4,608  | 82    |
|                 | 2019 | 37,086          | 24,821            | 37     | 485     | 4,484  | 7,177  | 82    |
| North Macedonia | 2016 | 1,823           | 1,109             | 660    | ..      | 37     | 17     | ..    |
|                 | 2017 | 1,836           | 1,111             | 671    | ..      | 37     | 17     | ..    |
|                 | 2018 | 1,839           | 1,111             | 674    | ..      | 37     | 17     | ..    |
|                 | 2019 | 1,844           | 1,112             | 678    | ..      | 37     | 17     | ..    |
| Norway          | 2016 | 33,810          | 1,073             | 31,817 | ..      | 883    | ..     | 37    |
|                 | 2017 | 34,230          | 1,074             | 31,912 | ..      | 1,207  | ..     | 37    |
|                 | 2018 | 35,418          | 1,073             | 32,530 | ..      | 1,710  | 68     | 37    |
|                 | 2019 | 36,912          | 1,074             | 32,797 | ..      | 2,914  | 90     | 37    |

Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Autoproducers |                   |       |       | Main activity producers |                   |        |         |        |
|---------------|-------------------|-------|-------|-------------------------|-------------------|--------|---------|--------|
| Total         | Combustible fuels | Hydro | Other | Total                   | Combustible fuels | Hydro  | Nuclear | Other  |
| 367           | 345               | ..    | 22    | 9,650                   | 6,351             | 529    | ..      | 2,770  |
| 385           | 350               | ..    | 36    | 10,222                  | 6,395             | 529    | ..      | 3,298  |
| 403           | 356               | ..    | 47    | 10,578                  | 6,396             | 529    | ..      | 3,653  |
| 421           | 364               | ..    | 57    | 10,716                  | 6,053             | 529    | ..      | 4,134  |
| 8             | 8                 | ..    | ..    | 176                     | 175               | 1      | ..      | ..     |
| 8             | 8                 | ..    | ..    | 180                     | 179               | 1      | ..      | ..     |
| 8             | 8                 | ..    | ..    | 180                     | 179               | 1      | ..      | ..     |
| 8             | 8                 | ..    | ..    | 180                     | 179               | 1      | ..      | ..     |
| 4,834         | 4,658             | 117   | 59    | 109,328                 | 57,438            | 22,181 | ..      | 29,709 |
| 5,034         | 4,863             | 119   | 52    | 109,206                 | 56,426            | 22,307 | ..      | 30,473 |
| 5,521         | 5,347             | 105   | 69    | 109,699                 | 55,929            | 22,393 | ..      | 31,377 |
| 5,432         | 5,256             | 106   | 70    | 111,003                 | 56,028            | 22,435 | ..      | 32,540 |
| *28           | *28               | ..    | ..    | 50                      | 50                | ..     | ..      | ..     |
| *28           | *28               | ..    | ..    | 50                      | 50                | ..     | ..      | ..     |
| *28           | *28               | ..    | ..    | 50                      | 50                | ..     | ..      | ..     |
| *28           | *28               | ..    | ..    | *50                     | *50               | ..     | ..      | ..     |
| ..            | ..                | ..    | ..    | 1,009                   | 915               | 86     | ..      | 8      |
| ..            | ..                | ..    | ..    | 1,409                   | 1,288             | 80     | ..      | 40     |
| ..            | ..                | ..    | ..    | 1,409                   | 1,288             | 80     | ..      | 40     |
| 0             | ..                | ..    | 0     | *1,602                  | *1,288            | 213    | ..      | 101    |
| 44            | 41                | 1     | 2     | 2,883                   | 1,251             | 1,563  | ..      | 69     |
| 33            | 31                | 1     | 1     | 2,908                   | 1,268             | 1,563  | ..      | 77     |
| 34            | 30                | 2     | 2     | 2,881                   | 1,239             | 1,563  | ..      | 78     |
| 34            | 29                | 1     | 3     | 2,904                   | 1,241             | 1,585  | ..      | 78     |
| ..            | ..                | ..    | ..    | *23                     | *1                | *10    | ..      | *12    |
| ..            | ..                | ..    | ..    | *24                     | *1                | *10    | ..      | *13    |
| ..            | ..                | ..    | ..    | *26                     | *1                | *10    | ..      | *15    |
| ..            | ..                | ..    | ..    | *27                     | *1                | *10    | ..      | *16    |
| 278           | 253               | ..    | 25    | 3,387                   | 1,931             | 877    | ..      | 579    |
| 280           | 255               | ..    | 25    | 3,046                   | 1,577             | 877    | ..      | 592    |
| 280           | 255               | ..    | 25    | 3,074                   | 1,582             | 877    | ..      | 615    |
| 282           | 257               | ..    | 25    | 3,096                   | 1,582             | 877    | ..      | 637    |
| 201           | 77                | 2     | 122   | 1,509                   | 61                | 1,328  | ..      | 120    |
| 186           | 55                | 2     | 128   | 1,523                   | 75                | 1,328  | ..      | 120    |
| 185           | 52                | 2     | 131   | 1,530                   | 79                | 1,328  | ..      | 123    |
| 215           | 53                | 2     | 160   | 1,563                   | 99                | 1,328  | ..      | 136    |
| 98            | 5                 | ..    | 94    | 475                     | 475               | ..     | ..      | ..     |
| 116           | 5                 | ..    | 112   | 590                     | 590               | ..     | ..      | ..     |
| 136           | 5                 | ..    | 131   | 590                     | 590               | ..     | ..      | ..     |
| 158           | 5                 | ..    | 154   | 590                     | 590               | ..     | ..      | ..     |
| ..            | ..                | ..    | ..    | 870                     | 219               | 651    | ..      | ..     |
| ..            | ..                | ..    | ..    | 949                     | 225               | 652    | ..      | 72     |
| ..            | ..                | ..    | ..    | 999                     | 225               | 652    | ..      | 121    |
| ..            | ..                | ..    | ..    | 1,001                   | 225               | 652    | ..      | 123    |
| 7,543         | 4,920             | ..    | 2,623 | 26,719                  | 22,346            | 37     | 485     | 3,851  |
| 8,265         | 4,919             | ..    | 3,346 | 25,557                  | 21,186            | 37     | 485     | 3,849  |
| 10,144        | 5,444             | ..    | 4,700 | 24,966                  | 20,061            | 37     | 485     | 4,383  |
| 12,314        | 5,405             | ..    | 6,909 | 24,772                  | 19,416            | 37     | 485     | 4,834  |
| 0             | 0                 | ..    | ..    | 1,823                   | 1,109             | 660    | ..      | 54     |
| 0             | 0                 | ..    | ..    | 1,836                   | 1,111             | 671    | ..      | 54     |
| ..            | ..                | ..    | ..    | 1,839                   | 1,111             | 674    | ..      | 54     |
| ..            | ..                | ..    | ..    | 1,844                   | 1,112             | 678    | ..      | 54     |
| 590           | 553               | ..    | 37    | 33,220                  | 520               | 31,817 | ..      | 883    |
| 576           | 539               | ..    | 37    | 33,654                  | 535               | 31,912 | ..      | 1,207  |
| 657           | 552               | ..    | 105   | 34,761                  | 521               | 32,530 | ..      | 1,710  |
| 679           | 552               | ..    | 127   | 36,233                  | 522               | 32,797 | ..      | 2,914  |

Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Country or area     | Year | Total producers |                   |         |         |        |        |       |
|---------------------|------|-----------------|-------------------|---------|---------|--------|--------|-------|
|                     |      | Total           | Combustible fuels | Hydro   | Nuclear | Wind   | Solar  | Other |
| Poland              | 2016 | 38,105          | 29,783            | 2,386   | ..      | 5,747  | 187    | 2     |
|                     | 2017 | 42,850          | 34,412            | 2,390   | ..      | 5,758  | 287    | 2     |
|                     | 2018 | 43,046          | 34,314            | 2,391   | ..      | 5,766  | 562    | 12    |
|                     | 2019 | 43,440          | 33,638            | 2,397   | ..      | 5,838  | 1,539  | 28    |
| Portugal            | 2016 | 20,613          | 7,990             | 6,960   | ..      | 5,125  | 513    | 25    |
|                     | 2017 | 20,933          | 7,975             | 7,226   | ..      | 5,124  | 579    | 30    |
|                     | 2018 | 21,186          | 8,080             | 7,236   | ..      | 5,172  | 667    | 30    |
|                     | 2019 | 21,575          | 8,160             | 7,262   | ..      | 5,223  | 901    | 29    |
| Republic of Moldova | 2016 | 463             | 443               | 16      | ..      | 2      | 2      | ..    |
|                     | 2017 | 477             | 450               | 16      | ..      | 9      | 2      | ..    |
|                     | 2018 | 478             | 425               | 16      | ..      | 34     | 3      | ..    |
|                     | 2019 | 486             | 430               | 16      | ..      | 35     | 5      | ..    |
| Romania             | 2016 | 23,580          | 11,038            | 6,734   | 1,411   | 3,025  | 1,372  | ..    |
|                     | 2017 | 23,572          | 11,067            | 6,691   | 1,411   | 3,029  | 1,374  | ..    |
|                     | 2018 | 23,553          | 11,023            | 6,701   | 1,411   | 3,032  | 1,386  | ..    |
|                     | 2019 | 20,908          | 8,366             | 6,686   | 1,411   | 3,038  | 1,407  | ..    |
| Russian Federation  | 2016 | 264,730         | 185,815           | 51,016  | 27,189  | 96     | 536    | 78    |
|                     | 2017 | 267,639         | 187,701           | 51,241  | 27,952  | 98     | 574    | 74    |
|                     | 2018 | 271,600         | 190,215           | 51,333  | 29,140  | 161    | 678    | 74    |
|                     | 2019 | *275,820        | *191,946          | *51,800 | 30,300  | *600   | *1,100 | *74   |
| Serbia              | 2016 | 7,410           | 4,352             | 3,030   | ..      | 17     | 11     | ..    |
|                     | 2017 | 7,416           | 4,343             | 3,038   | ..      | 25     | 10     | ..    |
|                     | 2018 | 8,066           | 4,851             | 2,936   | ..      | 264    | *15    | ..    |
|                     | 2019 | 7,896           | 4,413             | 3,074   | ..      | 398    | 11     | ..    |
| Slovakia            | 2016 | 7,742           | 2,710             | 2,524   | 1,940   | 3      | 533    | 32    |
|                     | 2017 | 7,671           | 2,645             | 2,523   | 1,940   | 4      | 528    | 31    |
|                     | 2018 | 7,625           | 2,651             | 2,528   | 1,940   | 4      | 471    | 31    |
|                     | 2019 | 7,724           | 2,639             | 2,527   | 1,940   | 4      | 590    | 24    |
| Slovenia            | 2016 | 3,536           | 1,318             | 1,293   | 688     | 5      | 232    | ..    |
|                     | 2017 | 3,619           | 1,332             | 1,347   | 688     | 5      | 247    | ..    |
|                     | 2018 | 3,798           | 1,514             | 1,344   | 688     | 5      | 247    | ..    |
|                     | 2019 | 3,820           | 1,512             | 1,351   | 688     | 5      | 264    | ..    |
| Spain               | 2016 | 105,945         | 48,400            | 20,080  | 7,399   | 22,990 | 7,017  | 59    |
|                     | 2017 | 103,863         | 46,456            | 20,079  | 7,117   | 23,124 | 7,027  | 59    |
|                     | 2018 | 103,737         | 46,009            | 20,080  | 7,117   | 23,405 | 7,068  | 59    |
|                     | 2019 | 109,970         | 45,821            | 20,114  | 7,117   | 25,583 | 11,277 | 59    |
| Sweden              | 2016 | 41,511          | 8,689             | 16,466  | 9,768   | 6,435  | 153    | ..    |
|                     | 2017 | 39,798          | 7,442             | 16,502  | 8,999   | 6,611  | 244    | ..    |
|                     | 2018 | 41,223          | 8,408             | 16,431  | 8,656   | 7,300  | 428    | ..    |
|                     | 2019 | 42,824          | 8,343             | 16,462  | 8,624   | 8,681  | 714    | ..    |
| Switzerland         | 2016 | 20,839          | 961               | 14,806  | 3,333   | 75     | 1,664  | ..    |
|                     | 2017 | 21,614          | 946               | 15,354  | 3,333   | 75     | 1,906  | ..    |
|                     | 2018 | 22,063          | 940               | 15,542  | 3,333   | 75     | 2,173  | ..    |
|                     | 2019 | 22,422          | 942               | 15,574  | 3,333   | 75     | 2,498  | ..    |
| Ukraine             | 2016 | 57,335          | 36,475            | 6,172   | 13,835  | 428    | 425    | ..    |
|                     | 2017 | 52,764          | 31,492            | 6,213   | 13,835  | 465    | 759    | ..    |
|                     | 2018 | 51,508          | 29,753            | 6,243   | 13,835  | 476    | 1,201  | ..    |
|                     | 2019 | 51,444          | 28,535            | 6,325   | 13,835  | 796    | 1,953  | ..    |
| United Kingdom      | 2016 | 98,749          | 56,702            | 4,733   | 9,261   | 16,126 | 11,914 | 13    |
|                     | 2017 | 104,824         | 58,430            | 4,770   | 9,261   | 19,585 | 12,760 | 18    |
|                     | 2018 | 108,294         | 59,400            | 4,773   | 9,261   | 21,767 | 13,073 | 20    |
|                     | 2019 | 104,847         | 53,350            | 4,773   | 9,261   | 24,095 | 13,346 | 22    |
| Oceania             | 2016 | 79,932          | 52,811            | 14,179  | ..      | 5,076  | 6,853  | 1,014 |
|                     | 2017 | 79,460          | 51,123            | 14,189  | ..      | 5,580  | 7,555  | 1,014 |
|                     | 2018 | 81,944          | 51,341            | 14,478  | ..      | 6,211  | 8,876  | 1,037 |
|                     | 2019 | 86,695          | 50,841            | 14,490  | ..      | 7,050  | 13,277 | 1,037 |



Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Total         | Autoproducers     |            |              | Main activity producers |                   |               |         |               |
|---------------|-------------------|------------|--------------|-------------------------|-------------------|---------------|---------|---------------|
|               | Combustible fuels | Hydro      | Other        | Total                   | Combustible fuels | Hydro         | Nuclear | Other         |
| 2,078         | 1,888             | 1          | 189          | 36,027                  | 27,895            | 2,385         | ..      | 5,747         |
| 2,773         | 2,483             | 1          | 289          | 40,077                  | 31,929            | 2,390         | ..      | 5,758         |
| 3,669         | 3,094             | 1          | 574          | 39,377                  | 31,220            | 2,391         | ..      | 5,766         |
| 4,680         | 3,112             | 1          | 1,567        | 38,760                  | 30,526            | 2,397         | ..      | 5,838         |
| 2,043         | 1,781             | 6          | 256          | 18,570                  | 6,209             | 6,954         | ..      | 5,407         |
| 2,084         | 1,769             | 6          | 309          | 18,849                  | 6,205             | 7,220         | ..      | 5,424         |
| 2,236         | 1,872             | 6          | 358          | 18,950                  | 6,208             | 7,230         | ..      | 5,511         |
| 2,409         | 1,879             | 6          | 524          | 19,166                  | 6,281             | 7,256         | ..      | 5,629         |
| 113           | 113               | ..         | ..           | 350                     | 330               | 16            | ..      | 4             |
| 124           | 120               | ..         | 4            | 353                     | 330               | 16            | ..      | 7             |
| 120           | 95                | ..         | 25           | 358                     | 330               | 16            | ..      | 12            |
| 123           | 100               | ..         | 23           | 363                     | 330               | 16            | ..      | 17            |
| 3,164         | 2,151             | 90         | 923          | 20,416                  | 8,887             | 6,644         | 1,411   | 3,474         |
| 3,022         | 2,159             | 81         | 782          | 20,550                  | 8,908             | 6,610         | 1,411   | 3,621         |
| 2,985         | 2,150             | 83         | 752          | 20,568                  | 8,873             | 6,618         | 1,411   | 3,666         |
| 2,270         | 1,696             | 83         | 491          | 18,638                  | 6,670             | 6,603         | 1,411   | 3,954         |
| 24,471        | 24,021            | 450        | ..           | 240,259                 | 161,794           | 50,566        | 27,189  | 710           |
| 25,250        | 24,789            | 461        | ..           | 242,389                 | 162,912           | 50,779        | 27,952  | 746           |
| 25,623        | 25,161            | 462        | ..           | 245,977                 | 165,054           | 50,871        | 29,140  | 913           |
| *25,622       | *25,160           | *462       | ..           | *250,198                | *166,786          | *51,338       | 30,300  | *1,774        |
| 129           | 129               | ..         | ..           | 7,281                   | 4,223             | 3,030         | ..      | 28            |
| 120           | 120               | ..         | ..           | 7,296                   | 4,223             | 3,038         | ..      | 35            |
| 118           | 118               | ..         | ..           | 7,948                   | 4,733             | 2,936         | ..      | 279           |
| 152           | 152               | ..         | ..           | 7,744                   | 4,261             | 3,074         | ..      | 409           |
| 1,099         | 604               | 31         | 464          | 6,643                   | 2,106             | 2,493         | 1,940   | 104           |
| 1,076         | 633               | 30         | 413          | 6,595                   | 2,012             | 2,493         | 1,940   | 150           |
| 1,107         | 769               | 32         | 306          | 6,518                   | 1,882             | 2,496         | 1,940   | 200           |
| 1,201         | 766               | 33         | 402          | 6,523                   | 1,873             | 2,494         | 1,940   | 216           |
| 388           | 46                | 116        | 226          | 3,148                   | 1,272             | 1,177         | 688     | 11            |
| 402           | 46                | 116        | 240          | 3,217                   | 1,286             | 1,231         | 688     | 12            |
| 403           | 47                | 116        | 240          | 3,395                   | 1,467             | 1,228         | 688     | 12            |
| 422           | 44                | 121        | 257          | 3,398                   | 1,468             | 1,230         | 688     | 12            |
| 6,589         | 6,157             | 369        | 63           | 99,356                  | 42,243            | 19,711        | 7,399   | 30,003        |
| 6,609         | 6,157             | 369        | 83           | 97,254                  | 40,299            | 19,710        | 7,117   | 30,127        |
| 6,683         | 6,210             | 369        | 104          | 97,054                  | 39,799            | 19,711        | 7,117   | 30,428        |
| 6,501         | 5,979             | 369        | 153          | 103,469                 | 39,842            | 19,745        | 7,117   | 36,765        |
| *1,206        | *1,194            | 12         | ..           | 40,305                  | 7,495             | 16,454        | 9,768   | 6,588         |
| 1,285         | 1,267             | 18         | ..           | 38,513                  | 6,175             | 16,484        | 8,999   | 6,855         |
| 1,448         | 1,430             | 18         | ..           | 39,775                  | 6,978             | 16,413        | 8,656   | 7,728         |
| 1,411         | 1,393             | 18         | ..           | 41,413                  | 6,950             | 16,444        | 8,624   | 9,395         |
| 3,103         | 744               | 695        | 1,664        | 17,736                  | 217               | 14,111        | 3,333   | 75            |
| 3,328         | 689               | 733        | 1,906        | 18,286                  | 257               | 14,621        | 3,333   | 75            |
| 3,607         | 683               | 751        | 2,173        | 18,456                  | 257               | 14,791        | 3,333   | 75            |
| 3,910         | 683               | 729        | 2,498        | 18,512                  | 259               | 14,845        | 3,333   | 75            |
| 3,469         | 3,462             | 5          | 2            | 53,866                  | 33,013            | 6,167         | 13,835  | 851           |
| 2,265         | 2,227             | 7          | 31           | 50,499                  | 29,265            | 6,206         | 13,835  | 1,193         |
| 2,139         | 2,091             | 5          | 43           | 49,369                  | 27,662            | 6,238         | 13,835  | 1,634         |
| 2,171         | 2,071             | ..         | 100          | 49,273                  | 26,464            | 6,325         | 13,835  | 2,649         |
| 25,780        | 12,338            | 373        | 13,069       | 72,969                  | 44,364            | 4,360         | 9,261   | 14,984        |
| 26,310        | 12,739            | 409        | 13,163       | 78,514                  | 45,691            | 4,361         | 9,261   | 19,201        |
| 26,735        | 13,345            | 407        | 12,984       | 81,559                  | 46,055            | 4,366         | 9,261   | 21,877        |
| 27,639        | 13,892            | 408        | 13,339       | 77,208                  | 39,458            | 4,365         | 9,261   | 24,125        |
| <b>12,142</b> | <b>5,644</b>      | <b>105</b> | <b>6,392</b> | <b>67,791</b>           | <b>47,167</b>     | <b>14,073</b> | ..      | <b>6,551</b>  |
| <b>12,651</b> | <b>5,555</b>      | <b>99</b>  | <b>6,998</b> | <b>66,809</b>           | <b>45,568</b>     | <b>14,090</b> | ..      | <b>7,152</b>  |
| <b>13,373</b> | <b>5,854</b>      | <b>98</b>  | <b>7,421</b> | <b>68,571</b>           | <b>45,487</b>     | <b>14,380</b> | ..      | <b>8,704</b>  |
| <b>15,480</b> | <b>6,219</b>      | <b>98</b>  | <b>9,163</b> | <b>71,215</b>           | <b>44,623</b>     | <b>14,392</b> | ..      | <b>12,200</b> |

Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Country or area             | Year | Total producers |                   |       |         |       |        |       |
|-----------------------------|------|-----------------|-------------------|-------|---------|-------|--------|-------|
|                             |      | Total           | Combustible fuels | Hydro | Nuclear | Wind  | Solar  | Other |
| American Samoa              | 2016 | 46              | 42                | ..    | ..      | ..    | 4      | ..    |
|                             | 2017 | 46              | 42                | ..    | ..      | ..    | 4      | ..    |
|                             | 2018 | 47              | 42                | ..    | ..      | ..    | 5      | ..    |
|                             | 2019 | 47              | 42                | ..    | ..      | ..    | 5      | ..    |
| Australia                   | 2016 | 67,142          | 47,857            | 8,271 | ..      | 4,324 | 6,689  | 1     |
|                             | 2017 | 66,632          | 46,194            | 8,271 | ..      | 4,812 | 7,354  | 1     |
|                             | 2018 | 68,902          | 46,311            | 8,523 | ..      | 5,442 | 8,626  | 0     |
|                             | 2019 | 73,528          | 45,756            | 8,523 | ..      | 6,279 | 12,970 | 0     |
| Cook Islands                | 2016 | *15             | *11               | ..    | ..      | ..    | 4      | ..    |
|                             | 2017 | *15             | *11               | ..    | ..      | ..    | 4      | ..    |
|                             | 2018 | *17             | *11               | ..    | ..      | ..    | 6      | ..    |
|                             | 2019 | *18             | *11               | ..    | ..      | ..    | 7      | ..    |
| Fiji                        | 2016 | 328             | *172              | 130   | ..      | 21    | 5      | ..    |
|                             | 2017 | *360            | *194              | 138   | ..      | *21   | 7      | ..    |
|                             | 2018 | *363            | *194              | 138   | ..      | *21   | 10     | ..    |
|                             | 2019 | *363            | *194              | 138   | ..      | *21   | 10     | ..    |
| French Polynesia            | 2016 | 258             | 185               | 47    | ..      | 0     | 26     | ..    |
|                             | 2017 | 268             | 185               | 47    | ..      | 0     | 36     | ..    |
|                             | 2018 | 271             | 186               | 47    | ..      | 0     | 38     | ..    |
|                             | 2019 | 277             | 186               | 49    | ..      | 0     | 41     | ..    |
| Guam                        | 2016 | 498             | 472               | ..    | ..      | 0     | 26     | ..    |
|                             | 2017 | 446             | 420               | ..    | ..      | 0     | 26     | ..    |
|                             | 2018 | 446             | 420               | ..    | ..      | 0     | 26     | ..    |
|                             | 2019 | 445             | 420               | ..    | ..      | 0     | 25     | ..    |
| Kiribati                    | 2016 | *11             | *8                | ..    | ..      | ..    | 3      | ..    |
|                             | 2017 | *11             | *8                | ..    | ..      | ..    | 3      | ..    |
|                             | 2018 | *11             | *8                | ..    | ..      | ..    | 3      | ..    |
|                             | 2019 | *11             | *8                | ..    | ..      | ..    | 3      | ..    |
| Marshall Islands            | 2016 | *38             | *36               | ..    | ..      | ..    | 2      | ..    |
|                             | 2017 | *39             | *37               | ..    | ..      | ..    | 2      | ..    |
|                             | 2018 | *39             | *37               | ..    | ..      | ..    | 2      | ..    |
|                             | 2019 | *39             | *37               | ..    | ..      | ..    | 2      | ..    |
| Micronesia (Fed. States of) | 2016 | *34             | *32               | 2     | ..      | ..    | 1      | ..    |
|                             | 2017 | *34             | *32               | *2    | ..      | ..    | 1      | ..    |
|                             | 2018 | *36             | *32               | *2    | ..      | 1     | 2      | ..    |
|                             | 2019 | *36             | *32               | *2    | ..      | 1     | 2      | ..    |
| Nauru                       | 2016 | *7              | *6                | ..    | ..      | ..    | 1      | ..    |
|                             | 2017 | *8              | *7                | ..    | ..      | ..    | 1      | ..    |
|                             | 2018 | *14             | *13               | ..    | ..      | ..    | 1      | ..    |
|                             | 2019 | *14             | *13               | ..    | ..      | ..    | 1      | ..    |
| New Caledonia               | 2016 | 1,001           | 875               | 78    | ..      | 38    | 10     | ..    |
|                             | 2017 | *1,020          | *875              | 78    | ..      | 54    | 13     | ..    |
|                             | 2018 | *1,040          | *875              | 78    | ..      | 54    | *33    | ..    |
|                             | 2019 | *1,066          | *875              | 78    | ..      | 54    | *59    | ..    |
| New Zealand                 | 2016 | 9,290           | 2,210             | 5,381 | ..      | 689   | 53     | 957   |
|                             | 2017 | 9,311           | 2,213             | 5,381 | ..      | 689   | 71     | 957   |
|                             | 2018 | 9,358           | 2,216             | 5,381 | ..      | 689   | 91     | 981   |
|                             | 2019 | 9,391           | 2,216             | 5,389 | ..      | 689   | 116    | 981   |
| Niue                        | 2016 | *2              | *2                | ..    | ..      | ..    | 0      | ..    |
|                             | 2017 | *2              | *2                | ..    | ..      | ..    | 0      | ..    |
|                             | 2018 | *2              | *2                | ..    | ..      | ..    | 0      | ..    |
|                             | 2019 | *3              | *2                | ..    | ..      | ..    | 1      | ..    |
| Northern Mariana Islands    | 2016 | 95              | 95                | ..    | ..      | ..    | ..     | ..    |
|                             | 2017 | *95             | *95               | ..    | ..      | ..    | ..     | ..    |
|                             | 2018 | *95             | *95               | ..    | ..      | ..    | ..     | ..    |
|                             | 2019 | *98             | *98               | ..    | ..      | ..    | ..     | ..    |

Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Autoproducers |                   |       |       | Main activity producers |                   |       |         |        |
|---------------|-------------------|-------|-------|-------------------------|-------------------|-------|---------|--------|
| Total         | Combustible fuels | Hydro | Other | Total                   | Combustible fuels | Hydro | Nuclear | Other  |
| ..            | ..                | ..    | ..    | 46                      | 42                | ..    | ..      | 4      |
| ..            | ..                | ..    | ..    | 46                      | 42                | ..    | ..      | 4      |
| ..            | ..                | ..    | ..    | 47                      | 42                | ..    | ..      | 5      |
| ..            | ..                | ..    | ..    | 47                      | 42                | ..    | ..      | 5      |
| 11,121        | 4,863             | ..    | 6,258 | 56,021                  | 42,994            | 8,271 | ..      | 4,756  |
| 11,602        | 4,758             | ..    | 6,844 | 55,030                  | 41,436            | 8,271 | ..      | 5,323  |
| 12,299        | 5,057             | ..    | 7,242 | 56,603                  | 41,254            | 8,523 | ..      | 6,826  |
| 14,374        | 5,422             | ..    | 8,952 | 59,154                  | 40,334            | 8,523 | ..      | 10,297 |
| ..            | ..                | ..    | ..    | *15                     | *11               | ..    | ..      | 4      |
| ..            | ..                | ..    | ..    | *15                     | *11               | ..    | ..      | 4      |
| ..            | ..                | ..    | ..    | *17                     | *11               | ..    | ..      | 6      |
| ..            | ..                | ..    | ..    | *18                     | *11               | ..    | ..      | 7      |
| *42           | *42               | ..    | ..    | 286                     | *130              | 130   | ..      | 26     |
| *54           | *54               | ..    | ..    | *306                    | *140              | 138   | ..      | *28    |
| 54            | 54                | ..    | ..    | *309                    | *140              | 138   | ..      | *31    |
| *54           | *54               | ..    | ..    | *309                    | *140              | 138   | ..      | *31    |
| ..            | ..                | ..    | ..    | 258                     | 185               | 47    | ..      | 27     |
| ..            | ..                | ..    | ..    | 268                     | 185               | 47    | ..      | 36     |
| ..            | ..                | ..    | ..    | 271                     | 186               | 47    | ..      | 38     |
| ..            | ..                | ..    | ..    | 277                     | 186               | 49    | ..      | 41     |
| ..            | ..                | ..    | ..    | 498                     | 472               | ..    | ..      | 26     |
| ..            | ..                | ..    | ..    | 446                     | 420               | ..    | ..      | 26     |
| ..            | ..                | ..    | ..    | 446                     | 420               | ..    | ..      | 26     |
| ..            | ..                | ..    | ..    | 445                     | 420               | ..    | ..      | 25     |
| *1            | *1                | ..    | ..    | *10                     | *7                | ..    | ..      | 3      |
| *1            | *1                | ..    | ..    | *10                     | *7                | ..    | ..      | 3      |
| *1            | *1                | ..    | ..    | *10                     | *7                | ..    | ..      | 3      |
| *1            | *1                | ..    | ..    | *10                     | *7                | ..    | ..      | 3      |
| ..            | ..                | ..    | ..    | *38                     | *36               | ..    | ..      | 2      |
| ..            | ..                | ..    | ..    | *39                     | *37               | ..    | ..      | 2      |
| ..            | ..                | ..    | ..    | *39                     | *37               | ..    | ..      | 2      |
| ..            | ..                | ..    | ..    | *39                     | *37               | ..    | ..      | 2      |
| ..            | ..                | ..    | ..    | *34                     | *32               | 2     | ..      | 1      |
| ..            | ..                | ..    | ..    | *34                     | *32               | *2    | ..      | 1      |
| ..            | ..                | ..    | ..    | *36                     | *32               | *2    | ..      | 3      |
| ..            | ..                | ..    | ..    | *36                     | *32               | *2    | ..      | 3      |
| ..            | ..                | ..    | ..    | *7                      | *6                | ..    | ..      | 1      |
| ..            | ..                | ..    | ..    | *8                      | *7                | ..    | ..      | 1      |
| ..            | ..                | ..    | ..    | *14                     | *13               | ..    | ..      | 1      |
| ..            | ..                | ..    | ..    | *14                     | *13               | ..    | ..      | 1      |
| *61           | *60               | ..    | 1     | 940                     | 815               | 78    | ..      | 46     |
| *63           | *60               | ..    | 3     | *957                    | *815              | 78    | ..      | 64     |
| *68           | *60               | ..    | *8    | *972                    | *815              | 78    | ..      | 79     |
| *75           | *60               | ..    | *15   | *991                    | *815              | 78    | ..      | 98     |
| 301           | 221               | 3     | 77    | 8,989                   | 1,989             | 5,378 | ..      | 1,622  |
| 323           | 225               | 3     | 95    | 8,988                   | 1,988             | 5,378 | ..      | 1,622  |
| 343           | 225               | 3     | 115   | 9,015                   | 1,991             | 5,378 | ..      | 1,646  |
| 368           | 225               | 3     | 140   | 9,023                   | 1,991             | 5,386 | ..      | 1,646  |
| ..            | ..                | ..    | ..    | *2                      | *2                | ..    | ..      | 0      |
| ..            | ..                | ..    | ..    | *2                      | *2                | ..    | ..      | 0      |
| ..            | ..                | ..    | ..    | *2                      | *2                | ..    | ..      | 0      |
| ..            | ..                | ..    | ..    | *3                      | *2                | ..    | ..      | 1      |
| ..            | ..                | ..    | ..    | 95                      | 95                | ..    | ..      | ..     |
| ..            | ..                | ..    | ..    | *95                     | *95               | ..    | ..      | ..     |
| ..            | ..                | ..    | ..    | *95                     | *95               | ..    | ..      | ..     |
| ..            | ..                | ..    | ..    | *98                     | *98               | ..    | ..      | ..     |

Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Country or area       | Year | Total producers |                   |       |         |      |       |       |
|-----------------------|------|-----------------|-------------------|-------|---------|------|-------|-------|
|                       |      | Total           | Combustible fuels | Hydro | Nuclear | Wind | Solar | Other |
| Palau                 | 2016 | 40              | 39                | ..    | ..      | ..   | *1    | ..    |
|                       | 2017 | *40             | *39               | ..    | ..      | ..   | *1    | ..    |
|                       | 2018 | *40             | *39               | ..    | ..      | ..   | *2    | ..    |
|                       | 2019 | *41             | *39               | ..    | ..      | ..   | *2    | ..    |
| Papua New Guinea      | 2016 | *971            | *656              | *258  | ..      | ..   | 1     | 56    |
|                       | 2017 | *971            | *656              | *258  | ..      | ..   | 1     | 56    |
|                       | 2018 | *1,102          | *750              | 295   | ..      | ..   | 1     | 56    |
|                       | 2019 | *1,152          | *800              | *295  | ..      | ..   | 1     | 56    |
| Samoa                 | 2016 | *52             | *23               | *11   | ..      | 1    | 17    | ..    |
|                       | 2017 | 53              | *23               | 13    | ..      | 1    | 17    | ..    |
|                       | 2018 | *54             | *23               | 13    | ..      | 1    | *18   | ..    |
|                       | 2019 | *56             | *23               | 14    | ..      | 1    | *18   | ..    |
| Solomon Islands       | 2016 | *38             | *36               | 0     | ..      | ..   | 2     | ..    |
|                       | 2017 | *39             | *36               | 0     | ..      | ..   | 3     | ..    |
|                       | 2018 | *39             | *36               | 0     | ..      | ..   | 3     | ..    |
|                       | 2019 | *40             | *36               | 0     | ..      | ..   | 3     | ..    |
| Tonga                 | 2016 | 20              | 17                | ..    | ..      | 0    | 2     | ..    |
|                       | 2017 | 24              | 18                | ..    | ..      | 0    | 6     | ..    |
|                       | 2018 | 24              | 18                | ..    | ..      | 0    | 6     | ..    |
|                       | 2019 | 25              | 18                | ..    | ..      | 1    | 6     | ..    |
| Tuvalu                | 2016 | *5              | *3                | ..    | ..      | ..   | 2     | ..    |
|                       | 2017 | *5              | *3                | ..    | ..      | ..   | 2     | ..    |
|                       | 2018 | 5               | 3                 | ..    | ..      | ..   | 2     | ..    |
|                       | 2019 | *5              | *3                | ..    | ..      | ..   | 2     | ..    |
| Vanuatu               | 2016 | 32              | 26                | 1     | ..      | 4    | 1     | ..    |
|                       | 2017 | 33              | 26                | 1     | ..      | 3    | 3     | ..    |
|                       | 2018 | 31              | 24                | 1     | ..      | 3    | 3     | ..    |
|                       | 2019 | 33              | 25                | 1     | ..      | 3    | 3     | ..    |
| Wallis and Futuna Is. | 2016 | 9               | 9                 | 0     | ..      | ..   | 0     | ..    |
|                       | 2017 | 9               | 9                 | 0     | ..      | ..   | 0     | ..    |
|                       | 2018 | 9               | 9                 | 0     | ..      | ..   | 0     | ..    |
|                       | 2019 | 9               | 9                 | 0     | ..      | ..   | 0     | ..    |

Table 30

## Net installed capacity of electricity plants by type

Megawatts

| Autoproducers |                   |       |       | Main activity producers |                   |       |         |       |
|---------------|-------------------|-------|-------|-------------------------|-------------------|-------|---------|-------|
| Total         | Combustible fuels | Hydro | Other | Total                   | Combustible fuels | Hydro | Nuclear | Other |
| *2            | *2                | ..    | ..    | 38                      | 37                | ..    | ..      | *1    |
| *2            | *2                | ..    | ..    | *38                     | *37               | ..    | ..      | *1    |
| *2            | *2                | ..    | ..    | *38                     | *37               | ..    | ..      | *2    |
| *2            | *2                | ..    | ..    | *39                     | *37               | ..    | ..      | *2    |
| *608          | *450              | *102  | 56    | *363                    | *206              | *155  | ..      | 1     |
| *602          | *450              | *96   | 56    | *369                    | *206              | *162  | ..      | 1     |
| *601          | *450              | *95   | 56    | *501                    | *300              | 200   | ..      | 1     |
| *601          | *450              | *95   | 56    | *551                    | *350              | *200  | ..      | 1     |
| 0             | ..                | ..    | 0     | *52                     | *23               | *11   | ..      | 18    |
| 0             | ..                | ..    | 0     | 53                      | *23               | 13    | ..      | 18    |
| 0             | ..                | ..    | 0     | *54                     | *23               | 13    | ..      | *19   |
| 0             | ..                | ..    | 0     | *56                     | *23               | 14    | ..      | *19   |
| *5            | *5                | ..    | ..    | *33                     | *31               | 0     | ..      | 2     |
| *5            | *5                | ..    | ..    | *34                     | *31               | 0     | ..      | 3     |
| *5            | *5                | ..    | ..    | *34                     | *31               | 0     | ..      | 3     |
| *5            | *5                | ..    | ..    | *35                     | *31               | 0     | ..      | 3     |
| ..            | ..                | ..    | ..    | 20                      | 17                | ..    | ..      | 2     |
| ..            | ..                | ..    | ..    | 24                      | 18                | ..    | ..      | 6     |
| ..            | ..                | ..    | ..    | 24                      | 18                | ..    | ..      | 6     |
| ..            | ..                | ..    | ..    | 25                      | 18                | ..    | ..      | 7     |
| ..            | ..                | ..    | ..    | *5                      | *3                | ..    | ..      | 2     |
| ..            | ..                | ..    | ..    | *5                      | *3                | ..    | ..      | 2     |
| ..            | ..                | ..    | ..    | 5                       | 3                 | ..    | ..      | 2     |
| ..            | ..                | ..    | ..    | *5                      | *3                | ..    | ..      | 2     |
| ..            | ..                | ..    | ..    | 32                      | 26                | 1     | ..      | 5     |
| ..            | ..                | ..    | ..    | 33                      | 26                | 1     | ..      | 6     |
| ..            | ..                | ..    | ..    | 31                      | 24                | 1     | ..      | 6     |
| ..            | ..                | ..    | ..    | 33                      | 25                | 1     | ..      | 6     |
| ..            | ..                | ..    | ..    | 9                       | 9                 | 0     | ..      | 0     |
| ..            | ..                | ..    | ..    | 9                       | 9                 | 0     | ..      | 0     |
| ..            | ..                | ..    | ..    | 9                       | 9                 | 0     | ..      | 0     |
| ..            | ..                | ..    | ..    | 9                       | 9                 | 0     | ..      | 0     |



## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

### Table Notes

Data on utilization are derived by dividing the data on electricity production shown in Table 32 by the net installed capacity shown in Table 30, and then by the total number of hours in a year to yield a percentage of theoretical maximal utilization.

For this table, **Other** under total producers refers to geothermal, tide, wave, marine and other non-specified sources. **Other** under autoproducers refers to nuclear (if any), wind, solar, tide, wave, marine and other non-specified sources. **Other** under main activity producers refers to wind, solar, tide, wave, marine and other non-specified sources.

For Austria data are given in gross maximum capacity.

Please refer to the Definitions Section on pages ix to xv for the appropriate product description /classification, and xvi to xvii for the descriptions of relevant flows.

Figure 74: Utilization of installed electric generating capacity by source and region, 2019

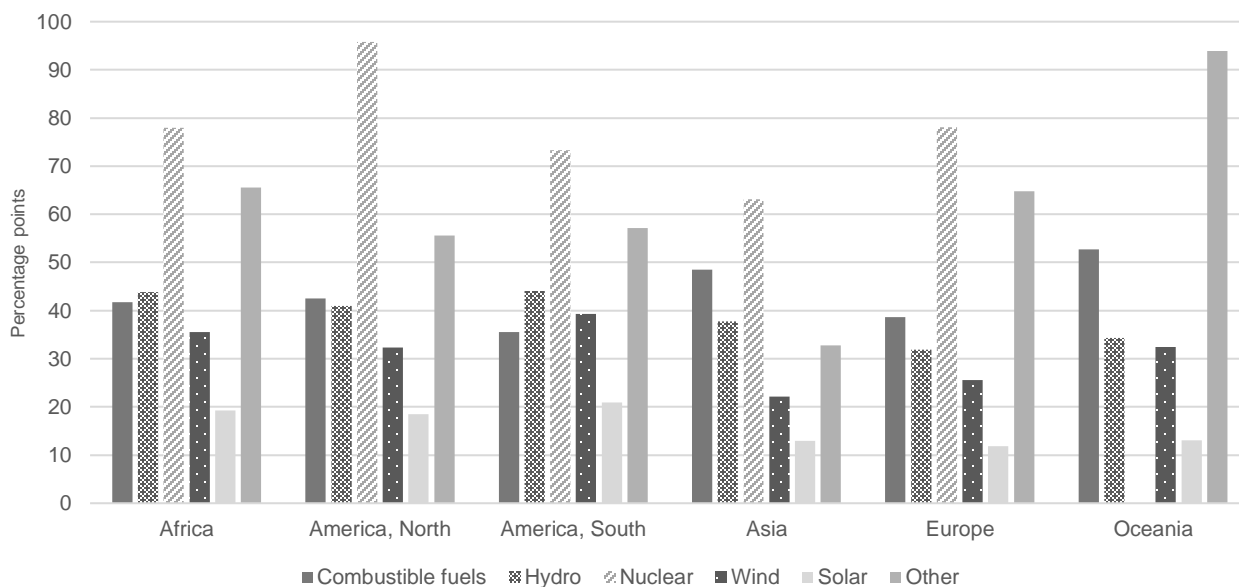


Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Country or area      | Year | Total producers |                   |       |         |      |       |       |
|----------------------|------|-----------------|-------------------|-------|---------|------|-------|-------|
|                      |      | Total           | Combustible fuels | Hydro | Nuclear | Wind | Solar | Other |
| World                | 2016 | 43              | 45                | 38    | 75      | 23   | 12    | 63    |
|                      | 2017 | 43              | 46                | 38    | 75      | 25   | 12    | 64    |
|                      | 2018 | 42              | 46                | 38    | 76      | 26   | 13    | 45    |
|                      | 2019 | 42              | 45                | 38    | 79      | 26   | 14    | 44    |
| Africa               | 2016 | 47              | 49                | 43    | 98      | 25   | 18    | 75    |
|                      | 2017 | 45              | 46                | 42    | 93      | 28   | 20    | 79    |
|                      | 2018 | 43              | 44                | 43    | 68      | 30   | 18    | 88    |
|                      | 2019 | 42              | 42                | 44    | 78      | 36   | 19    | 66    |
| Algeria              | 2016 | 43              | 43                | 4     | ..      | 22   | 16    | ..    |
|                      | 2017 | 44              | 46                | 3     | ..      | 22   | 15    | ..    |
|                      | 2018 | 41              | 42                | 6     | ..      | 12   | 17    | ..    |
|                      | 2019 | 43              | 44                | 8     | ..      | 13   | 17    | ..    |
| Angola               | 2016 | 41              | 40                | 42    | ..      | ..   | 16    | ..    |
|                      | 2017 | 28              | 17                | 37    | ..      | ..   | 16    | ..    |
|                      | 2018 | 29              | 15                | 41    | ..      | ..   | 16    | ..    |
|                      | 2019 | 29              | 15                | 46    | ..      | ..   | 16    | ..    |
| Benin                | 2016 | 8               | 10                | 1     | ..      | ..   | 19    | ..    |
|                      | 2017 | 10              | 12                | 0     | ..      | ..   | 20    | ..    |
|                      | 2018 | 6               | 7                 | 0     | ..      | ..   | 21    | ..    |
|                      | 2019 | 12              | 14                | 0     | ..      | ..   | 29    | ..    |
| Botswana             | 2016 | 49              | 49                | ..    | ..      | ..   | 18    | ..    |
|                      | 2017 | 46              | 46                | ..    | ..      | ..   | 18    | ..    |
|                      | 2018 | 45              | 45                | ..    | ..      | ..   | 44    | ..    |
|                      | 2019 | 38              | 38                | ..    | ..      | ..   | 40    | ..    |
| Burkina Faso         | 2016 | 34              | 32                | 50    | ..      | ..   | ..    | ..    |
|                      | 2017 | 38              | 37                | 46    | ..      | ..   | 27    | ..    |
|                      | 2018 | 33              | 34                | 33    | ..      | ..   | 26    | ..    |
|                      | 2019 | 22              | 23                | 37    | ..      | ..   | 11    | ..    |
| Burundi              | 2016 | 32              | 39                | 32    | ..      | ..   | 18    | ..    |
|                      | 2017 | 31              | 56                | 24    | ..      | ..   | 18    | ..    |
|                      | 2018 | 32              | 36                | 31    | ..      | ..   | 18    | ..    |
|                      | 2019 | 36              | 45                | 31    | ..      | ..   | 18    | ..    |
| Cabo Verde           | 2016 | 30              | 30                | ..    | ..      | 34   | 9     | ..    |
|                      | 2017 | 28              | 28                | ..    | ..      | 32   | 10    | ..    |
|                      | 2018 | 27              | 27                | ..    | ..      | 34   | 13    | ..    |
|                      | 2019 | 26              | 26                | ..    | ..      | 31   | 13    | ..    |
| Cameroon             | 2016 | 44              | 26                | 74    | ..      | ..   | 11    | ..    |
|                      | 2017 | 45              | 27                | 75    | ..      | ..   | 15    | ..    |
|                      | 2018 | 59              | 44                | 78    | ..      | ..   | 12    | ..    |
|                      | 2019 | 58              | 40                | 82    | ..      | ..   | 12    | ..    |
| Central African Rep. | 2016 | 37              | 1                 | 65    | ..      | ..   | 16    | ..    |
|                      | 2017 | 37              | 1                 | 66    | ..      | ..   | 16    | ..    |
|                      | 2018 | 38              | 1                 | 67    | ..      | ..   | 16    | ..    |
|                      | 2019 | 38              | 1                 | 68    | ..      | ..   | 16    | ..    |
| Chad                 | 2016 | 39              | 39                | ..    | ..      | ..   | ..    | ..    |
|                      | 2017 | 40              | 40                | ..    | ..      | ..   | ..    | ..    |
|                      | 2018 | 40              | 40                | ..    | ..      | ..   | ..    | ..    |
|                      | 2019 | 41              | 41                | ..    | ..      | ..   | ..    | ..    |
| Comoros              | 2016 | 25              | 26                | ..    | ..      | ..   | ..    | ..    |
|                      | 2017 | 29              | 30                | ..    | ..      | ..   | ..    | ..    |
|                      | 2018 | 32              | 33                | ..    | ..      | ..   | ..    | ..    |
|                      | 2019 | 35              | 36                | ..    | ..      | ..   | ..    | ..    |
| Congo                | 2016 | 56              | 53                | 62    | ..      | ..   | 25    | ..    |
|                      | 2017 | 56              | 51                | 64    | ..      | ..   | 12    | ..    |
|                      | 2018 | 58              | 58                | 58    | ..      | ..   | 20    | ..    |
|                      | 2019 | 69              | 82                | 45    | ..      | ..   | 20    | ..    |



Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Total | Autoproducers     |       |       | Main activity producers |                   |       |         |       |
|-------|-------------------|-------|-------|-------------------------|-------------------|-------|---------|-------|
|       | Combustible fuels | Hydro | Other | Total                   | Combustible fuels | Hydro | Nuclear | Other |
| 39    | 43                | 47    | 16    | 43                      | 45                | 38    | 75      | 21    |
| 41    | 48                | 46    | 17    | 43                      | 46                | 38    | 75      | 21    |
| 40    | 47                | 41    | 15    | 43                      | 46                | 38    | 76      | 21    |
| 39    | 46                | 40    | 15    | 42                      | 45                | 38    | 79      | 22    |
| 28    | 30                | 9     | 17    | 50                      | 52                | 44    | 98      | 38    |
| 24    | 24                | 12    | 22    | 48                      | 49                | 43    | 93      | 36    |
| 24    | 24                | 16    | 21    | 46                      | 47                | 44    | 68      | 35    |
| 26    | 26                | 13    | 25    | 44                      | 44                | 44    | 78      | 34    |
| 13    | 13                | ..    | ..    | 51                      | 53                | 4     | ..      | 16    |
| 14    | 14                | ..    | ..    | 53                      | 55                | 3     | ..      | 15    |
| 10    | 10                | ..    | ..    | 54                      | 56                | 6     | ..      | 17    |
| 10    | 10                | ..    | ..    | 58                      | 60                | 8     | ..      | 17    |
| 31    | 31                | ..    | ..    | 42                      | 42                | 42    | ..      | 16    |
| 20    | 20                | ..    | ..    | 28                      | 17                | 37    | ..      | 16    |
| 19    | 19                | ..    | ..    | 30                      | 15                | 41    | ..      | 16    |
| 16    | 16                | ..    | ..    | 29                      | 15                | 46    | ..      | 16    |
| 24    | 24                | ..    | ..    | 6                       | 7                 | 1     | ..      | 19    |
| 25    | 25                | ..    | ..    | 8                       | 10                | 0     | ..      | 20    |
| 29    | 29                | ..    | ..    | 3                       | 4                 | 0     | ..      | 21    |
| 41    | 41                | ..    | ..    | 9                       | 10                | 0     | ..      | 24    |
| ..    | ..                | ..    | ..    | 51                      | 51                | ..    | ..      | 18    |
| ..    | ..                | ..    | ..    | 47                      | 47                | ..    | ..      | 18    |
| ..    | ..                | ..    | ..    | 45                      | 45                | ..    | ..      | 44    |
| ..    | ..                | ..    | ..    | 38                      | 38                | ..    | ..      | 40    |
| ..    | ..                | ..    | ..    | 34                      | 32                | 50    | ..      | ..    |
| ..    | ..                | ..    | ..    | 38                      | 37                | 46    | ..      | 27    |
| ..    | ..                | ..    | ..    | 33                      | 34                | 33    | ..      | 26    |
| ..    | ..                | ..    | ..    | 22                      | 23                | 37    | ..      | 11    |
| 40    | 40                | ..    | ..    | 32                      | 39                | 32    | ..      | 18    |
| 38    | 38                | ..    | ..    | 31                      | 60                | 24    | ..      | 18    |
| 23    | 23                | ..    | ..    | 33                      | 37                | 31    | ..      | 18    |
| 27    | 27                | ..    | ..    | 36                      | 46                | 31    | ..      | 18    |
| 14    | 14                | ..    | ..    | 30                      | 30                | ..    | ..      | 29    |
| 17    | 17                | ..    | ..    | 28                      | 28                | ..    | ..      | 27    |
| 18    | 18                | ..    | ..    | 27                      | 27                | ..    | ..      | 29    |
| 18    | 18                | ..    | ..    | 26                      | 26                | ..    | ..      | 27    |
| 44    | 44                | ..    | ..    | 44                      | 6                 | 74    | ..      | 11    |
| 47    | 47                | ..    | ..    | 44                      | 5                 | 75    | ..      | 15    |
| 57    | 57                | ..    | ..    | 60                      | 13                | 78    | ..      | 12    |
| 53    | 53                | ..    | ..    | 61                      | 10                | 82    | ..      | 12    |
| ..    | ..                | ..    | ..    | 37                      | 1                 | 65    | ..      | 16    |
| ..    | ..                | ..    | ..    | 37                      | 1                 | 66    | ..      | 16    |
| ..    | ..                | ..    | ..    | 38                      | 1                 | 67    | ..      | 16    |
| ..    | ..                | ..    | ..    | 38                      | 1                 | 68    | ..      | 16    |
| ..    | ..                | ..    | ..    | 39                      | 39                | ..    | ..      | ..    |
| ..    | ..                | ..    | ..    | 40                      | 40                | ..    | ..      | ..    |
| ..    | ..                | ..    | ..    | 40                      | 40                | ..    | ..      | ..    |
| ..    | ..                | ..    | ..    | 41                      | 41                | ..    | ..      | ..    |
| ..    | ..                | ..    | ..    | 26                      | 26                | ..    | ..      | ..    |
| ..    | ..                | ..    | ..    | 30                      | 30                | ..    | ..      | ..    |
| ..    | ..                | ..    | ..    | 33                      | 33                | ..    | ..      | ..    |
| ..    | ..                | ..    | ..    | 36                      | 36                | ..    | ..      | ..    |
| 60    | 60                | ..    | ..    | 51                      | ..                | 62    | ..      | 25    |
| 57    | 57                | ..    | ..    | 54                      | ..                | 64    | ..      | 12    |
| 65    | 65                | ..    | ..    | 49                      | ..                | 58    | ..      | 20    |
| 92    | 92                | ..    | ..    | 38                      | ..                | 45    | ..      | 20    |

Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Country or area        | Year | Total producers |                   |       |         |      |       |       |
|------------------------|------|-----------------|-------------------|-------|---------|------|-------|-------|
|                        |      | Total           | Combustible fuels | Hydro | Nuclear | Wind | Solar | Other |
| Côte d'Ivoire          | 2016 | 61              | 76                | 29    | ..      | ..   | ..    | ..    |
|                        | 2017 | 52              | 70                | 27    | ..      | ..   | ..    | ..    |
|                        | 2018 | 52              | 62                | 38    | ..      | ..   | ..    | ..    |
|                        | 2019 | 55              | 61                | 45    | ..      | ..   | 26    | ..    |
| Dem. Rep. of the Congo | 2016 | 39              | 3                 | 41    | ..      | ..   | ..    | ..    |
|                        | 2017 | 35              | 3                 | 36    | ..      | ..   | ..    | ..    |
|                        | 2018 | 43              | 72                | 42    | ..      | ..   | 16    | ..    |
|                        | 2019 | 40              | 2                 | 42    | ..      | ..   | 17    | ..    |
| Djibouti               | 2016 | 8               | 8                 | ..    | ..      | ..   | ..    | ..    |
|                        | 2017 | 5               | 5                 | ..    | ..      | ..   | ..    | ..    |
|                        | 2018 | 5               | 5                 | ..    | ..      | ..   | ..    | ..    |
|                        | 2019 | 5               | 5                 | ..    | ..      | ..   | ..    | ..    |
| Egypt                  | 2016 | 54              | 54                | 55    | ..      | 31   | 14    | ..    |
|                        | 2017 | 47              | 47                | 52    | ..      | 34   | 47    | ..    |
|                        | 2018 | 41              | 41                | 51    | ..      | 26   | 32    | ..    |
|                        | 2019 | 38              | 38                | 53    | ..      | 37   | 17    | ..    |
| Equatorial Guinea      | 2016 | 28              | 33                | 18    | ..      | ..   | ..    | ..    |
|                        | 2017 | 18              | 33                | 7     | ..      | ..   | ..    | ..    |
|                        | 2018 | 15              | 28                | 7     | ..      | ..   | ..    | ..    |
|                        | 2019 | 15              | 28                | 7     | ..      | ..   | ..    | ..    |
| Eritrea                | 2016 | 30              | 30                | ..    | ..      | 23   | 80    | ..    |
|                        | 2017 | 23              | 24                | ..    | ..      | 23   | 13    | ..    |
|                        | 2018 | 24              | 25                | ..    | ..      | 23   | 11    | ..    |
|                        | 2019 | 24              | 26                | ..    | ..      | 23   | 13    | ..    |
| Eswatini               | 2016 | 25              | 28                | 19    | ..      | ..   | ..    | ..    |
|                        | 2017 | 25              | 29                | 18    | ..      | ..   | 13    | ..    |
|                        | 2018 | 31              | 30                | 33    | ..      | ..   | 13    | ..    |
|                        | 2019 | 35              | 30                | 42    | ..      | ..   | 26    | ..    |
| Ethiopia               | 2016 | 34              | 3                 | 35    | ..      | 28   | 17    | ..    |
|                        | 2017 | 35              | 3                 | 38    | ..      | 19   | 21    | ..    |
|                        | 2018 | 38              | 3                 | 41    | ..      | 19   | 21    | ..    |
|                        | 2019 | 40              | 3                 | 44    | ..      | 19   | 18    | ..    |
| Gabon                  | 2016 | 51              | 45                | 64    | ..      | ..   | 23    | ..    |
|                        | 2017 | 49              | 43                | 61    | ..      | ..   | 22    | ..    |
|                        | 2018 | 35              | 35                | 34    | ..      | ..   | 22    | ..    |
|                        | 2019 | 33              | 33                | 34    | ..      | ..   | 22    | ..    |
| Gambia                 | 2016 | 29              | 29                | ..    | ..      | 1    | 18    | ..    |
|                        | 2017 | 30              | 30                | ..    | ..      | 1    | 18    | ..    |
|                        | 2018 | 29              | 30                | ..    | ..      | 1    | 18    | ..    |
|                        | 2019 | 27              | 27                | ..    | ..      | 1    | 18    | ..    |
| Ghana                  | 2016 | 38              | 36                | 40    | ..      | ..   | 14    | ..    |
|                        | 2017 | 35              | 33                | 41    | ..      | ..   | 14    | ..    |
|                        | 2018 | 37              | 34                | 43    | ..      | ..   | 9     | ..    |
|                        | 2019 | 39              | 34                | 52    | ..      | ..   | 14    | ..    |
| Guinea                 | 2016 | 31              | 26                | 34    | ..      | ..   | ..    | ..    |
|                        | 2017 | 33              | 25                | 38    | ..      | ..   | ..    | ..    |
|                        | 2018 | 36              | 34                | 37    | ..      | ..   | ..    | ..    |
|                        | 2019 | 37              | 33                | 40    | ..      | ..   | ..    | ..    |
| Guinea-Bissau          | 2016 | 34              | 34                | ..    | ..      | ..   | ..    | ..    |
|                        | 2017 | 33              | 34                | ..    | ..      | ..   | 11    | ..    |
|                        | 2018 | 34              | 35                | ..    | ..      | ..   | 11    | ..    |
|                        | 2019 | 34              | 35                | ..    | ..      | ..   | 23    | ..    |
| Kenya                  | 2016 | 51              | 23                | 57    | ..      | 25   | ..    | 79    |
|                        | 2017 | 52              | 41                | 38    | ..      | 27   | ..    | 83    |
|                        | 2018 | 42              | 16                | 55    | ..      | 13   | 3     | 93    |
|                        | 2019 | 42              | 16                | 44    | ..      | 53   | 21    | 72    |

Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Autoproducers |                   |       |       | Main activity producers |                   |       |         |       |
|---------------|-------------------|-------|-------|-------------------------|-------------------|-------|---------|-------|
| Total         | Combustible fuels | Hydro | Other | Total                   | Combustible fuels | Hydro | Nuclear | Other |
| 86            | 86                | ..    | ..    | 61                      | 76                | 29    | ..      | ..    |
| 86            | 86                | ..    | ..    | 52                      | 70                | 27    | ..      | ..    |
| 30            | 30                | ..    | ..    | 53                      | 63                | 38    | ..      | ..    |
| 32            | 32                | ..    | ..    | 55                      | 62                | 45    | ..      | 26    |
| 0             | 11                | 0     | ..    | 49                      | 1                 | 52    | ..      | ..    |
| 4             | 3                 | 4     | ..    | 42                      | 2                 | 42    | ..      | ..    |
| 25            | 90                | 8     | ..    | 48                      | 2                 | 48    | ..      | 16    |
| 4             | 3                 | 4     | ..    | 48                      | 2                 | 49    | ..      | 17    |
| ..            | ..                | ..    | ..    | 8                       | 8                 | ..    | ..      | ..    |
| ..            | ..                | ..    | ..    | 5                       | 5                 | ..    | ..      | ..    |
| ..            | ..                | ..    | ..    | 5                       | 5                 | ..    | ..      | ..    |
| ..            | ..                | ..    | ..    | 5                       | 5                 | ..    | ..      | ..    |
| 31            | 31                | ..    | ..    | 55                      | 55                | 55    | ..      | 29    |
| 31            | 31                | ..    | ..    | 48                      | 48                | 52    | ..      | 36    |
| 34            | 34                | ..    | ..    | 41                      | 41                | 51    | ..      | 27    |
| 64            | 64                | ..    | ..    | 37                      | 37                | 53    | ..      | 28    |
| ..            | ..                | ..    | ..    | 28                      | 33                | 18    | ..      | ..    |
| ..            | ..                | ..    | ..    | 18                      | 33                | 7     | ..      | ..    |
| ..            | ..                | ..    | ..    | 15                      | 28                | 7     | ..      | ..    |
| ..            | ..                | ..    | ..    | 15                      | 28                | 7     | ..      | ..    |
| 13            | 13                | ..    | ..    | 31                      | 31                | ..    | ..      | 51    |
| 16            | 16                | ..    | ..    | 24                      | 24                | ..    | ..      | 14    |
| 18            | 18                | ..    | ..    | 24                      | 25                | ..    | ..      | 12    |
| 18            | 18                | ..    | ..    | 25                      | 26                | ..    | ..      | 13    |
| 30            | 31                | ..    | ..    | 18                      | ..                | 20    | ..      | ..    |
| 31            | 32                | ..    | 13    | 17                      | ..                | 19    | ..      | ..    |
| 31            | 33                | ..    | 13    | 30                      | ..                | 34    | ..      | ..    |
| 32            | 33                | ..    | 13    | 39                      | ..                | 44    | ..      | 27    |
| 9             | 9                 | ..    | ..    | 34                      | 0                 | 35    | ..      | 27    |
| 9             | 9                 | ..    | ..    | 35                      | 0                 | 38    | ..      | 18    |
| 9             | 9                 | ..    | ..    | 38                      | 1                 | 41    | ..      | 18    |
| 9             | 9                 | ..    | ..    | 40                      | 1                 | 44    | ..      | 18    |
| 36            | 37                | ..    | 23    | 53                      | 47                | 64    | ..      | ..    |
| 37            | 38                | 30    | 22    | 51                      | 44                | 62    | ..      | ..    |
| 30            | 30                | 32    | 22    | 35                      | 37                | 34    | ..      | ..    |
| 29            | 29                | 32    | 22    | 34                      | 34                | 34    | ..      | ..    |
| 12            | 12                | ..    | ..    | 35                      | 36                | ..    | ..      | 12    |
| 12            | 12                | ..    | ..    | 37                      | 38                | ..    | ..      | 12    |
| 12            | 12                | ..    | ..    | 36                      | 37                | ..    | ..      | 12    |
| 12            | 12                | ..    | ..    | 32                      | 33                | ..    | ..      | 12    |
| 10            | 10                | ..    | ..    | 39                      | 39                | 40    | ..      | 14    |
| 10            | 10                | ..    | ..    | 37                      | 34                | 41    | ..      | 14    |
| 10            | 10                | ..    | ..    | 38                      | 36                | 43    | ..      | 9     |
| 10            | 10                | ..    | ..    | 40                      | 35                | 52    | ..      | 14    |
| 36            | 36                | ..    | ..    | 29                      | 5                 | 34    | ..      | ..    |
| 35            | 35                | ..    | ..    | 32                      | 9                 | 38    | ..      | ..    |
| 48            | 48                | ..    | ..    | 32                      | 13                | 37    | ..      | ..    |
| 48            | 48                | ..    | ..    | 34                      | 13                | 40    | ..      | ..    |
| 40            | 40                | ..    | ..    | 32                      | 32                | ..    | ..      | ..    |
| 39            | 39                | ..    | ..    | 32                      | 33                | ..    | ..      | 11    |
| 41            | 41                | ..    | ..    | 32                      | 33                | ..    | ..      | 11    |
| 40            | 40                | ..    | ..    | 33                      | 33                | ..    | ..      | 23    |
| ..            | ..                | ..    | ..    | 50                      | 21                | 57    | ..      | 77    |
| ..            | ..                | ..    | ..    | 51                      | 38                | 38    | ..      | 81    |
| 4             | 4                 | ..    | ..    | 47                      | 21                | 55    | ..      | 62    |
| 7             | 7                 | ..    | ..    | 47                      | 20                | 44    | ..      | 65    |

Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Country or area | Year | Total producers |                   |       |         |      |       |       |
|-----------------|------|-----------------|-------------------|-------|---------|------|-------|-------|
|                 |      | Total           | Combustible fuels | Hydro | Nuclear | Wind | Solar | Other |
| Lesotho         | 2016 | 72              | 9                 | 72    | ..      | ..   | ..    | ..    |
|                 | 2017 | 76              | 14                | 77    | ..      | ..   | ..    | ..    |
|                 | 2018 | 79              | 14                | 80    | ..      | ..   | ..    | ..    |
|                 | 2019 | 60              | 15                | 60    | ..      | ..   | ..    | ..    |
| Liberia         | 2016 | 47              | 47                | 50    | ..      | ..   | ..    | ..    |
|                 | 2017 | 45              | 45                | 51    | ..      | ..   | 17    | ..    |
|                 | 2018 | 26              | 36                | 15    | ..      | ..   | 15    | ..    |
|                 | 2019 | 27              | 37                | 16    | ..      | ..   | 19    | ..    |
| Libya           | 2016 | 35              | 35                | ..    | ..      | ..   | 18    | ..    |
|                 | 2017 | 37              | 37                | ..    | ..      | ..   | 19    | ..    |
|                 | 2018 | 37              | 37                | ..    | ..      | ..   | 19    | ..    |
|                 | 2019 | 37              | 37                | ..    | ..      | ..   | 19    | ..    |
| Madagascar      | 2016 | 40              | 31                | 64    | ..      | 30   | 20    | ..    |
|                 | 2017 | 34              | 27                | 54    | ..      | 30   | 20    | ..    |
|                 | 2018 | 36              | 27                | 67    | ..      | 30   | 13    | ..    |
|                 | 2019 | 45              | 39                | 61    | ..      | 30   | 18    | ..    |
| Malawi          | 2016 | 44              | 10                | 65    | ..      | ..   | 24    | ..    |
|                 | 2017 | 42              | 10                | 62    | ..      | ..   | 23    | ..    |
|                 | 2018 | 38              | 10                | 55    | ..      | ..   | 23    | ..    |
|                 | 2019 | 44              | 10                | 65    | ..      | ..   | 23    | ..    |
| Mali            | 2016 | 32              | 35                | 28    | ..      | ..   | 22    | ..    |
|                 | 2017 | 35              | 39                | 29    | ..      | ..   | 16    | ..    |
|                 | 2018 | 37              | 43                | 29    | ..      | ..   | 17    | ..    |
|                 | 2019 | 37              | 44                | 29    | ..      | ..   | 8     | ..    |
| Mauritania      | 2016 | 26              | 25                | ..    | ..      | 37   | 19    | ..    |
|                 | 2017 | 27              | 28                | ..    | ..      | 34   | 13    | ..    |
|                 | 2018 | 25              | 26                | ..    | ..      | 35   | 19    | ..    |
|                 | 2019 | 25              | 26                | ..    | ..      | 35   | 19    | ..    |
| Mauritius       | 2016 | 41              | 44                | 19    | ..      | 19   | 13    | ..    |
|                 | 2017 | 43              | 46                | 17    | ..      | 16   | 15    | ..    |
|                 | 2018 | 41              | 46                | 24    | ..      | 16   | 8     | ..    |
|                 | 2019 | 44              | 50                | 19    | ..      | 17   | 16    | ..    |
| Morocco         | 2016 | 32              | 34                | 11    | ..      | 38   | 28    | ..    |
|                 | 2017 | 31              | 34                | 10    | ..      | 34   | 23    | ..    |
|                 | 2018 | 33              | 35                | 13    | ..      | 38   | 42    | ..    |
|                 | 2019 | 34              | 36                | 11    | ..      | 44   | 25    | ..    |
| Mozambique      | 2016 | 86              | 86                | 86    | ..      | ..   | 14    | ..    |
|                 | 2017 | 73              | 99                | 69    | ..      | ..   | 1     | ..    |
|                 | 2018 | 71              | 84                | 70    | ..      | ..   | 0     | ..    |
|                 | 2019 | 77              | 96                | 75    | ..      | ..   | 5     | ..    |
| Namibia         | 2016 | 32              | 5                 | 44    | ..      | 30   | 18    | ..    |
|                 | 2017 | 34              | 5                 | 52    | ..      | 11   | 5     | ..    |
|                 | 2018 | 26              | 2                 | 38    | ..      | 40   | 16    | ..    |
|                 | 2019 | 20              | 5                 | 31    | ..      | 11   | 3     | ..    |
| Niger           | 2016 | 18              | 17                | ..    | ..      | ..   | 19    | ..    |
|                 | 2017 | 22              | 22                | ..    | ..      | ..   | 19    | ..    |
|                 | 2018 | 18              | 18                | ..    | ..      | ..   | 19    | ..    |
|                 | 2019 | 20              | 20                | ..    | ..      | ..   | 14    | ..    |
| Nigeria         | 2016 | 33              | 31                | 44    | ..      | 11   | 17    | ..    |
|                 | 2017 | 30              | 28                | 42    | ..      | 11   | 17    | ..    |
|                 | 2018 | 30              | 29                | 37    | ..      | 11   | 17    | ..    |
|                 | 2019 | 31              | 29                | 36    | ..      | 11   | 17    | ..    |
| Rwanda          | 2016 | 38              | 39                | 37    | ..      | ..   | 19    | ..    |
|                 | 2017 | 38              | 36                | 45    | ..      | ..   | 16    | ..    |
|                 | 2018 | 38              | 38                | 42    | ..      | ..   | 17    | ..    |
|                 | 2019 | 40              | 37                | 47    | ..      | ..   | 17    | ..    |

Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Autoproducers |                   |       |       | Main activity producers |                   |       |         |       |
|---------------|-------------------|-------|-------|-------------------------|-------------------|-------|---------|-------|
| Total         | Combustible fuels | Hydro | Other | Total                   | Combustible fuels | Hydro | Nuclear | Other |
| ..            | ..                | ..    | ..    | 72                      | 9                 | 72    | ..      | ..    |
| ..            | ..                | ..    | ..    | 76                      | 14                | 77    | ..      | ..    |
| ..            | ..                | ..    | ..    | 79                      | 14                | 80    | ..      | ..    |
| ..            | ..                | ..    | ..    | 60                      | 15                | 60    | ..      | ..    |
| 43            | 43                | ..    | ..    | 54                      | 55                | 50    | ..      | ..    |
| 46            | 46                | ..    | ..    | 45                      | 45                | 51    | ..      | 17    |
| 34            | 34                | ..    | ..    | 21                      | 41                | 15    | ..      | 15    |
| 35            | 35                | ..    | ..    | 22                      | 41                | 16    | ..      | 19    |
| ..            | ..                | ..    | ..    | 35                      | 35                | ..    | ..      | 18    |
| ..            | ..                | ..    | ..    | 37                      | 37                | ..    | ..      | 19    |
| ..            | ..                | ..    | ..    | 37                      | 37                | ..    | ..      | 19    |
| ..            | ..                | ..    | ..    | 37                      | 37                | ..    | ..      | 19    |
| 61            | 61                | ..    | ..    | 38                      | 27                | 64    | ..      | 20    |
| 51            | 51                | ..    | ..    | 32                      | 24                | 54    | ..      | 20    |
| 52            | 52                | ..    | ..    | 35                      | 23                | 67    | ..      | 13    |
| 51            | 51                | ..    | ..    | 44                      | 37                | 61    | ..      | 18    |
| 10            | 10                | 11    | ..    | 64                      | 63                | 66    | ..      | 24    |
| 10            | 10                | 11    | ..    | 60                      | 63                | 62    | ..      | 23    |
| 10            | 10                | 11    | ..    | 54                      | 63                | 56    | ..      | 23    |
| 10            | 10                | 11    | ..    | 63                      | 63                | 65    | ..      | 23    |
| 40            | 40                | ..    | ..    | 29                      | 32                | 28    | ..      | 22    |
| 43            | 43                | ..    | ..    | 32                      | 36                | 29    | ..      | 16    |
| 52            | 52                | ..    | ..    | 32                      | 36                | 29    | ..      | 17    |
| 52            | 52                | ..    | ..    | 32                      | 37                | 29    | ..      | 8     |
| 51            | 51                | ..    | ..    | 20                      | 19                | ..    | ..      | 28    |
| 49            | 49                | ..    | ..    | 23                      | 23                | ..    | ..      | 22    |
| 46            | 46                | ..    | ..    | 22                      | 21                | ..    | ..      | 23    |
| 44            | 44                | ..    | ..    | 22                      | 22                | ..    | ..      | 23    |
| 60            | 65                | ..    | 14    | 28                      | 29                | 19    | ..      | 31    |
| 65            | 72                | ..    | 15    | 28                      | 30                | 17    | ..      | 24    |
| 56            | 69                | ..    | 9     | 30                      | 31                | 24    | ..      | 21    |
| 61            | 80                | ..    | 16    | 33                      | 34                | 19    | ..      | 21    |
| 5             | ..                | ..    | ..    | 43                      | 54                | 11    | ..      | 37    |
| 5             | ..                | ..    | ..    | 41                      | 53                | 10    | ..      | 32    |
| 5             | ..                | ..    | ..    | 44                      | 54                | 13    | ..      | 38    |
| 5             | ..                | ..    | ..    | 43                      | 53                | 11    | ..      | 37    |
| 28            | 25                | 61    | 14    | 86                      | 90                | 86    | ..      | ..    |
| 94            | 94                | ..    | ..    | 73                      | 99                | 69    | ..      | 1     |
| 81            | 81                | ..    | ..    | 71                      | 84                | 70    | ..      | 0     |
| 63            | 63                | ..    | ..    | 77                      | 99                | 75    | ..      | 5     |
| ..            | ..                | ..    | ..    | 32                      | 5                 | 44    | ..      | 18    |
| ..            | ..                | ..    | ..    | 34                      | 5                 | 52    | ..      | 5     |
| ..            | ..                | ..    | ..    | 26                      | 2                 | 38    | ..      | 17    |
| ..            | ..                | ..    | ..    | 20                      | 5                 | 31    | ..      | 4     |
| 5             | 3                 | ..    | 19    | 21                      | 21                | ..    | ..      | ..    |
| 5             | 2                 | ..    | 19    | 27                      | 27                | ..    | ..      | ..    |
| 7             | 2                 | ..    | 19    | 21                      | 21                | ..    | ..      | ..    |
| 6             | 2                 | ..    | 14    | 24                      | 24                | ..    | ..      | ..    |
| 22            | 22                | 48    | 16    | 37                      | 35                | 44    | ..      | ..    |
| 19            | 19                | 45    | 16    | 34                      | 31                | 42    | ..      | ..    |
| 20            | 20                | 40    | 16    | 34                      | 33                | 36    | ..      | ..    |
| 20            | 19                | 39    | 16    | 35                      | 35                | 36    | ..      | ..    |
| 23            | 23                | ..    | ..    | 38                      | 39                | 37    | ..      | 19    |
| 23            | 23                | ..    | ..    | 38                      | 36                | 45    | ..      | 16    |
| 23            | 23                | ..    | ..    | 38                      | 38                | 42    | ..      | 17    |
| 23            | 23                | ..    | ..    | 40                      | 37                | 47    | ..      | 17    |

Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Country or area         | Year | Total producers |                   |       |         |      |       |       |
|-------------------------|------|-----------------|-------------------|-------|---------|------|-------|-------|
|                         |      | Total           | Combustible fuels | Hydro | Nuclear | Wind | Solar | Other |
| Sao Tome and Principe   | 2016 | 36              | 36                | 38    | ..      | ..   | 14    | ..    |
|                         | 2017 | 36              | 37                | 34    | ..      | ..   | 14    | ..    |
|                         | 2018 | 36              | 37                | 29    | ..      | ..   | 14    | ..    |
|                         | 2019 | 36              | 37                | 29    | ..      | ..   | 14    | ..    |
| Senegal                 | 2016 | 52              | 55                | ..    | ..      | ..   | 3     | ..    |
|                         | 2017 | 50              | 55                | ..    | ..      | ..   | 11    | ..    |
|                         | 2018 | 44              | 49                | ..    | ..      | ..   | 6     | ..    |
|                         | 2019 | 35              | 41                | ..    | ..      | 5    | 20    | ..    |
| Seychelles              | 2016 | 41              | 43                | ..    | ..      | 13   | 13    | ..    |
|                         | 2017 | 38              | 39                | ..    | ..      | 11   | 11    | ..    |
|                         | 2018 | 38              | 40                | ..    | ..      | 14   | 11    | ..    |
|                         | 2019 | 39              | 41                | ..    | ..      | 15   | 16    | ..    |
| Sierra Leone            | 2016 | 25              | 12                | 42    | ..      | ..   | 16    | ..    |
|                         | 2017 | 25              | 13                | 42    | ..      | ..   | 17    | ..    |
|                         | 2018 | 26              | 11                | 48    | ..      | ..   | 15    | ..    |
|                         | 2019 | 21              | 2                 | 46    | ..      | ..   | 15    | ..    |
| Somalia                 | 2016 | 47              | 50                | ..    | ..      | 20   | 18    | ..    |
|                         | 2017 | 46              | 50                | ..    | ..      | 20   | 18    | ..    |
|                         | 2018 | 46              | 50                | ..    | ..      | 20   | 18    | ..    |
|                         | 2019 | 46              | 50                | ..    | ..      | 20   | 18    | ..    |
| South Africa            | 2016 | 56              | 61                | 14    | 98      | 18   | 17    | ..    |
|                         | 2017 | 53              | 57                | 17    | 93      | 25   | 21    | ..    |
|                         | 2018 | 52              | 57                | 19    | 68      | 32   | 16    | ..    |
|                         | 2019 | 49              | 52                | 19    | 78      | 33   | 21    | ..    |
| South Sudan             | 2016 | 71              | 74                | ..    | ..      | ..   | 16    | ..    |
|                         | 2017 | 47              | 51                | ..    | ..      | ..   | 4     | ..    |
|                         | 2018 | 51              | 55                | ..    | ..      | ..   | 5     | ..    |
|                         | 2019 | 52              | 56                | ..    | ..      | ..   | 6     | ..    |
| St. Helena and Depend.  | 2016 | 12              | 13                | ..    | ..      | 11   | 15    | ..    |
|                         | 2017 | 12              | 13                | ..    | ..      | 8    | 11    | ..    |
|                         | 2018 | 11              | 12                | ..    | ..      | 11   | 11    | ..    |
|                         | 2019 | 11              | 14                | ..    | ..      | 8    | 7     | ..    |
| Sudan                   | 2016 | 47              | 38                | 58    | ..      | ..   | 17    | ..    |
|                         | 2017 | 47              | 36                | 61    | ..      | ..   | 18    | ..    |
|                         | 2018 | 48              | 38                | 58    | ..      | ..   | 19    | ..    |
|                         | 2019 | 47              | 35                | 61    | ..      | ..   | 14    | ..    |
| Togo                    | 2016 | 51              | 54                | 43    | ..      | ..   | ..    | ..    |
|                         | 2017 | 35              | 35                | 35    | ..      | ..   | 10    | ..    |
|                         | 2018 | 30              | 28                | 34    | ..      | ..   | 10    | ..    |
|                         | 2019 | 36              | 35                | 41    | ..      | ..   | 6     | ..    |
| Tunisia                 | 2016 | 43              | 44                | 8     | ..      | 23   | 19    | ..    |
|                         | 2017 | 46              | 48                | 3     | ..      | 21   | 31    | ..    |
|                         | 2018 | 49              | 51                | 3     | ..      | 22   | 14    | ..    |
|                         | 2019 | 46              | 47                | 12    | ..      | 24   | 18    | ..    |
| Uganda                  | 2016 | 46              | 17                | 54    | ..      | ..   | 4     | ..    |
|                         | 2017 | 48              | 24                | 55    | ..      | ..   | 13    | ..    |
|                         | 2018 | 47              | 23                | 55    | ..      | ..   | 9     | ..    |
|                         | 2019 | 40              | 17                | 45    | ..      | ..   | 17    | ..    |
| United Rep. of Tanzania | 2016 | 59              | 68                | 48    | ..      | ..   | 20    | ..    |
|                         | 2017 | 59              | 67                | 48    | ..      | ..   | 20    | ..    |
|                         | 2018 | 53              | 55                | 48    | ..      | ..   | 40    | ..    |
|                         | 2019 | 59              | 65                | 49    | ..      | ..   | 40    | ..    |
| Zambia                  | 2016 | 47              | 17                | 53    | ..      | ..   | ..    | ..    |
|                         | 2017 | 56              | 46                | 58    | ..      | ..   | ..    | ..    |
|                         | 2018 | 64              | 81                | 60    | ..      | ..   | 10    | ..    |
|                         | 2019 | 58              | 83                | 54    | ..      | ..   | 0     | ..    |

Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Autoproducers |                   |       |       | Main activity producers |                   |       |         |       |
|---------------|-------------------|-------|-------|-------------------------|-------------------|-------|---------|-------|
| Total         | Combustible fuels | Hydro | Other | Total                   | Combustible fuels | Hydro | Nuclear | Other |
| ..            | ..                | ..    | ..    | 36                      | 36                | 38    | ..      | 14    |
| ..            | ..                | ..    | ..    | 36                      | 37                | 34    | ..      | 14    |
| ..            | ..                | ..    | ..    | 36                      | 37                | 29    | ..      | 14    |
| ..            | ..                | ..    | ..    | 36                      | 37                | 29    | ..      | 14    |
| 26            | 28                | ..    | 1     | 72                      | 72                | ..    | ..      | ..    |
| 24            | 28                | ..    | 9     | 71                      | 71                | ..    | ..      | ..    |
| 26            | 33                | ..    | 5     | 57                      | 57                | ..    | ..      | ..    |
| 25            | 30                | ..    | 9     | 40                      | 45                | ..    | ..      | 15    |
| 35            | 35                | ..    | ..    | 43                      | 46                | ..    | ..      | 13    |
| 35            | 35                | ..    | ..    | 38                      | 41                | ..    | ..      | 11    |
| 35            | 35                | ..    | ..    | 39                      | 41                | ..    | ..      | 13    |
| 36            | 36                | ..    | ..    | 40                      | 42                | ..    | ..      | 16    |
| 39            | 39                | ..    | ..    | 25                      | 12                | 42    | ..      | 16    |
| 40            | 40                | ..    | ..    | 25                      | 12                | 42    | ..      | 17    |
| 39            | 39                | ..    | ..    | 26                      | 10                | 48    | ..      | 15    |
| 39            | 39                | ..    | ..    | 21                      | 1                 | 46    | ..      | 15    |
| ..            | ..                | ..    | ..    | 47                      | 50                | ..    | ..      | 19    |
| ..            | ..                | ..    | ..    | 46                      | 50                | ..    | ..      | 19    |
| ..            | ..                | ..    | ..    | 46                      | 50                | ..    | ..      | 19    |
| ..            | ..                | ..    | ..    | 46                      | 50                | ..    | ..      | 19    |
| 44            | 70                | 26    | 17    | 59                      | 60                | 14    | 98      | 38    |
| 33            | 54                | 26    | 23    | 56                      | 57                | 17    | 93      | 39    |
| 35            | 63                | 14    | 22    | 55                      | 57                | 19    | 68      | 78    |
| 38            | 64                | 8     | 26    | 51                      | 52                | 19    | 78      | 80    |
| 84            | 85                | ..    | 11    | 59                      | 63                | ..    | ..      | 25    |
| 11            | 11                | ..    | 18    | 64                      | 72                | ..    | ..      | 2     |
| 12            | 11                | ..    | 22    | 68                      | 77                | ..    | ..      | 3     |
| 12            | 12                | ..    | 26    | 69                      | 78                | ..    | ..      | 3     |
| ..            | ..                | ..    | ..    | 12                      | 13                | ..    | ..      | 12    |
| ..            | ..                | ..    | ..    | 12                      | 13                | ..    | ..      | 9     |
| ..            | ..                | ..    | ..    | 11                      | 12                | ..    | ..      | 11    |
| ..            | ..                | ..    | ..    | 11                      | 14                | ..    | ..      | 8     |
| 7             | 7                 | ..    | ..    | 49                      | 42                | 58    | ..      | 17    |
| 7             | 7                 | ..    | ..    | 50                      | 39                | 61    | ..      | 18    |
| 7             | 7                 | ..    | ..    | 50                      | 42                | 58    | ..      | 19    |
| 6             | 6                 | ..    | ..    | 49                      | 38                | 61    | ..      | 14    |
| 19            | 19                | ..    | ..    | 52                      | 55                | 43    | ..      | ..    |
| 16            | 19                | ..    | 10    | 36                      | 36                | 35    | ..      | ..    |
| 7             | 6                 | ..    | 10    | 31                      | 29                | 34    | ..      | ..    |
| 6             | 5                 | ..    | 6     | 38                      | 36                | 41    | ..      | ..    |
| 57            | 51                | ..    | 19    | 43                      | 44                | 8     | ..      | 23    |
| 55            | 47                | ..    | 31    | 46                      | 48                | 3     | ..      | 21    |
| 49            | 58                | ..    | 14    | 49                      | 51                | 3     | ..      | 22    |
| 50            | 58                | ..    | 18    | 45                      | 47                | 12    | ..      | 24    |
| 42            | 31                | 52    | ..    | 47                      | 7                 | 54    | ..      | 4     |
| 29            | 22                | 37    | ..    | 52                      | 26                | 58    | ..      | 14    |
| 35            | 25                | 45    | ..    | 50                      | 22                | 57    | ..      | 9     |
| 31            | 23                | 37    | ..    | 42                      | 12                | 47    | ..      | 18    |
| 10            | ..                | ..    | 20    | 60                      | 70                | 48    | ..      | ..    |
| 8             | ..                | ..    | 20    | 61                      | 70                | 48    | ..      | ..    |
| 5             | ..                | ..    | 40    | 60                      | 68                | 48    | ..      | ..    |
| 5             | ..                | ..    | 40    | 67                      | 81                | 49    | ..      | ..    |
| ..            | ..                | ..    | ..    | 47                      | 17                | 53    | ..      | ..    |
| ..            | ..                | ..    | ..    | 56                      | 46                | 58    | ..      | ..    |
| ..            | ..                | ..    | ..    | 64                      | 81                | 60    | ..      | 10    |
| ..            | ..                | ..    | ..    | 58                      | 83                | 54    | ..      | 0     |

Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Country or area             | Year        | Total producers |                   |           |           |           |           |           |
|-----------------------------|-------------|-----------------|-------------------|-----------|-----------|-----------|-----------|-----------|
|                             |             | Total           | Combustible fuels | Hydro     | Nuclear   | Wind      | Solar     | Other     |
| Zimbabwe                    | 2016        | 40              | 38                | 44        | ..        | ..        | ..        | ..        |
|                             | 2017        | 43              | 32                | 60        | ..        | ..        | ..        | ..        |
|                             | 2018        | 46              | 39                | 55        | ..        | ..        | ..        | ..        |
|                             | 2019        | 38              | 39                | 37        | ..        | ..        | ..        | ..        |
| <b>America, North</b>       | <b>2016</b> | <b>46</b>       | <b>44</b>         | <b>41</b> | <b>94</b> | <b>32</b> | <b>17</b> | <b>73</b> |
|                             | <b>2017</b> | <b>45</b>       | <b>42</b>         | <b>44</b> | <b>94</b> | <b>33</b> | <b>18</b> | <b>62</b> |
|                             | <b>2018</b> | <b>46</b>       | <b>44</b>         | <b>43</b> | <b>95</b> | <b>33</b> | <b>18</b> | <b>57</b> |
|                             | <b>2019</b> | <b>45</b>       | <b>43</b>         | <b>41</b> | <b>96</b> | <b>32</b> | <b>18</b> | <b>56</b> |
| Anguilla                    | 2016        | 34              | 36                | ..        | ..        | ..        | 11        | ..        |
|                             | 2017        | 36              | 38                | ..        | ..        | ..        | 11        | ..        |
|                             | 2018        | 41              | 41                | ..        | ..        | ..        | 23        | ..        |
|                             | 2019        | 44              | 47                | ..        | ..        | ..        | 11        | ..        |
| Antigua and Barbuda         | 2016        | 34              | 35                | ..        | ..        | ..        | 17        | ..        |
|                             | 2017        | 34              | 35                | ..        | ..        | ..        | 17        | ..        |
|                             | 2018        | 45              | 49                | ..        | ..        | ..        | 16        | ..        |
|                             | 2019        | 35              | 37                | ..        | ..        | ..        | 16        | ..        |
| Aruba                       | 2016        | 38              | 35                | ..        | ..        | 55        | ..        | ..        |
|                             | 2017        | 39              | 37                | ..        | ..        | 55        | ..        | ..        |
|                             | 2018        | 39              | 36                | ..        | ..        | 67        | ..        | ..        |
|                             | 2019        | 39              | 36                | ..        | ..        | 63        | ..        | ..        |
| Bahamas                     | 2016        | 39              | 39                | ..        | ..        | ..        | ..        | ..        |
|                             | 2017        | 39              | 39                | ..        | ..        | ..        | ..        | ..        |
|                             | 2018        | 45              | 45                | ..        | ..        | ..        | ..        | ..        |
|                             | 2019        | 46              | 46                | ..        | ..        | ..        | ..        | ..        |
| Barbados                    | 2016        | 45              | 48                | ..        | ..        | ..        | 16        | ..        |
|                             | 2017        | 43              | 44                | ..        | ..        | ..        | 23        | ..        |
|                             | 2018        | 47              | 49                | ..        | ..        | ..        | 20        | ..        |
|                             | 2019        | 41              | 45                | ..        | ..        | ..        | 15        | ..        |
| Belize                      | 2016        | 30              | 16                | 58        | ..        | ..        | ..        | ..        |
|                             | 2017        | 28              | 14                | 60        | ..        | ..        | ..        | ..        |
|                             | 2018        | 29              | 17                | 56        | ..        | ..        | ..        | ..        |
|                             | 2019        | 22              | 26                | 16        | ..        | ..        | ..        | ..        |
| Bermuda                     | 2016        | 44              | 44                | ..        | ..        | ..        | 6         | ..        |
|                             | 2017        | 44              | 45                | ..        | ..        | ..        | 4         | ..        |
|                             | 2018        | 42              | 43                | ..        | ..        | ..        | 6         | ..        |
|                             | 2019        | 40              | 41                | ..        | ..        | ..        | 6         | ..        |
| Bonaire, St Eustatius, Saba | 2016        | 45              | 54                | ..        | ..        | 36        | 13        | ..        |
|                             | 2017        | 47              | 58                | ..        | ..        | 32        | 21        | ..        |
|                             | 2018        | 42              | 52                | ..        | ..        | 38        | 15        | ..        |
|                             | 2019        | 44              | 59                | ..        | ..        | 33        | 16        | ..        |
| British Virgin Islands      | 2016        | 54              | 55                | ..        | ..        | 24        | 11        | ..        |
|                             | 2017        | 60              | 62                | ..        | ..        | 16        | 9         | ..        |
|                             | 2018        | 59              | 61                | ..        | ..        | 14        | 11        | ..        |
|                             | 2019        | 64              | 65                | ..        | ..        | 16        | 12        | ..        |
| Canada                      | 2016        | 52              | 43                | 55        | 83        | 29        | 17        | 33        |
|                             | 2017        | 51              | 40                | 56        | 82        | 29        | 14        | 25        |
|                             | 2018        | 50              | 40                | 54        | 82        | 30        | 14        | 26        |
|                             | 2019        | 49              | 39                | 53        | 82        | 28        | 14        | 20        |
| Cayman Islands              | 2016        | 47              | 47                | ..        | ..        | ..        | ..        | ..        |
|                             | 2017        | 48              | 48                | ..        | ..        | ..        | ..        | ..        |
|                             | 2018        | 47              | 47                | ..        | ..        | ..        | ..        | ..        |
|                             | 2019        | 49              | 49                | ..        | ..        | ..        | ..        | ..        |
| Costa Rica                  | 2016        | 31              | 7                 | 36        | ..        | 21        | 16        | 74        |
|                             | 2017        | 36              | 4                 | 43        | ..        | 39        | 13        | 62        |
|                             | 2018        | 36              | 6                 | 40        | ..        | 50        | 15        | 53        |
|                             | 2019        | 36              | 6                 | 38        | ..        | 50        | 15        | 66        |



Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Autoproducers |                   |           |           | Main activity producers |                   |           |           |           |
|---------------|-------------------|-----------|-----------|-------------------------|-------------------|-----------|-----------|-----------|
| Total         | Combustible fuels | Hydro     | Other     | Total                   | Combustible fuels | Hydro     | Nuclear   | Other     |
| 70            | 70                | ..        | ..        | 39                      | 36                | 44        | ..        | ..        |
| 42            | 42                | ..        | ..        | 43                      | 32                | 60        | ..        | ..        |
| 52            | 52                | ..        | ..        | 46                      | 39                | 55        | ..        | ..        |
| 53            | 53                | ..        | ..        | 38                      | 38                | 37        | ..        | ..        |
| <b>45</b>     | <b>54</b>         | <b>58</b> | <b>17</b> | <b>46</b>               | <b>43</b>         | <b>41</b> | <b>94</b> | <b>31</b> |
| <b>45</b>     | <b>56</b>         | <b>65</b> | <b>17</b> | <b>45</b>               | <b>41</b>         | <b>43</b> | <b>94</b> | <b>32</b> |
| <b>46</b>     | <b>62</b>         | <b>63</b> | <b>16</b> | <b>46</b>               | <b>43</b>         | <b>42</b> | <b>95</b> | <b>31</b> |
| <b>45</b>     | <b>63</b>         | <b>61</b> | <b>16</b> | <b>45</b>               | <b>41</b>         | <b>40</b> | <b>96</b> | <b>31</b> |
| ..            | ..                | ..        | ..        | 34                      | 36                | ..        | ..        | 11        |
| ..            | ..                | ..        | ..        | 36                      | 38                | ..        | ..        | 11        |
| ..            | ..                | ..        | ..        | 41                      | 41                | ..        | ..        | 23        |
| ..            | ..                | ..        | ..        | 44                      | 47                | ..        | ..        | 11        |
| 11            | 11                | ..        | ..        | 35                      | 36                | ..        | ..        | 17        |
| 11            | 11                | ..        | ..        | 34                      | 35                | ..        | ..        | 17        |
| 11            | 11                | ..        | ..        | 46                      | 49                | ..        | ..        | 16        |
| 11            | 11                | ..        | ..        | 35                      | 37                | ..        | ..        | 16        |
| ..            | ..                | ..        | ..        | 38                      | 35                | ..        | ..        | 55        |
| ..            | ..                | ..        | ..        | 39                      | 37                | ..        | ..        | 55        |
| ..            | ..                | ..        | ..        | 39                      | 36                | ..        | ..        | 67        |
| ..            | ..                | ..        | ..        | 39                      | 36                | ..        | ..        | 63        |
| 22            | 22                | ..        | ..        | 40                      | 40                | ..        | ..        | ..        |
| 22            | 22                | ..        | ..        | 41                      | 41                | ..        | ..        | ..        |
| 23            | 23                | ..        | ..        | 47                      | 47                | ..        | ..        | ..        |
| 27            | 27                | ..        | ..        | 48                      | 48                | ..        | ..        | ..        |
| 20            | 20                | ..        | ..        | 46                      | 49                | ..        | ..        | 16        |
| 20            | 20                | ..        | ..        | 43                      | 45                | ..        | ..        | 23        |
| 20            | 20                | ..        | ..        | 48                      | 51                | ..        | ..        | 20        |
| 20            | 20                | ..        | ..        | 41                      | 46                | ..        | ..        | 15        |
| 27            | 27                | ..        | ..        | 32                      | 9                 | 58        | ..        | ..        |
| 21            | 21                | ..        | ..        | 31                      | 9                 | 60        | ..        | ..        |
| 24            | 24                | ..        | ..        | 31                      | 12                | 56        | ..        | ..        |
| 23            | 23                | ..        | ..        | 21                      | 28                | 16        | ..        | ..        |
| 26            | 36                | ..        | 6         | 45                      | 45                | ..        | ..        | ..        |
| 24            | 39                | ..        | 4         | 45                      | 45                | ..        | ..        | ..        |
| 20            | 33                | ..        | 6         | 43                      | 43                | ..        | ..        | ..        |
| 20            | 33                | ..        | 6         | 41                      | 41                | ..        | ..        | ..        |
| ..            | ..                | ..        | ..        | 45                      | 54                | ..        | ..        | 32        |
| ..            | ..                | ..        | ..        | 47                      | 58                | ..        | ..        | 31        |
| ..            | ..                | ..        | ..        | 42                      | 52                | ..        | ..        | 30        |
| ..            | ..                | ..        | ..        | 44                      | 59                | ..        | ..        | 27        |
| ..            | ..                | ..        | ..        | 54                      | 55                | ..        | ..        | 17        |
| ..            | ..                | ..        | ..        | 60                      | 62                | ..        | ..        | 13        |
| ..            | ..                | ..        | ..        | 59                      | 61                | ..        | ..        | 13        |
| ..            | ..                | ..        | ..        | 64                      | 65                | ..        | ..        | 15        |
| 59            | 63                | 63        | 16        | 51                      | 40                | 54        | 83        | 28        |
| 60            | 64                | 67        | 15        | 51                      | 36                | 55        | 82        | 27        |
| 57            | 61                | 65        | 15        | 50                      | 36                | 53        | 82        | 28        |
| 56            | 60                | 64        | 15        | 49                      | 35                | 53        | 82        | 26        |
| ..            | ..                | ..        | ..        | 47                      | 47                | ..        | ..        | ..        |
| ..            | ..                | ..        | ..        | 48                      | 48                | ..        | ..        | ..        |
| ..            | ..                | ..        | ..        | 47                      | 47                | ..        | ..        | ..        |
| ..            | ..                | ..        | ..        | 49                      | 49                | ..        | ..        | ..        |
| 4             | 49                | 0         | 1         | 36                      | 4                 | 39        | ..        | 54        |
| 36            | 50                | ..        | 14        | 36                      | 1                 | 43        | ..        | 47        |
| 29            | 40                | ..        | 15        | 36                      | 3                 | 40        | ..        | 51        |
| 23            | 30                | ..        | 14        | 37                      | 2                 | 38        | ..        | 56        |

Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Country or area    | Year | Total producers |                   |       |         |      |       |       |
|--------------------|------|-----------------|-------------------|-------|---------|------|-------|-------|
|                    |      | Total           | Combustible fuels | Hydro | Nuclear | Wind | Solar | Other |
| Cuba               | 2016 | 36              | 37                | 11    | ..      | 15   | 15    | ..    |
|                    | 2017 | 36              | 37                | 14    | ..      | 11   | 11    | ..    |
|                    | 2018 | 36              | 36                | 26    | ..      | 14   | 14    | ..    |
|                    | 2019 | 36              | 37                | 22    | ..      | 18   | 18    | ..    |
| Curaçao            | 2016 | 33              | 32                | ..    | ..      | 49   | 14    | ..    |
|                    | 2017 | 40              | 40                | ..    | ..      | 42   | 20    | ..    |
|                    | 2018 | 38              | 35                | ..    | ..      | 59   | 18    | ..    |
|                    | 2019 | 46              | 47                | ..    | ..      | 53   | 19    | ..    |
| Dominica           | 2016 | 42              | 39                | 63    | ..      | 32   | 6     | ..    |
|                    | 2017 | 35              | 34                | 47    | ..      | 32   | 6     | ..    |
|                    | 2018 | 31              | 28                | 58    | ..      | 32   | 6     | ..    |
|                    | 2019 | 39              | 38                | 48    | ..      | 32   | 6     | ..    |
| Dominican Republic | 2016 | 41              | 44                | 28    | ..      | 27   | 13    | ..    |
|                    | 2017 | 42              | 44                | 41    | ..      | 33   | 15    | ..    |
|                    | 2018 | 43              | 46                | 33    | ..      | 31   | 13    | ..    |
|                    | 2019 | 37              | 41                | 17    | ..      | 17   | 14    | ..    |
| El Salvador        | 2016 | 40              | 35                | 31    | ..      | ..   | 23    | 88    |
|                    | 2017 | 33              | 22                | 34    | ..      | ..   | 28    | 88    |
|                    | 2018 | 30              | 20                | 32    | ..      | ..   | 20    | 86    |
|                    | 2019 | 31              | 27                | 30    | ..      | ..   | 14    | 82    |
| Greenland          | 2016 | 30              | 11                | 50    | ..      | ..   | ..    | ..    |
|                    | 2017 | 32              | 15                | 49    | ..      | ..   | ..    | ..    |
|                    | 2018 | 32              | 15                | 50    | ..      | ..   | ..    | ..    |
|                    | 2019 | 32              | 15                | 49    | ..      | ..   | ..    | ..    |
| Grenada            | 2016 | 50              | 52                | ..    | ..      | ..   | 13    | ..    |
|                    | 2017 | 50              | 52                | ..    | ..      | ..   | 18    | ..    |
|                    | 2018 | 49              | 50                | ..    | ..      | ..   | 19    | ..    |
|                    | 2019 | 50              | 52                | ..    | ..      | ..   | 13    | ..    |
| Guatemala          | 2016 | 39              | 42                | 35    | ..      | 32   | 26    | 98    |
|                    | 2017 | 42              | 36                | 50    | ..      | 33   | 25    | 86    |
|                    | 2018 | 44              | 49                | 40    | ..      | 34   | 26    | 73    |
|                    | 2019 | 40              | 45                | 33    | ..      | 23   | 25    | 73    |
| Haiti              | 2016 | 37              | 42                | 13    | ..      | ..   | 36    | ..    |
|                    | 2017 | 35              | 38                | 24    | ..      | ..   | 58    | ..    |
|                    | 2018 | 34              | 33                | 37    | ..      | ..   | 62    | ..    |
|                    | 2019 | 26              | 25                | 29    | ..      | ..   | 15    | ..    |
| Honduras           | 2016 | 43              | 52                | 39    | ..      | 38   | 25    | ..    |
|                    | 2017 | 40              | 43                | 49    | ..      | 29   | 23    | 30    |
|                    | 2018 | 40              | 39                | 50    | ..      | 47   | 22    | 97    |
|                    | 2019 | 43              | 52                | 38    | ..      | 40   | 25    | 97    |
| Jamaica            | 2016 | 48              | 52                | 46    | ..      | 23   | 6     | ..    |
|                    | 2017 | 48              | 51                | 61    | ..      | 33   | 13    | ..    |
|                    | 2018 | 48              | 51                | 70    | ..      | 34   | 13    | ..    |
|                    | 2019 | 44              | 47                | 61    | ..      | 30   | 9     | ..    |
| Mexico             | 2016 | 50              | 56                | 28    | 75      | 29   | 15    | 76    |
|                    | 2017 | 49              | 55                | 29    | 77      | 29   | 19    | 69    |
|                    | 2018 | 46              | 51                | 29    | 96      | 25   | 6     | 43    |
|                    | 2019 | 43              | 48                | 20    | 74      | 32   | 28    | 44    |
| Montserrat         | 2016 | 28              | 28                | ..    | ..      | ..   | ..    | ..    |
|                    | 2017 | 28              | 28                | ..    | ..      | ..   | ..    | ..    |
|                    | 2018 | 30              | 30                | ..    | ..      | ..   | ..    | ..    |
|                    | 2019 | 28              | 29                | ..    | ..      | ..   | 14    | ..    |
| Nicaragua          | 2016 | 38              | 34                | 34    | ..      | 45   | 17    | 52    |
|                    | 2017 | 35              | 31                | 38    | ..      | 39   | 11    | 55    |
|                    | 2018 | 36              | 30                | 33    | ..      | 49   | 20    | 59    |
|                    | 2019 | 32              | 29                | 16    | ..      | 45   | 17    | 58    |

Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Total | Autoproducers     |       |       | Main activity producers |                   |       |         |       |
|-------|-------------------|-------|-------|-------------------------|-------------------|-------|---------|-------|
|       | Combustible fuels | Hydro | Other | Total                   | Combustible fuels | Hydro | Nuclear | Other |
| 22    | 22                | ..    | ..    | 37                      | 38                | 11    | ..      | 15    |
| 21    | 21                | ..    | ..    | 38                      | 38                | 14    | ..      | 11    |
| 16    | 16                | ..    | ..    | 38                      | 38                | 26    | ..      | 14    |
| 21    | 21                | ..    | ..    | 37                      | 38                | 22    | ..      | 18    |
| 13    | 13                | ..    | ..    | 51                      | 57                | ..    | ..      | 38    |
| 10    | 10                | ..    | ..    | 54                      | 62                | ..    | ..      | 38    |
| 15    | 15                | ..    | ..    | 50                      | 49                | ..    | ..      | 51    |
| 15    | 15                | ..    | ..    | 52                      | 55                | ..    | ..      | 46    |
| 34    | 34                | ..    | ..    | 47                      | 43                | 63    | ..      | 13    |
| 34    | 34                | ..    | ..    | 36                      | 33                | 47    | ..      | 13    |
| 34    | 34                | ..    | ..    | 30                      | 23                | 58    | ..      | 17    |
| 34    | 34                | ..    | ..    | 42                      | 41                | 48    | ..      | 17    |
| 16    | 16                | 50    | 15    | 50                      | 56                | 28    | ..      | 24    |
| 17    | 17                | 50    | 14    | 51                      | 54                | 41    | ..      | 30    |
| 18    | 18                | 50    | 15    | 51                      | 57                | 33    | ..      | 24    |
| 29    | 30                | ..    | 16    | 39                      | 45                | 17    | ..      | 16    |
| 27    | 26                | 42    | 23    | 43                      | 38                | 30    | ..      | 88    |
| 29    | 27                | 43    | 39    | 34                      | 21                | 33    | ..      | 72    |
| 25    | 26                | 42    | 17    | 32                      | 18                | 32    | ..      | 72    |
| 24    | 29                | 44    | 15    | 33                      | 26                | 30    | ..      | 48    |
| ..    | ..                | ..    | ..    | 33                      | 13                | 50    | ..      | ..    |
| ..    | ..                | ..    | ..    | 35                      | 19                | 49    | ..      | ..    |
| ..    | ..                | ..    | ..    | 35                      | 19                | 50    | ..      | ..    |
| ..    | ..                | ..    | ..    | 35                      | 18                | 49    | ..      | ..    |
| 52    | 52                | ..    | ..    | 50                      | 52                | ..    | ..      | 13    |
| 51    | 51                | ..    | ..    | 50                      | 52                | ..    | ..      | 18    |
| 92    | 92                | ..    | ..    | 49                      | 50                | ..    | ..      | 19    |
| 95    | 95                | ..    | ..    | 50                      | 52                | ..    | ..      | 13    |
| 15    | 15                | 52    | ..    | 45                      | 57                | 35    | ..      | 41    |
| 13    | 13                | 56    | ..    | 49                      | 49                | 50    | ..      | 38    |
| 18    | 18                | 63    | ..    | 50                      | 67                | 40    | ..      | 37    |
| 23    | 23                | 61    | ..    | 43                      | 54                | 33    | ..      | 34    |
| 4     | 4                 | ..    | ..    | 50                      | 63                | 13    | ..      | 36    |
| 3     | 3                 | ..    | ..    | 48                      | 56                | 24    | ..      | 58    |
| 2     | 2                 | ..    | ..    | 47                      | 50                | 37    | ..      | 62    |
| 2     | 2                 | ..    | ..    | 36                      | 38                | 29    | ..      | 15    |
| 40    | 40                | ..    | ..    | 43                      | 57                | 39    | ..      | 29    |
| 44    | 44                | ..    | ..    | 40                      | 43                | 49    | ..      | 26    |
| 51    | 51                | ..    | ..    | 38                      | 34                | 50    | ..      | 33    |
| 60    | 60                | ..    | ..    | 41                      | 50                | 38    | ..      | 33    |
| 55    | 68                | ..    | 23    | 44                      | 46                | 46    | ..      | ..    |
| 55    | 65                | ..    | 32    | 44                      | 45                | 61    | ..      | ..    |
| 55    | 65                | ..    | 34    | 44                      | 44                | 70    | ..      | ..    |
| 47    | 54                | ..    | 27    | 42                      | 43                | 61    | ..      | ..    |
| 37    | 40                | 44    | 26    | 54                      | 62                | 28    | 75      | 59    |
| 43    | 47                | 46    | 28    | 51                      | 57                | 29    | 77      | 48    |
| 57    | 75                | 46    | 26    | 44                      | 48                | 29    | 96      | 28    |
| 58    | 79                | 40    | 29    | 40                      | 44                | 20    | 74      | 39    |
| ..    | ..                | ..    | ..    | 28                      | 28                | ..    | ..      | ..    |
| ..    | ..                | ..    | ..    | 28                      | 28                | ..    | ..      | ..    |
| ..    | ..                | ..    | ..    | 30                      | 30                | ..    | ..      | ..    |
| ..    | ..                | ..    | ..    | 28                      | 29                | ..    | ..      | 14    |
| 38    | 38                | 13    | ..    | 37                      | 33                | 34    | ..      | 48    |
| 46    | 46                | 0     | ..    | 33                      | 27                | 38    | ..      | 45    |
| 47    | 48                | 0     | ..    | 34                      | 26                | 33    | ..      | 52    |
| 46    | 46                | ..    | ..    | 30                      | 25                | 16    | ..      | 49    |

Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Country or area           | Year        | Total producers |                   |           |           |           |           |           |
|---------------------------|-------------|-----------------|-------------------|-----------|-----------|-----------|-----------|-----------|
|                           |             | Total           | Combustible fuels | Hydro     | Nuclear   | Wind      | Solar     | Other     |
| Panama                    | 2016        | 37              | 34                | 42        | ..        | 26        | 9         | ..        |
|                           | 2017        | 37              | 29                | 47        | ..        | 21        | 12        | 13        |
|                           | 2018        | 32              | 17                | 50        | ..        | 25        | 14        | 25        |
|                           | 2019        | 33              | 35                | 32        | ..        | 31        | 17        | 29        |
| Puerto Rico               | 2016        | 38              | 39                | 8         | ..        | 18        | 10        | ..        |
|                           | 2017        | 30              | 31                | 6         | ..        | 17        | 11        | ..        |
|                           | 2018        | 34              | 36                | 4         | ..        | 12        | 6         | ..        |
|                           | 2019        | 35              | 36                | 5         | ..        | 18        | 17        | ..        |
| Sint Maarten (Dutch part) | 2016        | 42              | 42                | ..        | ..        | ..        | ..        | ..        |
|                           | 2017        | 39              | 39                | ..        | ..        | ..        | ..        | ..        |
|                           | 2018        | 36              | 36                | ..        | ..        | ..        | ..        | ..        |
|                           | 2019        | 35              | 35                | ..        | ..        | ..        | ..        | ..        |
| St. Kitts-Nevis           | 2016        | 40              | 41                | ..        | ..        | 39        | 18        | ..        |
|                           | 2017        | 41              | 42                | ..        | ..        | 39        | 18        | ..        |
|                           | 2018        | 37              | 38                | ..        | ..        | 39        | 18        | ..        |
|                           | 2019        | 38              | 38                | ..        | ..        | 39        | 18        | ..        |
| St. Lucia                 | 2016        | 51              | 51                | ..        | ..        | ..        | ..        | ..        |
|                           | 2017        | 52              | 52                | ..        | ..        | ..        | ..        | ..        |
|                           | 2018        | 50              | 52                | ..        | ..        | ..        | 19        | ..        |
|                           | 2019        | 52              | 53                | ..        | ..        | ..        | 19        | ..        |
| St. Pierre-Miquelon       | 2016        | 22              | 22                | ..        | ..        | ..        | ..        | ..        |
|                           | 2017        | 22              | 22                | ..        | ..        | ..        | ..        | ..        |
|                           | 2018        | 22              | 22                | ..        | ..        | ..        | ..        | ..        |
|                           | 2019        | 23              | 23                | ..        | ..        | ..        | ..        | ..        |
| St. Vincent-Grenadines    | 2016        | 33              | 34                | 32        | ..        | ..        | 14        | ..        |
|                           | 2017        | 36              | 36                | 41        | ..        | ..        | 12        | ..        |
|                           | 2018        | 38              | 38                | 48        | ..        | ..        | 11        | ..        |
|                           | 2019        | 38              | 39                | 50        | ..        | ..        | 10        | ..        |
| Trinidad and Tobago       | 2016        | 43              | 43                | ..        | ..        | ..        | 22        | ..        |
|                           | 2017        | 42              | 42                | ..        | ..        | 25        | 23        | ..        |
|                           | 2018        | 49              | 49                | ..        | ..        | 25        | 21        | ..        |
|                           | 2019        | 50              | 50                | ..        | ..        | 25        | 18        | ..        |
| Turks and Caicos Islands  | 2016        | 34              | 34                | ..        | ..        | ..        | ..        | ..        |
|                           | 2017        | 41              | 41                | ..        | ..        | ..        | ..        | ..        |
|                           | 2018        | 35              | 35                | ..        | ..        | ..        | 13        | ..        |
|                           | 2019        | 35              | 35                | ..        | ..        | ..        | 11        | ..        |
| United States             | 2016        | 45              | 43                | 32        | 96        | 32        | 17        | 73        |
|                           | 2017        | 44              | 41                | 36        | 96        | 34        | 19        | 61        |
|                           | 2018        | 45              | 43                | 35        | 97        | 33        | 19        | 72        |
|                           | 2019        | 44              | 42                | 35        | 98        | 33        | 18        | 68        |
| United States Virgin Is.  | 2016        | 27              | 28                | ..        | ..        | 31        | 15        | ..        |
|                           | 2017        | 21              | 21                | ..        | ..        | 31        | 12        | ..        |
|                           | 2018        | 21              | 22                | ..        | ..        | 31        | 12        | ..        |
|                           | 2019        | 23              | 23                | ..        | ..        | 31        | 14        | ..        |
| <b>America, South</b>     | <b>2016</b> | <b>44</b>       | <b>40</b>         | <b>47</b> | <b>73</b> | <b>36</b> | <b>25</b> | <b>..</b> |
|                           | <b>2017</b> | <b>42</b>       | <b>37</b>         | <b>46</b> | <b>67</b> | <b>37</b> | <b>18</b> | <b>29</b> |
|                           | <b>2018</b> | <b>41</b>       | <b>36</b>         | <b>46</b> | <b>67</b> | <b>36</b> | <b>21</b> | <b>60</b> |
|                           | <b>2019</b> | <b>40</b>       | <b>35</b>         | <b>44</b> | <b>73</b> | <b>39</b> | <b>21</b> | <b>57</b> |
| Argentina                 | 2016        | 45              | 45                | 43        | 54        | 29        | 18        | ..        |
|                           | 2017        | 42              | 42                | 42        | 40        | 31        | 23        | ..        |
|                           | 2018        | 41              | 42                | 42        | 42        | 21        | 6         | ..        |
|                           | 2019        | 39              | 39                | 37        | 52        | 35        | 21        | ..        |
| Bolivia (Plur. State of)  | 2016        | 43              | 45                | 40        | ..        | 15        | 13        | ..        |
|                           | 2017        | 42              | 43                | 41        | ..        | 26        | 6         | ..        |
|                           | 2018        | 41              | 41                | 43        | ..        | 25        | 20        | ..        |
|                           | 2019        | 31              | 27                | 49        | ..        | 30        | 18        | ..        |

Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Autoproducers |                   |           |           | Main activity producers |                   |           |           |           |
|---------------|-------------------|-----------|-----------|-------------------------|-------------------|-----------|-----------|-----------|
| Total         | Combustible fuels | Hydro     | Other     | Total                   | Combustible fuels | Hydro     | Nuclear   | Other     |
| 2             | 2                 | ..        | ..        | 39                      | 39                | 44        | ..        | 22        |
| 2             | 2                 | ..        | ..        | 39                      | 34                | 48        | ..        | 18        |
| 8             | 11                | ..        | ..        | 33                      | 17                | 52        | ..        | 20        |
| 26            | 29                | ..        | ..        | 34                      | 37                | 34        | ..        | 25        |
| 47            | 47                | ..        | ..        | 38                      | 39                | 8         | ..        | 14        |
| 39            | 39                | ..        | ..        | 30                      | 31                | 6         | ..        | 13        |
| 42            | 42                | ..        | ..        | 34                      | 36                | 4         | ..        | 8         |
| 44            | 44                | ..        | ..        | 35                      | 36                | 5         | ..        | 17        |
| ..            | ..                | ..        | ..        | 42                      | 42                | ..        | ..        | ..        |
| ..            | ..                | ..        | ..        | 39                      | 39                | ..        | ..        | ..        |
| ..            | ..                | ..        | ..        | 36                      | 36                | ..        | ..        | ..        |
| ..            | ..                | ..        | ..        | 35                      | 35                | ..        | ..        | ..        |
| 3             | 3                 | ..        | ..        | 43                      | 44                | ..        | ..        | 29        |
| 3             | 3                 | ..        | ..        | 43                      | 45                | ..        | ..        | 29        |
| 3             | 3                 | ..        | ..        | 39                      | 40                | ..        | ..        | 29        |
| 3             | 3                 | ..        | ..        | 40                      | 40                | ..        | ..        | 29        |
| ..            | ..                | ..        | ..        | 51                      | 51                | ..        | ..        | ..        |
| ..            | ..                | ..        | ..        | 52                      | 52                | ..        | ..        | ..        |
| ..            | ..                | ..        | ..        | 50                      | 52                | ..        | ..        | 19        |
| ..            | ..                | ..        | ..        | 52                      | 53                | ..        | ..        | 19        |
| ..            | ..                | ..        | ..        | 22                      | 22                | ..        | ..        | ..        |
| ..            | ..                | ..        | ..        | 22                      | 22                | ..        | ..        | ..        |
| ..            | ..                | ..        | ..        | 22                      | 22                | ..        | ..        | ..        |
| ..            | ..                | ..        | ..        | 23                      | 23                | ..        | ..        | ..        |
| 25            | ..                | ..        | 25        | 33                      | 34                | 32        | ..        | 12        |
| 23            | ..                | ..        | 23        | 36                      | 36                | 41        | ..        | 9         |
| 24            | ..                | ..        | 24        | 38                      | 38                | 48        | ..        | 8         |
| 23            | ..                | ..        | 23        | 39                      | 39                | 50        | ..        | 7         |
| 9             | 9                 | ..        | ..        | 44                      | 44                | ..        | ..        | 22        |
| 9             | 9                 | ..        | ..        | 44                      | 44                | ..        | ..        | 23        |
| 8             | 8                 | ..        | ..        | 51                      | 51                | ..        | ..        | 21        |
| 9             | 9                 | ..        | ..        | 51                      | 51                | ..        | ..        | 18        |
| ..            | ..                | ..        | ..        | 34                      | 34                | ..        | ..        | ..        |
| ..            | ..                | ..        | ..        | 41                      | 41                | ..        | ..        | ..        |
| ..            | ..                | ..        | ..        | 35                      | 35                | ..        | ..        | 13        |
| ..            | ..                | ..        | ..        | 35                      | 35                | ..        | ..        | 11        |
| 47            | 63                | 49        | 15        | 45                      | 42                | 32        | 96        | 31        |
| 45            | 64                | 53        | 14        | 44                      | 41                | 36        | 96        | 32        |
| 43            | 64                | 57        | 14        | 46                      | 43                | 35        | 97        | 32        |
| 42            | 65                | 49        | 14        | 45                      | 41                | 34        | 98        | 31        |
| 15            | ..                | ..        | 15        | 27                      | 28                | ..        | ..        | 17        |
| 10            | ..                | ..        | 10        | 21                      | 21                | ..        | ..        | 17        |
| 11            | ..                | ..        | 11        | 22                      | 22                | ..        | ..        | 17        |
| 13            | ..                | ..        | 13        | 23                      | 23                | ..        | ..        | 17        |
| <b>44</b>     | <b>43</b>         | <b>49</b> | <b>10</b> | <b>44</b>               | <b>39</b>         | <b>47</b> | <b>73</b> | <b>35</b> |
| <b>42</b>     | <b>42</b>         | <b>44</b> | <b>11</b> | <b>42</b>               | <b>36</b>         | <b>46</b> | <b>67</b> | <b>34</b> |
| <b>42</b>     | <b>42</b>         | <b>45</b> | <b>12</b> | <b>41</b>               | <b>34</b>         | <b>46</b> | <b>67</b> | <b>33</b> |
| <b>42</b>     | <b>43</b>         | <b>46</b> | <b>14</b> | <b>40</b>               | <b>33</b>         | <b>44</b> | <b>73</b> | <b>35</b> |
| 47            | 47                | 26        | ..        | 44                      | 45                | 43        | 54        | 29        |
| 47            | 47                | 26        | ..        | 41                      | 41                | 42        | 40        | 31        |
| 47            | 47                | 26        | ..        | 41                      | 41                | 42        | 42        | 18        |
| 47            | 47                | 26        | ..        | 38                      | 38                | 37        | 52        | 32        |
| 17            | 17                | 46        | ..        | 46                      | 48                | 40        | ..        | 15        |
| 20            | 20                | 42        | ..        | 44                      | 45                | 41        | ..        | 20        |
| 32            | 32                | 50        | ..        | 41                      | 41                | 43        | ..        | 22        |
| 32            | 32                | 50        | ..        | 31                      | 27                | 49        | ..        | 20        |

Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Country or area           | Year        | Total producers |                   |           |           |           |           |           |
|---------------------------|-------------|-----------------|-------------------|-----------|-----------|-----------|-----------|-----------|
|                           |             | Total           | Combustible fuels | Hydro     | Nuclear   | Wind      | Solar     | Other     |
| Brazil                    | 2016        | 44              | 41                | 45        | 91        | 38        | 11        | ..        |
|                           | 2017        | 43              | 43                | 42        | 90        | 39        | 9         | ..        |
|                           | 2018        | 42              | 41                | 43        | 90        | 38        | 17        | ..        |
|                           | 2019        | 42              | 41                | 42        | 93        | 42        | 17        | ..        |
| Chile                     | 2016        | 37              | 37                | 40        | ..        | 27        | 27        | ..        |
|                           | 2017        | 35              | 35                | 37        | ..        | 31        | 26        | 30        |
|                           | 2018        | 34              | 34                | 40        | ..        | 24        | 26        | 62        |
|                           | 2019        | 35              | 35                | 40        | ..        | 28        | 27        | 58        |
| Colombia                  | 2016        | 48              | 53                | 46        | ..        | 32        | ..        | ..        |
|                           | 2017        | 48              | 33                | 56        | ..        | 2         | 6         | ..        |
|                           | 2018        | 47              | 36                | 54        | ..        | 27        | 1         | ..        |
|                           | 2019        | 48              | 43                | 52        | ..        | 39        | 17        | ..        |
| Ecuador                   | 2016        | 36              | 32                | 40        | ..        | 45        | 17        | ..        |
|                           | 2017        | 37              | 23                | 49        | ..        | 40        | 17        | ..        |
|                           | 2018        | 36              | 24                | 45        | ..        | 43        | 16        | ..        |
|                           | 2019        | 39              | 21                | 53        | ..        | 46        | 16        | ..        |
| Falkland Is. (Malvinas)   | 2016        | 22              | 20                | ..        | ..        | 35        | 16        | ..        |
|                           | 2017        | 21              | 19                | ..        | ..        | 30        | 16        | ..        |
|                           | 2018        | 21              | 18                | ..        | ..        | 31        | 16        | ..        |
|                           | 2019        | 21              | 19                | ..        | ..        | 31        | 16        | ..        |
| Guyana                    | 2016        | 34              | 34                | ..        | ..        | 50        | 16        | ..        |
|                           | 2017        | 36              | 37                | ..        | ..        | 50        | 16        | ..        |
|                           | 2018        | 37              | 38                | ..        | ..        | 50        | 16        | ..        |
|                           | 2019        | 39              | 39                | ..        | ..        | 50        | 16        | ..        |
| Paraguay                  | 2016        | 83              | 29                | 83        | ..        | ..        | ..        | ..        |
|                           | 2017        | 78              | 34                | 78        | ..        | ..        | ..        | ..        |
|                           | 2018        | 77              | 35                | 77        | ..        | ..        | ..        | ..        |
|                           | 2019        | 64              | 46                | 64        | ..        | ..        | ..        | ..        |
| Peru                      | 2016        | 41              | 34                | 55        | ..        | 51        | 28        | ..        |
|                           | 2017        | 41              | 28                | 63        | ..        | 51        | 13        | ..        |
|                           | 2018        | 41              | 27                | 65        | ..        | 46        | 28        | ..        |
|                           | 2019        | 43              | 29                | 67        | ..        | 51        | 29        | ..        |
| Suriname                  | 2016        | 46              | 45                | 47        | ..        | ..        | 17        | ..        |
|                           | 2017        | 46              | 41                | 56        | ..        | ..        | 17        | ..        |
|                           | 2018        | 49              | 44                | 60        | ..        | ..        | 16        | ..        |
|                           | 2019        | 49              | 46                | 58        | ..        | ..        | 16        | ..        |
| Uruguay                   | 2016        | 41              | 31                | 58        | ..        | 28        | 19        | ..        |
|                           | 2017        | 36              | 25                | 56        | ..        | 29        | 13        | ..        |
|                           | 2018        | 34              | 21                | 49        | ..        | 36        | 19        | ..        |
|                           | 2019        | 37              | 20                | 60        | ..        | 36        | 19        | ..        |
| Venezuela (Bolivar. Rep.) | 2016        | 41              | 35                | 47        | ..        | 7         | 16        | ..        |
|                           | 2017        | 36              | 28                | 46        | ..        | 7         | 16        | ..        |
|                           | 2018        | 34              | 27                | 44        | ..        | 6         | 17        | ..        |
|                           | 2019        | 30              | 23                | 38        | ..        | 9         | 19        | ..        |
| <b>Asia</b>               | <b>2016</b> | <b>42</b>       | <b>47</b>         | <b>36</b> | <b>48</b> | <b>18</b> | <b>11</b> | <b>57</b> |
|                           | <b>2017</b> | <b>43</b>       | <b>49</b>         | <b>36</b> | <b>52</b> | <b>19</b> | <b>11</b> | <b>61</b> |
|                           | <b>2018</b> | <b>43</b>       | <b>49</b>         | <b>36</b> | <b>56</b> | <b>22</b> | <b>12</b> | <b>32</b> |
|                           | <b>2019</b> | <b>42</b>       | <b>48</b>         | <b>38</b> | <b>63</b> | <b>22</b> | <b>13</b> | <b>33</b> |
| Afghanistan               | 2016        | 31              | 13                | 37        | ..        | ..        | ..        | ..        |
|                           | 2017        | 31              | 15                | 37        | ..        | ..        | ..        | ..        |
|                           | 2018        | 28              | 17                | 32        | ..        | ..        | ..        | ..        |
|                           | 2019        | 34              | 15                | 41        | ..        | ..        | 20        | ..        |
| Armenia                   | 2016        | 23              | 16                | 20        | 67        | 8         | 11        | ..        |
|                           | 2017        | 25              | 18                | 20        | 73        | 8         | 7         | ..        |
|                           | 2018        | 25              | 21                | 20        | 58        | 7         | 12        | ..        |
|                           | 2019        | 24              | 19                | 20        | 62        | 9         | 16        | ..        |

Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Total     | Autoproducers     |           |           | Main activity producers |                   |           |           |           |
|-----------|-------------------|-----------|-----------|-------------------------|-------------------|-----------|-----------|-----------|
|           | Combustible fuels | Hydro     | Other     | Total                   | Combustible fuels | Hydro     | Nuclear   | Other     |
| 46        | 46                | 49        | 11        | 43                      | 37                | 45        | 91        | 38        |
| 45        | 46                | 42        | 14        | 42                      | 41                | 42        | 90        | 37        |
| 45        | 47                | 44        | 13        | 41                      | 35                | 43        | 90        | 36        |
| 44        | 46                | 44        | 15        | 41                      | 37                | 42        | 93        | 37        |
| 32        | 32                | 51        | 0         | 37                      | 38                | 40        | ..        | 27        |
| 23        | 23                | 63        | 8         | 36                      | 38                | 37        | ..        | 28        |
| 19        | 19                | 80        | 8         | 37                      | 39                | 40        | ..        | 26        |
| 22        | 22                | 40        | 2         | 37                      | 38                | 40        | ..        | 28        |
| 61        | 64                | 16        | ..        | 47                      | 49                | 46        | ..        | 32        |
| 60        | 63                | 18        | ..        | 47                      | 23                | 56        | ..        | 3         |
| 67        | 70                | 19        | ..        | 46                      | 26                | 55        | ..        | 6         |
| 74        | 77                | 24        | ..        | 46                      | 33                | 52        | ..        | 21        |
| 50        | 48                | 66        | ..        | 34                      | 27                | 39        | ..        | 30        |
| 49        | 45                | 70        | ..        | 35                      | 15                | 48        | ..        | 27        |
| 48        | 44                | 69        | ..        | 33                      | 16                | 44        | ..        | 28        |
| 51        | 44                | 84        | ..        | 37                      | 12                | 52        | ..        | 29        |
| 11        | 11                | ..        | ..        | 25                      | 22                | ..        | ..        | 34        |
| 11        | 11                | ..        | ..        | 23                      | 21                | ..        | ..        | 29        |
| 11        | 11                | ..        | ..        | 23                      | 20                | ..        | ..        | 31        |
| 11        | 11                | ..        | ..        | 23                      | 21                | ..        | ..        | 30        |
| 17        | 17                | ..        | ..        | 37                      | 38                | ..        | ..        | 17        |
| 19        | 19                | ..        | ..        | 39                      | 40                | ..        | ..        | 17        |
| 19        | 19                | ..        | ..        | 41                      | 41                | ..        | ..        | 17        |
| 8         | 8                 | ..        | ..        | 43                      | 44                | ..        | ..        | 17        |
| ..        | ..                | ..        | ..        | 83                      | 29                | 83        | ..        | ..        |
| ..        | ..                | ..        | ..        | 78                      | 34                | 78        | ..        | ..        |
| ..        | ..                | ..        | ..        | 77                      | 35                | 77        | ..        | ..        |
| ..        | ..                | ..        | ..        | 64                      | 46                | 64        | ..        | ..        |
| 17        | 14                | 63        | ..        | 44                      | 37                | 54        | ..        | 44        |
| 18        | 14                | 60        | 12        | 43                      | 31                | 63        | ..        | 32        |
| 19        | 15                | 65        | 13        | 44                      | 30                | 65        | ..        | 39        |
| 19        | 16                | 60        | 15        | 46                      | 31                | 67        | ..        | 42        |
| 53        | 62                | 47        | ..        | 34                      | 34                | ..        | ..        | 17        |
| 53        | 49                | 56        | ..        | 35                      | 36                | ..        | ..        | 17        |
| 62        | 65                | 60        | ..        | 31                      | 31                | ..        | ..        | 16        |
| 63        | 73                | 58        | ..        | 30                      | 31                | ..        | ..        | 16        |
| 39        | 42                | ..        | 3         | 41                      | 23                | 58        | ..        | 28        |
| 39        | 43                | ..        | 4         | 36                      | 16                | 56        | ..        | 27        |
| 42        | 46                | ..        | 5         | 33                      | 11                | 49        | ..        | 34        |
| 40        | 44                | ..        | 7         | 37                      | 11                | 60        | ..        | 34        |
| 21        | 22                | ..        | 12        | 41                      | 36                | 47        | ..        | 0         |
| 21        | 21                | ..        | 12        | 36                      | 28                | 46        | ..        | 0         |
| 20        | 21                | ..        | 10        | 35                      | 27                | 44        | ..        | 0         |
| 17        | 18                | ..        | 12        | 30                      | 23                | 38        | ..        | 2         |
| <b>39</b> | <b>43</b>         | <b>44</b> | <b>18</b> | <b>42</b>               | <b>48</b>         | <b>36</b> | <b>48</b> | <b>17</b> |
| <b>45</b> | <b>51</b>         | <b>39</b> | <b>18</b> | <b>43</b>               | <b>49</b>         | <b>36</b> | <b>52</b> | <b>17</b> |
| <b>41</b> | <b>48</b>         | <b>21</b> | <b>16</b> | <b>43</b>               | <b>49</b>         | <b>36</b> | <b>56</b> | <b>18</b> |
| <b>40</b> | <b>46</b>         | <b>20</b> | <b>16</b> | <b>42</b>               | <b>49</b>         | <b>38</b> | <b>63</b> | <b>18</b> |
| 19        | 1                 | 27        | ..        | 38                      | 24                | 42        | ..        | ..        |
| 19        | 1                 | 28        | ..        | 39                      | 27                | 42        | ..        | ..        |
| 17        | 1                 | 25        | ..        | 34                      | 31                | 35        | ..        | ..        |
| 18        | 1                 | 26        | ..        | 44                      | 29                | 49        | ..        | 20        |
| ..        | ..                | ..        | ..        | 23                      | 16                | 20        | 67        | 9         |
| 13        | ..                | ..        | 13        | 25                      | 18                | 20        | 73        | 5         |
| 16        | ..                | ..        | 16        | 25                      | 21                | 20        | 58        | 7         |
| 16        | ..                | ..        | 16        | 24                      | 19                | 20        | 62        | 13        |

Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Country or area        | Year | Total producers |                   |       |         |      |       |       |
|------------------------|------|-----------------|-------------------|-------|---------|------|-------|-------|
|                        |      | Total           | Combustible fuels | Hydro | Nuclear | Wind | Solar | Other |
| Azerbaijan             | 2016 | 36              | 39                | 20    | ..      | 17   | 16    | ..    |
|                        | 2017 | 35              | 38                | 18    | ..      | 16   | 15    | ..    |
|                        | 2018 | 37              | 40                | 18    | ..      | 14   | 13    | ..    |
|                        | 2019 | 39              | 43                | 16    | ..      | 18   | 14    | ..    |
| Bahrain                | 2016 | 47              | 47                | ..    | ..      | 11   | 21    | ..    |
|                        | 2017 | 48              | 48                | ..    | ..      | 11   | 21    | ..    |
|                        | 2018 | 48              | 48                | ..    | ..      | 11   | 21    | ..    |
|                        | 2019 | 55              | 55                | ..    | ..      | 11   | 23    | ..    |
| Bangladesh             | 2016 | 66              | 67                | 51    | ..      | 68   | 19    | ..    |
|                        | 2017 | 68              | 69                | 52    | ..      | 68   | 19    | ..    |
|                        | 2018 | 59              | 59                | 54    | ..      | 68   | 25    | ..    |
|                        | 2019 | 53              | 53                | 38    | ..      | 68   | 31    | ..    |
| Bhutan                 | 2016 | 56              | 0                 | 56    | ..      | 14   | 63    | ..    |
|                        | 2017 | 54              | 0                 | 55    | ..      | 21   | 63    | ..    |
|                        | 2018 | 49              | 0                 | 49    | ..      | 21   | 8     | ..    |
|                        | 2019 | 43              | 0                 | 43    | ..      | 21   | 8     | ..    |
| Brunei Darussalam      | 2016 | 59              | 60                | ..    | ..      | ..   | 10    | ..    |
|                        | 2017 | 48              | 48                | ..    | ..      | ..   | 19    | ..    |
|                        | 2018 | 49              | 49                | ..    | ..      | ..   | 19    | ..    |
|                        | 2019 | 51              | 51                | ..    | ..      | ..   | 15    | ..    |
| Cambodia               | 2016 | 39              | 47                | 33    | ..      | ..   | 17    | ..    |
|                        | 2017 | 42              | 53                | 33    | ..      | ..   | 6     | ..    |
|                        | 2018 | 44              | 48                | 42    | ..      | ..   | 18    | ..    |
|                        | 2019 | 41              | 52                | 35    | ..      | ..   | 10    | ..    |
| China                  | 2016 | 40              | 44                | 41    | 72      | 18   | 9     | 11    |
|                        | 2017 | 41              | 47                | 40    | 79      | 21   | 9     | 13    |
|                        | 2018 | 42              | 49                | 40    | 75      | 23   | 12    | 10    |
|                        | 2019 | 41              | 48                | 42    | 82      | 22   | 13    | 11    |
| China, Hong Kong SAR   | 2016 | 34              | 34                | ..    | ..      | ..   | ..    | ..    |
|                        | 2017 | 34              | 34                | ..    | ..      | ..   | ..    | ..    |
|                        | 2018 | 34              | 34                | ..    | ..      | ..   | ..    | ..    |
|                        | 2019 | 34              | 34                | ..    | ..      | ..   | ..    | ..    |
| China, Macao SAR       | 2016 | 23              | 23                | ..    | ..      | ..   | ..    | ..    |
|                        | 2017 | 38              | 38                | ..    | ..      | ..   | ..    | ..    |
|                        | 2018 | 17              | 17                | ..    | ..      | ..   | ..    | ..    |
|                        | 2019 | 22              | 22                | ..    | ..      | ..   | ..    | ..    |
| Cyprus                 | 2016 | 32              | 34                | ..    | ..      | 16   | 20    | ..    |
|                        | 2017 | 32              | 35                | ..    | ..      | 15   | 18    | ..    |
|                        | 2018 | 32              | 35                | ..    | ..      | 16   | 19    | ..    |
|                        | 2019 | 32              | 35                | ..    | ..      | 17   | 16    | ..    |
| Georgia                | 2016 | 40              | 30                | 44    | ..      | 5    | ..    | ..    |
|                        | 2017 | 37              | 30                | 39    | ..      | 50   | ..    | ..    |
|                        | 2018 | 39              | 28                | 42    | ..      | 48   | ..    | ..    |
|                        | 2019 | 36              | 29                | 39    | ..      | 46   | ..    | ..    |
| India                  | 2016 | 44              | 51                | 31    | 64      | 11   | 11    | 49    |
|                        | 2017 | 42              | 50                | 32    | 65      | 12   | 11    | 54    |
|                        | 2018 | 41              | 48                | 34    | 64      | 19   | 16    | ..    |
|                        | 2019 | 41              | 47                | 39    | 78      | 20   | 17    | ..    |
| Indonesia              | 2016 | 45              | 44                | 50    | ..      | 10   | 19    | 68    |
|                        | 2017 | 53              | 54                | 41    | ..      | 10   | 19    | 67    |
|                        | 2018 | 52              | 53                | 39    | ..      | ..   | 3     | 71    |
|                        | 2019 | 51              | 52                | 38    | ..      | ..   | 1     | 70    |
| Iran (Islamic Rep. of) | 2016 | 45              | 50                | 16    | 74      | 15   | 1     | 21    |
|                        | 2017 | 46              | 52                | 14    | 84      | 13   | 5     | 23    |
|                        | 2018 | 45              | 50                | 14    | 84      | 24   | 11    | 23    |
|                        | 2019 | 46              | 51                | 15    | 80      | 21   | 14    | 21    |



Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Total | Autoproducers     |       |       | Main activity producers |                   |       |         |       |
|-------|-------------------|-------|-------|-------------------------|-------------------|-------|---------|-------|
|       | Combustible fuels | Hydro | Other | Total                   | Combustible fuels | Hydro | Nuclear | Other |
| 35    | 35                | ..    | 25    | 36                      | 39                | 20    | ..      | 14    |
| 31    | 31                | ..    | 28    | 35                      | 39                | 18    | ..      | 13    |
| 28    | 28                | ..    | 0     | 38                      | 42                | 18    | ..      | 14    |
| 28    | 28                | ..    | 0     | 40                      | 46                | 16    | ..      | 17    |
| 43    | 43                | ..    | ..    | 50                      | 50                | ..    | ..      | 19    |
| 42    | 42                | ..    | ..    | 52                      | 52                | ..    | ..      | 19    |
| 44    | 44                | ..    | ..    | 52                      | 52                | ..    | ..      | 19    |
| 57    | 57                | ..    | ..    | 53                      | 53                | ..    | ..      | 21    |
| 86    | 86                | ..    | ..    | 61                      | 62                | 51    | ..      | 19    |
| 82    | 82                | ..    | ..    | 65                      | 66                | 52    | ..      | 19    |
| 42    | 42                | ..    | ..    | 66                      | 67                | 54    | ..      | 25    |
| 26    | 26                | ..    | ..    | 71                      | 72                | 38    | ..      | 31    |
| ..    | ..                | ..    | ..    | 56                      | 0                 | 56    | ..      | 22    |
| ..    | ..                | ..    | ..    | 54                      | 0                 | 55    | ..      | 28    |
| ..    | ..                | ..    | ..    | 49                      | 0                 | 49    | ..      | 13    |
| ..    | ..                | ..    | ..    | 43                      | 0                 | 43    | ..      | 13    |
| 44    | 44                | ..    | ..    | 62                      | 62                | ..    | ..      | 10    |
| 42    | 42                | ..    | ..    | 49                      | 49                | ..    | ..      | 19    |
| 43    | 43                | ..    | ..    | 50                      | 50                | ..    | ..      | 19    |
| 44    | 44                | ..    | ..    | 52                      | 53                | ..    | ..      | 15    |
| ..    | ..                | ..    | ..    | 39                      | 47                | 33    | ..      | 17    |
| ..    | ..                | ..    | ..    | 42                      | 53                | 33    | ..      | 6     |
| ..    | ..                | ..    | ..    | 44                      | 48                | 42    | ..      | 18    |
| ..    | ..                | ..    | ..    | 41                      | 52                | 35    | ..      | 10    |
| 41    | 41                | ..    | ..    | 40                      | 44                | 41    | 72      | 15    |
| 99    | 99                | ..    | ..    | 40                      | 45                | 40    | 79      | 16    |
| 92    | 92                | ..    | ..    | 41                      | 47                | 40    | 75      | 17    |
| 88    | 88                | ..    | ..    | 40                      | 46                | 42    | 82      | 17    |
| ..    | ..                | ..    | ..    | 34                      | 34                | ..    | ..      | ..    |
| ..    | ..                | ..    | ..    | 34                      | 34                | ..    | ..      | ..    |
| ..    | ..                | ..    | ..    | 34                      | 34                | ..    | ..      | ..    |
| ..    | ..                | ..    | ..    | 34                      | 34                | ..    | ..      | ..    |
| 79    | 79                | ..    | ..    | 19                      | 19                | ..    | ..      | ..    |
| 81    | 81                | ..    | ..    | 35                      | 35                | ..    | ..      | ..    |
| 70    | 70                | ..    | ..    | 13                      | 13                | ..    | ..      | ..    |
| 85    | 85                | ..    | ..    | 17                      | 17                | ..    | ..      | ..    |
| 17    | 14                | ..    | 20    | 32                      | 35                | ..    | ..      | 17    |
| 17    | 14                | ..    | 20    | 33                      | 35                | ..    | ..      | 16    |
| 18    | 16                | ..    | 20    | 33                      | 35                | ..    | ..      | 17    |
| 17    | 20                | ..    | 16    | 33                      | 36                | ..    | ..      | 17    |
| ..    | ..                | ..    | ..    | 40                      | 30                | 44    | ..      | 5     |
| ..    | ..                | ..    | ..    | 37                      | 30                | 39    | ..      | 50    |
| ..    | ..                | ..    | ..    | 39                      | 28                | 42    | ..      | 48    |
| ..    | ..                | ..    | ..    | 36                      | 29                | 39    | ..      | 46    |
| 43    | 46                | 23    | 12    | 44                      | 52                | 31    | 64      | 17    |
| 37    | 39                | 25    | 13    | 43                      | 53                | 32    | 65      | 17    |
| 27    | 27                | 30    | 9     | 44                      | 54                | 34    | 64      | 16    |
| 32    | 32                | 30    | 24    | 43                      | 52                | 39    | 78      | 16    |
| 40    | 35                | 67    | 75    | 48                      | 48                | 44    | ..      | 57    |
| 34    | 29                | 51    | 82    | 62                      | 65                | 37    | ..      | 49    |
| 9     | 10                | ..    | ..    | 73                      | 74                | 63    | ..      | 71    |
| 9     | 11                | ..    | ..    | 71                      | 72                | 63    | ..      | 70    |
| 13    | 13                | ..    | ..    | 47                      | 53                | 16    | 74      | 13    |
| 16    | 16                | ..    | ..    | 48                      | 55                | 14    | 84      | 10    |
| 15    | 15                | ..    | ..    | 47                      | 53                | 14    | 84      | 18    |
| 9     | 9                 | ..    | ..    | 49                      | 55                | 15    | 80      | 17    |

Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Country or area        | Year | Total producers |                   |       |         |      |       |       |
|------------------------|------|-----------------|-------------------|-------|---------|------|-------|-------|
|                        |      | Total           | Combustible fuels | Hydro | Nuclear | Wind | Solar | Other |
| Iraq                   | 2016 | 28              | 30                | 15    | ..      | ..   | 18    | ..    |
|                        | 2017 | 37              | 38                | 14    | ..      | ..   | 18    | ..    |
|                        | 2018 | 34              | 36                | 12    | ..      | ..   | 20    | ..    |
|                        | 2019 | 40              | 42                | 12    | ..      | ..   | 3     | ..    |
| Israel                 | 2016 | 43              | 45                | 0     | ..      | 0    | 20    | ..    |
|                        | 2017 | 43              | 45                | 0     | ..      | 76   | 18    | ..    |
|                        | 2018 | 44              | 46                | 0     | ..      | 60   | 13    | ..    |
|                        | 2019 | 42              | 46                | ..    | ..      | 60   | 17    | ..    |
| Japan                  | 2016 | 36              | 51                | 20    | 5       | 22   | 12    | 88    |
|                        | 2017 | 36              | 51                | 21    | 10      | 21   | 13    | 89    |
|                        | 2018 | 35              | 48                | 20    | 19      | 24   | 13    | 88    |
|                        | 2019 | 34              | 47                | 20    | 22      | 22   | 12    | 89    |
| Jordan                 | 2016 | 50              | 54                | 40    | ..      | 22   | 16    | ..    |
|                        | 2017 | 50              | 54                | 36    | ..      | 26   | 26    | ..    |
|                        | 2018 | 46              | 53                | 22    | ..      | 29   | 20    | ..    |
|                        | 2019 | 45              | 54                | 18    | ..      | 27   | 22    | ..    |
| Kazakhstan             | 2016 | 48              | 48                | 49    | ..      | 32   | 10    | ..    |
|                        | 2017 | 46              | 46                | 47    | ..      | 35   | 10    | ..    |
|                        | 2018 | 48              | 50                | 43    | ..      | 40   | 9     | ..    |
|                        | 2019 | 51              | 54                | 41    | ..      | 28   | 12    | ..    |
| Korea, Dem.Ppl's.Rep.  | 2016 | 24              | 13                | 31    | ..      | ..   | 15    | ..    |
|                        | 2017 | 21              | 10                | 29    | ..      | ..   | 16    | ..    |
|                        | 2018 | 21              | 8                 | 31    | ..      | ..   | 17    | ..    |
|                        | 2019 | 19              | 9                 | 26    | ..      | ..   | 18    | ..    |
| Korea, Republic of     | 2016 | 58              | 58                | 12    | 80      | 18   | 13    | 39    |
|                        | 2017 | 53              | 53                | 12    | 75      | 20   | 14    | 44    |
|                        | 2018 | 53              | 56                | 13    | 70      | 20   | 13    | 43    |
|                        | 2019 | 50              | 53                | 11    | 72      | 20   | 12    | 43    |
| Kuwait                 | 2016 | 42              | 42                | ..    | ..      | ..   | 0     | ..    |
|                        | 2017 | 44              | 44                | ..    | ..      | ..   | 11    | ..    |
|                        | 2018 | 45              | 45                | ..    | ..      | ..   | 11    | ..    |
|                        | 2019 | 44              | 44                | ..    | ..      | ..   | 13    | ..    |
| Kyrgyzstan             | 2016 | 40              | 28                | 43    | ..      | ..   | ..    | ..    |
|                        | 2017 | 46              | 20                | 52    | ..      | ..   | ..    | ..    |
|                        | 2018 | 46              | 22                | 52    | ..      | ..   | ..    | ..    |
|                        | 2019 | 45              | 20                | 50    | ..      | ..   | ..    | ..    |
| Lao People's Dem. Rep. | 2016 | 44              | 42                | 45    | ..      | ..   | 7     | ..    |
|                        | 2017 | 55              | 75                | 47    | ..      | ..   | 5     | ..    |
|                        | 2018 | 58              | 82                | 50    | ..      | ..   | 31    | ..    |
|                        | 2019 | 44              | 73                | 35    | ..      | ..   | 21    | ..    |
| Lebanon                | 2016 | 67              | 72                | 16    | ..      | ..   | 14    | ..    |
|                        | 2017 | 72              | 77                | 19    | ..      | ..   | 13    | ..    |
|                        | 2018 | 71              | 76                | 16    | ..      | ..   | 13    | ..    |
|                        | 2019 | 73              | 76                | 44    | ..      | ..   | 17    | ..    |
| Malaysia               | 2016 | 54              | 60                | 37    | ..      | ..   | 13    | ..    |
|                        | 2017 | 56              | 59                | 50    | ..      | ..   | 11    | ..    |
|                        | 2018 | 57              | 62                | 49    | ..      | ..   | 7     | ..    |
|                        | 2019 | 59              | 64                | 49    | ..      | ..   | 12    | ..    |
| Maldives               | 2016 | 28              | 28                | ..    | ..      | 23   | 16    | ..    |
|                        | 2017 | 30              | 30                | ..    | ..      | 23   | 16    | ..    |
|                        | 2018 | 23              | 24                | ..    | ..      | 23   | 16    | ..    |
|                        | 2019 | 18              | 18                | ..    | ..      | 34   | 17    | ..    |
| Mongolia               | 2016 | 54              | 56                | 34    | ..      | 35   | 6     | ..    |
|                        | 2017 | 52              | 58                | 34    | ..      | 17   | 6     | ..    |
|                        | 2018 | 51              | 57                | 30    | ..      | 25   | 11    | ..    |
|                        | 2019 | 53              | 61                | 31    | ..      | 25   | 8     | ..    |

Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Total | Autoproducers     |       |       | Total | Main activity producers |       |         |       |
|-------|-------------------|-------|-------|-------|-------------------------|-------|---------|-------|
|       | Combustible fuels | Hydro | Other |       | Combustible fuels       | Hydro | Nuclear | Other |
| 18    | ..                | ..    | 18    | 28    | 30                      | 15    | ..      | ..    |
| 18    | ..                | ..    | 18    | 37    | 38                      | 14    | ..      | ..    |
| 20    | ..                | ..    | 20    | 34    | 36                      | 12    | ..      | ..    |
| 3     | ..                | ..    | 3     | 40    | 42                      | 12    | ..      | ..    |
| 33    | 55                | 0     | 20    | 44    | 44                      | 0     | ..      | 0     |
| 31    | 44                | 0     | 20    | 45    | 45                      | 0     | ..      | 0     |
| 29    | 55                | 0     | 15    | 46    | 46                      | 0     | ..      | 0     |
| 29    | 66                | ..    | 18    | 45    | 45                      | ..    | ..      | ..    |
| 26    | 40                | 64    | 18    | 38    | 53                      | 19    | 5       | 18    |
| 25    | 39                | 68    | 17    | 39    | 52                      | 20    | 10      | 18    |
| 24    | 39                | 83    | 17    | 38    | 49                      | 20    | 19      | 18    |
| 24    | 40                | 85    | 16    | 38    | 48                      | 19    | 22      | 17    |
| 11    | 11                | ..    | ..    | 52    | 56                      | 40    | ..      | 19    |
| 11    | 11                | ..    | ..    | 52    | 56                      | 36    | ..      | 26    |
| 8     | 8                 | ..    | ..    | 47    | 55                      | 22    | ..      | 22    |
| 48    | 48                | ..    | ..    | 45    | 54                      | 18    | ..      | 23    |
| 11    | ..                | ..    | 11    | 48    | 48                      | 49    | ..      | 18    |
| 11    | ..                | ..    | 11    | 46    | 46                      | 47    | ..      | 20    |
| 11    | ..                | ..    | 11    | 48    | 50                      | 43    | ..      | 15    |
| 11    | ..                | ..    | 11    | 51    | 54                      | 41    | ..      | 16    |
| ..    | ..                | ..    | ..    | 24    | 13                      | 31    | ..      | 15    |
| ..    | ..                | ..    | ..    | 21    | 10                      | 29    | ..      | 16    |
| ..    | ..                | ..    | ..    | 21    | 8                       | 31    | ..      | 17    |
| ..    | ..                | ..    | ..    | 19    | 9                       | 26    | ..      | 18    |
| 54    | 59                | ..    | 9     | 58    | 58                      | 12    | 80      | 17    |
| 43    | 45                | ..    | 12    | 53    | 54                      | 12    | 75      | 17    |
| 41    | 45                | ..    | 12    | 54    | 57                      | 13    | 70      | 16    |
| 39    | 44                | ..    | 11    | 51    | 54                      | 11    | 72      | 15    |
| 0     | ..                | ..    | 0     | 42    | 42                      | ..    | ..      | ..    |
| 1     | ..                | ..    | 11    | 44    | 44                      | ..    | ..      | ..    |
| 1     | ..                | ..    | 11    | 45    | 45                      | ..    | ..      | ..    |
| 7     | ..                | ..    | 11    | 45    | 45                      | ..    | ..      | ..    |
| 49    | 49                | ..    | ..    | 40    | 28                      | 43    | ..      | ..    |
| 29    | 29                | ..    | ..    | 46    | 20                      | 52    | ..      | ..    |
| 74    | 74                | ..    | ..    | 46    | 21                      | 52    | ..      | ..    |
| 61    | 61                | ..    | ..    | 45    | 19                      | 50    | ..      | ..    |
| ..    | ..                | ..    | ..    | 44    | 42                      | 45    | ..      | 7     |
| ..    | ..                | ..    | ..    | 55    | 75                      | 47    | ..      | 5     |
| ..    | ..                | ..    | ..    | 58    | 82                      | 50    | ..      | 31    |
| ..    | ..                | ..    | ..    | 44    | 73                      | 35    | ..      | 21    |
| 89    | 91                | ..    | 14    | 58    | 63                      | 16    | ..      | ..    |
| 90    | 92                | ..    | 13    | 65    | 70                      | 19    | ..      | ..    |
| 79    | 82                | ..    | 13    | 68    | 74                      | 16    | ..      | ..    |
| 88    | 93                | ..    | 17    | 66    | 68                      | 44    | ..      | ..    |
| 22    | 28                | ..    | ..    | 58    | 64                      | 37    | ..      | 8     |
| 25    | 25                | 27    | 1     | 59    | 62                      | 50    | ..      | 11    |
| 31    | 42                | ..    | 1     | 59    | 64                      | 49    | ..      | 6     |
| 35    | 49                | ..    | 1     | 61    | 66                      | 49    | ..      | 10    |
| 22    | 22                | ..    | ..    | 33    | 34                      | ..    | ..      | 17    |
| 24    | 24                | ..    | ..    | 35    | 36                      | ..    | ..      | 17    |
| 26    | 26                | ..    | ..    | 22    | 23                      | ..    | ..      | 17    |
| 16    | 16                | ..    | ..    | 19    | 19                      | ..    | ..      | 18    |
| 25    | ..                | 34    | ..    | 55    | 57                      | ..    | ..      | 28    |
| 25    | ..                | 34    | ..    | 53    | 59                      | ..    | ..      | 14    |
| 23    | ..                | 30    | ..    | 52    | 58                      | ..    | ..      | 21    |
| 24    | ..                | 31    | ..    | 54    | 61                      | ..    | ..      | 19    |

Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Country or area      | Year | Total producers |                   |       |         |      |       |       |
|----------------------|------|-----------------|-------------------|-------|---------|------|-------|-------|
|                      |      | Total           | Combustible fuels | Hydro | Nuclear | Wind | Solar | Other |
| Myanmar              | 2016 | 43              | 43                | 43    | ..      | ..   | ..    | ..    |
|                      | 2017 | 41              | 42                | 39    | ..      | ..   | ..    | ..    |
|                      | 2018 | 45              | 52                | 39    | ..      | ..   | 4     | ..    |
|                      | 2019 | 38              | 43                | 33    | ..      | ..   | 23    | ..    |
| Nepal                | 2016 | 49              | ..                | 53    | ..      | 11   | 11    | ..    |
|                      | 2017 | 46              | 0                 | 49    | ..      | 11   | 10    | ..    |
|                      | 2018 | 47              | 0                 | 49    | ..      | 11   | 7     | ..    |
|                      | 2019 | 59              | 0                 | 62    | ..      | 5    | 6     | ..    |
| Oman                 | 2016 | 48              | 48                | ..    | ..      | ..   | 22    | ..    |
|                      | 2017 | 50              | 50                | ..    | ..      | ..   | 22    | ..    |
|                      | 2018 | 51              | 51                | ..    | ..      | ..   | 22    | ..    |
|                      | 2019 | 51              | 52                | ..    | ..      | ..   | 22    | ..    |
| Other Asia           | 2016 | 61              | 67                | 24    | 70      | 17   | 10    | ..    |
|                      | 2017 | 60              | 70                | 21    | 50      | 20   | 11    | ..    |
|                      | 2018 | 60              | 68                | 19    | 70      | 19   | 11    | 0     |
|                      | 2019 | 56              | 62                | 21    | 95      | 19   | 11    | 29    |
| Pakistan             | 2016 | 49              | 48                | 55    | 70      | 27   | 6     | 33    |
|                      | 2017 | 45              | 43                | 52    | 72      | 20   | 19    | 35    |
|                      | 2018 | 44              | 44                | 44    | 79      | 23   | 19    | 31    |
|                      | 2019 | 41              | 42                | 38    | 73      | 30   | 19    | 26    |
| Philippines          | 2016 | 48              | 53                | 26    | ..      | 26   | 16    | 66    |
|                      | 2017 | 47              | 51                | 30    | ..      | 29   | 15    | 61    |
|                      | 2018 | 47              | 52                | 29    | ..      | 31   | 16    | 61    |
|                      | 2019 | 47              | 52                | 24    | ..      | 28   | 15    | 63    |
| Qatar                | 2016 | 56              | 56                | ..    | ..      | ..   | ..    | ..    |
|                      | 2017 | 51              | 51                | ..    | ..      | ..   | ..    | ..    |
|                      | 2018 | 52              | 52                | ..    | ..      | ..   | ..    | ..    |
|                      | 2019 | 54              | 54                | ..    | ..      | ..   | ..    | ..    |
| Saudi Arabia         | 2016 | 53              | 53                | ..    | ..      | ..   | 22    | ..    |
|                      | 2017 | 50              | 50                | ..    | ..      | 20   | 22    | ..    |
|                      | 2018 | 51              | 51                | ..    | ..      | 20   | 29    | ..    |
|                      | 2019 | 51              | 51                | ..    | ..      | 20   | 23    | ..    |
| Singapore            | 2016 | 44              | 44                | ..    | ..      | ..   | 17    | ..    |
|                      | 2017 | 44              | 44                | ..    | ..      | ..   | 18    | ..    |
|                      | 2018 | 45              | 45                | ..    | ..      | ..   | 24    | ..    |
|                      | 2019 | 50              | 50                | ..    | ..      | ..   | 17    | ..    |
| Sri Lanka            | 2016 | 41              | 53                | 28    | ..      | 31   | 12    | ..    |
|                      | 2017 | 42              | 55                | 27    | ..      | 33   | 24    | ..    |
|                      | 2018 | 44              | 50                | 41    | ..      | 29   | 16    | ..    |
|                      | 2019 | 44              | 59                | 30    | ..      | 31   | 19    | ..    |
| State of Palestine   | 2016 | 33              | 35                | ..    | ..      | ..   | 19    | ..    |
|                      | 2017 | 33              | 36                | ..    | ..      | ..   | 17    | ..    |
|                      | 2018 | 24              | 26                | ..    | ..      | ..   | 17    | ..    |
|                      | 2019 | 39              | 49                | ..    | ..      | ..   | 17    | ..    |
| Syrian Arab Republic | 2016 | 21              | 24                | 7     | ..      | ..   | ..    | ..    |
|                      | 2017 | 22              | 25                | 6     | ..      | ..   | ..    | ..    |
|                      | 2018 | 21              | 23                | 6     | ..      | ..   | ..    | ..    |
|                      | 2019 | 20              | 22                | 6     | ..      | ..   | ..    | ..    |
| Tajikistan           | 2016 | 30              | 10                | 32    | ..      | ..   | ..    | ..    |
|                      | 2017 | 31              | 16                | 33    | ..      | ..   | ..    | ..    |
|                      | 2018 | 34              | 21                | 36    | ..      | ..   | ..    | ..    |
|                      | 2019 | 37              | 24                | 38    | ..      | ..   | ..    | ..    |
| Thailand             | 2016 | 50              | 59                | 12    | ..      | 8    | 9     | 38    |
|                      | 2017 | 47              | 56                | 16    | ..      | 20   | 11    | 57    |
|                      | 2018 | 46              | 54                | 24    | ..      | 17   | 10    | 53    |
|                      | 2019 | 48              | 57                | 20    | ..      | 28   | 12    | 49    |

Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Total | Autoproducers     |       |       | Main activity producers |                   |       |         |       |
|-------|-------------------|-------|-------|-------------------------|-------------------|-------|---------|-------|
|       | Combustible fuels | Hydro | Other | Total                   | Combustible fuels | Hydro | Nuclear | Other |
| 43    | 43                | 43    | ..    | 43                      | 43                | 43    | ..      | ..    |
| 55    | 56                | 50    | ..    | 36                      | 30                | 39    | ..      | ..    |
| 53    | 65                | 37    | 4     | 38                      | 33                | 40    | ..      | ..    |
| 44    | 49                | 35    | 23    | 31                      | 31                | 32    | ..      | ..    |
| 18    | ..                | 18    | ..    | 53                      | ..                | 57    | ..      | 11    |
| 18    | ..                | 18    | ..    | 49                      | 0                 | 52    | ..      | 11    |
| 14    | ..                | 14    | ..    | 51                      | 0                 | 54    | ..      | 10    |
| 15    | ..                | 15    | ..    | 64                      | 0                 | 68    | ..      | 6     |
| ..    | ..                | ..    | ..    | 48                      | 48                | ..    | ..      | 22    |
| ..    | ..                | ..    | ..    | 50                      | 50                | ..    | ..      | 22    |
| ..    | ..                | ..    | ..    | 51                      | 51                | ..    | ..      | 22    |
| ..    | ..                | ..    | ..    | 51                      | 52                | ..    | ..      | 3     |
| 25    | 27                | ..    | 6     | 80                      | 94                | 24    | 70      | 55    |
| 23    | 26                | ..    | 7     | 79                      | 98                | 21    | 50      | 66    |
| 25    | 29                | ..    | 9     | 80                      | 94                | 19    | 70      | 64    |
| 23    | 28                | ..    | 9     | 75                      | 82                | 21    | 95      | 56    |
| 39    | 41                | ..    | 33    | 50                      | 48                | 55    | 70      | 15    |
| 38    | 41                | ..    | 35    | 45                      | 43                | 52    | 72      | 20    |
| 39    | 46                | ..    | 31    | 44                      | 44                | 44    | 79      | 22    |
| 37    | 47                | ..    | 26    | 41                      | 42                | 38    | 73      | 27    |
| 25    | 26                | 12    | ..    | 48                      | 54                | 26    | ..      | 48    |
| 26    | 26                | 12    | ..    | 47                      | 52                | 30    | ..      | 44    |
| 26    | 26                | 12    | ..    | 48                      | 53                | 29    | ..      | 45    |
| 26    | 26                | 12    | ..    | 47                      | 52                | 24    | ..      | 45    |
| 62    | 62                | ..    | ..    | 23                      | 23                | ..    | ..      | ..    |
| 57    | 57                | ..    | ..    | 21                      | 21                | ..    | ..      | ..    |
| 59    | 59                | ..    | ..    | 11                      | 11                | ..    | ..      | ..    |
| 61    | 61                | ..    | ..    | 14                      | 14                | ..    | ..      | ..    |
| 80    | 80                | ..    | ..    | 48                      | 48                | ..    | ..      | 22    |
| 70    | 70                | ..    | ..    | 46                      | 46                | ..    | ..      | 22    |
| 90    | 90                | ..    | ..    | 38                      | 38                | ..    | ..      | 29    |
| 51    | 51                | ..    | ..    | 51                      | 52                | ..    | ..      | 23    |
| 96    | 96                | ..    | ..    | 42                      | 42                | ..    | ..      | 17    |
| 80    | 80                | ..    | ..    | 42                      | 43                | ..    | ..      | 18    |
| 95    | 95                | ..    | ..    | 42                      | 43                | ..    | ..      | 24    |
| 93    | 93                | ..    | ..    | 48                      | 48                | ..    | ..      | 17    |
| 25    | 43                | 25    | 17    | 43                      | 53                | 29    | ..      | 27    |
| 31    | 34                | 31    | 30    | 43                      | 56                | 26    | ..      | 29    |
| 33    | 31                | 36    | 18    | 46                      | 50                | 42    | ..      | 23    |
| 26    | 31                | 28    | 12    | 47                      | 59                | 31    | ..      | 27    |
| 62    | 89                | ..    | 19    | 27                      | 28                | ..    | ..      | 19    |
| 50    | 75                | ..    | 17    | 29                      | 30                | ..    | ..      | 17    |
| 39    | 61                | ..    | 17    | 20                      | 21                | ..    | ..      | 17    |
| 30    | 57                | ..    | 17    | 41                      | 48                | ..    | ..      | 17    |
| 8     | 8                 | ..    | ..    | 23                      | 26                | 7     | ..      | ..    |
| 9     | 9                 | ..    | ..    | 23                      | 27                | 6     | ..      | ..    |
| 8     | 8                 | ..    | ..    | 22                      | 25                | 6     | ..      | ..    |
| 7     | 7                 | ..    | ..    | 21                      | 24                | 6     | ..      | ..    |
| ..    | ..                | ..    | ..    | 30                      | 10                | 32    | ..      | ..    |
| ..    | ..                | ..    | ..    | 31                      | 16                | 33    | ..      | ..    |
| ..    | ..                | ..    | ..    | 34                      | 21                | 36    | ..      | ..    |
| ..    | ..                | ..    | ..    | 37                      | 24                | 38    | ..      | ..    |
| 35    | 37                | 14    | 17    | 59                      | 76                | 12    | ..      | 3     |
| 37    | 39                | 17    | 23    | 53                      | 67                | 16    | ..      | 6     |
| 43    | 46                | 29    | 23    | 48                      | 60                | 24    | ..      | 6     |
| 46    | 49                | 27    | 26    | 49                      | 63                | 20    | ..      | 11    |

Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Country or area        | Year        | Total producers |                   |           |           |           |           |           |
|------------------------|-------------|-----------------|-------------------|-----------|-----------|-----------|-----------|-----------|
|                        |             | Total           | Combustible fuels | Hydro     | Nuclear   | Wind      | Solar     | Other     |
| Timor-Leste            | 2016        | 17              | 17                | 53        | ..        | ..        | 18        | ..        |
|                        | 2017        | 17              | 17                | 53        | ..        | ..        | 18        | ..        |
|                        | 2018        | 18              | 18                | 53        | ..        | ..        | 18        | ..        |
|                        | 2019        | 21              | 21                | 53        | ..        | ..        | 18        | ..        |
| Turkey                 | 2016        | 40              | 48                | 29        | ..        | 31        | 14        | 66        |
|                        | 2017        | 40              | 52                | 24        | ..        | 31        | 10        | 65        |
|                        | 2018        | 39              | 51                | 24        | ..        | 33        | 18        | 65        |
|                        | 2019        | 38              | 42                | 36        | ..        | 33        | 18        | 61        |
| Turkmenistan           | 2016        | 55              | 55                | ..        | ..        | ..        | ..        | ..        |
|                        | 2017        | 49              | 49                | 36        | ..        | ..        | ..        | ..        |
|                        | 2018        | 49              | 49                | 36        | ..        | ..        | ..        | ..        |
|                        | 2019        | 49              | 49                | 36        | ..        | ..        | ..        | ..        |
| United Arab Emirates   | 2016        | 51              | 52                | ..        | ..        | ..        | 29        | ..        |
|                        | 2017        | 51              | 51                | ..        | ..        | ..        | 28        | ..        |
|                        | 2018        | 50              | 51                | ..        | ..        | ..        | 25        | ..        |
|                        | 2019        | 48              | 49                | ..        | ..        | ..        | 25        | ..        |
| Uzbekistan             | 2016        | 47              | 48                | 42        | ..        | ..        | 1         | ..        |
|                        | 2017        | 48              | 48                | 49        | ..        | ..        | 2         | ..        |
|                        | 2018        | 50              | 53                | 35        | ..        | ..        | 1         | ..        |
|                        | 2019        | 45              | 46                | 39        | ..        | 33        | 0         | ..        |
| Viet Nam               | 2016        | 48              | 51                | 43        | ..        | 15        | ..        | ..        |
|                        | 2017        | 51              | 48                | 56        | ..        | 15        | ..        | ..        |
|                        | 2018        | 54              | 56                | 52        | ..        | 15        | 11        | ..        |
|                        | 2019        | 47              | 53                | 53        | ..        | 9         | 0         | ..        |
| Yemen                  | 2016        | 31              | 35                | ..        | ..        | ..        | 7         | ..        |
|                        | 2017        | 26              | 29                | ..        | ..        | ..        | 9         | ..        |
|                        | 2018        | 23              | 23                | ..        | ..        | ..        | 22        | ..        |
|                        | 2019        | 23              | 23                | ..        | ..        | ..        | 22        | ..        |
| <b>Europe</b>          | <b>2016</b> | <b>40</b>       | <b>40</b>         | <b>34</b> | <b>78</b> | <b>23</b> | <b>12</b> | <b>69</b> |
|                        | <b>2017</b> | <b>39</b>       | <b>41</b>         | <b>31</b> | <b>78</b> | <b>25</b> | <b>12</b> | <b>67</b> |
|                        | <b>2018</b> | <b>39</b>       | <b>39</b>         | <b>34</b> | <b>78</b> | <b>24</b> | <b>12</b> | <b>64</b> |
|                        | <b>2019</b> | <b>38</b>       | <b>39</b>         | <b>32</b> | <b>78</b> | <b>26</b> | <b>12</b> | <b>65</b> |
| Albania                | 2016        | 42              | ..                | 45        | ..        | ..        | ..        | ..        |
|                        | 2017        | 24              | ..                | 25        | ..        | ..        | ..        | ..        |
|                        | 2018        | 44              | ..                | 46        | ..        | ..        | ..        | ..        |
|                        | 2019        | 25              | ..                | 27        | ..        | ..        | 17        | ..        |
| Andorra                | 2016        | 22              | 32                | 21        | ..        | ..        | 17        | ..        |
|                        | 2017        | 23              | 39                | 21        | ..        | ..        | 16        | ..        |
|                        | 2018        | 29              | 46                | 28        | ..        | ..        | 7         | ..        |
|                        | 2019        | 23              | 48                | 21        | ..        | ..        | 9         | ..        |
| Austria                | 2016        | 31              | 30                | 35        | ..        | 22        | 11        | 0         |
|                        | 2017        | 33              | 37                | 34        | ..        | 26        | 11        | 1         |
|                        | 2018        | 31              | 35                | 32        | ..        | 22        | 11        | 3         |
|                        | 2019        | 33              | 38                | 34        | ..        | 26        | 11        | 2         |
| Belarus                | 2016        | 38              | 39                | 23        | ..        | 14        | 7         | ..        |
|                        | 2017        | 39              | 39                | 47        | ..        | 13        | 13        | ..        |
|                        | 2018        | 44              | 45                | 38        | ..        | 12        | 13        | ..        |
|                        | 2019        | 45              | 46                | 41        | ..        | 18        | 13        | ..        |
| Belgium                | 2016        | 45              | 42                | 12        | 84        | 26        | 11        | 31        |
|                        | 2017        | 45              | 44                | 11        | 81        | 27        | 10        | 31        |
|                        | 2018        | 38              | 46                | 11        | 55        | 26        | 11        | 27        |
|                        | 2019        | 44              | 48                | 10        | 84        | 29        | 10        | 31        |
| Bosnia and Herzegovina | 2016        | 46              | 63                | 30        | ..        | ..        | 30        | ..        |
|                        | 2017        | 41              | 62                | 21        | ..        | ..        | 15        | ..        |
|                        | 2018        | 49              | 67                | 33        | ..        | 23        | 13        | ..        |
|                        | 2019        | 45              | 59                | 31        | ..        | 33        | 16        | ..        |

Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Autoproducers |                   |           |           | Main activity producers |                   |           |           |           |
|---------------|-------------------|-----------|-----------|-------------------------|-------------------|-----------|-----------|-----------|
| Total         | Combustible fuels | Hydro     | Other     | Total                   | Combustible fuels | Hydro     | Nuclear   | Other     |
| ..            | ..                | ..        | ..        | 17                      | 17                | 53        | ..        | 18        |
| ..            | ..                | ..        | ..        | 17                      | 17                | 53        | ..        | 18        |
| ..            | ..                | ..        | ..        | 18                      | 18                | 53        | ..        | 18        |
| ..            | ..                | ..        | ..        | 21                      | 21                | 53        | ..        | 18        |
| 45            | 50                | 18        | 27        | 40                      | 47                | 29        | ..        | 34        |
| 37            | 46                | 20        | 15        | 40                      | 52                | 24        | ..        | 30        |
| 35            | 42                | 22        | 20        | 40                      | 52                | 24        | ..        | 32        |
| 35            | 41                | 27        | 19        | 38                      | 42                | 36        | ..        | 32        |
| ..            | ..                | ..        | ..        | 55                      | 55                | ..        | ..        | ..        |
| ..            | ..                | ..        | ..        | 49                      | 49                | 36        | ..        | ..        |
| ..            | ..                | ..        | ..        | 49                      | 49                | 36        | ..        | ..        |
| ..            | ..                | ..        | ..        | 49                      | 49                | 36        | ..        | ..        |
| ..            | ..                | ..        | ..        | 51                      | 52                | ..        | ..        | 29        |
| ..            | ..                | ..        | ..        | 51                      | 51                | ..        | ..        | 28        |
| ..            | ..                | ..        | ..        | 50                      | 51                | ..        | ..        | 25        |
| ..            | ..                | ..        | ..        | 48                      | 49                | ..        | ..        | 25        |
| ..            | ..                | ..        | ..        | 47                      | 48                | 42        | ..        | 1         |
| ..            | ..                | ..        | ..        | 48                      | 48                | 49        | ..        | 2         |
| ..            | ..                | ..        | ..        | 50                      | 53                | 35        | ..        | 1         |
| ..            | ..                | ..        | ..        | 45                      | 46                | 39        | ..        | 20        |
| 10            | 11                | 3         | 4         | 53                      | 61                | 43        | ..        | 15        |
| 9             | 9                 | 3         | 4         | 57                      | 58                | 57        | ..        | 14        |
| 9             | 9                 | 3         | 4         | 61                      | 68                | 53        | ..        | 14        |
| 9             | 9                 | 3         | 4         | 51                      | 62                | 54        | ..        | 1         |
| 13            | 25                | ..        | 7         | 36                      | 36                | ..        | ..        | ..        |
| 14            | 24                | ..        | 9         | 29                      | 29                | ..        | ..        | ..        |
| 23            | 24                | ..        | 22        | 22                      | 22                | ..        | ..        | ..        |
| 24            | 27                | ..        | 22        | 23                      | 23                | ..        | ..        | ..        |
| <b>36</b>     | <b>43</b>         | <b>35</b> | <b>13</b> | <b>40</b>               | <b>40</b>         | <b>34</b> | <b>78</b> | <b>20</b> |
| <b>36</b>     | <b>43</b>         | <b>33</b> | <b>13</b> | <b>40</b>               | <b>41</b>         | <b>31</b> | <b>78</b> | <b>21</b> |
| <b>36</b>     | <b>43</b>         | <b>35</b> | <b>14</b> | <b>39</b>               | <b>39</b>         | <b>34</b> | <b>78</b> | <b>21</b> |
| <b>35</b>     | <b>44</b>         | <b>35</b> | <b>13</b> | <b>38</b>               | <b>38</b>         | <b>32</b> | <b>78</b> | <b>21</b> |
| ..            | ..                | ..        | ..        | 43                      | ..                | 45        | ..        | ..        |
| ..            | ..                | ..        | ..        | 24                      | ..                | 25        | ..        | ..        |
| ..            | ..                | ..        | ..        | 44                      | ..                | 46        | ..        | ..        |
| ..            | ..                | ..        | ..        | 25                      | ..                | 27        | ..        | 17        |
| ..            | ..                | ..        | ..        | 22                      | 32                | 21        | ..        | 17        |
| ..            | ..                | ..        | ..        | 23                      | 39                | 21        | ..        | 16        |
| ..            | ..                | ..        | ..        | 29                      | 46                | 28        | ..        | 7         |
| ..            | ..                | ..        | ..        | 23                      | 48                | 21        | ..        | 9         |
| 40            | 49                | 11        | ..        | 30                      | 24                | 36        | ..        | 19        |
| 53            | 66                | 13        | ..        | 31                      | 29                | 35        | ..        | 22        |
| 53            | 66                | 13        | ..        | 29                      | 27                | 33        | ..        | 19        |
| 41            | 47                | 14        | ..        | 32                      | 34                | 35        | ..        | 21        |
| 46            | 46                | 40        | 11        | 38                      | 38                | 21        | ..        | 11        |
| 52            | 53                | 34        | 13        | 38                      | 38                | 48        | ..        | 13        |
| 47            | 49                | 46        | 13        | 44                      | 44                | 38        | ..        | 13        |
| 50            | 53                | 40        | 14        | 45                      | 46                | 41        | ..        | 16        |
| 25            | 53                | ..        | 11        | 51                      | 40                | 12        | 84        | 26        |
| 26            | 59                | ..        | 10        | 50                      | 41                | 11        | 81        | 27        |
| 25            | 58                | ..        | 11        | 42                      | 44                | 11        | 55        | 26        |
| 25            | 60                | ..        | 11        | 52                      | 45                | 10        | 84        | 29        |
| 20            | 20                | ..        | ..        | 48                      | 68                | 30        | ..        | 30        |
| 22            | 22                | ..        | ..        | 43                      | 66                | 21        | ..        | 15        |
| 71            | 71                | ..        | ..        | 49                      | 67                | 33        | ..        | 21        |
| 66            | 66                | ..        | ..        | 44                      | 59                | 31        | ..        | 30        |

Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Country or area | Year | Total producers |                   |       |         |      |       |       |
|-----------------|------|-----------------|-------------------|-------|---------|------|-------|-------|
|                 |      | Total           | Combustible fuels | Hydro | Nuclear | Wind | Solar | Other |
| Bulgaria        | 2016 | 47              | 66                | 16    | 92      | 23   | 15    | ..    |
|                 | 2017 | 47              | 71                | 12    | 90      | 25   | 15    | ..    |
|                 | 2018 | 46              | 61                | 18    | 92      | 22   | 15    | ..    |
|                 | 2019 | 44              | 60                | 11    | 94      | 21   | 16    | ..    |
| Croatia         | 2016 | 31              | 26                | 37    | ..      | 24   | 14    | ..    |
|                 | 2017 | 28              | 28                | 29    | ..      | 24   | 15    | ..    |
|                 | 2018 | 31              | 24                | 40    | ..      | 26   | 13    | 2     |
|                 | 2019 | 31              | 33                | 31    | ..      | 26   | 11    | 105   |
| Czechia         | 2016 | 43              | 46                | 16    | 64      | 20   | 12    | ..    |
|                 | 2017 | 45              | 45                | 15    | 75      | 22   | 12    | ..    |
|                 | 2018 | 45              | 45                | 14    | 80      | 22   | 13    | ..    |
|                 | 2019 | 45              | 44                | 16    | 80      | 24   | 13    | ..    |
| Denmark         | 2016 | 25              | 24                | 24    | ..      | 28   | 10    | ..    |
|                 | 2017 | 25              | 22                | 29    | ..      | 31   | 9     | ..    |
|                 | 2018 | 23              | 22                | 24    | ..      | 26   | 11    | ..    |
|                 | 2019 | 22              | 18                | 28    | ..      | 30   | 10    | ..    |
| Estonia         | 2016 | 54              | 58                | 67    | ..      | 22   | 11    | ..    |
|                 | 2017 | 59              | 64                | 41    | ..      | 26   | 11    | ..    |
|                 | 2018 | 50              | 54                | 23    | ..      | 23   | 11    | ..    |
|                 | 2019 | 32              | 34                | 36    | ..      | 25   | 7     | ..    |
| Faeroe Islands  | 2016 | 30              | 27                | 32    | ..      | 42   | ..    | ..    |
|                 | 2017 | 31              | 27                | 33    | ..      | 48   | ..    | ..    |
|                 | 2018 | 33              | 30                | 32    | ..      | 51   | ..    | ..    |
|                 | 2019 | 34              | 34                | 31    | ..      | 42   | ..    | ..    |
| Finland         | 2016 | 48              | 35                | 56    | 96      | 22   | 6     | ..    |
|                 | 2017 | 45              | 32                | 52    | 92      | 27   | 7     | ..    |
|                 | 2018 | 47              | 36                | 46    | 93      | 33   | 7     | ..    |
|                 | 2019 | 45              | 33                | 43    | 98      | 30   | 8     | ..    |
| France          | 2016 | 48              | 29                | 29    | 73      | 21   | 13    | 56    |
|                 | 2017 | 48              | 38                | 24    | 72      | 21   | 13    | 67    |
|                 | 2018 | 49              | 31                | 31    | 75      | 22   | 13    | 60    |
|                 | 2019 | 48              | 36                | 27    | 72      | 24   | 13    | 58    |
| Germany         | 2016 | 36              | 50                | 27    | 89      | 18   | 11    | 62    |
|                 | 2017 | 35              | 49                | 27    | 81      | 22   | 11    | 53    |
|                 | 2018 | 32              | 43                | 25    | 80      | 21   | 12    | 49    |
|                 | 2019 | 30              | 38                | 27    | 90      | 24   | 11    | 47    |
| Gibraltar       | 2016 | 57              | 57                | ..    | ..      | ..   | ..    | 11    |
|                 | 2017 | 48              | 48                | ..    | ..      | ..   | ..    | 11    |
|                 | 2018 | 57              | 57                | ..    | ..      | ..   | ..    | 11    |
|                 | 2019 | 58              | 58                | ..    | ..      | ..   | ..    | 11    |
| Greece          | 2016 | 32              | 42                | 19    | ..      | 25   | 17    | ..    |
|                 | 2017 | 32              | 44                | 14    | ..      | 24   | 17    | ..    |
|                 | 2018 | 31              | 40                | 19    | ..      | 25   | 16    | ..    |
|                 | 2019 | 27              | 35                | 14    | ..      | 23   | 18    | ..    |
| Guernsey        | 2016 | 9               | 9                 | ..    | ..      | ..   | ..    | ..    |
|                 | 2017 | 7               | 7                 | ..    | ..      | ..   | ..    | ..    |
|                 | 2018 | 5               | 5                 | ..    | ..      | ..   | ..    | ..    |
|                 | 2019 | 14              | 14                | ..    | ..      | ..   | 22    | ..    |
| Hungary         | 2016 | 42              | 27                | 52    | 92      | 24   | 12    | 24    |
|                 | 2017 | 42              | 29                | 44    | 92      | 26   | 12    | 24    |
|                 | 2018 | 40              | 28                | 44    | 89      | 21   | 10    | 42    |
|                 | 2019 | 39              | 29                | 43    | 92      | 26   | 12    | 36    |
| Iceland         | 2016 | 76              | 0                 | 77    | ..      | 34   | ..    | 87    |
|                 | 2017 | 78              | 0                 | 80    | ..      | 38   | ..    | 83    |
|                 | 2018 | 76              | 0                 | 75    | ..      | 21   | ..    | 91    |
|                 | 2019 | 75              | 0                 | 73    | ..      | 31   | ..    | 91    |



Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Autoproducers |                   |       |       | Main activity producers |                   |       |         |       |
|---------------|-------------------|-------|-------|-------------------------|-------------------|-------|---------|-------|
| Total         | Combustible fuels | Hydro | Other | Total                   | Combustible fuels | Hydro | Nuclear | Other |
| 16            | 28                | ..    | ..    | 48                      | 68                | 16    | 92      | 19    |
| 18            | 32                | ..    | ..    | 48                      | 74                | 12    | 90      | 19    |
| 19            | 33                | ..    | ..    | 47                      | 63                | 18    | 92      | 18    |
| 23            | 49                | ..    | ..    | 45                      | 61                | 11    | 94      | 18    |
| 23            | 23                | 40    | ..    | 31                      | 26                | 37    | ..      | 23    |
| 30            | 30                | 24    | ..    | 27                      | 27                | 29    | ..      | 23    |
| 26            | 26                | 25    | ..    | 31                      | 23                | 40    | ..      | 24    |
| 26            | 26                | 25    | ..    | 31                      | 34                | 31    | ..      | 25    |
| 57            | 59                | 36    | ..    | 42                      | 45                | 14    | 64      | 13    |
| 54            | 55                | 38    | ..    | 44                      | 44                | 13    | 75      | 13    |
| 52            | 54                | 31    | ..    | 44                      | 43                | 12    | 80      | 14    |
| 52            | 53                | 36    | ..    | 44                      | 43                | 14    | 80      | 14    |
| 22            | 38                | ..    | 10    | 25                      | 23                | 24    | ..      | 28    |
| 21            | 38                | ..    | 9     | 25                      | 21                | 29    | ..      | 31    |
| 22            | 38                | ..    | 11    | 23                      | 21                | 24    | ..      | 26    |
| 22            | 43                | ..    | 10    | 22                      | 16                | 28    | ..      | 30    |
| 95            | 112               | ..    | 25    | 53                      | 58                | 67    | ..      | 21    |
| 70            | 75                | ..    | ..    | 59                      | 64                | 41    | ..      | 26    |
| 54            | 56                | ..    | 11    | 50                      | 54                | 23    | ..      | 22    |
| 45            | 45                | ..    | 23    | 32                      | 34                | 34    | ..      | 20    |
| ..            | ..                | ..    | ..    | 30                      | 27                | 32    | ..      | 42    |
| ..            | ..                | ..    | ..    | 31                      | 27                | 33    | ..      | 48    |
| ..            | ..                | ..    | ..    | 33                      | 30                | 32    | ..      | 51    |
| ..            | ..                | ..    | ..    | 34                      | 34                | 31    | ..      | 42    |
| 53            | 51                | 64    | 8     | 48                      | 30                | 55    | 96      | 22    |
| 49            | 48                | 61    | 7     | 44                      | 27                | 51    | 92      | 28    |
| 52            | 53                | 57    | 7     | 46                      | 31                | 46    | 93      | 33    |
| 50            | 54                | 41    | 8     | 44                      | 27                | 43    | 98      | 30    |
| 29            | 38                | 37    | 14    | 49                      | 28                | 29    | 73      | 19    |
| 30            | 40                | 32    | 15    | 49                      | 38                | 24    | 72      | 19    |
| 31            | 41                | 38    | 15    | 50                      | 28                | 31    | 75      | 19    |
| 31            | 42                | 35    | 15    | 49                      | 34                | 27    | 72      | 21    |
| 59            | 59                | 47    | 62    | 34                      | 49                | 27    | 89      | 15    |
| 56            | 56                | 47    | 56    | 33                      | 48                | 27    | 81      | 17    |
| 52            | 52                | 31    | 55    | 31                      | 41                | 25    | 80      | 17    |
| 51            | 51                | 32    | 58    | 29                      | 36                | 27    | 90      | 18    |
| ..            | ..                | ..    | ..    | 57                      | 57                | ..    | ..      | 11    |
| ..            | ..                | ..    | ..    | 48                      | 48                | ..    | ..      | 11    |
| ..            | ..                | ..    | ..    | 57                      | 57                | ..    | ..      | 11    |
| ..            | ..                | ..    | ..    | 58                      | 58                | ..    | ..      | 11    |
| 39            | 39                | ..    | ..    | 32                      | 42                | 19    | ..      | 21    |
| 39            | 39                | ..    | ..    | 32                      | 44                | 14    | ..      | 21    |
| 45            | 45                | ..    | ..    | 31                      | 40                | 19    | ..      | 21    |
| 50            | 50                | ..    | ..    | 26                      | 34                | 14    | ..      | 21    |
| ..            | ..                | ..    | ..    | 9                       | 9                 | ..    | ..      | ..    |
| ..            | ..                | ..    | ..    | 7                       | 7                 | ..    | ..      | ..    |
| ..            | ..                | ..    | ..    | 5                       | 5                 | ..    | ..      | ..    |
| ..            | ..                | ..    | ..    | 14                      | 14                | ..    | ..      | 22    |
| 25            | 37                | ..    | 13    | 43                      | 27                | 52    | 92      | 23    |
| 24            | 39                | ..    | 13    | 44                      | 28                | 44    | 92      | 24    |
| 24            | 43                | ..    | 14    | 41                      | 27                | 44    | 89      | 15    |
| 22            | 42                | ..    | 14    | 41                      | 28                | 43    | 92      | 16    |
| ..            | ..                | ..    | ..    | 76                      | 0                 | 77    | ..      | 87    |
| ..            | ..                | ..    | ..    | 78                      | 0                 | 80    | ..      | 83    |
| ..            | ..                | ..    | ..    | 76                      | 0                 | 75    | ..      | 91    |
| ..            | ..                | ..    | ..    | 75                      | 0                 | 73    | ..      | 91    |

Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Country or area | Year | Total producers |                   |       |         |      |       |       |
|-----------------|------|-----------------|-------------------|-------|---------|------|-------|-------|
|                 |      | Total           | Combustible fuels | Hydro | Nuclear | Wind | Solar | Other |
| Ireland         | 2016 | 35              | 40                | 21    | ..      | 25   | 11    | ..    |
|                 | 2017 | 33              | 38                | 19    | ..      | 26   | 8     | ..    |
|                 | 2018 | 32              | 36                | 20    | ..      | 27   | 8     | ..    |
|                 | 2019 | 32              | 35                | 24    | ..      | 27   | 8     | ..    |
| Isle of Man     | 2016 | 27              | 27                | 28    | ..      | ..   | ..    | ..    |
|                 | 2017 | 28              | 28                | 36    | ..      | ..   | ..    | ..    |
|                 | 2018 | 30              | 30                | 23    | ..      | ..   | ..    | ..    |
|                 | 2019 | 35              | 35                | 30    | ..      | ..   | ..    | ..    |
| Italy           | 2016 | 29              | 37                | 23    | ..      | 22   | 13    | 73    |
|                 | 2017 | 30              | 39                | 19    | ..      | 21   | 14    | 71    |
|                 | 2018 | 29              | 36                | 26    | ..      | 20   | 13    | 69    |
|                 | 2019 | 29              | 36                | 24    | ..      | 22   | 13    | 72    |
| Jersey          | 2016 | 10              | 10                | ..    | ..      | ..   | ..    | ..    |
|                 | 2017 | 7               | 7                 | ..    | ..      | ..   | ..    | ..    |
|                 | 2018 | 7               | 7                 | ..    | ..      | ..   | ..    | ..    |
|                 | 2019 | 7               | 7                 | ..    | ..      | ..   | ..    | ..    |
| Kosovo          | 2016 | 68              | 72                | 33    | ..      | ..   | ..    | ..    |
|                 | 2017 | 48              | 51                | 25    | ..      | 0    | 1     | ..    |
|                 | 2018 | 48              | 50                | 39    | ..      | 10   | 3     | ..    |
|                 | 2019 | 45              | 54                | 11    | ..      | 11   | 11    | ..    |
| Latvia          | 2016 | 25              | 33                | 18    | ..      | 21   | ..    | ..    |
|                 | 2017 | 29              | 26                | 32    | ..      | 22   | 7     | ..    |
|                 | 2018 | 26              | 37                | 18    | ..      | 18   | 7     | ..    |
|                 | 2019 | 25              | 38                | 15    | ..      | 23   | 11    | ..    |
| Liechtenstein   | 2016 | 45              | 27                | 77    | ..      | ..   | 19    | ..    |
|                 | 2017 | 44              | 26                | 78    | ..      | ..   | 19    | ..    |
|                 | 2018 | 39              | 21                | 71    | ..      | ..   | 19    | ..    |
|                 | 2019 | 44              | 24                | 85    | ..      | ..   | 19    | ..    |
| Lithuania       | 2016 | 13              | 9                 | 14    | ..      | 25   | 11    | ..    |
|                 | 2017 | 14              | 8                 | 15    | ..      | 30   | 10    | ..    |
|                 | 2018 | 12              | 7                 | 12    | ..      | 25   | 12    | ..    |
|                 | 2019 | 13              | 8                 | 12    | ..      | 32   | 10    | ..    |
| Luxembourg      | 2016 | 15              | 39                | 13    | ..      | 10   | 9     | ..    |
|                 | 2017 | 15              | 41                | 12    | ..      | 22   | 10    | ..    |
|                 | 2018 | 15              | 43                | 11    | ..      | 24   | 10    | ..    |
|                 | 2019 | 12              | 41                | 8     | ..      | 24   | 9     | ..    |
| Malta           | 2016 | 17              | 17                | ..    | ..      | ..   | 16    | ..    |
|                 | 2017 | 27              | 29                | ..    | ..      | 7    | 17    | ..    |
|                 | 2018 | 31              | 34                | ..    | ..      | 7    | 16    | ..    |
|                 | 2019 | 32              | 36                | ..    | ..      | 7    | 16    | ..    |
| Montenegro      | 2016 | 41              | 68                | 32    | ..      | ..   | ..    | ..    |
|                 | 2017 | 30              | 68                | 18    | ..      | 15   | ..    | ..    |
|                 | 2018 | 42              | 73                | 37    | ..      | 14   | 8     | ..    |
|                 | 2019 | 39              | 76                | 28    | ..      | 28   | 5     | ..    |
| Netherlands     | 2016 | 38              | 42                | 31    | 93      | 22   | 9     | 193   |
|                 | 2017 | 40              | 43                | 19    | 80      | 29   | 9     | 224   |
|                 | 2018 | 37              | 43                | 22    | 83      | 27   | 9     | 83    |
|                 | 2019 | 37              | 46                | 23    | 92      | 29   | 8     | 86    |
| North Macedonia | 2016 | 35              | 37                | 33    | ..      | 34   | 16    | ..    |
|                 | 2017 | 35              | 45                | 19    | ..      | 34   | 16    | ..    |
|                 | 2018 | 35              | 38                | 30    | ..      | 30   | 15    | ..    |
|                 | 2019 | 36              | 47                | 20    | ..      | 31   | 16    | ..    |
| Norway          | 2016 | 50              | 34                | 51    | ..      | 27   | ..    | ..    |
|                 | 2017 | 50              | 34                | 51    | ..      | 27   | ..    | ..    |
|                 | 2018 | 47              | 34                | 49    | ..      | 26   | 0     | ..    |
|                 | 2019 | 42              | 32                | 44    | ..      | 22   | 2     | ..    |

Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Autoproducers |                   |       |       | Main activity producers |                   |       |         |       |
|---------------|-------------------|-------|-------|-------------------------|-------------------|-------|---------|-------|
| Total         | Combustible fuels | Hydro | Other | Total                   | Combustible fuels | Hydro | Nuclear | Other |
| 70            | 73                | ..    | 20    | 33                      | 38                | 21    | ..      | 25    |
| 66            | 72                | ..    | 15    | 32                      | 36                | 19    | ..      | 26    |
| 63            | 69                | ..    | 14    | 31                      | 35                | 20    | ..      | 27    |
| 59            | 65                | ..    | 15    | 31                      | 33                | 24    | ..      | 28    |
| 37            | 37                | ..    | ..    | 26                      | 26                | 28    | ..      | ..    |
| 36            | 36                | ..    | ..    | 28                      | 28                | 36    | ..      | ..    |
| 49            | 49                | ..    | ..    | 29                      | 29                | 23    | ..      | ..    |
| 49            | 49                | ..    | ..    | 35                      | 35                | 30    | ..      | ..    |
| 44            | 43                | 55    | 42    | 28                      | 36                | 22    | ..      | 18    |
| 45            | 45                | 47    | 31    | 29                      | 38                | 19    | ..      | 18    |
| 47            | 47                | 51    | 34    | 28                      | 35                | 26    | ..      | 17    |
| 47            | 47                | 53    | 25    | 28                      | 35                | 24    | ..      | 18    |
| 18            | 18                | ..    | ..    | 6                       | 6                 | ..    | ..      | ..    |
| 18            | 18                | ..    | ..    | 1                       | 1                 | ..    | ..      | ..    |
| 18            | 18                | ..    | ..    | 0                       | 0                 | ..    | ..      | ..    |
| 17            | 17                | ..    | ..    | 0                       | 0                 | ..    | ..      | ..    |
| ..            | ..                | ..    | ..    | 68                      | 72                | 33    | ..      | ..    |
| ..            | ..                | ..    | ..    | 48                      | 51                | 25    | ..      | 0     |
| ..            | ..                | ..    | ..    | 48                      | 50                | 39    | ..      | 9     |
| 8             | ..                | ..    | 8     | 45                      | 54                | 11    | ..      | 11    |
| 55            | 58                | 23    | 11    | 25                      | 32                | 18    | ..      | 21    |
| 66            | 69                | 40    | 26    | 29                      | 25                | 32    | ..      | 22    |
| 63            | 70                | 13    | 12    | 26                      | 37                | 18    | ..      | 18    |
| 63            | 71                | 15    | 18    | 25                      | 37                | 15    | ..      | 22    |
| ..            | ..                | ..    | ..    | 45                      | 27                | 77    | ..      | 19    |
| ..            | ..                | ..    | ..    | 44                      | 26                | 78    | ..      | 19    |
| ..            | ..                | ..    | ..    | 39                      | 21                | 71    | ..      | 19    |
| ..            | ..                | ..    | ..    | 44                      | 24                | 85    | ..      | 19    |
| 36            | 28                | ..    | ..    | 11                      | 7                 | 14    | ..      | 24    |
| 34            | 26                | ..    | ..    | 13                      | 5                 | 15    | ..      | 28    |
| 26            | 19                | ..    | ..    | 11                      | 5                 | 12    | ..      | 23    |
| 33            | 27                | ..    | ..    | 12                      | 4                 | 12    | ..      | 29    |
| 16            | 26                | 46    | 9     | 14                      | 54                | 13    | ..      | 10    |
| 17            | 34                | 22    | 10    | 15                      | 46                | 12    | ..      | 22    |
| 17            | 35                | 23    | 10    | 14                      | 48                | 11    | ..      | 24    |
| 15            | 32                | 25    | 9     | 12                      | 46                | 8     | ..      | 24    |
| 16            | 20                | ..    | 16    | 17                      | 17                | ..    | ..      | ..    |
| 17            | 24                | ..    | 17    | 29                      | 29                | ..    | ..      | ..    |
| 17            | 22                | ..    | 16    | 34                      | 34                | ..    | ..      | ..    |
| 16            | 16                | ..    | 16    | 36                      | 36                | ..    | ..      | ..    |
| ..            | ..                | ..    | ..    | 41                      | 68                | 32    | ..      | ..    |
| ..            | ..                | ..    | ..    | 30                      | 68                | 18    | ..      | 15    |
| ..            | ..                | ..    | ..    | 42                      | 73                | 37    | ..      | 13    |
| ..            | ..                | ..    | ..    | 39                      | 76                | 28    | ..      | 27    |
| 35            | 47                | ..    | 12    | 39                      | 41                | 31    | 93      | 25    |
| 35            | 51                | ..    | 11    | 41                      | 42                | 19    | 80      | 33    |
| 30            | 46                | ..    | 11    | 40                      | 42                | 22    | 83      | 27    |
| 27            | 48                | ..    | 10    | 43                      | 45                | 23    | 92      | 27    |
| ..            | ..                | ..    | ..    | 35                      | 37                | 33    | ..      | 28    |
| ..            | ..                | ..    | ..    | 35                      | 45                | 19    | ..      | 28    |
| ..            | ..                | ..    | ..    | 35                      | 38                | 30    | ..      | 25    |
| ..            | ..                | ..    | ..    | 36                      | 47                | 20    | ..      | 26    |
| 56            | 54                | ..    | ..    | 50                      | 13                | 51    | ..      | 27    |
| 56            | 53                | ..    | ..    | 50                      | 14                | 51    | ..      | 27    |
| 51            | 53                | ..    | 0     | 47                      | 13                | 49    | ..      | 26    |
| 46            | 49                | ..    | 1     | 42                      | 14                | 44    | ..      | 22    |

Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Country or area     | Year | Total producers |                   |       |         |      |       |       |
|---------------------|------|-----------------|-------------------|-------|---------|------|-------|-------|
|                     |      | Total           | Combustible fuels | Hydro | Nuclear | Wind | Solar | Other |
| Poland              | 2016 | 50              | 58                | 13    | ..      | 25   | 8     | 57    |
|                     | 2017 | 45              | 51                | 14    | ..      | 30   | 7     | 36    |
|                     | 2018 | 45              | 51                | 11    | ..      | 25   | 6     | 55    |
|                     | 2019 | 43              | 49                | 13    | ..      | 30   | 5     | 74    |
| Portugal            | 2016 | 33              | 43                | 28    | ..      | 28   | 19    | 79    |
|                     | 2017 | 32              | 55                | 12    | ..      | 27   | 20    | 84    |
|                     | 2018 | 32              | 45                | 22    | ..      | 28   | 17    | 89    |
|                     | 2019 | 28              | 39                | 16    | ..      | 30   | 17    | 84    |
| Republic of Moldova | 2016 | 22              | 22                | 28    | ..      | 17   | 11    | ..    |
|                     | 2017 | 21              | 21                | 34    | ..      | 9    | 11    | ..    |
|                     | 2018 | 23              | 24                | 31    | ..      | 8    | 4     | ..    |
|                     | 2019 | 22              | 22                | 46    | ..      | 14   | 2     | ..    |
| Romania             | 2016 | 32              | 28                | 31    | 91      | 25   | 15    | ..    |
|                     | 2017 | 31              | 30                | 25    | 93      | 28   | 15    | ..    |
|                     | 2018 | 31              | 28                | 31    | 92      | 24   | 15    | ..    |
|                     | 2019 | 33              | 32                | 27    | 91      | 25   | 14    | ..    |
| Russian Federation  | 2016 | 47              | 43                | 42    | 83      | 18   | 10    | 65    |
|                     | 2017 | 47              | 43                | 42    | 83      | 16   | 11    | 67    |
|                     | 2018 | 47              | 43                | 43    | 80      | 16   | 12    | 66    |
|                     | 2019 | 46              | 42                | 43    | 79      | 6    | 13    | 67    |
| Serbia              | 2016 | 61              | 73                | 43    | ..      | 17   | 12    | ..    |
|                     | 2017 | 57              | 72                | 37    | ..      | 22   | 15    | ..    |
|                     | 2018 | 53              | 61                | 44    | ..      | 6    | 10    | ..    |
|                     | 2019 | 54              | 69                | 38    | ..      | 26   | 15    | ..    |
| Slovakia            | 2016 | 40              | 30                | 21    | 87      | 23   | 11    | 46    |
|                     | 2017 | 41              | 32                | 21    | 89      | 17   | 11    | 57    |
|                     | 2018 | 40              | 32                | 18    | 87      | 17   | 14    | 43    |
|                     | 2019 | 42              | 34                | 21    | 90      | 17   | 11    | 16    |
| Slovenia            | 2016 | 53              | 50                | 42    | 95      | 14   | 13    | ..    |
|                     | 2017 | 51              | 48                | 35    | 104     | 13   | 13    | ..    |
|                     | 2018 | 49              | 41                | 42    | 96      | 13   | 12    | ..    |
|                     | 2019 | 48              | 40                | 40    | 97      | 14   | 13    | ..    |
| Spain               | 2016 | 30              | 27                | 23    | 90      | 24   | 22    | 21    |
|                     | 2017 | 30              | 33                | 12    | 93      | 24   | 23    | 18    |
|                     | 2018 | 30              | 29                | 21    | 89      | 25   | 21    | 18    |
|                     | 2019 | 28              | 29                | 15    | 94      | 25   | 15    | 31    |
| Sweden              | 2016 | 43              | 20                | 43    | 74      | 27   | 11    | ..    |
|                     | 2017 | 47              | 24                | 45    | 83      | 30   | 11    | ..    |
|                     | 2018 | 45              | 21                | 43    | 90      | 26   | 11    | ..    |
|                     | 2019 | 45              | 22                | 45    | 88      | 26   | 11    | ..    |
| Switzerland         | 2016 | 35              | 46                | 28    | 72      | 17   | 9     | ..    |
|                     | 2017 | 33              | 47                | 28    | 70      | 20   | 10    | ..    |
|                     | 2018 | 36              | 45                | 28    | 87      | 19   | 10    | ..    |
|                     | 2019 | 37              | 46                | 30    | 90      | 22   | 10    | ..    |
| Ukraine             | 2016 | 33              | 23                | 17    | 67      | 25   | 13    | ..    |
|                     | 2017 | 34              | 21                | 19    | 71      | 24   | 11    | ..    |
|                     | 2018 | 35              | 23                | 22    | 70      | 28   | 10    | ..    |
|                     | 2019 | 34              | 23                | 14    | 68      | 29   | 17    | ..    |
| United Kingdom      | 2016 | 39              | 43                | 20    | 88      | 26   | 10    | 0     |
|                     | 2017 | 37              | 39                | 21    | 87      | 29   | 10    | 3     |
|                     | 2018 | 35              | 36                | 19    | 80      | 30   | 11    | 5     |
|                     | 2019 | 35              | 39                | 18    | 69      | 30   | 11    | 7     |
| Oceania             | 2016 | 45              | 52                | 35    | ..      | 33   | 11    | 95    |
|                     | 2017 | 45              | 54                | 35    | ..      | 30   | 13    | 96    |
|                     | 2018 | 44              | 53                | 35    | ..      | 32   | 13    | 93    |
|                     | 2019 | 42              | 53                | 34    | ..      | 32   | 13    | 94    |

Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Total | Autoproducers     |       |       | Main activity producers |                   |       |         |       |
|-------|-------------------|-------|-------|-------------------------|-------------------|-------|---------|-------|
|       | Combustible fuels | Hydro | Other | Total                   | Combustible fuels | Hydro | Nuclear | Other |
| 57    | 62                | 34    | 8     | 49                      | 58                | 13    | ..      | 25    |
| 49    | 54                | 80    | 7     | 45                      | 50                | 14    | ..      | 30    |
| 46    | 53                | 74    | 7     | 45                      | 51                | 11    | ..      | 25    |
| 42    | 60                | 71    | 6     | 43                      | 48                | 13    | ..      | 30    |
| 46    | 50                | 38    | 17    | 32                      | 41                | 28    | ..      | 28    |
| 46    | 51                | 19    | 17    | 31                      | 56                | 12    | ..      | 27    |
| 42    | 48                | 34    | 16    | 31                      | 45                | 21    | ..      | 28    |
| 41    | 49                | 33    | 14    | 26                      | 36                | 16    | ..      | 30    |
| 4     | 4                 | ..    | ..    | 28                      | 28                | 28    | ..      | 14    |
| 5     | 5                 | ..    | 6     | 27                      | 27                | 34    | ..      | 11    |
| 7     | 7                 | ..    | 6     | 28                      | 29                | 31    | ..      | 10    |
| 7     | 6                 | ..    | 12    | 27                      | 27                | 46    | ..      | 13    |
| 26    | 33                | 41    | 6     | 32                      | 26                | 31    | 91      | 26    |
| 26    | 33                | 34    | 7     | 32                      | 29                | 25    | 93      | 28    |
| 28    | 36                | 33    | 5     | 32                      | 26                | 31    | 92      | 24    |
| 32    | 38                | 37    | 10    | 33                      | 31                | 27    | 91      | 23    |
| 35    | 35                | 34    | ..    | 48                      | 45                | 42    | 83      | 17    |
| 33    | 33                | 30    | ..    | 48                      | 44                | 42    | 83      | 17    |
| 34    | 34                | 29    | ..    | 48                      | 44                | 43    | 80      | 17    |
| 34    | 34                | 29    | ..    | 48                      | 44                | 43    | 79      | 13    |
| 40    | 40                | ..    | ..    | 61                      | 74                | 43    | ..      | 15    |
| 50    | 50                | ..    | ..    | 57                      | 72                | 37    | ..      | 20    |
| 53    | 53                | ..    | ..    | 53                      | 61                | 44    | ..      | 7     |
| 35    | 35                | ..    | ..    | 55                      | 70                | 38    | ..      | 25    |
| 32    | 47                | 36    | 13    | 41                      | 25                | 21    | 87      | 17    |
| 33    | 45                | 38    | 13    | 43                      | 28                | 21    | 89      | 14    |
| 36    | 43                | 40    | 19    | 41                      | 28                | 17    | 87      | 11    |
| 29    | 38                | 42    | 12    | 44                      | 33                | 20    | 90      | 11    |
| 22    | 66                | 22    | 13    | 57                      | 49                | 44    | 95      | 13    |
| 21    | 66                | 19    | 13    | 55                      | 47                | 37    | 104     | 13    |
| 21    | 62                | 22    | 12    | 52                      | 40                | 43    | 96      | 12    |
| 21    | 68                | 20    | 13    | 52                      | 39                | 41    | 97      | 13    |
| 59    | 61                | 25    | 27    | 28                      | 22                | 23    | 90      | 24    |
| 62    | 66                | 15    | 33    | 28                      | 28                | 12    | 93      | 24    |
| 64    | 67                | 28    | 32    | 28                      | 23                | 21    | 89      | 24    |
| 67    | 71                | 28    | 27    | 26                      | 23                | 15    | 94      | 22    |
| 54    | 55                | 10    | ..    | 43                      | 14                | 43    | 74      | 27    |
| 55    | 56                | 8     | ..    | 47                      | 17                | 45    | 83      | 30    |
| 48    | 49                | 7     | ..    | 45                      | 15                | 43    | 90      | 25    |
| 56    | 57                | 3     | ..    | 45                      | 15                | 45    | 88      | 25    |
| 26    | 49                | 43    | 9     | 36                      | 36                | 28    | 72      | 17    |
| 26    | 53                | 41    | 10    | 35                      | 29                | 27    | 70      | 20    |
| 25    | 52                | 44    | 10    | 38                      | 26                | 27    | 87      | 19    |
| 24    | 53                | 45    | 10    | 40                      | 27                | 29    | 90      | 22    |
| 19    | 19                | 53    | 34    | 34                      | 23                | 17    | 67      | 19    |
| 20    | 20                | 7     | 10    | 34                      | 21                | 19    | 71      | 16    |
| 14    | 14                | 5     | 2     | 36                      | 24                | 22    | 70      | 16    |
| 12    | 12                | ..    | 1     | 35                      | 24                | 14    | 68      | 21    |
| 23    | 33                | 43    | 13    | 45                      | 45                | 18    | 88      | 25    |
| 24    | 33                | 48    | 15    | 41                      | 40                | 18    | 87      | 26    |
| 24    | 32                | 46    | 16    | 39                      | 38                | 16    | 80      | 27    |
| 25    | 34                | 49    | 16    | 39                      | 41                | 16    | 69      | 28    |
| 27    | 45                | 39    | 11    | 48                      | 53                | 35    | ..      | 40    |
| 30    | 52                | 41    | 13    | 48                      | 54                | 35    | ..      | 38    |
| 31    | 52                | 25    | 15    | 47                      | 53                | 35    | ..      | 35    |
| 31    | 53                | 33    | 16    | 45                      | 53                | 34    | ..      | 29    |

Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Country or area             | Year | Total producers |                   |       |         |      |       |       |
|-----------------------------|------|-----------------|-------------------|-------|---------|------|-------|-------|
|                             |      | Total           | Combustible fuels | Hydro | Nuclear | Wind | Solar | Other |
| American Samoa              | 2016 | 42              | 45                | ..    | ..      | ..   | 9     | ..    |
|                             | 2017 | 41              | 44                | ..    | ..      | ..   | 13    | ..    |
|                             | 2018 | 41              | 44                | ..    | ..      | ..   | 11    | ..    |
|                             | 2019 | 41              | 45                | ..    | ..      | ..   | 11    | ..    |
| Australia                   | 2016 | 44              | 53                | 21    | ..      | 32   | 11    | 0     |
|                             | 2017 | 44              | 55                | 22    | ..      | 30   | 13    | 6     |
|                             | 2018 | 43              | 54                | 21    | ..      | 32   | 13    | ..    |
|                             | 2019 | 41              | 54                | 21    | ..      | 32   | 13    | ..    |
| Cook Islands                | 2016 | 26              | 30                | ..    | ..      | ..   | 13    | ..    |
|                             | 2017 | 27              | 31                | ..    | ..      | ..   | 16    | ..    |
|                             | 2018 | 27              | 31                | ..    | ..      | ..   | 20    | ..    |
|                             | 2019 | 24              | 29                | ..    | ..      | ..   | 16    | ..    |
| Fiji                        | 2016 | 33              | 29                | 44    | ..      | 2    | 15    | ..    |
|                             | 2017 | 32              | 30                | 41    | ..      | 1    | 15    | ..    |
|                             | 2018 | 33              | 27                | 47    | ..      | 1    | 15    | ..    |
|                             | 2019 | 34              | 29                | 46    | ..      | 2    | 15    | ..    |
| French Polynesia            | 2016 | 31              | 29                | 45    | ..      | 4    | 14    | ..    |
|                             | 2017 | 29              | 29                | 43    | ..      | 4    | 11    | ..    |
|                             | 2018 | 29              | 29                | 40    | ..      | 4    | 11    | ..    |
|                             | 2019 | 29              | 30                | 37    | ..      | 6    | 11    | ..    |
| Guam                        | 2016 | 39              | 40                | ..    | ..      | 21   | 23    | ..    |
|                             | 2017 | 45              | 46                | ..    | ..      | 21   | 23    | ..    |
|                             | 2018 | 44              | 45                | ..    | ..      | 21   | 23    | ..    |
|                             | 2019 | 44              | 45                | ..    | ..      | 21   | 24    | ..    |
| Kiribati                    | 2016 | 33              | 38                | ..    | ..      | ..   | 19    | ..    |
|                             | 2017 | 33              | 38                | ..    | ..      | ..   | 19    | ..    |
|                             | 2018 | 33              | 38                | ..    | ..      | ..   | 20    | ..    |
|                             | 2019 | 33              | 38                | ..    | ..      | ..   | 19    | ..    |
| Marshall Islands            | 2016 | 26              | 27                | ..    | ..      | ..   | 11    | ..    |
|                             | 2017 | 26              | 27                | ..    | ..      | ..   | 11    | ..    |
|                             | 2018 | 26              | 27                | ..    | ..      | ..   | 11    | ..    |
|                             | 2019 | 27              | 27                | ..    | ..      | ..   | 11    | ..    |
| Micronesia (Fed. States of) | 2016 | 22              | 24                | 1     | ..      | ..   | 16    | ..    |
|                             | 2017 | 22              | 24                | 1     | ..      | ..   | 16    | ..    |
|                             | 2018 | 22              | 23                | 1     | ..      | 16   | 16    | ..    |
|                             | 2019 | 22              | 23                | 1     | ..      | 16   | 18    | ..    |
| Nauru                       | 2016 | 54              | 60                | ..    | ..      | ..   | 6     | ..    |
|                             | 2017 | 51              | 55                | ..    | ..      | ..   | 19    | ..    |
|                             | 2018 | 30              | 31                | ..    | ..      | ..   | 16    | ..    |
|                             | 2019 | 31              | 32                | ..    | ..      | ..   | 11    | ..    |
| New Caledonia               | 2016 | 36              | 37                | 34    | ..      | 14   | 13    | ..    |
|                             | 2017 | 36              | 36                | 53    | ..      | 10   | 25    | ..    |
|                             | 2018 | 38              | 40                | 46    | ..      | 10   | 16    | ..    |
|                             | 2019 | 36              | 38                | 42    | ..      | 12   | 22    | ..    |
| New Zealand                 | 2016 | 54              | 39                | 55    | ..      | 39   | 12    | 96    |
|                             | 2017 | 54              | 46                | 53    | ..      | 35   | 12    | 96    |
|                             | 2018 | 54              | 41                | 56    | ..      | 34   | 13    | 93    |
|                             | 2019 | 54              | 45                | 54    | ..      | 37   | 13    | 94    |
| Niue                        | 2016 | 16              | 18                | ..    | ..      | ..   | 2     | ..    |
|                             | 2017 | 16              | 18                | ..    | ..      | ..   | 2     | ..    |
|                             | 2018 | 18              | 18                | ..    | ..      | ..   | 16    | ..    |
|                             | 2019 | 15              | 19                | ..    | ..      | ..   | 6     | ..    |
| Northern Mariana Islands    | 2016 | 47              | 47                | ..    | ..      | ..   | ..    | ..    |
|                             | 2017 | 46              | 46                | ..    | ..      | ..   | ..    | ..    |
|                             | 2018 | 47              | 47                | ..    | ..      | ..   | ..    | ..    |
|                             | 2019 | 46              | 46                | ..    | ..      | ..   | ..    | ..    |

Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Autoproducers |                   |       |       | Main activity producers |                   |       |         |       |
|---------------|-------------------|-------|-------|-------------------------|-------------------|-------|---------|-------|
| Total         | Combustible fuels | Hydro | Other | Total                   | Combustible fuels | Hydro | Nuclear | Other |
| ..            | ..                | ..    | ..    | 42                      | 45                | ..    | ..      | 9     |
| ..            | ..                | ..    | ..    | 41                      | 44                | ..    | ..      | 13    |
| ..            | ..                | ..    | ..    | 41                      | 44                | ..    | ..      | 11    |
| ..            | ..                | ..    | ..    | 41                      | 45                | ..    | ..      | 11    |
| 25            | 43                | ..    | 10    | 47                      | 54                | 21    | ..      | 30    |
| 28            | 52                | ..    | 12    | 48                      | 55                | 22    | ..      | 28    |
| 30            | 52                | ..    | 14    | 46                      | 54                | 21    | ..      | 27    |
| 29            | 52                | ..    | 16    | 44                      | 54                | 21    | ..      | 22    |
| ..            | ..                | ..    | ..    | 26                      | 30                | ..    | ..      | 13    |
| ..            | ..                | ..    | ..    | 27                      | 31                | ..    | ..      | 16    |
| ..            | ..                | ..    | ..    | 27                      | 31                | ..    | ..      | 20    |
| ..            | ..                | ..    | ..    | 24                      | 29                | ..    | ..      | 16    |
| 3             | 3                 | ..    | ..    | 37                      | 37                | 44    | ..      | 5     |
| 5             | 5                 | ..    | ..    | 37                      | 40                | 41    | ..      | 5     |
| 9             | 9                 | ..    | ..    | 37                      | 35                | 47    | ..      | 6     |
| 10            | 10                | ..    | ..    | 38                      | 37                | 46    | ..      | 6     |
| ..            | ..                | ..    | ..    | 31                      | 29                | 45    | ..      | 14    |
| ..            | ..                | ..    | ..    | 29                      | 29                | 43    | ..      | 11    |
| ..            | ..                | ..    | ..    | 29                      | 29                | 40    | ..      | 11    |
| ..            | ..                | ..    | ..    | 29                      | 30                | 37    | ..      | 11    |
| ..            | ..                | ..    | ..    | 39                      | 40                | ..    | ..      | 23    |
| ..            | ..                | ..    | ..    | 45                      | 46                | ..    | ..      | 23    |
| ..            | ..                | ..    | ..    | 44                      | 45                | ..    | ..      | 23    |
| ..            | ..                | ..    | ..    | 44                      | 45                | ..    | ..      | 24    |
| 21            | 21                | ..    | ..    | 34                      | 41                | ..    | ..      | 19    |
| 21            | 21                | ..    | ..    | 34                      | 41                | ..    | ..      | 19    |
| 21            | 21                | ..    | ..    | 34                      | 41                | ..    | ..      | 20    |
| 21            | 21                | ..    | ..    | 34                      | 41                | ..    | ..      | 19    |
| ..            | ..                | ..    | ..    | 26                      | 27                | ..    | ..      | 11    |
| ..            | ..                | ..    | ..    | 26                      | 27                | ..    | ..      | 11    |
| ..            | ..                | ..    | ..    | 26                      | 27                | ..    | ..      | 11    |
| ..            | ..                | ..    | ..    | 27                      | 27                | ..    | ..      | 11    |
| ..            | ..                | ..    | ..    | 22                      | 24                | 1     | ..      | 16    |
| ..            | ..                | ..    | ..    | 22                      | 24                | 1     | ..      | 16    |
| ..            | ..                | ..    | ..    | 22                      | 23                | 1     | ..      | 16    |
| ..            | ..                | ..    | ..    | 22                      | 23                | 1     | ..      | 17    |
| ..            | ..                | ..    | ..    | 54                      | 60                | ..    | ..      | 6     |
| ..            | ..                | ..    | ..    | 51                      | 55                | ..    | ..      | 19    |
| ..            | ..                | ..    | ..    | 30                      | 31                | ..    | ..      | 16    |
| ..            | ..                | ..    | ..    | 31                      | 32                | ..    | ..      | 11    |
| ..            | ..                | ..    | ..    | 38                      | 40                | 34    | ..      | 14    |
| ..            | ..                | ..    | ..    | 38                      | 39                | 53    | ..      | 13    |
| ..            | ..                | ..    | ..    | 41                      | 43                | 46    | ..      | 13    |
| ..            | ..                | ..    | ..    | 38                      | 40                | 42    | ..      | 20    |
| 53            | 63                | 15    | 27    | 54                      | 36                | 55    | ..      | 72    |
| 52            | 64                | 15    | 24    | 54                      | 44                | 53    | ..      | 71    |
| 47            | 61                | 15    | 21    | 54                      | 39                | 56    | ..      | 69    |
| 48            | 67                | 15    | 19    | 55                      | 43                | 54    | ..      | 71    |
| ..            | ..                | ..    | ..    | 16                      | 18                | ..    | ..      | 2     |
| ..            | ..                | ..    | ..    | 16                      | 18                | ..    | ..      | 2     |
| ..            | ..                | ..    | ..    | 18                      | 18                | ..    | ..      | 16    |
| ..            | ..                | ..    | ..    | 15                      | 19                | ..    | ..      | 6     |
| ..            | ..                | ..    | ..    | 47                      | 47                | ..    | ..      | ..    |
| ..            | ..                | ..    | ..    | 46                      | 46                | ..    | ..      | ..    |
| ..            | ..                | ..    | ..    | 47                      | 47                | ..    | ..      | ..    |
| ..            | ..                | ..    | ..    | 46                      | 46                | ..    | ..      | ..    |

Table 31

## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Country or area       | Year | Total producers |                   |       |         |      |       |       |
|-----------------------|------|-----------------|-------------------|-------|---------|------|-------|-------|
|                       |      | Total           | Combustible fuels | Hydro | Nuclear | Wind | Solar | Other |
| Palau                 | 2016 | 27              | 28                | ..    | ..      | ..   | 2     | ..    |
|                       | 2017 | 27              | 28                | ..    | ..      | ..   | 2     | ..    |
|                       | 2018 | 27              | 28                | ..    | ..      | ..   | 15    | ..    |
|                       | 2019 | 27              | 28                | ..    | ..      | ..   | 11    | ..    |
| Papua New Guinea      | 2016 | 56              | 59                | 45    | ..      | ..   | 17    | 86    |
|                       | 2017 | 54              | 55                | 45    | ..      | ..   | 17    | 86    |
|                       | 2018 | 48              | 51                | 32    | ..      | ..   | 18    | 86    |
|                       | 2019 | 48              | 50                | 36    | ..      | ..   | 18    | 91    |
| Samoa                 | 2016 | 33              | 50                | 34    | ..      | 4    | 10    | ..    |
|                       | 2017 | 33              | 53                | 24    | ..      | 3    | 13    | ..    |
|                       | 2018 | 32              | 44                | 39    | ..      | 3    | 13    | ..    |
|                       | 2019 | 35              | 47                | 40    | ..      | 4    | 15    | ..    |
| Solomon Islands       | 2016 | 30              | 31                | 30    | ..      | ..   | 11    | ..    |
|                       | 2017 | 30              | 31                | 30    | ..      | ..   | 15    | ..    |
|                       | 2018 | 30              | 32                | 30    | ..      | ..   | 13    | ..    |
|                       | 2019 | 31              | 32                | 34    | ..      | ..   | 15    | ..    |
| Tonga                 | 2016 | 35              | 36                | ..    | ..      | 10   | 22    | ..    |
|                       | 2017 | 32              | 40                | ..    | ..      | 17   | 10    | ..    |
|                       | 2018 | 31              | 40                | ..    | ..      | 11   | 8     | ..    |
|                       | 2019 | 32              | 41                | ..    | ..      | 2    | 12    | ..    |
| Tuvalu                | 2016 | 18              | 22                | ..    | ..      | ..   | 11    | ..    |
|                       | 2017 | 18              | 23                | ..    | ..      | ..   | 11    | ..    |
|                       | 2018 | 21              | 27                | ..    | ..      | ..   | 12    | ..    |
|                       | 2019 | 20              | 25                | ..    | ..      | ..   | 11    | ..    |
| Vanuatu               | 2016 | 27              | 27                | 48    | ..      | 17   | 17    | ..    |
|                       | 2017 | 27              | 28                | 63    | ..      | 17   | 19    | ..    |
|                       | 2018 | 30              | 31                | 67    | ..      | 15   | 22    | ..    |
|                       | 2019 | 29              | 28                | 68    | ..      | 21   | 23    | ..    |
| Wallis and Futuna Is. | 2016 | 26              | 26                | 17    | ..      | ..   | 10    | ..    |
|                       | 2017 | 25              | 26                | 19    | ..      | ..   | 10    | ..    |
|                       | 2018 | 26              | 27                | 19    | ..      | ..   | 10    | ..    |
|                       | 2019 | 28              | 28                | 20    | ..      | ..   | 10    | ..    |



## Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

| Total | Autoproducers     |       |       | Main activity producers |                   |       |         |       |
|-------|-------------------|-------|-------|-------------------------|-------------------|-------|---------|-------|
|       | Combustible fuels | Hydro | Other | Total                   | Combustible fuels | Hydro | Nuclear | Other |
| 35    | 35                | ..    | ..    | 27                      | 28                | ..    | ..      | 2     |
| 40    | 40                | ..    | ..    | 26                      | 27                | ..    | ..      | 2     |
| 40    | 40                | ..    | ..    | 27                      | 27                | ..    | ..      | 15    |
| 40    | 40                | ..    | ..    | 26                      | 27                | ..    | ..      | 11    |
| 66    | 70                | 40    | 86    | 40                      | 34                | 48    | ..      | 17    |
| 63    | 64                | 42    | 86    | 40                      | 34                | 47    | ..      | 17    |
| 62    | 67                | 25    | 86    | 31                      | 29                | 35    | ..      | 18    |
| 64    | 67                | 33    | 91    | 31                      | 27                | 37    | ..      | 18    |
| 10    | ..                | ..    | 10    | 33                      | 50                | 34    | ..      | 10    |
| 10    | ..                | ..    | 10    | 33                      | 53                | 24    | ..      | 13    |
| 10    | ..                | ..    | 10    | 32                      | 44                | 39    | ..      | 13    |
| 10    | ..                | ..    | 10    | 35                      | 47                | 40    | ..      | 15    |
| 9     | 9                 | ..    | ..    | 33                      | 34                | 30    | ..      | 11    |
| 9     | 9                 | ..    | ..    | 33                      | 35                | 30    | ..      | 15    |
| 7     | 7                 | ..    | ..    | 34                      | 35                | 30    | ..      | 13    |
| 7     | 7                 | ..    | ..    | 34                      | 36                | 34    | ..      | 15    |
| ..    | ..                | ..    | ..    | 35                      | 36                | ..    | ..      | 22    |
| ..    | ..                | ..    | ..    | 32                      | 40                | ..    | ..      | 10    |
| ..    | ..                | ..    | ..    | 31                      | 40                | ..    | ..      | 8     |
| ..    | ..                | ..    | ..    | 32                      | 41                | ..    | ..      | 10    |
| ..    | ..                | ..    | ..    | 18                      | 22                | ..    | ..      | 11    |
| ..    | ..                | ..    | ..    | 18                      | 23                | ..    | ..      | 11    |
| ..    | ..                | ..    | ..    | 21                      | 27                | ..    | ..      | 12    |
| ..    | ..                | ..    | ..    | 20                      | 25                | ..    | ..      | 11    |
| ..    | ..                | ..    | ..    | 27                      | 27                | 48    | ..      | 17    |
| ..    | ..                | ..    | ..    | 27                      | 28                | 63    | ..      | 18    |
| ..    | ..                | ..    | ..    | 30                      | 31                | 67    | ..      | 18    |
| ..    | ..                | ..    | ..    | 29                      | 28                | 68    | ..      | 22    |
| ..    | ..                | ..    | ..    | 26                      | 26                | 17    | ..      | 10    |
| ..    | ..                | ..    | ..    | 25                      | 26                | 19    | ..      | 10    |
| ..    | ..                | ..    | ..    | 26                      | 27                | 19    | ..      | 10    |
| ..    | ..                | ..    | ..    | 28                      | 28                | 20    | ..      | 10    |

**Table 32**

**Production of electricity - by type**

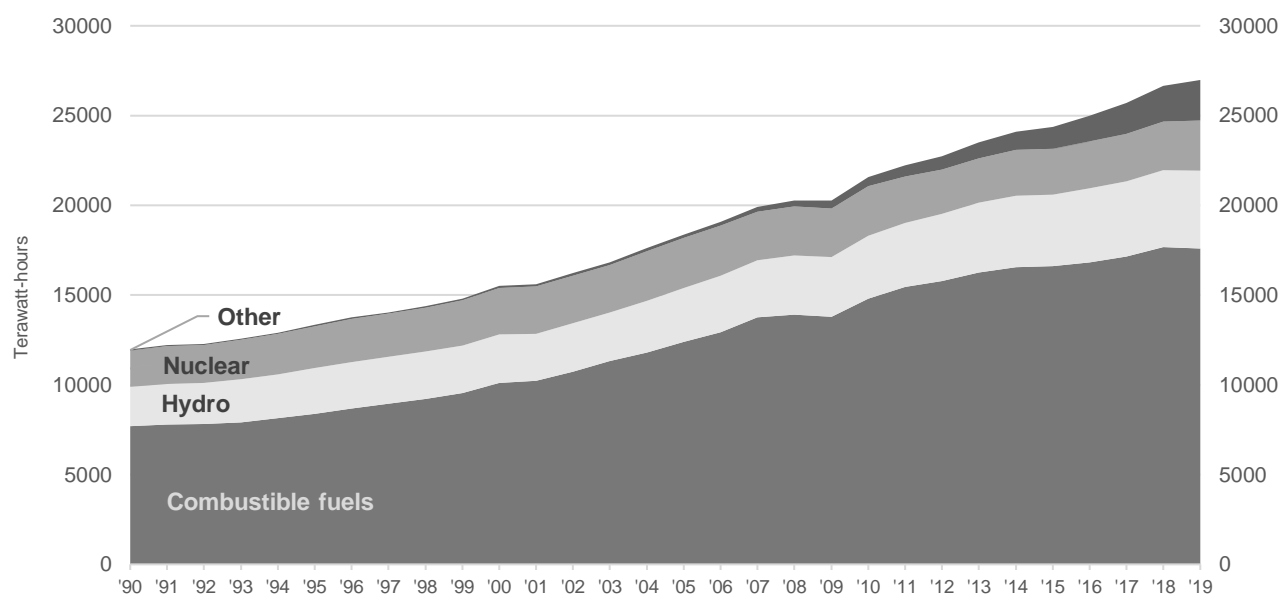
Gigawatt-hours

**Table Notes**

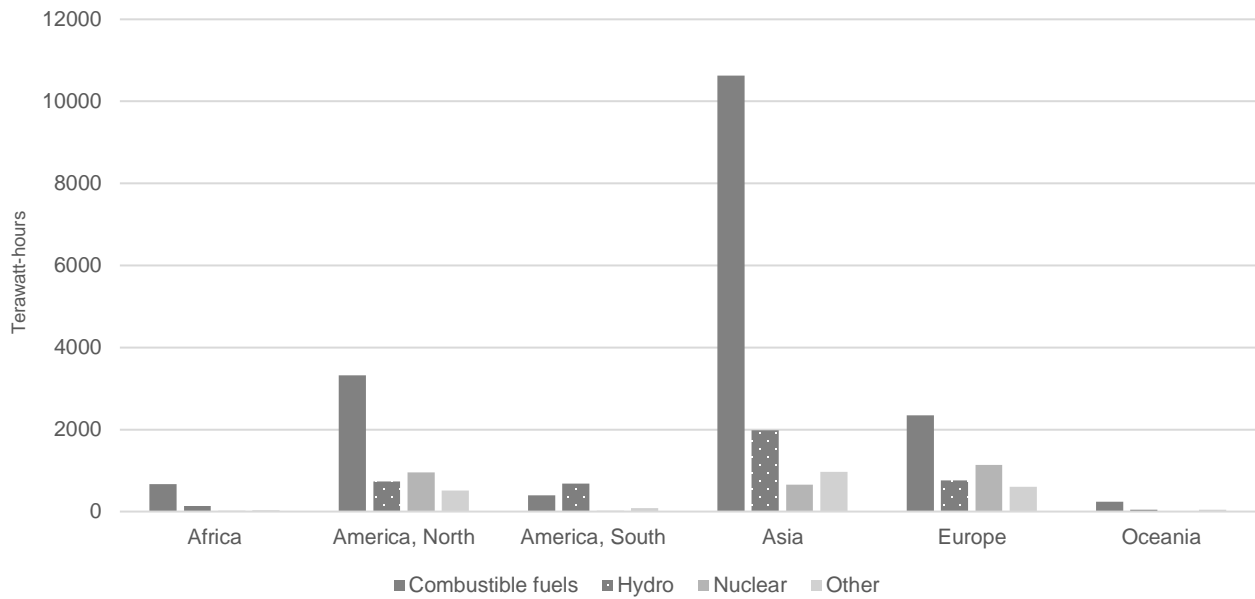
For this table, **Other** under total producers refers to geothermal, tide, wave, marine, electricity from chemical heat, and other non-specified sources. **Other** under autoproducers refers to nuclear (if any), wind, solar, tide, wave, marine, electricity from chemical heat, and other non-specified sources. **Other** under main activity producers refers to wind, solar, tide, wave, marine, electricity from chemical heat, and other non-specified sources.

Please refer to the Definitions Section on pages ix to xv for the appropriate product description /classification, and xvi to xvii for the descriptions of relevant flows.

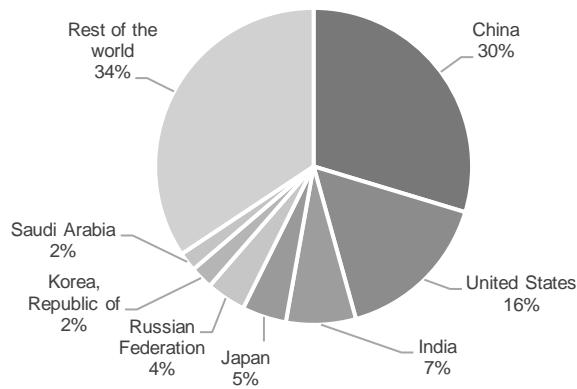
**Figure 75: World electricity generation by source, 1990-2019**



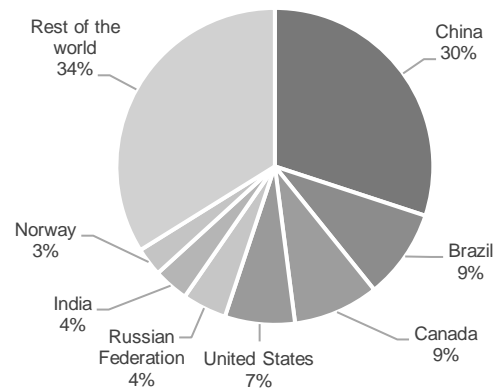
**Figure 76: World production of electricity by source and region, 2019**



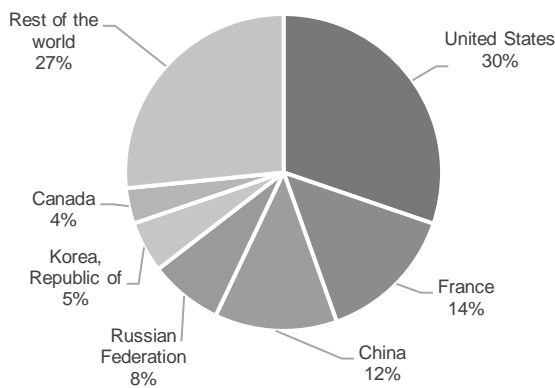
**Figure 77: Major countries producing electricity from combustible fuels, 2019**



**Figure 78: Major countries producing hydro electricity, 2019**



**Figure 79: Major countries producing nuclear electricity, 2019**



**Figure 80: Major countries producing electricity from other sources, 2019**

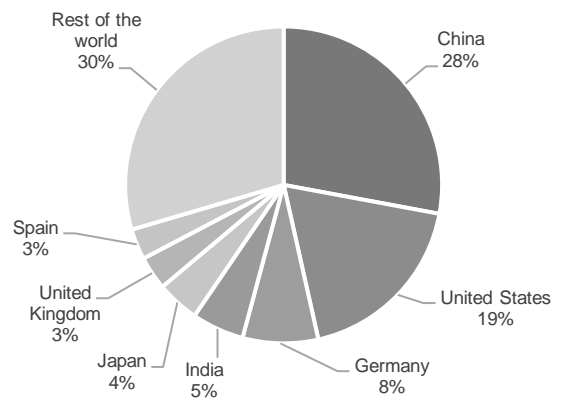


Table 32

## Production of electricity - by type

Gigawatt-hours

| Country or area      | Year | Total producers |                   |           |           |           |         |         |
|----------------------|------|-----------------|-------------------|-----------|-----------|-----------|---------|---------|
|                      |      | Total           | Combustible fuels | Hydro     | Nuclear   | Wind      | Solar   | Other   |
| World                | 2016 | 24,986,890      | 16,812,692        | 4,141,058 | 2,606,892 | 949,697   | 319,767 | 156,784 |
|                      | 2017 | 25,699,698      | 17,159,011        | 4,187,792 | 2,634,659 | 1,117,899 | 429,364 | 170,974 |
|                      | 2018 | 26,654,467      | 17,667,832        | 4,301,140 | 2,708,656 | 1,272,554 | 566,889 | 137,396 |
|                      | 2019 | 26,982,699      | 17,594,661        | 4,341,634 | 2,788,265 | 1,426,854 | 690,164 | 141,121 |
| Africa               | 2016 | 809,152         | 648,764           | 123,663   | 15,913    | 10,338    | 4,418   | 6,057   |
|                      | 2017 | 827,879         | 658,782           | 129,135   | 15,743    | 11,650    | 6,230   | 6,340   |
|                      | 2018 | 852,350         | 674,604           | 137,668   | 11,580    | 14,166    | 7,531   | 6,802   |
|                      | 2019 | 857,322         | 668,869           | 140,250   | 13,252    | 17,873    | 10,198  | 6,881   |
| Algeria              | 2016 | 71,092          | 70,661            | *72       | ..        | *19       | *339    | ..      |
|                      | 2017 | 76,018          | 75,383            | *56       | ..        | *19       | *560    | ..      |
|                      | 2018 | 76,662          | 75,880            | *117      | ..        | *11       | *655    | ..      |
|                      | 2019 | 81,533          | 80,691            | *152      | ..        | *12       | *678    | ..      |
| Angola               | 2016 | 10,379          | 4,546             | 5,815     | ..        | ..        | 18      | ..      |
|                      | 2017 | 10,737          | 3,066             | 7,653     | ..        | ..        | 18      | ..      |
|                      | 2018 | 12,869          | 3,058             | 9,793     | ..        | ..        | 18      | ..      |
|                      | 2019 | 15,474          | 4,582             | 10,874    | ..        | ..        | 18      | ..      |
| Benin                | 2016 | 276             | 266               | 5         | ..        | ..        | 5       | ..      |
|                      | 2017 | 331             | 325               | 1         | ..        | ..        | 5       | ..      |
|                      | 2018 | 202             | 197               | 0         | ..        | ..        | 5       | ..      |
|                      | 2019 | 529             | 521               | 0         | ..        | ..        | 8       | ..      |
| Botswana             | 2016 | 2,688           | 2,686             | ..        | ..        | ..        | 2       | ..      |
|                      | 2017 | 3,022           | 3,020             | ..        | ..        | ..        | 2       | ..      |
|                      | 2018 | 3,105           | 3,100             | ..        | ..        | ..        | 5       | ..      |
|                      | 2019 | 2,508           | 2,504             | ..        | ..        | ..        | 5       | ..      |
| Burkina Faso         | 2016 | 973             | 834               | 140       | ..        | ..        | ..      | ..      |
|                      | 2017 | 1,095           | 958               | 128       | ..        | ..        | 9       | ..      |
|                      | 2018 | 1,021           | 875               | 91        | ..        | ..        | 54      | ..      |
|                      | 2019 | 752             | 588               | 105       | ..        | ..        | 59      | ..      |
| Burundi              | 2016 | 181             | 31                | 143       | ..        | ..        | 6       | ..      |
|                      | 2017 | 192             | 84                | 100       | ..        | ..        | 8       | ..      |
|                      | 2018 | 246             | 105               | 133       | ..        | ..        | 8       | ..      |
|                      | 2019 | 271             | 131               | 132       | ..        | ..        | 8       | ..      |
| Cabo Verde           | 2016 | 444             | 361               | ..        | ..        | 77        | 6       | ..      |
|                      | 2017 | 492             | 409               | ..        | ..        | 76        | 7       | ..      |
|                      | 2018 | *497            | *394              | ..        | ..        | *93       | *10     | ..      |
|                      | 2019 | *513            | *417              | ..        | ..        | *85       | *10     | ..      |
| Cameroon             | 2016 | 7,531           | 2,767             | 4,752     | ..        | ..        | 12      | ..      |
|                      | 2017 | 8,082           | 2,976             | 5,090     | ..        | ..        | 16      | ..      |
|                      | 2018 | 8,581           | 3,539             | 5,023     | ..        | ..        | 19      | ..      |
|                      | 2019 | 8,476           | 3,227             | 5,229     | ..        | ..        | 19      | ..      |
| Central African Rep. | 2016 | 143             | *1                | 142       | ..        | ..        | 0       | ..      |
|                      | 2017 | 145             | *1                | 144       | ..        | ..        | 0       | ..      |
|                      | 2018 | 147             | *1                | 146       | ..        | ..        | 0       | ..      |
|                      | 2019 | 149             | *1                | 148       | ..        | ..        | 0       | ..      |
| Chad                 | 2016 | 294             | 294               | ..        | ..        | ..        | ..      | ..      |
|                      | 2017 | 299             | 299               | ..        | ..        | ..        | ..      | ..      |
|                      | 2018 | 303             | 303               | ..        | ..        | ..        | ..      | ..      |
|                      | 2019 | 308             | 308               | ..        | ..        | ..        | ..      | ..      |
| Comoros              | 2016 | *58             | *58               | ..        | ..        | ..        | ..      | ..      |
|                      | 2017 | *91             | *91               | ..        | ..        | ..        | ..      | ..      |
|                      | 2018 | *98             | *98               | ..        | ..        | ..        | ..      | ..      |
|                      | 2019 | *108            | *108              | ..        | ..        | ..        | ..      | ..      |
| Congo                | 2016 | 2,953           | 1,825             | 1,127     | ..        | ..        | 1       | ..      |
|                      | 2017 | 2,965           | 1,761             | 1,203     | ..        | ..        | 1       | ..      |
|                      | 2018 | 3,096           | 2,001             | 1,094     | ..        | ..        | 1       | ..      |
|                      | 2019 | 3,655           | 2,807             | 847       | ..        | ..        | 1       | ..      |

## Production of electricity - by type

Gigawatt-hours

| Autoproducers |                   |        |         | Main activity producers |                   |           |           |           |
|---------------|-------------------|--------|---------|-------------------------|-------------------|-----------|-----------|-----------|
| Total         | Combustible fuels | Hydro  | Other   | Total                   | Combustible fuels | Hydro     | Nuclear   | Other     |
| 2,033,532     | 1,798,828         | 79,994 | 154,710 | 22,953,359              | 15,013,864        | 4,061,064 | 2,606,892 | 1,271,538 |
| 2,076,345     | 1,817,947         | 77,730 | 180,667 | 23,623,353              | 15,341,063        | 4,110,062 | 2,634,659 | 1,537,570 |
| 2,194,047     | 1,927,030         | 76,353 | 190,663 | 24,460,421              | 15,740,801        | 4,224,787 | 2,708,656 | 1,786,176 |
| 2,292,117     | 1,998,259         | 75,193 | 218,666 | 24,690,582              | 15,596,402        | 4,266,441 | 2,788,265 | 2,039,473 |
| 64,961        | 56,223            | 574    | 8,164   | 744,192                 | 592,541           | 123,089   | 15,913    | 12,649    |
| 51,744        | 40,331            | 731    | 10,682  | 776,135                 | 618,451           | 128,404   | 15,743    | 13,537    |
| 58,628        | 45,447            | 1,009  | 12,172  | 793,723                 | 629,157           | 136,659   | 11,580    | 16,327    |
| 64,456        | 50,562            | 855    | 13,039  | 792,866                 | 618,307           | 139,395   | 13,252    | 21,912    |
| 4,764         | 4,764             | ..     | ..      | 66,328                  | 65,897            | *72       | ..        | *359      |
| 5,120         | 5,120             | ..     | ..      | 70,898                  | 70,263            | *56       | ..        | *579      |
| 5,437         | 5,437             | ..     | ..      | 71,225                  | 70,443            | *117      | ..        | *665      |
| 5,508         | 5,508             | ..     | ..      | 76,025                  | 75,183            | *152      | ..        | *690      |
| 596           | 596               | ..     | ..      | 9,783                   | 3,950             | 5,815     | ..        | 18        |
| 430           | 430               | ..     | ..      | 10,307                  | 2,636             | 7,653     | ..        | 18        |
| 421           | 421               | ..     | ..      | 12,448                  | 2,637             | 9,793     | ..        | 18        |
| 418           | 418               | ..     | ..      | 15,056                  | 4,165             | 10,874    | ..        | 18        |
| 96            | 96                | ..     | ..      | 180                     | 170               | 5         | ..        | 5         |
| 98            | 98                | ..     | ..      | 233                     | 226               | 1         | ..        | 5         |
| 114           | 114               | ..     | ..      | 88                      | 83                | 0         | ..        | 5         |
| 163           | 162               | ..     | 1       | 366                     | 359               | 0         | ..        | 6         |
| ..            | ..                | ..     | ..      | 2,688                   | 2,686             | ..        | ..        | 2         |
| ..            | ..                | ..     | ..      | 3,022                   | 3,020             | ..        | ..        | 2         |
| ..            | ..                | ..     | ..      | 3,105                   | 3,100             | ..        | ..        | 5         |
| ..            | ..                | ..     | ..      | 2,508                   | 2,504             | ..        | ..        | 5         |
| ..            | ..                | ..     | ..      | 973                     | 834               | 140       | ..        | ..        |
| ..            | ..                | ..     | ..      | 1,095                   | 958               | 128       | ..        | 9         |
| ..            | ..                | ..     | ..      | 1,021                   | 875               | 91        | ..        | 54        |
| ..            | ..                | ..     | ..      | 752                     | 588               | 105       | ..        | 59        |
| *7            | *7                | ..     | ..      | 174                     | 24                | 143       | ..        | 6         |
| *10           | *10               | ..     | ..      | 182                     | 74                | 100       | ..        | 8         |
| *6            | *6                | ..     | ..      | 240                     | 99                | 133       | ..        | 8         |
| *7            | *7                | ..     | ..      | 264                     | 124               | 132       | ..        | 8         |
| *1            | *1                | ..     | ..      | 443                     | 361               | ..        | ..        | 83        |
| *1            | *1                | ..     | ..      | 491                     | 408               | ..        | ..        | 83        |
| *1            | *1                | ..     | ..      | *496                    | *393              | ..        | ..        | *103      |
| *1            | *1                | ..     | ..      | *512                    | *417              | ..        | ..        | *95       |
| 2,489         | 2,489             | ..     | ..      | 5,042                   | 278               | 4,752     | ..        | 12        |
| 2,690         | 2,690             | ..     | ..      | 5,391                   | 286               | 5,090     | ..        | 16        |
| 3,245         | 3,245             | ..     | ..      | 5,336                   | 293               | 5,023     | ..        | 19        |
| 2,990         | 2,990             | ..     | ..      | 5,486                   | 237               | 5,229     | ..        | 19        |
| ..            | ..                | ..     | ..      | 143                     | *1                | 142       | ..        | 0         |
| ..            | ..                | ..     | ..      | 145                     | *1                | 144       | ..        | 0         |
| ..            | ..                | ..     | ..      | 147                     | *1                | 146       | ..        | 0         |
| ..            | ..                | ..     | ..      | 149                     | *1                | 148       | ..        | 0         |
| ..            | ..                | ..     | ..      | 294                     | 294               | ..        | ..        | ..        |
| ..            | ..                | ..     | ..      | 299                     | 299               | ..        | ..        | ..        |
| ..            | ..                | ..     | ..      | 303                     | 303               | ..        | ..        | ..        |
| ..            | ..                | ..     | ..      | 308                     | 308               | ..        | ..        | ..        |
| ..            | ..                | ..     | ..      | *58                     | *58               | ..        | ..        | ..        |
| ..            | ..                | ..     | ..      | *91                     | *91               | ..        | ..        | ..        |
| ..            | ..                | ..     | ..      | *98                     | *98               | ..        | ..        | ..        |
| ..            | ..                | ..     | ..      | *108                    | *108              | ..        | ..        | ..        |
| 1,825         | 1,825             | ..     | ..      | 1,128                   | ..                | 1,127     | ..        | 1         |
| 1,761         | 1,761             | ..     | ..      | 1,204                   | ..                | 1,203     | ..        | 1         |
| 2,001         | 2,001             | ..     | ..      | 1,095                   | ..                | 1,094     | ..        | 1         |
| 2,807         | 2,807             | ..     | ..      | 848                     | ..                | 847       | ..        | 1         |

Table 32

## Production of electricity - by type

Gigawatt-hours

| Country or area        | Year | Total producers |                   |        |         |       |       |       |
|------------------------|------|-----------------|-------------------|--------|---------|-------|-------|-------|
|                        |      | Total           | Combustible fuels | Hydro  | Nuclear | Wind  | Solar | Other |
| Côte d'Ivoire          | 2016 | 10,253          | 8,724             | 1,529  | ..      | ..    | ..    | ..    |
|                        | 2017 | 10,121          | 8,074             | 2,047  | ..      | ..    | ..    | ..    |
|                        | 2018 | 10,058          | 7,096             | 2,962  | ..      | ..    | ..    | ..    |
|                        | 2019 | 10,697          | 7,197             | 3,481  | ..      | ..    | 18    | ..    |
| Dem. Rep. of the Congo | 2016 | 9,135           | 36                | 9,099  | ..      | ..    | ..    | ..    |
|                        | 2017 | 9,510           | 28                | 9,482  | ..      | ..    | ..    | ..    |
|                        | 2018 | 12,067          | 976               | 11,064 | ..      | ..    | 27    | ..    |
|                        | 2019 | 11,107          | 33                | 11,045 | ..      | ..    | 29    | ..    |
| Djibouti               | 2016 | 88              | 88                | ..     | ..      | ..    | ..    | ..    |
|                        | 2017 | *59             | *59               | ..     | ..      | ..    | ..    | ..    |
|                        | 2018 | *58             | *58               | ..     | ..      | ..    | ..    | ..    |
|                        | 2019 | *60             | *60               | ..     | ..      | ..    | ..    | ..    |
| Egypt                  | 2016 | 191,920         | 176,234           | 13,460 | ..      | 2,058 | 168   | ..    |
|                        | 2017 | 195,150         | 179,520           | 12,850 | ..      | 2,200 | 580   | ..    |
|                        | 2018 | 202,838         | 187,341           | 12,726 | ..      | 2,234 | 537   | ..    |
|                        | 2019 | 194,279         | 175,998           | 13,121 | ..      | 3,689 | 1,471 | ..    |
| Equatorial Guinea      | 2016 | *850            | *650              | *200   | ..      | ..    | ..    | ..    |
|                        | 2017 | *850            | *650              | *200   | ..      | ..    | ..    | ..    |
|                        | 2018 | *736            | *536              | *200   | ..      | ..    | ..    | ..    |
|                        | 2019 | *750            | *550              | *200   | ..      | ..    | ..    | ..    |
| Eritrea                | 2016 | 423             | 414               | ..     | ..      | 2     | 7     | ..    |
|                        | 2017 | 444             | 430               | ..     | ..      | 2     | 11    | ..    |
|                        | 2018 | 467             | 445               | ..     | ..      | 2     | 20    | ..    |
|                        | 2019 | 483             | 459               | ..     | ..      | 2     | 22    | ..    |
| Eswatini               | 2016 | 408             | 284               | 123    | ..      | ..    | ..    | ..    |
|                        | 2017 | 414             | 297               | 117    | ..      | ..    | 0     | ..    |
|                        | 2018 | 519             | 311               | 208    | ..      | ..    | 0     | ..    |
|                        | 2019 | 584             | 313               | 269    | ..      | ..    | 2     | ..    |
| Ethiopia               | 2016 | 12,588          | 32                | 11,753 | ..      | 782   | 21    | ..    |
|                        | 2017 | 13,268          | 32                | 12,681 | ..      | 533   | 22    | ..    |
|                        | 2018 | 14,242          | 34                | 13,655 | ..      | 533   | 20    | ..    |
|                        | 2019 | 15,149          | 35                | 14,564 | ..      | 533   | 18    | ..    |
| Gabon                  | 2016 | 2,338           | 1,383             | 953    | ..      | ..    | 2     | ..    |
|                        | 2017 | 2,278           | 1,347             | 929    | ..      | ..    | 2     | ..    |
|                        | 2018 | 2,280           | 1,297             | 981    | ..      | ..    | 2     | ..    |
|                        | 2019 | 2,284           | 1,301             | 981    | ..      | ..    | 2     | ..    |
| Gambia                 | 2016 | 302             | 299               | ..     | ..      | 0     | *4    | ..    |
|                        | 2017 | 317             | 314               | ..     | ..      | 0     | *4    | ..    |
|                        | 2018 | *321            | *318              | ..     | ..      | 0     | *4    | ..    |
|                        | 2019 | *325            | *321              | ..     | ..      | 0     | *4    | ..    |
| Ghana                  | 2016 | 13,203          | 7,615             | 5,561  | ..      | ..    | 27    | ..    |
|                        | 2017 | 14,248          | 8,604             | 5,616  | ..      | ..    | 28    | ..    |
|                        | 2018 | 16,425          | 10,375            | 6,017  | ..      | ..    | 33    | ..    |
|                        | 2019 | 18,368          | 11,065            | 7,252  | ..      | ..    | 52    | ..    |
| Guinea                 | 2016 | 1,596           | 512               | 1,084  | ..      | ..    | ..    | ..    |
|                        | 2017 | 1,753           | 541               | 1,212  | ..      | ..    | ..    | ..    |
|                        | 2018 | 1,914           | 732               | 1,182  | ..      | ..    | ..    | ..    |
|                        | 2019 | 2,019           | *740              | 1,280  | ..      | ..    | ..    | ..    |
| Guinea-Bissau          | 2016 | *79             | *79               | ..     | ..      | ..    | ..    | ..    |
|                        | 2017 | *80             | *79               | ..     | ..      | ..    | 1     | ..    |
|                        | 2018 | *81             | *80               | ..     | ..      | ..    | 1     | ..    |
|                        | 2019 | *82             | *80               | ..     | ..      | ..    | 2     | ..    |
| Kenya                  | 2016 | 10,058          | 1,557             | 3,960  | ..      | 56    | ..    | 4,484 |
|                        | 2017 | 10,360          | 2,766             | 2,777  | ..      | 61    | ..    | 4,756 |
|                        | 2018 | 11,182          | 1,679             | 3,986  | ..      | 376   | 14    | 5,128 |
|                        | 2019 | 11,621          | 1,526             | 3,205  | ..      | 1,563 | 92    | 5,235 |

Table 32

## Production of electricity - by type

Gigawatt-hours

| Autoproducers |                   |       |       | Main activity producers |                   |        |         |       |
|---------------|-------------------|-------|-------|-------------------------|-------------------|--------|---------|-------|
| Total         | Combustible fuels | Hydro | Other | Total                   | Combustible fuels | Hydro  | Nuclear | Other |
| 173           | 173               | ..    | ..    | 10,080                  | 8,551             | 1,529  | ..      | ..    |
| 173           | 173               | ..    | ..    | 9,948                   | 7,901             | 2,047  | ..      | ..    |
| 61            | 61                | ..    | ..    | 9,997                   | 7,035             | 2,962  | ..      | ..    |
| 65            | 65                | ..    | ..    | 10,631                  | 7,132             | 3,481  | ..      | 18    |
| 24            | 24                | 0     | ..    | 9,111                   | 12                | 9,099  | ..      | ..    |
| 180           | 22                | 158   | ..    | 9,330                   | 6                 | 9,324  | ..      | ..    |
| 1,311         | 971               | 340   | ..    | 10,756                  | 5                 | 10,724 | ..      | 27    |
| 211           | 27                | 184   | ..    | 10,896                  | 5                 | 10,861 | ..      | 29    |
| ..            | ..                | ..    | ..    | 88                      | 88                | ..     | ..      | ..    |
| ..            | ..                | ..    | ..    | *59                     | *59               | ..     | ..      | ..    |
| ..            | ..                | ..    | ..    | *58                     | *58               | ..     | ..      | ..    |
| ..            | ..                | ..    | ..    | *60                     | *60               | ..     | ..      | ..    |
| *5,600        | *5,600            | ..    | ..    | 186,320                 | 170,634           | 13,460 | ..      | 2,226 |
| *5,600        | *5,600            | ..    | ..    | 189,550                 | 173,920           | 12,850 | ..      | 2,780 |
| 6,078         | 6,078             | ..    | ..    | 196,760                 | 181,263           | 12,726 | ..      | 2,771 |
| 11,554        | 11,554            | ..    | ..    | 182,725                 | 164,444           | 13,121 | ..      | 5,160 |
| ..            | ..                | ..    | ..    | *850                    | *650              | *200   | ..      | ..    |
| ..            | ..                | ..    | ..    | *850                    | *650              | *200   | ..      | ..    |
| ..            | ..                | ..    | ..    | *736                    | *536              | *200   | ..      | ..    |
| ..            | ..                | ..    | ..    | *750                    | *550              | *200   | ..      | ..    |
| 11            | 11                | ..    | ..    | 412                     | 403               | ..     | ..      | 9     |
| 14            | 14                | ..    | ..    | 430                     | 416               | ..     | ..      | 13    |
| 15            | 15                | ..    | ..    | 452                     | 430               | ..     | ..      | 22    |
| 16            | 16                | ..    | ..    | 468                     | 443               | ..     | ..      | 24    |
| 284           | 284               | ..    | ..    | 123                     | ..                | 123    | ..      | ..    |
| 297           | 297               | ..    | 0     | 117                     | ..                | 117    | ..      | ..    |
| 311           | 311               | ..    | 0     | 208                     | ..                | 208    | ..      | ..    |
| 313           | 313               | ..    | 0     | 271                     | ..                | 269    | ..      | 2     |
| 28            | 28                | ..    | ..    | 12,560                  | 4                 | 11,753 | ..      | 803   |
| 28            | 28                | ..    | ..    | 13,240                  | 4                 | 12,681 | ..      | 555   |
| 29            | 29                | ..    | ..    | 14,213                  | 5                 | 13,655 | ..      | 553   |
| 30            | 30                | ..    | ..    | 15,119                  | 5                 | 14,564 | ..      | 550   |
| 226           | 224               | ..    | 2     | 2,112                   | 1,159             | 953    | ..      | ..    |
| 240           | 232               | 5     | 2     | 2,039                   | 1,115             | 924    | ..      | ..    |
| 230           | 223               | 6     | 2     | 2,050                   | 1,075             | 975    | ..      | ..    |
| 226           | 218               | 6     | 2     | 2,058                   | 1,083             | 975    | ..      | ..    |
| *37           | *37               | ..    | ..    | 265                     | 262               | ..     | ..      | *4    |
| *37           | *37               | ..    | ..    | 280                     | 277               | ..     | ..      | *4    |
| *37           | *37               | ..    | ..    | *284                    | *280              | ..     | ..      | *4    |
| *38           | *38               | ..    | ..    | *287                    | *283              | ..     | ..      | *4    |
| *180          | *180              | ..    | ..    | 13,023                  | 7,435             | 5,561  | ..      | 27    |
| *180          | *180              | ..    | ..    | 14,068                  | 8,424             | 5,616  | ..      | 28    |
| *180          | *180              | ..    | ..    | 16,245                  | 10,195            | 6,017  | ..      | 33    |
| *180          | *180              | ..    | ..    | 18,188                  | 10,885            | 7,252  | ..      | 52    |
| 478           | 478               | ..    | ..    | 1,117                   | 34                | 1,084  | ..      | ..    |
| 465           | 465               | ..    | ..    | 1,288                   | 76                | 1,212  | ..      | ..    |
| 619           | 619               | ..    | ..    | 1,295                   | 114               | 1,182  | ..      | ..    |
| *625          | *625              | ..    | ..    | 1,394                   | *115              | 1,280  | ..      | ..    |
| *18           | *18               | ..    | ..    | *60                     | *60               | ..     | ..      | ..    |
| *19           | *19               | ..    | ..    | *61                     | *60               | ..     | ..      | 1     |
| *19           | *19               | ..    | ..    | *62                     | *61               | ..     | ..      | 1     |
| *19           | *19               | ..    | ..    | *63                     | *61               | ..     | ..      | 2     |
| 86            | 86                | ..    | ..    | 9,971                   | 1,471             | 3,960  | ..      | 4,541 |
| 231           | 231               | ..    | ..    | 10,129                  | 2,534             | 2,777  | ..      | 4,818 |
| 133           | 133               | ..    | ..    | 11,049                  | 1,546             | 3,986  | ..      | 5,517 |
| 212           | 212               | ..    | ..    | 11,408                  | 1,313             | 3,205  | ..      | 6,890 |

Table 32

## Production of electricity - by type

Gigawatt-hours

| Country or area | Year | Total producers |                   |        |         |       |       |       |
|-----------------|------|-----------------|-------------------|--------|---------|-------|-------|-------|
|                 |      | Total           | Combustible fuels | Hydro  | Nuclear | Wind  | Solar | Other |
| Lesotho         | 2016 | 508             | 0                 | 508    | ..      | ..    | ..    | ..    |
|                 | 2017 | 502             | *1                | 501    | ..      | ..    | ..    | ..    |
|                 | 2018 | 517             | 1                 | 517    | ..      | ..    | ..    | ..    |
|                 | 2019 | 393             | 1                 | 392    | ..      | ..    | ..    | ..    |
| Liberia         | 2016 | *440            | *400              | *40    | ..      | ..    | ..    | ..    |
|                 | 2017 | *440            | *397              | *40    | ..      | ..    | *3    | ..    |
|                 | 2018 | *444            | *318              | *122   | ..      | ..    | *4    | ..    |
|                 | 2019 | *456            | *322              | *129   | ..      | ..    | *5    | ..    |
| Libya           | 2016 | 31,420          | 31,412            | ..     | ..      | ..    | 8     | ..    |
|                 | 2017 | 33,282          | 33,274            | ..     | ..      | ..    | 8     | ..    |
|                 | 2018 | 34,172          | 34,164            | ..     | ..      | ..    | 8     | ..    |
|                 | 2019 | 33,719          | 33,711            | ..     | ..      | ..    | 8     | ..    |
| Madagascar      | 2016 | 1,886           | 980               | 887    | ..      | 0     | 19    | ..    |
|                 | 2017 | 1,994           | 1,182             | 789    | ..      | 0     | 23    | ..    |
|                 | 2018 | 2,095           | 1,104             | 968    | ..      | 0     | *23   | ..    |
|                 | 2019 | 2,162           | 1,244             | 886    | ..      | 0     | 32    | ..    |
| Malawi          | 2016 | 2,233           | *183              | 2,025  | ..      | ..    | 25    | ..    |
|                 | 2017 | 2,142           | *183              | 1,920  | ..      | ..    | 39    | ..    |
|                 | 2018 | *1,997          | *185              | *1,765 | ..      | ..    | 47    | ..    |
|                 | 2019 | *2,321          | *189              | *2,085 | ..      | ..    | *47   | ..    |
| Mali            | 2016 | 2,613           | 1,509             | 1,102  | ..      | ..    | 2     | ..    |
|                 | 2017 | 3,068           | *1,935            | 1,130  | ..      | ..    | 3     | ..    |
|                 | 2018 | *3,261          | *2,128            | *1,130 | ..      | ..    | *3    | ..    |
|                 | 2019 | *3,298          | *2,152            | *1,143 | ..      | ..    | *4    | ..    |
| Mauritania      | 2016 | 1,042           | 875               | ..     | ..      | 111   | 57    | ..    |
|                 | 2017 | 1,183           | 1,022             | ..     | ..      | 104   | 57    | ..    |
|                 | 2018 | 1,271           | 1,023             | ..     | ..      | 104   | 144   | ..    |
|                 | 2019 | 1,347           | 1,099             | ..     | ..      | *104  | *144  | ..    |
| Mauritius       | 2016 | 3,042           | 2,894             | 100    | ..      | 18    | 30    | ..    |
|                 | 2017 | 3,120           | 2,976             | 90     | ..      | 15    | 39    | ..    |
|                 | 2018 | 3,132           | 2,943             | 125    | ..      | 15    | 49    | ..    |
|                 | 2019 | 3,237           | 2,994             | 99     | ..      | 15    | 128   | ..    |
| Morocco         | 2016 | 32,141          | 25,776            | 1,662  | ..      | 3,000 | 401   | 1,302 |
|                 | 2017 | 33,192          | 26,875            | 1,565  | ..      | 3,035 | 415   | 1,302 |
|                 | 2018 | 35,822          | 27,731            | 1,998  | ..      | 3,841 | 950   | 1,302 |
|                 | 2019 | 41,650          | 32,414            | 1,654  | ..      | 4,699 | 1,581 | 1,302 |
| Mozambique      | 2016 | 18,697          | 3,103             | 15,592 | ..      | ..    | 2     | ..    |
|                 | 2017 | 17,641          | 3,581             | 14,058 | ..      | ..    | 2     | ..    |
|                 | 2018 | 17,140          | 3,239             | 13,899 | ..      | ..    | 1     | ..    |
|                 | 2019 | 18,981          | 4,021             | 14,930 | ..      | ..    | 31    | ..    |
| Namibia         | 2016 | 1,479           | 62                | 1,359  | ..      | 1     | 57    | ..    |
|                 | 2017 | 1,694           | 66                | 1,593  | ..      | 5     | *30   | ..    |
|                 | 2018 | 1,307           | 21                | 1,144  | ..      | 18    | 124   | ..    |
|                 | 2019 | 1,052           | 52                | 954    | ..      | 5     | 41    | ..    |
| Niger           | 2016 | 442             | 428               | ..     | ..      | ..    | 13    | ..    |
|                 | 2017 | 566             | 552               | ..     | ..      | ..    | 15    | ..    |
|                 | 2018 | 480             | 447               | ..     | ..      | ..    | 33    | ..    |
|                 | 2019 | *555            | *522              | ..     | ..      | ..    | 33    | ..    |
| Nigeria         | 2016 | 36,512          | 28,331            | 8,151  | ..      | 3     | 27    | ..    |
|                 | 2017 | 32,221          | 24,443            | 7,747  | ..      | 3     | 28    | ..    |
|                 | 2018 | 32,446          | 25,657            | 6,758  | ..      | 3     | 28    | ..    |
|                 | 2019 | 31,422          | 24,633            | 6,745  | ..      | 3     | 41    | ..    |
| Rwanda          | 2016 | 633             | 341               | 277    | ..      | ..    | 15    | ..    |
|                 | 2017 | 700             | 349               | 334    | ..      | ..    | 17    | ..    |
|                 | 2018 | 759             | 403               | 338    | ..      | ..    | 18    | ..    |
|                 | 2019 | 798             | 393               | 387    | ..      | ..    | 18    | ..    |



Table 32

## Production of electricity - by type

Gigawatt-hours

| Autoproducers |                   |       |       | Main activity producers |                   |        |         |       |
|---------------|-------------------|-------|-------|-------------------------|-------------------|--------|---------|-------|
| Total         | Combustible fuels | Hydro | Other | Total                   | Combustible fuels | Hydro  | Nuclear | Other |
| ..            | ..                | ..    | ..    | 508                     | 0                 | 508    | ..      | ..    |
| ..            | ..                | ..    | ..    | 502                     | *1                | 501    | ..      | ..    |
| ..            | ..                | ..    | ..    | 517                     | 1                 | 517    | ..      | ..    |
| ..            | ..                | ..    | ..    | 393                     | 1                 | 392    | ..      | ..    |
| *265          | *265              | ..    | ..    | *175                    | *135              | *40    | ..      | ..    |
| *280          | *280              | ..    | ..    | *160                    | *117              | *40    | ..      | *3    |
| *210          | *210              | ..    | ..    | *234                    | *108              | *122   | ..      | *4    |
| *213          | *213              | ..    | ..    | *243                    | *109              | *129   | ..      | *5    |
| ..            | ..                | ..    | ..    | 31,420                  | 31,412            | ..     | ..      | 8     |
| ..            | ..                | ..    | ..    | 33,282                  | 33,274            | ..     | ..      | 8     |
| ..            | ..                | ..    | ..    | 34,172                  | 34,164            | ..     | ..      | 8     |
| ..            | ..                | ..    | ..    | 33,719                  | 33,711            | ..     | ..      | 8     |
| *215          | *215              | ..    | ..    | 1,671                   | 765               | 887    | ..      | 20    |
| 269           | 269               | ..    | ..    | 1,725                   | 913               | 789    | ..      | 23    |
| *275          | *275              | ..    | ..    | 1,820                   | 829               | 968    | ..      | *23   |
| *270          | *270              | ..    | ..    | 1,892                   | 974               | 886    | ..      | 32    |
| *183          | *178              | *5    | ..    | 2,050                   | *5                | 2,020  | ..      | 25    |
| *183          | *178              | *5    | ..    | 1,959                   | *5                | 1,915  | ..      | 39    |
| *185          | *180              | *5    | ..    | *1,812                  | *5                | *1,760 | ..      | 47    |
| *189          | *184              | *5    | ..    | *2,132                  | *5                | *2,080 | ..      | *47   |
| *708          | *708              | ..    | ..    | 1,905                   | 801               | 1,102  | ..      | 2     |
| *986          | *986              | ..    | ..    | 2,082                   | 949               | 1,130  | ..      | 3     |
| *1,178        | *1,178            | ..    | ..    | *2,083                  | *950              | *1,130 | ..      | *3    |
| *1,191        | *1,191            | ..    | ..    | *2,107                  | *961              | *1,143 | ..      | *4    |
| 360           | 360               | ..    | ..    | 683                     | 515               | ..     | ..      | 168   |
| 342           | 342               | ..    | ..    | 841                     | 680               | ..     | ..      | 161   |
| *346          | *346              | ..    | ..    | 925                     | 677               | ..     | ..      | 248   |
| *350          | *350              | ..    | ..    | 997                     | 749               | ..     | ..      | *248  |
| 1,827         | 1,782             | ..    | 45    | 1,215                   | 1,112             | 100    | ..      | 4     |
| 1,843         | 1,792             | ..    | 51    | 1,277                   | 1,184             | 90     | ..      | 3     |
| 1,781         | 1,719             | ..    | 62    | 1,350                   | 1,223             | 125    | ..      | 3     |
| 1,775         | 1,634             | ..    | 141   | 1,462                   | 1,361             | 99     | ..      | 3     |
| 1,302         | ..                | ..    | 1,302 | 30,839                  | 25,776            | 1,662  | ..      | 3,401 |
| 1,302         | ..                | ..    | 1,302 | 31,890                  | 26,875            | 1,565  | ..      | 3,450 |
| 1,302         | ..                | ..    | 1,302 | 34,519                  | 27,731            | 1,998  | ..      | 4,791 |
| 1,302         | ..                | ..    | 1,302 | 40,348                  | 32,414            | 1,654  | ..      | 6,281 |
| 77            | 58                | 17    | 2     | 18,620                  | 3,045             | 15,575 | ..      | ..    |
| 246           | 246               | ..    | ..    | 17,394                  | 3,335             | 14,058 | ..      | 2     |
| 213           | 213               | ..    | ..    | 16,927                  | 3,027             | 13,899 | ..      | 1     |
| 222           | 222               | ..    | ..    | 18,759                  | 3,799             | 14,930 | ..      | 31    |
| ..            | ..                | ..    | ..    | 1,479                   | 62                | 1,359  | ..      | 58    |
| ..            | ..                | ..    | ..    | 1,694                   | 66                | 1,593  | ..      | *35   |
| ..            | ..                | ..    | ..    | 1,307                   | 21                | 1,144  | ..      | 142   |
| ..            | ..                | ..    | ..    | 1,052                   | 52                | 954    | ..      | 46    |
| 26            | 13                | ..    | 13    | 415                     | 415               | ..     | ..      | ..    |
| 25            | 10                | ..    | 15    | 541                     | 541               | ..     | ..      | ..    |
| 43            | *11               | ..    | 33    | 437                     | 437               | ..     | ..      | ..    |
| 44            | *11               | ..    | 33    | *511                    | *511              | ..     | ..      | ..    |
| 6,388         | 6,191             | 167   | 30    | 30,124                  | 22,140            | 7,984  | ..      | ..    |
| 5,531         | 5,341             | 159   | 31    | 26,690                  | 19,102            | 7,588  | ..      | ..    |
| 5,776         | 5,607             | 138   | 31    | 26,670                  | 20,051            | 6,620  | ..      | ..    |
| 5,565         | 5,383             | 138   | 44    | 25,857                  | 19,250            | 6,607  | ..      | ..    |
| *2            | *2                | ..    | ..    | 631                     | 339               | 277    | ..      | 15    |
| *2            | *2                | ..    | ..    | 698                     | 347               | 334    | ..      | 17    |
| *2            | *2                | ..    | ..    | 757                     | 401               | 338    | ..      | 18    |
| *2            | *2                | ..    | ..    | 796                     | 391               | 387    | ..      | 18    |

Table 32

## Production of electricity - by type

Gigawatt-hours

| Country or area         | Year | Total producers |                   |        |         |       |       |       |
|-------------------------|------|-----------------|-------------------|--------|---------|-------|-------|-------|
|                         |      | Total           | Combustible fuels | Hydro  | Nuclear | Wind  | Solar | Other |
| Sao Tome and Principe   | 2016 | 86              | 79                | *7     | ..      | ..    | 0     | ..    |
|                         | 2017 | *91             | *83               | *7     | ..      | ..    | 0     | ..    |
|                         | 2018 | *91             | *85               | 6      | ..      | ..    | 0     | ..    |
|                         | 2019 | *91             | *85               | 6      | ..      | ..    | 0     | ..    |
| Senegal                 | 2016 | 4,097           | 4,044             | ..     | ..      | ..    | 6     | 47    |
|                         | 2017 | 4,418           | 4,270             | ..     | ..      | ..    | 99    | 49    |
|                         | 2018 | 4,502           | 4,333             | ..     | ..      | ..    | 80    | 89    |
|                         | 2019 | *4,453          | *4,081            | ..     | ..      | 23    | *291  | 58    |
| Seychelles              | 2016 | 496             | 487               | ..     | ..      | 7     | 2     | ..    |
|                         | 2017 | 513             | 503               | ..     | ..      | 7     | 3     | ..    |
|                         | 2018 | 518             | 507               | ..     | ..      | 7     | 4     | ..    |
|                         | 2019 | 540             | 527               | ..     | ..      | 8     | 5     | ..    |
| Sierra Leone            | 2016 | *303            | *84               | *219   | ..      | ..    | 1     | ..    |
|                         | 2017 | 313             | *88               | 219    | ..      | ..    | 6     | ..    |
|                         | 2018 | 315             | *70               | 239    | ..      | ..    | *6    | ..    |
|                         | 2019 | 260             | *13               | 241    | ..      | ..    | *6    | ..    |
| Somalia                 | 2016 | 362             | 350               | ..     | ..      | 5     | 7     | ..    |
|                         | 2017 | 367             | 350               | ..     | ..      | 6     | 11    | ..    |
|                         | 2018 | 367             | 350               | ..     | ..      | 6     | 11    | ..    |
|                         | 2019 | 367             | 350               | ..     | ..      | *6    | *11   | ..    |
| South Africa            | 2016 | 255,112         | 228,523           | 3,947  | 15,913  | 3,722 | 3,007 | ..    |
|                         | 2017 | 257,769         | 227,635           | 5,323  | 15,743  | 5,132 | 3,936 | ..    |
|                         | 2018 | 256,064         | 228,082           | 5,694  | 11,580  | 6,467 | 4,241 | ..    |
|                         | 2019 | 252,639         | 222,163           | 5,791  | 13,252  | 6,624 | 4,809 | ..    |
| South Sudan             | 2016 | 521             | 519               | ..     | ..      | ..    | 2     | ..    |
|                         | 2017 | 542             | 539               | ..     | ..      | ..    | 3     | ..    |
|                         | 2018 | 584             | 580               | ..     | ..      | ..    | 4     | ..    |
|                         | 2019 | 593             | 589               | ..     | ..      | ..    | 4     | ..    |
| St. Helena and Depend.  | 2016 | 12              | 8                 | ..     | ..      | 2     | 1     | ..    |
|                         | 2017 | 11              | 9                 | ..     | ..      | 2     | 1     | ..    |
|                         | 2018 | 12              | 8                 | ..     | ..      | 3     | 2     | ..    |
|                         | 2019 | 12              | 9                 | ..     | ..      | 2     | 1     | ..    |
| Sudan                   | 2016 | 14,558          | 6,489             | 8,051  | ..      | ..    | 18    | ..    |
|                         | 2017 | 15,679          | 6,312             | 9,347  | ..      | ..    | 20    | ..    |
|                         | 2018 | 16,395          | 6,717             | 9,657  | ..      | ..    | 21    | ..    |
|                         | 2019 | 17,024          | *6,792            | 10,210 | ..      | ..    | 22    | ..    |
| Togo                    | 2016 | 950             | 742               | 208    | ..      | ..    | ..    | ..    |
|                         | 2017 | 692             | 485               | 205    | ..      | ..    | 2     | ..    |
|                         | 2018 | 589             | 389               | 196    | ..      | ..    | 3     | ..    |
|                         | 2019 | 723             | 481               | 239    | ..      | ..    | 3     | ..    |
| Tunisia                 | 2016 | 19,808          | 19,002            | 45     | ..      | 474   | 63    | 224   |
|                         | 2017 | 20,589          | 19,758            | 17     | ..      | 449   | 133   | 232   |
|                         | 2018 | 21,012          | 20,085            | 17     | ..      | 453   | 174   | 283   |
|                         | 2019 | 22,083          | 20,986            | 66     | ..      | 500   | 245   | 286   |
| Uganda                  | 2016 | 3,508           | 244               | 3,261  | ..      | ..    | 4     | ..    |
|                         | 2017 | 3,854           | 381               | 3,447  | ..      | ..    | 25    | ..    |
|                         | 2018 | 4,040           | 405               | 3,602  | ..      | ..    | 32    | ..    |
|                         | 2019 | 4,364           | 300               | 3,986  | ..      | ..    | 78    | ..    |
| United Rep. of Tanzania | 2016 | 7,216           | 4,817             | 2,366  | ..      | ..    | 33    | ..    |
|                         | 2017 | 7,250           | 4,861             | 2,350  | ..      | ..    | 39    | ..    |
|                         | 2018 | 7,396           | 4,908             | *2,400 | ..      | ..    | 88    | ..    |
|                         | 2019 | 7,865           | 5,298             | 2,477  | ..      | ..    | 89    | ..    |
| Zambia                  | 2016 | 11,695          | 670               | 11,025 | ..      | ..    | ..    | ..    |
|                         | 2017 | 14,185          | 1,987             | 12,198 | ..      | ..    | ..    | ..    |
|                         | 2018 | 16,191          | 3,524             | 12,666 | ..      | ..    | 1     | ..    |
|                         | 2019 | 15,041          | 3,598             | 11,441 | ..      | ..    | 1     | ..    |

Table 32

## Production of electricity - by type

Gigawatt-hours

| Autoproducers |                   |       |        | Main activity producers |                   |        |         |       |
|---------------|-------------------|-------|--------|-------------------------|-------------------|--------|---------|-------|
| Total         | Combustible fuels | Hydro | Other  | Total                   | Combustible fuels | Hydro  | Nuclear | Other |
| ..            | ..                | ..    | ..     | 86                      | 79                | *7     | ..      | 0     |
| ..            | ..                | ..    | ..     | *91                     | *83               | *7     | ..      | 0     |
| ..            | ..                | ..    | ..     | *91                     | *85               | 6      | ..      | 0     |
| ..            | ..                | ..    | ..     | *91                     | *85               | 6      | ..      | 0     |
| 858           | 805               | ..    | 53     | 3,239                   | 3,239             | ..     | ..      | ..    |
| 969           | 821               | ..    | 148    | 3,449                   | 3,449             | ..     | ..      | ..    |
| 1,134         | 965               | ..    | 169    | 3,368                   | 3,368             | ..     | ..      | ..    |
| 1,026         | 869               | ..    | *158   | *3,427                  | *3,212            | ..     | ..      | *214  |
| *86           | *86               | ..    | ..     | 410                     | 401               | ..     | ..      | 9     |
| *89           | *89               | ..    | ..     | 424                     | 414               | ..     | ..      | 10    |
| *90           | *90               | ..    | ..     | 428                     | 417               | ..     | ..      | 11    |
| *92           | *92               | ..    | ..     | 448                     | 435               | ..     | ..      | 13    |
| *4            | *4                | ..    | ..     | *299                    | *80               | *219   | ..      | 1     |
| *4            | *4                | ..    | ..     | 309                     | *84               | 219    | ..      | 6     |
| *4            | *4                | ..    | ..     | 311                     | *66               | 239    | ..      | *6    |
| *4            | *4                | ..    | ..     | 256                     | *9                | 241    | ..      | *6    |
| ..            | ..                | ..    | ..     | 362                     | 350               | ..     | ..      | 12    |
| ..            | ..                | ..    | ..     | 367                     | 350               | ..     | ..      | 17    |
| ..            | ..                | ..    | ..     | 367                     | 350               | ..     | ..      | 17    |
| ..            | ..                | ..    | ..     | 367                     | 350               | ..     | ..      | *17   |
| 33,356        | 26,869            | 91    | 6,396  | 221,756                 | 201,654           | 3,856  | 15,913  | 333   |
| 20,121        | 11,256            | 140   | 8,725  | 237,648                 | 216,379           | 5,183  | 15,743  | 343   |
| 23,261        | 13,163            | 75    | 10,023 | 232,803                 | 214,919           | 5,619  | 11,580  | 685   |
| 24,159        | 13,385            | 43    | 10,731 | 228,480                 | 208,778           | 5,748  | 13,252  | 702   |
| 300           | 299               | ..    | 1      | 221                     | 220               | ..     | ..      | 1     |
| 39            | 37                | ..    | 2      | 503                     | 502               | ..     | ..      | 1     |
| 42            | 40                | ..    | 2      | 542                     | 540               | ..     | ..      | 2     |
| 43            | 41                | ..    | 2      | 550                     | 548               | ..     | ..      | 2     |
| ..            | ..                | ..    | ..     | 12                      | 8                 | ..     | ..      | 3     |
| ..            | ..                | ..    | ..     | 11                      | 9                 | ..     | ..      | 3     |
| ..            | ..                | ..    | ..     | 12                      | 8                 | ..     | ..      | 4     |
| ..            | ..                | ..    | ..     | 12                      | 9                 | ..     | ..      | 3     |
| 111           | 111               | ..    | ..     | 14,447                  | 6,378             | 8,051  | ..      | 18    |
| 117           | 117               | ..    | ..     | 15,562                  | 6,195             | 9,347  | ..      | 20    |
| 118           | 118               | ..    | ..     | 16,277                  | 6,599             | 9,657  | ..      | 21    |
| 109           | 109               | ..    | ..     | 16,915                  | *6,683            | 10,210 | ..      | 22    |
| 13            | 13                | ..    | ..     | 937                     | 729               | 208    | ..      | ..    |
| 15            | 13                | ..    | 2      | 677                     | 472               | 205    | ..      | ..    |
| 7             | 4                 | ..    | 3      | 582                     | 385               | 196    | ..      | ..    |
| 7             | 4                 | ..    | 3      | 716                     | 478               | 239    | ..      | ..    |
| 1,174         | 887               | ..    | 287    | 18,634                  | 18,115            | 45     | ..      | 474   |
| 1,187         | 822               | ..    | 365    | 19,402                  | 18,936            | 17     | ..      | 449   |
| 1,467         | 1,010             | ..    | 457    | 19,545                  | 19,075            | 17     | ..      | 453   |
| 1,534         | 1,003             | ..    | 531    | 20,549                  | 19,983            | 66     | ..      | 500   |
| 471           | 178               | 294   | ..     | 3,037                   | 66                | 2,967  | ..      | 4     |
| 414           | 150               | 264   | ..     | 3,440                   | 231               | 3,183  | ..      | 25    |
| 651           | 207               | 444   | ..     | 3,389                   | 199               | 3,158  | ..      | 32    |
| 677           | 197               | 480   | ..     | 3,687                   | 103               | 3,506  | ..      | 78    |
| 33            | ..                | ..    | 33     | 7,183                   | 4,817             | 2,366  | ..      | ..    |
| 39            | ..                | ..    | 39     | 7,211                   | 4,861             | 2,350  | ..      | ..    |
| 88            | ..                | ..    | 88     | 7,308                   | 4,908             | *2,400 | ..      | ..    |
| 89            | ..                | ..    | 89     | 7,776                   | 5,298             | 2,477  | ..      | ..    |
| ..            | ..                | ..    | ..     | 11,695                  | 670               | 11,025 | ..      | ..    |
| ..            | ..                | ..    | ..     | 14,185                  | 1,987             | 12,198 | ..      | ..    |
| ..            | ..                | ..    | ..     | 16,191                  | 3,524             | 12,666 | ..      | 1     |
| ..            | ..                | ..    | ..     | 15,041                  | 3,598             | 11,441 | ..      | 1     |

Table 32

## Production of electricity - by type

Gigawatt-hours

| Country or area             | Year        | Total producers  |                   |                |                |                |                |               |
|-----------------------------|-------------|------------------|-------------------|----------------|----------------|----------------|----------------|---------------|
|                             |             | Total            | Combustible fuels | Hydro          | Nuclear        | Wind           | Solar          | Other         |
| Zimbabwe                    | 2016        | 7,090            | 4,175             | 2,915          | ..             | ..             | ..             | ..            |
|                             | 2017        | 7,544            | 3,575             | 3,969          | ..             | ..             | ..             | ..            |
|                             | 2018        | 9,418            | 4,369             | 5,049          | ..             | ..             | ..             | ..            |
|                             | 2019        | 7,792            | 4,285             | 3,507          | ..             | ..             | ..             | ..            |
| <b>America, North</b>       | <b>2016</b> | <b>5,445,040</b> | <b>3,393,769</b>  | <b>733,409</b> | <b>951,914</b> | <b>275,142</b> | <b>56,387</b>  | <b>34,420</b> |
|                             | <b>2017</b> | <b>5,406,703</b> | <b>3,258,242</b>  | <b>781,936</b> | <b>951,043</b> | <b>303,615</b> | <b>77,747</b>  | <b>34,119</b> |
|                             | <b>2018</b> | <b>5,606,105</b> | <b>3,419,153</b>  | <b>765,136</b> | <b>955,735</b> | <b>327,736</b> | <b>92,764</b>  | <b>45,582</b> |
|                             | <b>2019</b> | <b>5,524,519</b> | <b>3,319,449</b>  | <b>737,593</b> | <b>955,717</b> | <b>353,490</b> | <b>111,688</b> | <b>46,582</b> |
| Anguilla                    | 2016        | 105              | 103               | ..             | ..             | ..             | 2              | ..            |
|                             | 2017        | 82               | 80                | ..             | ..             | ..             | 2              | ..            |
|                             | 2018        | 89               | 87                | ..             | ..             | ..             | 2              | ..            |
|                             | 2019        | 100              | 98                | ..             | ..             | ..             | 2              | ..            |
| Antigua and Barbuda         | 2016        | *353             | *344              | ..             | ..             | ..             | 9              | ..            |
|                             | 2017        | *353             | *344              | ..             | ..             | ..             | 9              | ..            |
|                             | 2018        | 362              | 349               | ..             | ..             | ..             | 13             | ..            |
|                             | 2019        | *362             | *349              | ..             | ..             | ..             | *13            | ..            |
| Aruba                       | 2016        | *947             | *802              | ..             | ..             | *145           | ..             | ..            |
|                             | 2017        | *978             | *835              | ..             | ..             | *144           | ..             | ..            |
|                             | 2018        | *983             | *808              | ..             | ..             | *175           | ..             | ..            |
|                             | 2019        | *987             | *822              | ..             | ..             | *165           | ..             | ..            |
| Bahamas                     | 2016        | 1,966            | 1,966             | ..             | ..             | ..             | ..             | ..            |
|                             | 2017        | *1,987           | *1,987            | ..             | ..             | ..             | ..             | ..            |
|                             | 2018        | *2,280           | *2,280            | ..             | ..             | ..             | ..             | ..            |
|                             | 2019        | *2,337           | *2,337            | ..             | ..             | ..             | ..             | ..            |
| Barbados                    | 2016        | 1,064            | 1,037             | ..             | ..             | ..             | 27             | ..            |
|                             | 2017        | 1,047            | 1,009             | ..             | ..             | ..             | 38             | ..            |
|                             | 2018        | 1,055            | 1,011             | ..             | ..             | ..             | 44             | ..            |
|                             | 2019        | 1,070            | 1,018             | ..             | ..             | ..             | 52             | ..            |
| Belize                      | 2016        | 389              | 128               | 261            | ..             | ..             | ..             | ..            |
|                             | 2017        | 406              | 135               | 271            | ..             | ..             | ..             | ..            |
|                             | 2018        | 415              | 166               | 250            | ..             | ..             | ..             | ..            |
|                             | 2019        | 304              | 230               | 75             | ..             | ..             | ..             | ..            |
| Bermuda                     | 2016        | 666              | 665               | ..             | ..             | ..             | *1             | ..            |
|                             | 2017        | 676              | 675               | ..             | ..             | ..             | *1             | ..            |
|                             | 2018        | 644              | 642               | ..             | ..             | ..             | *2             | ..            |
|                             | 2019        | 613              | 611               | ..             | ..             | ..             | *2             | ..            |
| Bonaire, St Eustatius, Saba | 2016        | 132              | 95                | ..             | ..             | 35             | 2              | ..            |
|                             | 2017        | 137              | 101               | ..             | ..             | 32             | 4              | ..            |
|                             | 2018        | *137             | *91               | ..             | ..             | *37            | 8              | ..            |
|                             | 2019        | *145             | *104              | ..             | ..             | *33            | 9              | ..            |
| British Virgin Islands      | 2016        | *212             | *211              | ..             | ..             | *1             | *1             | ..            |
|                             | 2017        | *167             | *166              | ..             | ..             | *1             | 0              | ..            |
|                             | 2018        | *171             | *170              | ..             | ..             | *1             | 0              | ..            |
|                             | 2019        | *183             | *182              | ..             | ..             | *1             | 0              | ..            |
| Canada                      | 2016        | 663,808          | 141,715           | 385,505        | 101,429        | 30,930         | 4,030          | 199           |
|                             | 2017        | 662,972          | 131,719           | 394,659        | 101,299        | 31,511         | 3,573          | 211           |
|                             | 2018        | 653,780          | 129,889           | 385,951        | 100,731        | 33,183         | 3,796          | 230           |
|                             | 2019        | 645,429          | 127,583           | 379,742        | 101,197        | 32,657         | 4,079          | 171           |
| Cayman Islands              | 2016        | 666              | 666               | ..             | ..             | ..             | ..             | ..            |
|                             | 2017        | 671              | 671               | ..             | ..             | ..             | ..             | ..            |
|                             | 2018        | 658              | 658               | ..             | ..             | ..             | ..             | ..            |
|                             | 2019        | 696              | 696               | ..             | ..             | ..             | ..             | ..            |
| Costa Rica                  | 2016        | 10,932           | 389               | 8,026          | ..             | 1,147          | 30             | 1,340         |
|                             | 2017        | 11,359           | 237               | 8,677          | ..             | 1,288          | 40             | 1,118         |
|                             | 2018        | 11,528           | 358               | 8,343          | ..             | 1,799          | 60             | 969           |
|                             | 2019        | 11,508           | 295               | 7,827          | ..             | 1,796          | 77             | 1,513         |

Table 32

## Production of electricity - by type

Gigawatt-hours

| Autoproducers  |                   |               |               | Main activity producers |                   |                |                |                |
|----------------|-------------------|---------------|---------------|-------------------------|-------------------|----------------|----------------|----------------|
| Total          | Combustible fuels | Hydro         | Other         | Total                   | Combustible fuels | Hydro          | Nuclear        | Other          |
| 278            | 278               | ..            | ..            | 6,812                   | 3,897             | 2,915          | ..             | ..             |
| 167            | 167               | ..            | ..            | 7,377                   | 3,408             | 3,969          | ..             | ..             |
| 206            | 206               | ..            | ..            | 9,212                   | 4,163             | 5,049          | ..             | ..             |
| 209            | 209               | ..            | ..            | 7,583                   | 4,076             | 3,507          | ..             | ..             |
| <b>305,578</b> | <b>245,590</b>    | <b>30,795</b> | <b>29,193</b> | <b>5,139,462</b>        | <b>3,148,179</b>  | <b>702,614</b> | <b>951,914</b> | <b>336,755</b> |
| <b>321,746</b> | <b>254,581</b>    | <b>32,850</b> | <b>34,315</b> | <b>5,084,958</b>        | <b>3,003,662</b>  | <b>749,086</b> | <b>951,043</b> | <b>381,166</b> |
| <b>329,942</b> | <b>258,507</b>    | <b>31,992</b> | <b>39,443</b> | <b>5,276,163</b>        | <b>3,160,645</b>  | <b>733,144</b> | <b>955,735</b> | <b>426,639</b> |
| <b>334,149</b> | <b>257,496</b>    | <b>31,012</b> | <b>45,641</b> | <b>5,190,370</b>        | <b>3,061,953</b>  | <b>706,581</b> | <b>955,717</b> | <b>466,118</b> |
| ..             | ..                | ..            | ..            | 105                     | 103               | ..             | ..             | 2              |
| ..             | ..                | ..            | ..            | 82                      | 80                | ..             | ..             | 2              |
| ..             | ..                | ..            | ..            | 89                      | 87                | ..             | ..             | 2              |
| ..             | ..                | ..            | ..            | 100                     | 98                | ..             | ..             | 2              |
| *1             | *1                | ..            | ..            | *352                    | *343              | ..             | ..             | 9              |
| *1             | *1                | ..            | ..            | *352                    | *343              | ..             | ..             | 9              |
| *1             | *1                | ..            | ..            | 361                     | 348               | ..             | ..             | 13             |
| *1             | *1                | ..            | ..            | *361                    | *348              | ..             | ..             | *13            |
| ..             | ..                | ..            | ..            | *947                    | *802              | ..             | ..             | *145           |
| ..             | ..                | ..            | ..            | *978                    | *835              | ..             | ..             | *144           |
| ..             | ..                | ..            | ..            | *983                    | *808              | ..             | ..             | *175           |
| ..             | ..                | ..            | ..            | *987                    | *822              | ..             | ..             | *165           |
| *76            | *76               | ..            | ..            | 1,890                   | 1,890             | ..             | ..             | ..             |
| *75            | *75               | ..            | ..            | *1,912                  | *1,912            | ..             | ..             | ..             |
| *80            | *80               | ..            | ..            | *2,200                  | *2,200            | ..             | ..             | ..             |
| *92            | *92               | ..            | ..            | *2,245                  | *2,245            | ..             | ..             | ..             |
| 18             | 18                | ..            | ..            | 1,046                   | 1,020             | ..             | ..             | 27             |
| 17             | 17                | ..            | ..            | 1,030                   | 992               | ..             | ..             | 38             |
| 17             | 17                | ..            | ..            | 1,038                   | 994               | ..             | ..             | 44             |
| 18             | 18                | ..            | ..            | 1,053                   | 1,001             | ..             | ..             | 52             |
| 79             | 79                | ..            | ..            | 310                     | 49                | 261            | ..             | ..             |
| 82             | 82                | ..            | ..            | 323                     | 53                | 271            | ..             | ..             |
| 94             | 94                | ..            | ..            | 322                     | 72                | 250            | ..             | ..             |
| 92             | 92                | ..            | ..            | 212                     | 137               | 75             | ..             | ..             |
| *13            | *12               | ..            | *1            | 653                     | 653               | ..             | ..             | ..             |
| *14            | *13               | ..            | *1            | 662                     | 662               | ..             | ..             | ..             |
| *15            | *13               | ..            | *2            | 629                     | 629               | ..             | ..             | ..             |
| *15            | *13               | ..            | *2            | 598                     | 598               | ..             | ..             | ..             |
| ..             | ..                | ..            | ..            | 132                     | 95                | ..             | ..             | 38             |
| ..             | ..                | ..            | ..            | 137                     | 101               | ..             | ..             | 35             |
| ..             | ..                | ..            | ..            | *137                    | *91               | ..             | ..             | *45            |
| ..             | ..                | ..            | ..            | *145                    | *104              | ..             | ..             | *41            |
| ..             | ..                | ..            | ..            | *212                    | *211              | ..             | ..             | *2             |
| ..             | ..                | ..            | ..            | *167                    | *166              | ..             | ..             | *1             |
| ..             | ..                | ..            | ..            | *171                    | *170              | ..             | ..             | *1             |
| ..             | ..                | ..            | ..            | *183                    | *182              | ..             | ..             | *1             |
| 61,246         | 31,392            | 28,275        | 1,579         | 602,562                 | 110,323           | 357,230        | 101,429        | 33,580         |
| 63,265         | 31,272            | 30,139        | 1,854         | 599,707                 | 100,447           | 364,520        | 101,299        | 33,441         |
| 61,887         | 30,268            | 29,553        | 2,066         | 591,893                 | 99,621            | 356,398        | 100,731        | 35,143         |
| 61,095         | 30,057            | 28,876        | 2,162         | 584,334                 | 97,526            | 350,866        | 101,197        | 34,745         |
| ..             | ..                | ..            | ..            | 666                     | 666               | ..             | ..             | ..             |
| ..             | ..                | ..            | ..            | 671                     | 671               | ..             | ..             | ..             |
| ..             | ..                | ..            | ..            | 658                     | 658               | ..             | ..             | ..             |
| ..             | ..                | ..            | ..            | 696                     | 696               | ..             | ..             | ..             |
| 225            | 196               | 0             | 29            | 10,707                  | 193               | 8,026          | ..             | 2,488          |
| 237            | 200               | ..            | 37            | 11,123                  | 37                | 8,677          | ..             | 2,408          |
| 250            | 200               | ..            | 50            | 11,279                  | 159               | 8,343          | ..             | 2,777          |
| 267            | 200               | ..            | 68            | 11,241                  | 96                | 7,827          | ..             | 3,319          |

Table 32

## Production of electricity - by type

Gigawatt-hours

| Country or area    | Year | Total producers |                   |        |         |        |       |        |
|--------------------|------|-----------------|-------------------|--------|---------|--------|-------|--------|
|                    |      | Total           | Combustible fuels | Hydro  | Nuclear | Wind   | Solar | Other  |
| Cuba               | 2016 | 20,459          | 20,334            | 64     | ..      | *21    | *39   | ..     |
|                    | 2017 | 20,558          | 20,394            | 83     | ..      | *21    | *60   | ..     |
|                    | 2018 | 20,837          | 20,524            | 146    | ..      | *44    | *124  | ..     |
|                    | 2019 | 20,703          | 20,328            | 125    | ..      | *65    | *186  | ..     |
| Curaçao            | 2016 | 884             | 735               | ..     | ..      | 130    | 19    | ..     |
|                    | 2017 | 891             | 704               | ..     | ..      | 169    | 19    | ..     |
|                    | 2018 | 866             | 614               | ..     | ..      | 234    | 19    | ..     |
|                    | 2019 | 879             | 651               | ..     | ..      | 208    | 20    | ..     |
| Dominica           | 2016 | 157             | 120               | 36     | ..      | 1      | 0     | ..     |
|                    | 2017 | 131             | 103               | 27     | ..      | 1      | 0     | ..     |
|                    | 2018 | 110             | *85               | 24     | ..      | 1      | 0     | ..     |
|                    | 2019 | 138             | 117               | 20     | ..      | *1     | 0     | ..     |
| Dominican Republic | 2016 | 18,690          | 16,773            | 1,519  | ..      | 323    | 75    | ..     |
|                    | 2017 | 19,036          | 16,309            | 2,196  | ..      | 390    | 140   | ..     |
|                    | 2018 | 19,651          | 17,144            | 1,780  | ..      | 497    | 230   | ..     |
|                    | 2019 | 19,857          | 18,121            | 928    | ..      | 552    | 256   | ..     |
| El Salvador        | 2016 | 6,083           | 3,139             | 1,344  | ..      | ..     | 24    | 1,576  |
|                    | 2017 | 5,615           | 2,077             | 1,704  | ..      | ..     | 265   | 1,569  |
|                    | 2018 | 5,402           | 1,937             | 1,631  | ..      | ..     | 289   | 1,545  |
|                    | 2019 | 6,071           | 2,582             | 1,526  | ..      | ..     | 489   | 1,474  |
| Greenland          | 2016 | 490             | 89                | 401    | ..      | ..     | ..    | ..     |
|                    | 2017 | 518             | 130               | 388    | ..      | ..     | ..    | ..     |
|                    | 2018 | *530            | *130              | *400   | ..      | ..     | ..    | ..     |
|                    | 2019 | *520            | *128              | *392   | ..      | ..     | ..    | ..     |
| Grenada            | 2016 | 221             | 218               | ..     | ..      | ..     | 2     | ..     |
|                    | 2017 | 230             | 227               | ..     | ..      | ..     | 3     | ..     |
|                    | 2018 | 234             | 231               | ..     | ..      | ..     | 3     | ..     |
|                    | 2019 | 243             | 239               | ..     | ..      | ..     | 3     | ..     |
| Guatemala          | 2016 | 11,789          | 7,122             | 3,971  | ..      | 215    | 192   | 289    |
|                    | 2017 | 12,272          | 5,816             | 5,787  | ..      | 218    | 198   | 253    |
|                    | 2018 | 13,568          | 7,572             | 5,218  | ..      | 320    | 208   | 250    |
|                    | 2019 | *14,083         | *8,855            | 4,497  | ..      | 221    | 199   | 312    |
| Haiti              | 2016 | 1,086           | 1,013             | 71     | ..      | ..     | 2     | ..     |
|                    | 2017 | 1,058           | 928               | 127    | ..      | ..     | 3     | ..     |
|                    | 2018 | 1,048           | 848               | 197    | ..      | ..     | 3     | ..     |
|                    | 2019 | 1,064           | 860               | 200    | ..      | ..     | 3     | ..     |
| Honduras           | 2016 | 9,219           | 5,505             | 2,246  | ..      | 583    | 885   | ..     |
|                    | 2017 | 9,385           | 4,820             | 2,971  | ..      | 578    | 924   | 93     |
|                    | 2018 | 9,629           | 4,253             | 3,158  | ..      | 929    | 993   | 297    |
|                    | 2019 | 10,439          | 5,779             | 2,430  | ..      | 818    | 1,116 | 296    |
| Jamaica            | 2016 | 4,342           | 4,002             | 118    | ..      | 207    | 15    | ..     |
|                    | 2017 | 4,360           | 3,873             | 154    | ..      | 289    | 44    | ..     |
|                    | 2018 | 4,402           | 3,875             | 179    | ..      | 302    | 46    | ..     |
|                    | 2019 | 4,434           | 3,961             | 155    | ..      | 272    | 46    | ..     |
| Mexico             | 2016 | 320,565         | 262,310           | 30,698 | 10,567  | 10,378 | 464   | 6,148  |
|                    | 2017 | 322,063         | 261,726           | 31,982 | 10,883  | 10,442 | 1,085 | 5,945  |
|                    | 2018 | 357,593         | 279,725           | 32,526 | 13,675  | 12,877 | 1,363 | 17,427 |
|                    | 2019 | 344,176         | 266,753           | 23,716 | 11,190  | 16,880 | 7,057 | 18,580 |
| Montserrat         | 2016 | 14              | 14                | ..     | ..      | ..     | ..    | ..     |
|                    | 2017 | 13              | 13                | ..     | ..      | ..     | ..    | ..     |
|                    | 2018 | 14              | 14                | ..     | ..      | ..     | ..    | ..     |
|                    | 2019 | 14              | 14                | ..     | ..      | ..     | 0     | ..     |
| Nicaragua          | 2016 | 4,591           | 2,728             | 426    | ..      | 729    | 2     | 706    |
|                    | 2017 | 4,525           | 2,657             | 468    | ..      | 635    | 14    | 751    |
|                    | 2018 | 4,636           | 2,599             | 411    | ..      | 801    | 24    | 801    |
|                    | 2019 | 4,574           | 2,815             | 227    | ..      | 730    | 24    | 778    |

Table 32

## Production of electricity - by type

Gigawatt-hours

| Autoproducers |                   |       |        | Main activity producers |                   |        |         |        |
|---------------|-------------------|-------|--------|-------------------------|-------------------|--------|---------|--------|
| Total         | Combustible fuels | Hydro | Other  | Total                   | Combustible fuels | Hydro  | Nuclear | Other  |
| 949           | 949               | ..    | ..     | 19,509                  | 19,385            | 64     | ..      | *60    |
| 963           | 963               | ..    | ..     | 19,595                  | 19,431            | 83     | ..      | *81    |
| 763           | 763               | ..    | ..     | 20,074                  | 19,761            | 146    | ..      | *168   |
| 842           | 842               | ..    | ..     | 19,861                  | 19,486            | 125    | ..      | *251   |
| 160           | 160               | ..    | ..     | 724                     | 575               | ..     | ..      | 149    |
| 74            | 74                | ..    | ..     | 817                     | 629               | ..     | ..      | 188    |
| 114           | 114               | ..    | ..     | 752                     | 500               | ..     | ..      | 252    |
| 43            | 43                | ..    | ..     | 836                     | 608               | ..     | ..      | 228    |
| *44           | *44               | ..    | ..     | 113                     | 75                | 36     | ..      | 1      |
| *44           | *44               | ..    | ..     | 87                      | 58                | 27     | ..      | 1      |
| *44           | *44               | ..    | ..     | 66                      | 41                | 24     | ..      | 1      |
| *44           | *44               | ..    | ..     | 94                      | 73                | 20     | ..      | *1     |
| 1,962         | 1,905             | 6     | 51     | 16,728                  | 14,869            | 1,513  | ..      | 347    |
| 1,919         | 1,821             | 6     | 92     | 17,117                  | 14,489            | 2,190  | ..      | 438    |
| 2,011         | 1,856             | 7     | 148    | 17,640                  | 15,288            | 1,773  | ..      | 580    |
| 3,512         | 3,348             | ..    | 164    | 16,345                  | 14,774            | 928    | ..      | 643    |
| 742           | 634               | 83    | 24     | 5,342                   | 2,505             | 1,261  | ..      | 1,576  |
| 933           | 678               | 85    | 170    | 4,682                   | 1,399             | 1,619  | ..      | 1,664  |
| 980           | 737               | 83    | 160    | 4,422                   | 1,200             | 1,548  | ..      | 1,675  |
| 1,180         | 826               | 81    | 273    | 4,891                   | 1,756             | 1,445  | ..      | 1,690  |
| ..            | ..                | ..    | ..     | 490                     | 89                | 401    | ..      | ..     |
| ..            | ..                | ..    | ..     | 518                     | 130               | 388    | ..      | ..     |
| ..            | ..                | ..    | ..     | *530                    | *130              | *400   | ..      | ..     |
| ..            | ..                | ..    | ..     | *520                    | *128              | *392   | ..      | ..     |
| 2             | 2                 | ..    | ..     | 219                     | 217               | ..     | ..      | 2      |
| 2             | 2                 | ..    | ..     | 228                     | 225               | ..     | ..      | 3      |
| 3             | 3                 | ..    | ..     | 231                     | 228               | ..     | ..      | 3      |
| 3             | 3                 | ..    | ..     | 239                     | 236               | ..     | ..      | 3      |
| 911           | 891               | 20    | ..     | 10,878                  | 6,231             | 3,951  | ..      | 696    |
| 783           | 761               | 22    | ..     | 11,490                  | 5,055             | 5,765  | ..      | 669    |
| 1,046         | 1,018             | 27    | ..     | 12,522                  | 6,554             | 5,191  | ..      | 778    |
| 1,335         | 1,308             | 27    | ..     | *12,748                 | *7,547            | 4,470  | ..      | 732    |
| 37            | 37                | ..    | ..     | 1,049                   | 976               | 71     | ..      | 2      |
| 23            | 23                | ..    | ..     | 1,035                   | 905               | 127    | ..      | 3      |
| 21            | 21                | ..    | ..     | 1,027                   | 827               | 197    | ..      | 3      |
| 22            | 22                | ..    | ..     | 1,042                   | 839               | 200    | ..      | 3      |
| 1,269         | 1,269             | ..    | ..     | 7,950                   | 4,236             | 2,246  | ..      | 1,468  |
| 1,511         | 1,511             | ..    | ..     | 7,875                   | 3,309             | 2,971  | ..      | 1,595  |
| 1,647         | 1,647             | ..    | ..     | 7,982                   | 2,606             | 3,158  | ..      | 2,219  |
| 1,844         | 1,844             | ..    | ..     | 8,595                   | 3,935             | 2,430  | ..      | 2,230  |
| 1,786         | 1,564             | ..    | 222    | 2,556                   | 2,438             | 118    | ..      | ..     |
| 1,827         | 1,494             | ..    | 333    | 2,533                   | 2,379             | 154    | ..      | ..     |
| 1,841         | 1,493             | ..    | 348    | 2,561                   | 2,382             | 179    | ..      | ..     |
| 1,985         | 1,667             | ..    | 318    | 2,449                   | 2,294             | 155    | ..      | ..     |
| 54,364        | 45,079            | 893   | 8,392  | 266,201                 | 217,231           | 29,805 | 10,567  | 8,598  |
| 62,985        | 52,566            | 942   | 9,477  | 259,078                 | 209,160           | 31,040 | 10,883  | 7,995  |
| 64,651        | 52,967            | 905   | 10,779 | 292,942                 | 226,758           | 31,621 | 13,675  | 20,888 |
| 59,882        | 46,466            | 789   | 12,627 | 284,294                 | 220,287           | 22,927 | 11,190  | 29,890 |
| ..            | ..                | ..    | ..     | 14                      | 14                | ..     | ..      | ..     |
| ..            | ..                | ..    | ..     | 13                      | 13                | ..     | ..      | ..     |
| ..            | ..                | ..    | ..     | 14                      | 14                | ..     | ..      | ..     |
| ..            | ..                | ..    | ..     | 14                      | 14                | ..     | ..      | 0      |
| 589           | 588               | 1     | ..     | 4,002                   | 2,140             | 425    | ..      | 1,437  |
| 711           | 711               | 0     | ..     | 3,814                   | 1,946             | 468    | ..      | 1,400  |
| 735           | 735               | 0     | ..     | 3,901                   | 1,864             | 411    | ..      | 1,626  |
| 888           | 888               | ..    | ..     | 3,686                   | 1,927             | 227    | ..      | 1,533  |

Table 32

## Production of electricity - by type

Gigawatt-hours

| Country or area           | Year        | Total producers  |                   |                |               |               |               |            |
|---------------------------|-------------|------------------|-------------------|----------------|---------------|---------------|---------------|------------|
|                           |             | Total            | Combustible fuels | Hydro          | Nuclear       | Wind          | Solar         | Other      |
| Panama                    | 2016        | 10,885           | 3,666             | 6,523          | ..            | 625           | 71            | ..         |
|                           | 2017        | 11,054           | 3,141             | 7,256          | ..            | 491           | 156           | 9          |
|                           | 2018        | 11,353           | 2,657             | 7,858          | ..            | 588           | 233           | 18         |
|                           | 2019        | 11,663           | 5,527             | 5,096          | ..            | 725           | 295           | 20         |
| Puerto Rico               | 2016        | 20,644           | 20,262            | 71             | ..            | 193           | 118           | ..         |
|                           | 2017        | 16,371           | 16,013            | 51             | ..            | 149           | 159           | ..         |
|                           | 2018        | 17,453           | 17,226            | 38             | ..            | 108           | 81            | ..         |
|                           | 2019        | 18,886           | 18,444            | 41             | ..            | 159           | 242           | ..         |
| Sint Maarten (Dutch part) | 2016        | *362             | *362              | ..             | ..            | ..            | ..            | ..         |
|                           | 2017        | *300             | *300              | ..             | ..            | ..            | ..            | ..         |
|                           | 2018        | *291             | *291              | ..             | ..            | ..            | ..            | ..         |
|                           | 2019        | *296             | *296              | ..             | ..            | ..            | ..            | ..         |
| St. Kitts-Nevis           | 2016        | *228             | *217              | ..             | ..            | 8             | 3             | ..         |
|                           | 2017        | 232              | 221               | ..             | ..            | 8             | 3             | ..         |
|                           | 2018        | *232             | *221              | ..             | ..            | 8             | 3             | ..         |
|                           | 2019        | *235             | *224              | ..             | ..            | *8            | *3            | ..         |
| St. Lucia                 | 2016        | 391              | 391               | ..             | ..            | ..            | ..            | ..         |
|                           | 2017        | 400              | 400               | ..             | ..            | ..            | ..            | ..         |
|                           | 2018        | 404              | 399               | ..             | ..            | ..            | 5             | ..         |
|                           | 2019        | 413              | 408               | ..             | ..            | ..            | *5            | ..         |
| St. Pierre-Miquelon       | 2016        | 48               | 48                | ..             | ..            | 0             | ..            | ..         |
|                           | 2017        | 49               | 49                | ..             | ..            | ..            | ..            | ..         |
|                           | 2018        | 51               | 51                | ..             | ..            | ..            | ..            | ..         |
|                           | 2019        | 52               | 52                | ..             | ..            | ..            | ..            | ..         |
| St. Vincent-Grenadines    | 2016        | 153              | 136               | 16             | ..            | ..            | 1             | ..         |
|                           | 2017        | 151              | 129               | 20             | ..            | ..            | 1             | ..         |
|                           | 2018        | 151              | 125               | 24             | ..            | ..            | 2             | ..         |
|                           | 2019        | *163             | *136              | *25            | ..            | ..            | *2            | ..         |
| Trinidad and Tobago       | 2016        | 9,419            | 9,414             | ..             | ..            | ..            | 5             | ..         |
|                           | 2017        | 9,323            | 9,318             | ..             | ..            | 0             | 5             | ..         |
|                           | 2018        | 9,225            | 9,220             | ..             | ..            | 0             | 5             | ..         |
|                           | 2019        | 9,188            | 9,183             | ..             | ..            | 0             | 5             | ..         |
| Turks and Caicos Islands  | 2016        | *245             | *245              | ..             | ..            | ..            | ..            | ..         |
|                           | 2017        | *293             | *293              | ..             | ..            | ..            | ..            | ..         |
|                           | 2018        | *258             | *257              | ..             | ..            | ..            | 1             | ..         |
|                           | 2019        | *261             | *260              | ..             | ..            | ..            | 1             | ..         |
| United States             | 2016        | 4,322,038        | 2,886,040         | 292,113        | 839,918       | 229,471       | 50,334        | 24,162     |
|                           | 2017        | 4,286,429        | 2,770,054         | 325,114        | 838,861       | 257,249       | 70,980        | 24,170     |
|                           | 2018        | 4,455,439        | 2,912,041         | 317,004        | 841,329       | 275,834       | 85,184        | 24,046     |
|                           | 2019        | 4,391,761        | 2,818,743         | 310,571        | 843,330       | 298,200       | 97,478        | 23,438     |
| United States Virgin Is.  | 2016        | *797             | *765              | ..             | ..            | 0             | *33           | ..         |
|                           | 2017        | *611             | *589              | ..             | ..            | 0             | *21           | ..         |
|                           | 2018        | *626             | *605              | ..             | ..            | 0             | *21           | ..         |
|                           | 2019        | *672             | *647              | ..             | ..            | 0             | *24           | ..         |
| <b>America, South</b>     | <b>2016</b> | <b>1,167,384</b> | <b>432,408</b>    | <b>666,824</b> | <b>24,149</b> | <b>40,807</b> | <b>3,197</b>  | <b>0</b>   |
|                           | <b>2017</b> | <b>1,160,969</b> | <b>410,688</b>    | <b>671,374</b> | <b>21,827</b> | <b>51,584</b> | <b>5,433</b>  | <b>64</b>  |
|                           | <b>2018</b> | <b>1,185,415</b> | <b>403,382</b>    | <b>689,521</b> | <b>22,127</b> | <b>59,969</b> | <b>10,201</b> | <b>214</b> |
|                           | <b>2019</b> | <b>1,191,139</b> | <b>399,377</b>    | <b>679,389</b> | <b>24,056</b> | <b>72,599</b> | <b>15,517</b> | <b>202</b> |
| Argentina                 | 2016        | 146,353          | 99,479            | 38,028         | *8,285        | 547           | 14            | ..         |
|                           | 2017        | 145,618          | 97,257            | 41,645         | 6,088         | 612           | 16            | ..         |
|                           | 2018        | 152,224          | 102,820           | 41,430         | 6,453         | 1,413         | 108           | ..         |
|                           | 2019        | 145,990          | 95,389            | 36,878         | 7,927         | 4,996         | 800           | ..         |
| Bolivia (Plur. State of)  | 2016        | 9,307            | 7,546             | 1,720          | ..            | 35            | 6             | ..         |
|                           | 2017        | 9,617            | 7,317             | 2,234          | ..            | 60            | 6             | ..         |
|                           | 2018        | 9,855            | 7,056             | 2,612          | ..            | 59            | 127           | ..         |
|                           | 2019        | 10,172           | 6,662             | 3,251          | ..            | 70            | 188           | ..         |



Table 32

## Production of electricity - by type

Gigawatt-hours

| Autoproducers  |                   |               |              | Main activity producers |                   |                |               |               |
|----------------|-------------------|---------------|--------------|-------------------------|-------------------|----------------|---------------|---------------|
| Total          | Combustible fuels | Hydro         | Other        | Total                   | Combustible fuels | Hydro          | Nuclear       | Other         |
| 32             | 32                | ..            | ..           | 10,853                  | 3,634             | 6,523          | ..            | 697           |
| 32             | 32                | ..            | ..           | 11,022                  | 3,109             | 7,256          | ..            | 657           |
| 161            | 161               | ..            | ..           | 11,192                  | 2,496             | 7,858          | ..            | 838           |
| 1,167          | 1,167             | ..            | ..           | 10,495                  | 4,359             | 5,096          | ..            | 1,040         |
| 250            | 250               | ..            | ..           | 20,394                  | 20,012            | 71             | ..            | 311           |
| 210            | 210               | ..            | ..           | 16,161                  | 15,803            | 51             | ..            | 308           |
| 220            | 220               | ..            | ..           | 17,233                  | 17,006            | 38             | ..            | 189           |
| *230           | *230              | ..            | ..           | 18,656                  | 18,214            | 41             | ..            | 401           |
| ..             | ..                | ..            | ..           | *362                    | *362              | ..             | ..            | ..            |
| ..             | ..                | ..            | ..           | *300                    | *300              | ..             | ..            | ..            |
| ..             | ..                | ..            | ..           | *291                    | *291              | ..             | ..            | ..            |
| ..             | ..                | ..            | ..           | *296                    | *296              | ..             | ..            | ..            |
| *1             | *1                | ..            | ..           | *227                    | *216              | ..             | ..            | 11            |
| *1             | *1                | ..            | ..           | 231                     | 220               | ..             | ..            | 11            |
| *1             | *1                | ..            | ..           | *231                    | *220              | ..             | ..            | 11            |
| *1             | *1                | ..            | ..           | *234                    | *223              | ..             | ..            | *11           |
| ..             | ..                | ..            | ..           | 391                     | 391               | ..             | ..            | ..            |
| ..             | ..                | ..            | ..           | 400                     | 400               | ..             | ..            | ..            |
| ..             | ..                | ..            | ..           | 404                     | 399               | ..             | ..            | 5             |
| ..             | ..                | ..            | ..           | 413                     | 408               | ..             | ..            | *5            |
| ..             | ..                | ..            | ..           | 48                      | 48                | ..             | ..            | 0             |
| ..             | ..                | ..            | ..           | 49                      | 49                | ..             | ..            | ..            |
| ..             | ..                | ..            | ..           | 51                      | 51                | ..             | ..            | ..            |
| ..             | ..                | ..            | ..           | 52                      | 52                | ..             | ..            | ..            |
| 0              | ..                | ..            | 0            | 153                     | 136               | 16             | ..            | 1             |
| 1              | ..                | ..            | 1            | 150                     | 129               | 20             | ..            | 1             |
| 1              | ..                | ..            | 1            | 150                     | 125               | 24             | ..            | 1             |
| *1             | ..                | ..            | *1           | *162                    | *136              | *25            | ..            | *1            |
| 82             | 82                | ..            | ..           | 9,337                   | 9,332             | ..             | ..            | 5             |
| 82             | 82                | ..            | ..           | 9,241                   | 9,236             | ..             | ..            | 5             |
| 76             | 76                | ..            | ..           | 9,149                   | 9,144             | ..             | ..            | 5             |
| 76             | 76                | ..            | ..           | 9,112                   | 9,108             | ..             | ..            | 5             |
| ..             | ..                | ..            | ..           | *245                    | *245              | ..             | ..            | ..            |
| ..             | ..                | ..            | ..           | *293                    | *293              | ..             | ..            | ..            |
| ..             | ..                | ..            | ..           | *258                    | *257              | ..             | ..            | 1             |
| ..             | ..                | ..            | ..           | *261                    | *260              | ..             | ..            | 1             |
| 180,721        | 160,329           | 1,517         | 18,875       | 4,141,317               | 2,725,711         | 290,596        | 839,918       | 285,092       |
| 185,940        | 161,948           | 1,656         | 22,337       | 4,100,488               | 2,608,106         | 323,458        | 838,861       | 330,062       |
| 193,271        | 165,979           | 1,417         | 25,875       | 4,262,168               | 2,746,063         | 315,587        | 841,329       | 359,190       |
| 199,497        | 168,249           | 1,239         | 30,010       | 4,192,264               | 2,650,495         | 309,332        | 843,330       | 389,106       |
| *19            | ..                | ..            | *19          | *778                    | *765              | ..             | ..            | 14            |
| *14            | ..                | ..            | *14          | *597                    | *589              | ..             | ..            | 8             |
| *14            | ..                | ..            | *14          | *612                    | *605              | ..             | ..            | 8             |
| *17            | ..                | ..            | *17          | *655                    | *647              | ..             | ..            | 8             |
| <b>141,499</b> | <b>117,419</b>    | <b>23,915</b> | <b>165</b>   | <b>1,025,884</b>        | <b>314,988</b>    | <b>642,908</b> | <b>24,149</b> | <b>43,838</b> |
| <b>141,939</b> | <b>120,059</b>    | <b>21,524</b> | <b>356</b>   | <b>1,019,030</b>        | <b>290,629</b>    | <b>649,850</b> | <b>21,827</b> | <b>56,724</b> |
| <b>146,375</b> | <b>122,941</b>    | <b>22,725</b> | <b>710</b>   | <b>1,039,039</b>        | <b>280,442</b>    | <b>666,796</b> | <b>22,127</b> | <b>69,675</b> |
| <b>148,271</b> | <b>123,343</b>    | <b>23,031</b> | <b>1,897</b> | <b>1,042,868</b>        | <b>276,033</b>    | <b>656,358</b> | <b>24,056</b> | <b>86,420</b> |
| 14,827         | 14,781            | 46            | ..           | 131,526                 | 84,698            | 37,982         | *8,285        | 561           |
| 14,744         | 14,698            | 46            | ..           | 130,874                 | 82,559            | 41,599         | 6,088         | 628           |
| 14,744         | 14,698            | 46            | ..           | 137,480                 | 88,122            | 41,384         | 6,453         | 1,521         |
| 14,744         | 14,698            | 46            | ..           | 131,246                 | 80,691            | 36,832         | 7,927         | 5,796         |
| 285            | 281               | 4             | ..           | 9,022                   | 7,265             | 1,716          | ..            | 41            |
| 352            | 348               | 4             | ..           | 9,265                   | 6,969             | 2,230          | ..            | 66            |
| 362            | 356               | 7             | ..           | 9,493                   | 6,701             | 2,606          | ..            | 186           |
| 435            | 429               | 7             | ..           | 9,737                   | 6,234             | 3,245          | ..            | 258           |

Table 32

## Production of electricity - by type

Gigawatt-hours

| Country or area           | Year        | Total producers   |                   |                  |                |                |                |                |
|---------------------------|-------------|-------------------|-------------------|------------------|----------------|----------------|----------------|----------------|
|                           |             | Total             | Combustible fuels | Hydro            | Nuclear        | Wind           | Solar          | Other          |
| Brazil                    | 2016        | 578,897           | 148,549           | 380,911          | 15,864         | 33,488         | 85             | ..             |
|                           | 2017        | 589,326           | 159,476           | 370,906          | 15,739         | 42,373         | 832            | ..             |
|                           | 2018        | 601,396           | 144,815           | 388,971          | 15,674         | 48,475         | 3,461          | ..             |
|                           | 2019        | 626,329           | 149,682           | 397,877          | 16,129         | 55,986         | 6,655          | ..             |
| Chile                     | 2016        | 79,308            | 50,946            | 23,274           | ..             | 2,449          | 2,639          | 0              |
|                           | 2017        | 79,417            | 50,602            | 21,315           | ..             | 3,521          | 3,915          | 64             |
|                           | 2018        | 82,313            | 49,926            | 23,367           | ..             | 3,588          | 5,218          | 214            |
|                           | 2019        | 84,558            | 50,564            | 22,477           | ..             | 4,897          | 6,419          | 202            |
| Colombia                  | 2016        | 74,574            | 27,605            | 46,918           | ..             | 51             | ..             | ..             |
|                           | 2017        | 75,125            | 17,641            | 57,476           | ..             | 3              | 5              | ..             |
|                           | 2018        | 78,426            | 21,563            | 56,809           | ..             | 43             | 11             | ..             |
|                           | 2019        | 80,590            | 25,759            | 54,636           | ..             | 63             | 132            | ..             |
| Ecuador                   | 2016        | 27,314            | 11,357            | 15,834           | ..             | 84             | 39             | ..             |
|                           | 2017        | 28,033            | 7,833             | 20,089           | ..             | 73             | 37             | ..             |
|                           | 2018        | 29,198            | 8,402             | 20,678           | ..             | 80             | 38             | ..             |
|                           | 2019        | 32,267            | 7,479             | 24,664           | ..             | 86             | 38             | ..             |
| Falkland Is. (Malvinas)   | 2016        | 21                | 15                | ..               | ..             | 6              | 0              | ..             |
|                           | 2017        | 20                | 14                | ..               | ..             | 5              | 0              | ..             |
|                           | 2018        | 19                | 14                | ..               | ..             | 5              | 0              | ..             |
|                           | 2019        | 20                | 14                | ..               | ..             | 5              | 0              | ..             |
| Guyana                    | 2016        | 1,081             | 1,076             | ..               | ..             | 0              | 5              | ..             |
|                           | 2017        | 1,105             | 1,098             | ..               | ..             | 0              | 7              | ..             |
|                           | 2018        | 1,136             | 1,125             | ..               | ..             | 0              | 11             | ..             |
|                           | 2019        | 1,135             | 1,123             | ..               | ..             | 0              | 11             | ..             |
| Paraguay                  | 2016        | 63,771            | 1                 | 63,770           | ..             | ..             | ..             | ..             |
|                           | 2017        | 59,685            | 2                 | 59,684           | ..             | ..             | ..             | ..             |
|                           | 2018        | 59,212            | 2                 | 59,211           | ..             | ..             | ..             | ..             |
|                           | 2019        | 49,448            | 2                 | 49,446           | ..             | ..             | ..             | ..             |
| Peru                      | 2016        | 52,720            | 26,630            | 24,785           | ..             | 1,064          | 241            | ..             |
|                           | 2017        | 52,743            | 22,265            | 29,075           | ..             | 1,073          | 330            | ..             |
|                           | 2018        | 54,982            | 21,946            | 30,737           | ..             | 1,502          | 797            | ..             |
|                           | 2019        | 57,038            | 23,088            | 31,462           | ..             | 1,655          | 833            | ..             |
| Suriname                  | 2016        | 2,031             | 1,239             | 783              | ..             | ..             | 9              | ..             |
|                           | 2017        | 2,122             | 1,187             | 926              | ..             | ..             | 9              | ..             |
|                           | 2018        | 2,293             | 1,284             | 1,000            | ..             | ..             | 10             | ..             |
|                           | 2019        | 2,337             | 1,375             | 952              | ..             | ..             | 10             | ..             |
| Uruguay                   | 2016        | 13,885            | 2,896             | 7,842            | ..             | 2,994          | 152            | ..             |
|                           | 2017        | 14,363            | 2,802             | 7,518            | ..             | 3,775          | 269            | ..             |
|                           | 2018        | 14,623            | 2,921             | 6,557            | ..             | 4,732          | 414            | ..             |
|                           | 2019        | 16,090            | 2,806             | 8,108            | ..             | 4,752          | 424            | ..             |
| Venezuela (Bolivar. Rep.) | 2016        | 118,122           | 55,068            | 62,959           | ..             | 88             | 7              | ..             |
|                           | 2017        | 103,796           | 43,194            | 60,507           | ..             | 88             | 7              | ..             |
|                           | 2018        | 99,737            | 41,510            | 58,150           | ..             | 71             | 6              | ..             |
|                           | 2019        | 85,166            | 35,432            | 49,637           | ..             | 88             | 9              | ..             |
| <b>Asia</b>               | <b>2016</b> | <b>12,388,583</b> | <b>9,611,703</b>  | <b>1,774,684</b> | <b>476,522</b> | <b>301,459</b> | <b>135,674</b> | <b>88,541</b>  |
|                           | <b>2017</b> | <b>13,104,361</b> | <b>10,098,118</b> | <b>1,817,416</b> | <b>507,231</b> | <b>370,043</b> | <b>209,256</b> | <b>102,298</b> |
|                           | <b>2018</b> | <b>13,787,110</b> | <b>10,508,762</b> | <b>1,858,943</b> | <b>577,728</b> | <b>470,077</b> | <b>314,234</b> | <b>57,365</b>  |
|                           | <b>2019</b> | <b>14,238,341</b> | <b>10,631,628</b> | <b>1,977,488</b> | <b>655,314</b> | <b>521,694</b> | <b>392,362</b> | <b>59,855</b>  |
| Afghanistan               | 2016        | 1,394             | 155               | 1,239            | ..             | ..             | ..             | ..             |
|                           | 2017        | 1,420             | 176               | 1,244            | ..             | ..             | ..             | ..             |
|                           | 2018        | 1,266             | 200               | 1,066            | ..             | ..             | ..             | ..             |
|                           | 2019        | 1,592             | 183               | 1,388            | ..             | ..             | 21             | ..             |
| Armenia                   | 2016        | 7,315             | 2,581             | 2,350            | 2,381          | 2              | 1              | ..             |
|                           | 2017        | 7,765             | 2,872             | 2,269            | 2,620          | 2              | 3              | ..             |
|                           | 2018        | 7,791             | 3,376             | 2,318            | 2,076          | 2              | 19             | ..             |
|                           | 2019        | 7,680             | 3,047             | 2,371            | 2,198          | 3              | 61             | ..             |

Table 32

## Production of electricity - by type

Gigawatt-hours

| Autoproducers    |                   |               |                | Main activity producers |                   |                  |                |                |
|------------------|-------------------|---------------|----------------|-------------------------|-------------------|------------------|----------------|----------------|
| Total            | Combustible fuels | Hydro         | Other          | Total                   | Combustible fuels | Hydro            | Nuclear        | Other          |
| 98,537           | 77,063            | 21,412        | 62             | 480,360                 | 71,486            | 359,499          | 15,864         | 33,511         |
| 98,179           | 79,383            | 18,593        | 203            | 491,147                 | 80,093            | 352,313          | 15,739         | 43,002         |
| 101,164          | 81,273            | 19,330        | 561            | 500,232                 | 63,542            | 369,641          | 15,674         | 51,375         |
| 102,385          | 81,249            | 19,427        | 1,709          | 523,944                 | 68,433            | 378,450          | 16,129         | 60,932         |
| 6,976            | 6,815             | 161           | 0              | 72,332                  | 44,131            | 23,113           | ..             | 5,088          |
| 7,384            | 7,338             | 44            | 2              | 72,033                  | 43,264            | 21,271           | ..             | 7,497          |
| 6,975            | 6,910             | 60            | 5              | 75,338                  | 43,016            | 23,307           | ..             | 9,015          |
| 6,525            | 6,488             | 30            | 8              | 78,033                  | 44,076            | 22,447           | ..             | 11,510         |
| 8,641            | 8,511             | 130           | ..             | 65,933                  | 19,094            | 46,788           | ..             | 51             |
| 8,568            | 8,420             | 148           | ..             | 66,557                  | 9,221             | 57,328           | ..             | 8              |
| 9,483            | 9,322             | 161           | ..             | 68,943                  | 12,241            | 56,648           | ..             | 54             |
| 10,476           | 10,277            | 199           | ..             | 70,115                  | 15,482            | 54,437           | ..             | 195            |
| 4,771            | 4,041             | 730           | ..             | 22,543                  | 7,316             | 15,104           | ..             | 123            |
| 5,142            | 4,061             | 1,082         | ..             | 22,891                  | 3,772             | 19,008           | ..             | 111            |
| 5,585            | 4,211             | 1,374         | ..             | 23,613                  | 4,191             | 19,304           | ..             | 118            |
| 6,019            | 4,342             | 1,677         | ..             | 26,247                  | 3,137             | 22,987           | ..             | 123            |
| *2               | *2                | ..            | ..             | 19                      | 13                | ..               | ..             | 6              |
| *2               | *2                | ..            | ..             | 18                      | 12                | ..               | ..             | 5              |
| *2               | *2                | ..            | ..             | 17                      | 12                | ..               | ..             | 6              |
| 2                | 2                 | ..            | ..             | 18                      | 12                | ..               | ..             | 5              |
| 82               | 82                | ..            | ..             | 999                     | 994               | ..               | ..             | 5              |
| 82               | 82                | ..            | ..             | 1,022                   | 1,015             | ..               | ..             | 7              |
| 82               | 82                | ..            | ..             | 1,054                   | 1,043             | ..               | ..             | 11             |
| 30               | 30                | ..            | ..             | 1,105                   | 1,094             | ..               | ..             | 11             |
| ..               | ..                | ..            | ..             | 63,771                  | 1                 | 63,770           | ..             | ..             |
| ..               | ..                | ..            | ..             | 59,685                  | 2                 | 59,684           | ..             | ..             |
| ..               | ..                | ..            | ..             | 59,212                  | 2                 | 59,211           | ..             | ..             |
| ..               | ..                | ..            | ..             | 49,448                  | 2                 | 49,446           | ..             | ..             |
| 2,255            | 1,606             | 649           | ..             | 50,465                  | 25,024            | 24,136           | ..             | 1,305          |
| 2,399            | 1,674             | 682           | 43             | 50,344                  | 20,591            | 28,393           | ..             | 1,360          |
| 2,615            | 1,821             | 748           | 46             | 52,367                  | 20,125            | 29,989           | ..             | 2,253          |
| 2,574            | 1,827             | 693           | 54             | 54,464                  | 21,261            | 30,769           | ..             | 2,434          |
| 1,450            | 667               | 783           | ..             | 582                     | 573               | ..               | ..             | 9              |
| 1,451            | 525               | 926           | ..             | 671                     | 662               | ..               | ..             | 9              |
| 1,705            | 705               | 1,000         | ..             | *589                    | *579              | ..               | ..             | 10             |
| 1,734            | 782               | 952           | ..             | 603                     | 593               | ..               | ..             | 10             |
| 1,611            | 1,601             | ..            | 10             | 12,274                  | 1,295             | 7,842            | ..             | 3,137          |
| 1,650            | 1,635             | ..            | 15             | 12,713                  | 1,167             | 7,518            | ..             | 4,028          |
| 1,767            | 1,744             | ..            | 23             | 12,857                  | 1,177             | 6,557            | ..             | 5,123          |
| 1,702            | 1,668             | ..            | 34             | 14,388                  | 1,138             | 8,108            | ..             | 5,142          |
| 2,062            | 1,969             | ..            | 93             | 116,060                 | 53,099            | 62,959           | ..             | 2              |
| 1,985            | 1,892             | ..            | 93             | 101,811                 | 41,302            | 60,507           | ..             | 2              |
| 1,893            | 1,818             | ..            | 75             | 97,844                  | 39,692            | 58,150           | ..             | 2              |
| 1,644            | 1,552             | ..            | 92             | 83,521                  | 33,880            | 49,637           | ..             | 4              |
| <b>1,115,969</b> | <b>1,022,327</b>  | <b>13,931</b> | <b>79,711</b>  | <b>11,272,614</b>       | <b>8,589,376</b>  | <b>1,760,753</b> | <b>476,522</b> | <b>445,963</b> |
| <b>1,138,642</b> | <b>1,034,314</b>  | <b>12,385</b> | <b>91,943</b>  | <b>11,965,720</b>       | <b>9,063,804</b>  | <b>1,805,031</b> | <b>507,231</b> | <b>589,654</b> |
| <b>1,216,268</b> | <b>1,116,658</b>  | <b>10,121</b> | <b>89,489</b>  | <b>12,570,842</b>       | <b>9,392,104</b>  | <b>1,848,823</b> | <b>577,728</b> | <b>752,187</b> |
| <b>1,285,069</b> | <b>1,173,723</b>  | <b>9,617</b>  | <b>101,729</b> | <b>12,953,272</b>       | <b>9,457,904</b>  | <b>1,967,872</b> | <b>655,314</b> | <b>872,182</b> |
| *318             | *5                | *313          | ..             | 1,076                   | 150               | 927              | ..             | ..             |
| *322             | *8                | *314          | ..             | 1,098                   | 168               | 930              | ..             | ..             |
| *287             | *7                | *280          | ..             | 979                     | 193               | 786              | ..             | ..             |
| *306             | *6                | *300          | ..             | 1,286                   | 177               | 1,088            | ..             | 21             |
| ..               | ..                | ..            | ..             | 7,315                   | 2,581             | 2,350            | 2,381          | 3              |
| 2                | ..                | ..            | 2              | 7,763                   | 2,872             | 2,269            | 2,620          | 2              |
| 14               | ..                | ..            | 14             | 7,777                   | 3,376             | 2,318            | 2,076          | 7              |
| 47               | ..                | ..            | 47             | 7,632                   | 3,047             | 2,371            | 2,198          | 17             |

Table 32

## Production of electricity - by type

Gigawatt-hours

| Country or area        | Year | Total producers |                   |           |         |         |         |         |
|------------------------|------|-----------------|-------------------|-----------|---------|---------|---------|---------|
|                        |      | Total           | Combustible fuels | Hydro     | Nuclear | Wind    | Solar   | Other   |
| Azerbaijan             | 2016 | 24,953          | 22,936            | 1,959     | ..      | 23      | 35      | ..      |
|                        | 2017 | 24,321          | 22,515            | 1,746     | ..      | 22      | 37      | ..      |
|                        | 2018 | 25,229          | 23,339            | 1,768     | ..      | 83      | 39      | ..      |
|                        | 2019 | 26,073          | 24,359            | 1,565     | ..      | 105     | 44      | ..      |
| Bahrain                | 2016 | 28,479          | 28,469            | ..        | ..      | 1       | 9       | ..      |
|                        | 2017 | 29,193          | 29,183            | ..        | ..      | *1      | *9      | ..      |
|                        | 2018 | 29,516          | 29,506            | ..        | ..      | *1      | *9      | ..      |
|                        | 2019 | 33,453          | 33,442            | ..        | ..      | *1      | *10     | ..      |
| Bangladesh             | 2016 | 68,909          | 67,650            | 1,020     | ..      | 6       | 233     | ..      |
|                        | 2017 | 73,249          | 71,934            | 1,041     | ..      | 6       | 268     | ..      |
|                        | 2018 | 78,612          | 77,229            | 1,086     | ..      | 6       | 291     | ..      |
|                        | 2019 | 84,551          | 83,407            | 769       | ..      | 6       | 370     | ..      |
| Bhutan                 | 2016 | 7,954           | 0                 | 7,953     | ..      | 1       | 1       | ..      |
|                        | 2017 | 7,730           | 0                 | 7,728     | ..      | 1       | 1       | ..      |
|                        | 2018 | 6,960           | 0                 | 6,959     | ..      | 1       | 1       | ..      |
|                        | 2019 | 8,859           | 0                 | 8,857     | ..      | *1      | 1       | ..      |
| Brunei Darussalam      | 2016 | 4,270           | 4,269             | ..        | ..      | ..      | 1       | ..      |
|                        | 2017 | 4,157           | 4,155             | ..        | ..      | ..      | 2       | ..      |
|                        | 2018 | 4,294           | 4,292             | ..        | ..      | ..      | 2       | ..      |
|                        | 2019 | 4,933           | 4,931             | ..        | ..      | ..      | 2       | ..      |
| Cambodia               | 2016 | 5,812           | 3,111             | 2,698     | ..      | ..      | 3       | ..      |
|                        | 2017 | 6,902           | 4,105             | 2,792     | ..      | ..      | 5       | ..      |
|                        | 2018 | 8,475           | 3,581             | 4,879     | ..      | ..      | 16      | ..      |
|                        | 2019 | 8,675           | 4,557             | 4,025     | ..      | ..      | 93      | ..      |
| China                  | 2016 | 6,133,158       | 4,437,068         | 1,184,048 | 213,287 | 237,070 | 61,586  | 99      |
|                        | 2017 | 6,604,476       | 4,754,595         | 1,197,865 | 248,100 | 297,230 | 106,338 | 348     |
|                        | 2018 | 7,166,133       | 5,096,318         | 1,231,787 | 294,359 | 365,971 | 177,517 | 181     |
|                        | 2019 | 7,503,458       | 5,220,150         | 1,304,440 | 348,350 | 406,030 | 224,460 | 28      |
| China, Hong Kong SAR   | 2016 | 38,154          | 38,154            | ..        | ..      | ..      | ..      | ..      |
|                        | 2017 | 36,970          | 36,970            | ..        | ..      | ..      | ..      | ..      |
|                        | 2018 | 36,565          | 36,565            | ..        | ..      | ..      | ..      | ..      |
|                        | 2019 | 36,911          | 36,911            | ..        | ..      | ..      | ..      | ..      |
| China, Macao SAR       | 2016 | 988             | 988               | ..        | ..      | ..      | ..      | ..      |
|                        | 2017 | 1,465           | 1,465             | ..        | ..      | ..      | ..      | ..      |
|                        | 2018 | 653             | 653               | ..        | ..      | ..      | ..      | ..      |
|                        | 2019 | 830             | 830               | ..        | ..      | ..      | ..      | ..      |
| Cyprus                 | 2016 | 4,887           | 4,515             | ..        | ..      | 226     | 146     | ..      |
|                        | 2017 | 5,004           | 4,621             | ..        | ..      | 211     | 172     | ..      |
|                        | 2018 | 5,061           | 4,640             | ..        | ..      | 221     | 199     | ..      |
|                        | 2019 | 5,141           | 4,685             | ..        | ..      | 239     | 218     | ..      |
| Georgia                | 2016 | 11,574          | 2,236             | 9,329     | ..      | 9       | ..      | ..      |
|                        | 2017 | 11,531          | 2,233             | 9,210     | ..      | 88      | ..      | ..      |
|                        | 2018 | 12,149          | 2,115             | 9,949     | ..      | 84      | ..      | ..      |
|                        | 2019 | 11,857          | 2,840             | 8,932     | ..      | 85      | ..      | ..      |
| India                  | 2016 | 1,432,358       | 1,188,280         | 122,507   | 37,916  | 35,530  | 12,578  | *35,547 |
|                        | 2017 | 1,490,257       | 1,217,575         | 126,235   | 38,346  | 38,486  | 24,613  | *45,002 |
|                        | 2018 | 1,521,958       | 1,244,959         | 135,164   | 37,813  | *64,294 | *39,728 | ..      |
|                        | 2019 | 1,576,740       | 1,253,707         | 156,049   | 46,472  | *69,949 | *50,563 | ..      |
| Indonesia              | 2016 | 233,367         | 201,209           | 21,475    | ..      | 6       | 21      | 10,656  |
|                        | 2017 | *283,647        | *251,766          | 18,632    | ..      | *6      | 29      | 13,214  |
|                        | 2018 | 293,203         | 260,211           | 19,774    | ..      | ..      | 7       | 13,211  |
|                        | 2019 | 299,603         | 266,765           | 19,749    | ..      | ..      | 10      | 13,079  |
| Iran (Islamic Rep. of) | 2016 | 289,116         | 265,799           | 16,421    | 6,620   | 250     | 4       | 22      |
|                        | 2017 | 307,992         | 285,012           | 15,051    | 7,514   | 306     | 85      | 24      |
|                        | 2018 | 307,968         | 284,508           | 15,051    | 7,514   | 585     | 286     | 24      |
|                        | 2019 | 322,778         | 298,753           | 15,865    | 7,148   | 555     | 435     | 22      |

Table 32

## Production of electricity - by type

Gigawatt-hours

| Autoproducers |                   |       |        | Main activity producers |                   |           |         |          |
|---------------|-------------------|-------|--------|-------------------------|-------------------|-----------|---------|----------|
| Total         | Combustible fuels | Hydro | Other  | Total                   | Combustible fuels | Hydro     | Nuclear | Other    |
| 2,254         | 2,237             | ..    | 17     | 22,699                  | 20,699            | 1,959     | ..      | 41       |
| 2,089         | 2,070             | ..    | 20     | 22,232                  | 20,445            | 1,746     | ..      | 40       |
| 2,096         | 2,096             | ..    | 0      | 23,133                  | 21,243            | 1,768     | ..      | 122      |
| 2,069         | 2,069             | ..    | 0      | 24,004                  | 22,290            | 1,565     | ..      | 150      |
| 11,423        | 11,423            | ..    | ..     | 17,056                  | 17,046            | ..        | ..      | 10       |
| 11,244        | 11,244            | ..    | ..     | 17,949                  | 17,939            | ..        | ..      | *10      |
| 11,683        | 11,683            | ..    | ..     | 17,833                  | 17,823            | ..        | ..      | *10      |
| 15,236        | 15,236            | ..    | ..     | 18,217                  | 18,206            | ..        | ..      | *11      |
| 17,264        | 17,264            | ..    | ..     | 51,645                  | 50,386            | 1,020     | ..      | 239      |
| 17,237        | 17,237            | ..    | ..     | 56,012                  | 54,697            | 1,041     | ..      | 274      |
| 17,244        | 17,244            | ..    | ..     | 61,368                  | 59,985            | 1,086     | ..      | 297      |
| 16,861        | 16,861            | ..    | ..     | 67,690                  | 66,546            | 769       | ..      | 376      |
| ..            | ..                | ..    | ..     | 7,954                   | 0                 | 7,953     | ..      | 1        |
| ..            | ..                | ..    | ..     | 7,730                   | 0                 | 7,728     | ..      | 2        |
| ..            | ..                | ..    | ..     | 6,960                   | 0                 | 6,959     | ..      | 2        |
| ..            | ..                | ..    | ..     | 8,859                   | 0                 | 8,857     | ..      | *2       |
| 427           | 427               | ..    | ..     | 3,843                   | 3,842             | ..        | ..      | 1        |
| 433           | 433               | ..    | ..     | 3,724                   | 3,722             | ..        | ..      | 2        |
| 440           | 440               | ..    | ..     | 3,854                   | 3,852             | ..        | ..      | 2        |
| 912           | 912               | ..    | ..     | 4,021                   | 4,019             | ..        | ..      | 2        |
| ..            | ..                | ..    | ..     | 5,812                   | 3,111             | 2,698     | ..      | 3        |
| ..            | ..                | ..    | ..     | 6,902                   | 4,105             | 2,792     | ..      | 5        |
| ..            | ..                | ..    | ..     | 8,475                   | 3,581             | 4,879     | ..      | 16       |
| ..            | ..                | ..    | ..     | 8,675                   | 4,557             | 4,025     | ..      | 93       |
| 359,846       | 359,846           | ..    | ..     | 5,773,312               | 4,077,222         | 1,184,048 | 213,287 | 298,755  |
| 385,598       | 385,598           | ..    | ..     | 6,218,878               | 4,368,997         | 1,197,865 | 248,100 | 403,916  |
| 413,311       | 413,311           | ..    | ..     | 6,752,822               | 4,683,007         | 1,231,787 | 294,359 | 543,669  |
| 423,354       | 423,354           | ..    | ..     | 7,080,104               | 4,796,796         | 1,304,440 | 348,350 | 630,518  |
| ..            | ..                | ..    | ..     | 38,154                  | 38,154            | ..        | ..      | ..       |
| ..            | ..                | ..    | ..     | 36,970                  | 36,970            | ..        | ..      | ..       |
| ..            | ..                | ..    | ..     | 36,565                  | 36,565            | ..        | ..      | ..       |
| ..            | ..                | ..    | ..     | 36,911                  | 36,911            | ..        | ..      | ..       |
| 201           | 201               | ..    | ..     | 787                     | 787               | ..        | ..      | ..       |
| 205           | 205               | ..    | ..     | 1,260                   | 1,260             | ..        | ..      | ..       |
| 179           | 179               | ..    | ..     | 474                     | 474               | ..        | ..      | ..       |
| 217           | 217               | ..    | ..     | 613                     | 613               | ..        | ..      | ..       |
| 98            | 46                | ..    | 52     | 4,789                   | 4,469             | ..        | ..      | 320      |
| 108           | 47                | ..    | 61     | 4,896                   | 4,574             | ..        | ..      | 322      |
| 122           | 51                | ..    | 71     | 4,938                   | 4,589             | ..        | ..      | 349      |
| 138           | 51                | ..    | 87     | 5,003                   | 4,633             | ..        | ..      | 370      |
| ..            | ..                | ..    | ..     | 11,574                  | 2,236             | 9,329     | ..      | 9        |
| ..            | ..                | ..    | ..     | 11,531                  | 2,233             | 9,210     | ..      | 88       |
| ..            | ..                | ..    | ..     | 12,149                  | 2,115             | 9,949     | ..      | 84       |
| ..            | ..                | ..    | ..     | 11,857                  | 2,840             | 8,932     | ..      | 85       |
| 198,432       | 194,764           | 129   | *3,539 | 1,233,926               | 993,516           | 122,378   | 37,916  | 80,116   |
| 184,303       | 180,391           | 112   | *3,800 | 1,305,954               | 1,037,184         | 126,123   | 38,346  | 104,301  |
| 175,633       | 172,645           | 270   | *2,718 | 1,346,325               | 1,072,314         | 134,894   | 37,813  | *101,304 |
| 217,942       | 210,869           | 280   | *6,793 | 1,358,798               | 1,042,838         | 155,769   | 46,472  | *113,719 |
| 66,909        | 52,603            | 7,590 | 6,716  | 166,458                 | 148,606           | 13,885    | ..      | 3,967    |
| 58,901        | 43,997            | 6,207 | 8,697  | *224,746                | *207,769          | 12,425    | ..      | 4,552    |
| 16,322        | 16,322            | ..    | ..     | 276,881                 | 243,889           | 19,774    | ..      | 13,218   |
| 17,848        | 17,848            | ..    | ..     | 281,755                 | 248,917           | 19,749    | ..      | 13,088   |
| 6,482         | 6,482             | ..    | ..     | 282,634                 | 259,317           | 16,421    | 6,620   | 276      |
| 7,905         | 7,905             | ..    | ..     | 300,087                 | 277,107           | 15,051    | 7,514   | 415      |
| 7,905         | 7,905             | ..    | ..     | 300,063                 | 276,603           | 15,051    | 7,514   | 895      |
| 4,893         | 4,893             | ..    | ..     | 317,885                 | 293,860           | 15,865    | 7,148   | 1,013    |

Table 32

## Production of electricity - by type

Gigawatt-hours

| Country or area        | Year | Total producers |                   |        |         |       |        |        |
|------------------------|------|-----------------|-------------------|--------|---------|-------|--------|--------|
|                        |      | Total           | Combustible fuels | Hydro  | Nuclear | Wind  | Solar  | Other  |
| Iraq                   | 2016 | 80,087          | 76,659            | 3,371  | ..      | ..    | 57     | ..     |
|                        | 2017 | 83,947          | 81,714            | 2,176  | ..      | ..    | 57     | ..     |
|                        | 2018 | 82,507          | 80,312            | 1,818  | ..      | ..    | 377    | ..     |
|                        | 2019 | 95,816          | 93,941            | 1,818  | ..      | ..    | 57     | ..     |
| Israel                 | 2016 | 66,976          | 65,432            | 0      | ..      | 0     | 1,544  | ..     |
|                        | 2017 | 67,674          | 65,742            | 0      | ..      | 180   | 1,511  | 242    |
|                        | 2018 | 68,894          | 66,978            | 0      | ..      | 183   | 1,574  | 159    |
|                        | 2019 | 72,524          | 68,796            | ..     | ..      | 184   | 3,294  | 250    |
| Japan                  | 2016 | 1,070,871       | 892,019           | 85,665 | 18,060  | 6,166 | 45,761 | 23,200 |
|                        | 2017 | 1,080,974       | 872,308           | 91,060 | 32,912  | 6,490 | 55,069 | 23,136 |
|                        | 2018 | 1,068,464       | 823,457           | 88,348 | 64,929  | 7,481 | 62,668 | 21,581 |
|                        | 2019 | 1,044,978       | 795,424           | 87,256 | 63,779  | 7,673 | 68,953 | 21,894 |
| Jordan                 | 2016 | *19,563         | *18,704           | 42     | ..      | 391   | 427    | ..     |
|                        | 2017 | 19,760          | 18,354            | 38     | ..      | 449   | 920    | ..     |
|                        | 2018 | 19,437          | 17,293            | 23     | ..      | 707   | 1,415  | ..     |
|                        | 2019 | 20,609          | 17,629            | 18     | ..      | 875   | 2,086  | ..     |
| Kazakhstan             | 2016 | 106,675         | 94,644            | 11,620 | ..      | 274   | 137    | ..     |
|                        | 2017 | 103,195         | 91,485            | 11,210 | ..      | 339   | 161    | ..     |
|                        | 2018 | 107,329         | 96,187            | 10,330 | ..      | 427   | 385    | ..     |
|                        | 2019 | 106,879         | 95,346            | 9,994  | ..      | 707   | 832    | ..     |
| Korea, Dem.Ppl's.Rep.  | 2016 | 16,272          | 3,459             | 12,800 | ..      | ..    | 13     | ..     |
|                        | 2017 | 14,451          | 2,537             | 11,900 | ..      | ..    | 14     | ..     |
|                        | 2018 | 15,044          | 2,229             | 12,800 | ..      | ..    | 15     | ..     |
|                        | 2019 | 13,579          | 2,563             | 11,000 | ..      | ..    | 16     | ..     |
| Korea, Republic of     | 2016 | 562,603         | 385,386           | 6,634  | 161,995 | 1,683 | 5,123  | 1,782  |
|                        | 2017 | 566,880         | 400,148           | 7,006  | 148,427 | 2,169 | 7,056  | 2,074  |
|                        | 2018 | 590,111         | 435,292           | 7,270  | 133,505 | 2,465 | 9,208  | 2,370  |
|                        | 2019 | 581,492         | 410,786           | 6,249  | 145,910 | 2,681 | 12,996 | 2,870  |
| Kuwait                 | 2016 | 70,085          | 70,085            | ..     | ..      | ..    | 0      | ..     |
|                        | 2017 | 72,790          | 72,788            | ..     | ..      | ..    | 2      | ..     |
|                        | 2018 | 74,107          | 74,103            | ..     | ..      | ..    | 4      | ..     |
|                        | 2019 | 75,184          | 75,082            | ..     | ..      | ..    | 102    | ..     |
| Kyrgyzstan             | 2016 | 13,262          | 1,768             | 11,494 | ..      | ..    | ..     | ..     |
|                        | 2017 | 15,514          | 1,311             | 14,203 | ..      | ..    | ..     | ..     |
|                        | 2018 | 15,728          | 1,410             | 14,318 | ..      | ..    | ..     | ..     |
|                        | 2019 | 15,100          | 1,256             | 13,844 | ..      | ..    | ..     | ..     |
| Lao People's Dem. Rep. | 2016 | 25,068          | 7,120             | 17,946 | ..      | ..    | 2      | ..     |
|                        | 2017 | 33,227          | 12,441            | 20,777 | ..      | ..    | 9      | ..     |
|                        | 2018 | 36,762          | 13,703            | 22,999 | ..      | ..    | 60     | ..     |
|                        | 2019 | 31,133          | 12,194            | 18,899 | ..      | ..    | 40     | ..     |
| Lebanon                | 2016 | 21,457          | 21,047            | 382    | ..      | ..    | 28     | ..     |
|                        | 2017 | 23,411          | 22,955            | 415    | ..      | ..    | 41     | ..     |
|                        | 2018 | 23,150          | 22,754            | 348    | ..      | ..    | 48     | ..     |
|                        | 2019 | 23,819          | 22,736            | 965    | ..      | ..    | 118    | ..     |
| Malaysia               | 2016 | 156,665         | 136,336           | 20,019 | ..      | ..    | 310    | ..     |
|                        | 2017 | 164,509         | 137,599           | 26,580 | ..      | ..    | 330    | ..     |
|                        | 2018 | 170,578         | 143,621           | 26,325 | ..      | ..    | 632    | ..     |
|                        | 2019 | 175,778         | 148,168           | 26,666 | ..      | ..    | *943   | ..     |
| Maldives               | 2016 | 672             | 660               | ..     | ..      | 2     | 10     | ..     |
|                        | 2017 | 725             | 709               | ..     | ..      | 2     | 14     | ..     |
|                        | 2018 | 772             | 756               | ..     | ..      | 2     | 14     | ..     |
|                        | 2019 | 847             | 823               | ..     | ..      | 3     | 21     | ..     |
| Mongolia               | 2016 | 5,667           | 5,413             | 87     | ..      | 159   | 8      | ..     |
|                        | 2017 | 6,027           | 5,759             | 86     | ..      | 155   | 27     | ..     |
|                        | 2018 | 6,535           | 6,055             | 81     | ..      | 340   | 59     | ..     |
|                        | 2019 | 6,900           | 6,416             | *85    | ..      | *340  | *59    | ..     |

Table 32

## Production of electricity - by type

Gigawatt-hours

| Autoproducers |                   |       |        | Main activity producers |                   |        |         |        |
|---------------|-------------------|-------|--------|-------------------------|-------------------|--------|---------|--------|
| Total         | Combustible fuels | Hydro | Other  | Total                   | Combustible fuels | Hydro  | Nuclear | Other  |
| 57            | ..                | ..    | 57     | 80,030                  | 76,659            | 3,371  | ..      | ..     |
| 57            | ..                | ..    | 57     | 83,890                  | 81,714            | 2,176  | ..      | ..     |
| 377           | ..                | ..    | 377    | 82,130                  | 80,312            | 1,818  | ..      | ..     |
| 57            | ..                | ..    | 57     | 95,759                  | 93,941            | 1,818  | ..      | ..     |
| 4,069         | 2,525             | 0     | 1,544  | 62,907                  | 62,907            | 0      | ..      | 0      |
| 4,265         | 2,333             | 0     | 1,933  | 63,409                  | 63,409            | 0      | ..      | 0      |
| 5,047         | 3,131             | 0     | 1,916  | 63,847                  | 63,847            | 0      | ..      | 0      |
| 7,523         | 3,796             | ..    | 3,727  | 65,000                  | 65,000            | ..     | ..      | ..     |
| 147,360       | 83,196            | 3,316 | 60,848 | 923,511                 | 808,823           | 82,349 | 18,060  | 14,279 |
| 151,108       | 80,645            | 2,704 | 67,759 | 929,866                 | 791,663           | 88,356 | 32,912  | 16,936 |
| 161,951       | 86,312            | 3,290 | 72,349 | 906,514                 | 737,145           | 85,058 | 64,929  | 19,382 |
| 165,742       | 86,470            | 2,951 | 76,320 | 879,236                 | 708,954           | 84,304 | 63,779  | 22,199 |
| *200          | *200              | ..    | ..     | *19,363                 | *18,504           | 42     | ..      | 818    |
| *200          | *200              | ..    | ..     | 19,560                  | 18,154            | 38     | ..      | 1,369  |
| *139          | *139              | ..    | ..     | 19,298                  | 17,154            | 23     | ..      | 2,122  |
| 835           | 835               | ..    | ..     | 19,773                  | 16,794            | 18     | ..      | 2,961  |
| 1             | ..                | ..    | 1      | 106,674                 | 94,644            | 11,620 | ..      | 410    |
| 1             | ..                | ..    | 1      | 103,194                 | 91,485            | 11,210 | ..      | 499    |
| 1             | ..                | ..    | 1      | 107,328                 | 96,187            | 10,330 | ..      | 811    |
| 1             | ..                | ..    | 1      | 106,878                 | 95,346            | 9,994  | ..      | 1,538  |
| ..            | ..                | ..    | ..     | 16,272                  | 3,459             | 12,800 | ..      | 13     |
| ..            | ..                | ..    | ..     | 14,451                  | 2,537             | 11,900 | ..      | 14     |
| ..            | ..                | ..    | ..     | 15,044                  | 2,229             | 12,800 | ..      | 15     |
| ..            | ..                | ..    | ..     | 13,579                  | 2,563             | 11,000 | ..      | 16     |
| 35,013        | 34,224            | ..    | 789    | 527,590                 | 351,162           | 6,634  | 161,995 | 7,799  |
| 33,652        | 32,688            | ..    | 964    | 533,228                 | 367,460           | 7,006  | 148,427 | 10,335 |
| 35,726        | 34,603            | ..    | 1,123  | 554,386                 | 400,689           | 7,270  | 133,505 | 12,921 |
| 31,840        | 30,495            | ..    | 1,345  | 549,652                 | 380,291           | 6,249  | 145,910 | 17,202 |
| 0             | ..                | ..    | 0      | 70,085                  | 70,085            | ..     | ..      | ..     |
| 2             | ..                | ..    | 2      | 72,788                  | 72,788            | ..     | ..      | ..     |
| 4             | ..                | ..    | 4      | 74,103                  | 74,103            | ..     | ..      | ..     |
| 102           | ..                | ..    | 102    | 75,082                  | 75,082            | ..     | ..      | ..     |
| 26            | 26                | ..    | ..     | 13,236                  | 1,742             | 11,494 | ..      | ..     |
| 15            | 15                | ..    | ..     | 15,499                  | 1,296             | 14,203 | ..      | ..     |
| 39            | 39                | ..    | ..     | 15,689                  | 1,371             | 14,318 | ..      | ..     |
| 32            | 32                | ..    | ..     | 15,068                  | 1,224             | 13,844 | ..      | ..     |
| ..            | ..                | ..    | ..     | 25,068                  | 7,120             | 17,946 | ..      | 2      |
| ..            | ..                | ..    | ..     | 33,227                  | 12,441            | 20,777 | ..      | 9      |
| ..            | ..                | ..    | ..     | 36,762                  | 13,703            | 22,999 | ..      | 60     |
| ..            | ..                | ..    | ..     | 31,133                  | 12,194            | 18,899 | ..      | 40     |
| 8,397         | 8,369             | ..    | 28     | 13,060                  | 12,678            | 382    | ..      | ..     |
| 8,913         | 8,872             | ..    | 41     | 14,498                  | 14,083            | 415    | ..      | ..     |
| 7,916         | 7,868             | ..    | 48     | 15,234                  | 14,886            | 348    | ..      | ..     |
| 9,117         | 8,999             | ..    | 118    | 14,702                  | 13,737            | 965    | ..      | ..     |
| 6,223         | 6,223             | ..    | ..     | 150,442                 | 130,113           | 20,019 | ..      | 310    |
| 5,252         | 5,247             | 5     | 0      | 159,257                 | 132,352           | 26,575 | ..      | 330    |
| 7,163         | 7,104             | 0     | 59     | 163,415                 | 136,517           | 26,325 | ..      | 573    |
| 7,584         | 7,498             | ..    | *86    | 168,194                 | 140,670           | 26,666 | ..      | *857   |
| *240          | *240              | ..    | ..     | 432                     | 420               | ..     | ..      | 12     |
| *260          | *260              | ..    | ..     | 465                     | 449               | ..     | ..      | 16     |
| *280          | *280              | ..    | ..     | 492                     | 476               | ..     | ..      | 16     |
| *300          | *300              | ..    | ..     | 547                     | 523               | ..     | ..      | 24     |
| 87            | ..                | 87    | ..     | 5,580                   | 5,413             | ..     | ..      | 167    |
| 86            | ..                | 86    | ..     | 5,941                   | 5,759             | ..     | ..      | 182    |
| 81            | ..                | 81    | ..     | 6,454                   | 6,055             | ..     | ..      | 399    |
| *85           | ..                | *85   | ..     | 6,815                   | 6,416             | ..     | ..      | *399   |

Table 32

## Production of electricity - by type

Gigawatt-hours

| Country or area      | Year | Total producers |                   |        |         |       |       |        |
|----------------------|------|-----------------|-------------------|--------|---------|-------|-------|--------|
|                      |      | Total           | Combustible fuels | Hydro  | Nuclear | Wind  | Solar | Other  |
| Myanmar              | 2016 | 20,248          | 8,123             | 12,125 | ..      | ..    | ..    | ..     |
|                      | 2017 | 20,055          | 8,864             | 11,191 | ..      | ..    | ..    | ..     |
|                      | 2018 | 22,883          | 11,641            | 11,228 | ..      | ..    | 14    | ..     |
|                      | 2019 | 23,778          | 14,328            | 9,369  | ..      | ..    | 81    | ..     |
| Nepal                | 2016 | 4,244           | ..                | 4,237  | ..      | 6     | 1     | ..     |
|                      | 2017 | 4,639           | 0                 | 4,632  | ..      | 6     | 1     | ..     |
|                      | 2018 | 4,902           | 0                 | 4,895  | ..      | 6     | 1     | ..     |
|                      | 2019 | 6,181           | 0                 | 6,173  | ..      | 7     | 1     | ..     |
| Oman                 | 2016 | 34,232          | 34,228            | ..     | ..      | ..    | 4     | ..     |
|                      | 2017 | 36,130          | 36,114            | ..     | ..      | ..    | 16    | ..     |
|                      | 2018 | 37,718          | 37,702            | ..     | ..      | ..    | 16    | ..     |
|                      | 2019 | 38,337          | 38,320            | ..     | ..      | ..    | 17    | ..     |
| Other Asia           | 2016 | 264,130         | 220,023           | 9,856  | 31,661  | 1,458 | 1,132 | ..     |
|                      | 2017 | 270,281         | 235,640           | 8,780  | 22,446  | 1,722 | 1,692 | ..     |
|                      | 2018 | 275,577         | 235,595           | 7,852  | 27,682  | 1,707 | 2,740 | 0      |
|                      | 2019 | 274,191         | 227,207           | 8,753  | 32,323  | 1,892 | 4,014 | 1      |
| Pakistan             | 2016 | 115,503         | 74,698            | 34,573 | 4,602   | 791   | 207   | 632    |
|                      | 2017 | 123,533         | 81,447            | 32,132 | 6,867   | 1,422 | 654   | 1,011  |
|                      | 2018 | 134,982         | 93,546            | 27,729 | 9,849   | 2,124 | 714   | 1,020  |
|                      | 2019 | 136,461         | 89,621            | 32,789 | 9,134   | 3,234 | 716   | 967    |
| Philippines          | 2016 | 91,789          | 70,519            | 8,128  | ..      | 975   | 1,097 | 11,070 |
|                      | 2017 | 95,747          | 73,554            | 9,628  | ..      | 1,094 | 1,201 | 10,270 |
|                      | 2018 | 101,223         | 78,985            | 9,401  | ..      | 1,153 | 1,249 | 10,435 |
|                      | 2019 | 107,517         | 86,496            | 8,043  | ..      | 1,042 | 1,246 | 10,691 |
| Qatar                | 2016 | 42,307          | 42,307            | ..     | ..      | ..    | ..    | ..     |
|                      | 2017 | 45,555          | 45,555            | ..     | ..      | ..    | ..    | ..     |
|                      | 2018 | 47,913          | 47,913            | ..     | ..      | ..    | ..    | ..     |
|                      | 2019 | 49,873          | 49,873            | ..     | ..      | ..    | ..    | ..     |
| Saudi Arabia         | 2016 | 345,149         | 345,103           | ..     | ..      | ..    | 46    | ..     |
|                      | 2017 | 355,145         | 355,075           | ..     | ..      | 5     | 65    | ..     |
|                      | 2018 | 343,992         | 343,773           | ..     | ..      | 5     | 214   | ..     |
|                      | 2019 | 343,458         | 342,623           | ..     | ..      | 6     | 829   | ..     |
| Singapore            | 2016 | 51,733          | 51,587            | ..     | ..      | ..    | 146   | ..     |
|                      | 2017 | 52,401          | 52,226            | ..     | ..      | ..    | 175   | ..     |
|                      | 2018 | 53,142          | 52,905            | ..     | ..      | ..    | 237   | ..     |
|                      | 2019 | 54,552          | 54,142            | ..     | ..      | ..    | 410   | ..     |
| Sri Lanka            | 2016 | 14,363          | 9,721             | 4,221  | ..      | 347   | 75    | ..     |
|                      | 2017 | 15,004          | 10,381            | 4,039  | ..      | 367   | 217   | ..     |
|                      | 2018 | 15,985          | 9,072             | 6,401  | ..      | 326   | 186   | ..     |
|                      | 2019 | 16,726          | 11,218            | 4,802  | ..      | 348   | 357   | ..     |
| State of Palestine   | 2016 | 537             | 495               | ..     | ..      | ..    | 43    | ..     |
|                      | 2017 | 546             | 501               | ..     | ..      | ..    | 45    | ..     |
|                      | 2018 | 420             | 360               | ..     | ..      | ..    | 60    | ..     |
|                      | 2019 | 811             | 691               | ..     | ..      | ..    | 120   | ..     |
| Syrian Arab Republic | 2016 | 18,202          | 17,273            | 929    | ..      | ..    | ..    | ..     |
|                      | 2017 | 18,412          | 17,658            | 754    | ..      | ..    | ..    | ..     |
|                      | 2018 | 18,210          | 17,456            | 754    | ..      | ..    | ..    | ..     |
|                      | 2019 | 17,586          | 16,832            | 754    | ..      | ..    | ..    | ..     |
| Tajikistan           | 2016 | 17,232          | 608               | 16,624 | ..      | ..    | ..    | ..     |
|                      | 2017 | 18,144          | 1,011             | 17,133 | ..      | ..    | ..    | ..     |
|                      | 2018 | 19,743          | 1,348             | 18,395 | ..      | ..    | ..    | ..     |
|                      | 2019 | 20,676          | 1,507             | 19,169 | ..      | ..    | ..    | ..     |
| Thailand             | 2016 | 188,265         | 180,891           | 3,651  | ..      | 345   | 3,377 | 1      |
|                      | 2017 | 181,940         | 171,453           | 4,833  | ..      | 1,110 | 4,543 | 2      |
|                      | 2018 | 182,288         | 168,326           | 7,783  | ..      | 1,641 | 4,537 | 1      |
|                      | 2019 | 190,681         | 175,418           | 6,446  | ..      | 3,670 | 5,146 | 1      |



Table 32

## Production of electricity - by type

Gigawatt-hours

| Autoproducers |                   |       |       | Main activity producers |                   |        |         |        |
|---------------|-------------------|-------|-------|-------------------------|-------------------|--------|---------|--------|
| Total         | Combustible fuels | Hydro | Other | Total                   | Combustible fuels | Hydro  | Nuclear | Other  |
| 3,030         | 2,389             | 641   | ..    | 17,218                  | 5,734             | 11,484 | ..      | ..     |
| 6,499         | 5,749             | 750   | ..    | 13,557                  | 3,116             | 10,441 | ..      | ..     |
| 12,396        | 8,779             | 3,602 | 14    | 10,487                  | 2,862             | 7,625  | ..      | ..     |
| 14,415        | 10,929            | 3,405 | 81    | 9,363                   | 3,399             | 5,964  | ..      | ..     |
| 155           | ..                | 155   | ..    | 4,089                   | ..                | 4,082  | ..      | 7      |
| 156           | ..                | 156   | ..    | 4,483                   | 0                 | 4,476  | ..      | 7      |
| 157           | ..                | 157   | ..    | 4,745                   | 0                 | 4,738  | ..      | 6      |
| 161           | ..                | 161   | ..    | 6,019                   | 0                 | 6,012  | ..      | 7      |
| ..            | ..                | ..    | ..    | 34,232                  | 34,228            | ..     | ..      | 4      |
| ..            | ..                | ..    | ..    | 36,130                  | 36,114            | ..     | ..      | 16     |
| ..            | ..                | ..    | ..    | 37,718                  | 37,702            | ..     | ..      | 16     |
| ..            | ..                | ..    | ..    | 38,337                  | 38,320            | ..     | ..      | 17     |
| 36,863        | 35,782            | ..    | 1,081 | 227,267                 | 184,241           | 9,856  | 31,661  | 1,509  |
| 36,034        | 34,433            | ..    | 1,601 | 234,246                 | 201,207           | 8,780  | 22,446  | 1,813  |
| 41,765        | 39,108            | ..    | 2,657 | 233,811                 | 196,487           | 7,852  | 27,682  | 1,789  |
| 42,095        | 38,332            | ..    | 3,763 | 232,096                 | 188,875           | 8,753  | 32,323  | 2,144  |
| 2,314         | 1,682             | ..    | 632   | 113,189                 | 73,016            | 34,573 | 4,602   | 998    |
| 2,726         | 1,715             | ..    | 1,011 | 120,807                 | 79,732            | 32,132 | 6,867   | 2,076  |
| 2,983         | 1,963             | ..    | 1,020 | 131,999                 | 91,583            | 27,729 | 9,849   | 2,838  |
| 2,980         | 2,013             | ..    | 967   | 133,481                 | 87,608            | 32,789 | 9,134   | 3,950  |
| *991          | *974              | *17   | ..    | 90,798                  | 69,544            | 8,111  | ..      | 13,143 |
| *1,376        | *1,359            | *17   | ..    | 94,371                  | 72,195            | 9,611  | ..      | 12,565 |
| *1,458        | *1,441            | *17   | ..    | 99,765                  | 77,544            | 9,384  | ..      | 12,837 |
| *1,475        | *1,458            | *17   | ..    | 106,042                 | 85,038            | 8,026  | ..      | 12,979 |
| 39,757        | 39,757            | ..    | ..    | 2,550                   | 2,550             | ..     | ..      | ..     |
| 42,813        | 42,813            | ..    | ..    | 2,742                   | 2,742             | ..     | ..      | ..     |
| 46,380        | 46,380            | ..    | ..    | 1,533                   | 1,533             | ..     | ..      | ..     |
| 47,942        | 47,942            | ..    | ..    | 1,930                   | 1,930             | ..     | ..      | ..     |
| 84,490        | 84,490            | ..    | ..    | 260,659                 | 260,613           | ..     | ..      | 46     |
| 90,143        | 90,143            | ..    | ..    | 265,002                 | 264,932           | ..     | ..      | 70     |
| 151,161       | 151,161           | ..    | ..    | 192,831                 | 192,612           | ..     | ..      | 219    |
| 149,601       | 149,601           | ..    | ..    | 193,857                 | 193,022           | ..     | ..      | 835    |
| 3,520         | 3,520             | ..    | ..    | 48,212                  | 48,066            | ..     | ..      | 146    |
| 3,990         | 3,990             | ..    | ..    | 48,410                  | 48,235            | ..     | ..      | 175    |
| 4,733         | 4,733             | ..    | ..    | 48,409                  | 48,172            | ..     | ..      | 237    |
| 4,497         | 4,497             | ..    | ..    | 50,055                  | 49,645            | ..     | ..      | 410    |
| 902           | 91                | 739   | 73    | 13,461                  | 9,630             | 3,482  | ..      | 349    |
| 1,184         | 86                | 964   | 134   | 13,821                  | 10,296            | 3,075  | ..      | 450    |
| 1,409         | 87                | 1,232 | 89    | 14,577                  | 8,985             | 5,169  | ..      | 423    |
| 1,207         | *91               | 1,019 | *96   | 15,519                  | 11,127            | 3,783  | ..      | 609    |
| 177           | 156               | ..    | 21    | 360                     | 339               | ..     | ..      | 21     |
| 154           | 132               | ..    | 23    | 392                     | 369               | ..     | ..      | 23     |
| 137           | 107               | ..    | 30    | 284                     | 254               | ..     | ..      | 30     |
| 160           | 100               | ..    | 60    | 651                     | 591               | ..     | ..      | 60     |
| 646           | 646               | ..    | ..    | 17,556                  | 16,627            | 929    | ..      | ..     |
| 717           | 717               | ..    | ..    | 17,695                  | 16,941            | 754    | ..      | ..     |
| 672           | 672               | ..    | ..    | 17,538                  | 16,784            | 754    | ..      | ..     |
| 580           | 580               | ..    | ..    | 17,006                  | 16,252            | 754    | ..      | ..     |
| ..            | ..                | ..    | ..    | 17,232                  | 608               | 16,624 | ..      | ..     |
| ..            | ..                | ..    | ..    | 18,144                  | 1,011             | 17,133 | ..      | ..     |
| ..            | ..                | ..    | ..    | 19,743                  | 1,348             | 18,395 | ..      | ..     |
| ..            | ..                | ..    | ..    | 20,676                  | 1,507             | 19,169 | ..      | ..     |
| 51,810        | 48,817            | 19    | 2,974 | 136,455                 | 132,074           | 3,632  | ..      | 749    |
| 55,688        | 51,659            | 22    | 4,006 | 126,251                 | 119,793           | 4,811  | ..      | 1,648  |
| 64,128        | 60,089            | 38    | 4,001 | 118,161                 | 108,237           | 7,745  | ..      | 2,178  |
| 68,932        | 64,358            | 35    | 4,538 | 121,749                 | 111,059           | 6,411  | ..      | 4,279  |

Table 32

## Production of electricity - by type

Gigawatt-hours

| Country or area        | Year        | Total producers  |                   |                |                  |                |                |               |
|------------------------|-------------|------------------|-------------------|----------------|------------------|----------------|----------------|---------------|
|                        |             | Total            | Combustible fuels | Hydro          | Nuclear          | Wind           | Solar          | Other         |
| Timor-Leste            | 2016        | 415              | 413               | 2              | ..               | ..             | 1              | ..            |
|                        | 2017        | 430              | 427               | 2              | ..               | ..             | 1              | ..            |
|                        | 2018        | 453              | 450               | 2              | ..               | ..             | 1              | ..            |
|                        | 2019        | 518              | 515               | 2              | ..               | ..             | *1             | ..            |
| Turkey                 | 2016        | 274,408          | 185,085           | 67,231         | ..               | 15,517         | 1,043          | 5,532         |
|                        | 2017        | 297,278          | 211,290           | 58,218         | ..               | 17,904         | 2,889          | 6,976         |
|                        | 2018        | 304,802          | 208,733           | 59,938         | ..               | 19,949         | 7,800          | 8,381         |
|                        | 2019        | 303,898          | 174,041           | 88,823         | ..               | 21,731         | 9,250          | 10,053        |
| Turkmenistan           | 2016        | 22,534           | 22,534            | ..             | ..               | ..             | ..             | ..            |
|                        | 2017        | 22,534           | 22,531            | 3              | ..               | ..             | ..             | ..            |
|                        | 2018        | 22,534           | 22,531            | 3              | ..               | ..             | ..             | ..            |
|                        | 2019        | 22,534           | 22,531            | 3              | ..               | ..             | ..             | ..            |
| United Arab Emirates   | 2016        | 129,596          | 129,287           | ..             | ..               | ..             | 309            | ..            |
|                        | 2017        | 134,553          | 133,761           | ..             | ..               | ..             | 792            | ..            |
|                        | 2018        | 135,997          | 134,694           | ..             | ..               | ..             | 1,303          | ..            |
|                        | 2019        | 138,454          | 134,674           | ..             | ..               | ..             | 3,780          | ..            |
| Uzbekistan             | 2016        | 58,634           | 51,773            | 6,860          | ..               | ..             | 0              | ..            |
|                        | 2017        | 60,323           | 52,393            | 7,930          | ..               | ..             | 1              | ..            |
|                        | 2018        | 62,408           | 56,510            | 5,897          | ..               | ..             | 0              | ..            |
|                        | 2019        | 63,021           | 56,544            | 6,462          | ..               | 16             | 0              | ..            |
| Viet Nam               | 2016        | 181,653          | 116,244           | 65,188         | ..               | 221            | ..             | ..            |
|                        | 2017        | 198,499          | 109,354           | 88,875         | ..               | 270            | ..             | ..            |
|                        | 2018        | 213,199          | 128,576           | 84,205         | ..               | 312            | 106            | ..            |
|                        | 2019        | *227,715         | *142,200          | 85,097         | ..               | 312            | 106            | ..            |
| Yemen                  | 2016        | 4,798            | 4,643             | ..             | ..               | ..             | 155            | ..            |
|                        | 2017        | 4,050            | 3,856             | ..             | ..               | ..             | 194            | ..            |
|                        | 2018        | 3,487            | 3,003             | ..             | ..               | ..             | 484            | ..            |
|                        | 2019        | 3,603            | 3,119             | ..             | ..               | ..             | 484            | ..            |
| <b>Europe</b>          | <b>2016</b> | <b>4,863,751</b> | <b>2,485,730</b>  | <b>799,287</b> | <b>1,138,394</b> | <b>307,368</b> | <b>113,678</b> | <b>19,295</b> |
|                        | <b>2017</b> | <b>4,884,828</b> | <b>2,493,334</b>  | <b>744,388</b> | <b>1,138,815</b> | <b>366,272</b> | <b>122,368</b> | <b>19,650</b> |
|                        | <b>2018</b> | <b>4,905,167</b> | <b>2,423,831</b>  | <b>805,632</b> | <b>1,141,487</b> | <b>383,321</b> | <b>131,915</b> | <b>18,982</b> |
|                        | <b>2019</b> | <b>4,849,473</b> | <b>2,340,802</b>  | <b>763,381</b> | <b>1,139,926</b> | <b>441,163</b> | <b>145,133</b> | <b>19,068</b> |
| Albania                | 2016        | 7,136            | ..                | 7,136          | ..               | ..             | ..             | ..            |
|                        | 2017        | 4,526            | ..                | 4,526          | ..               | ..             | ..             | ..            |
|                        | 2018        | 8,552            | ..                | 8,552          | ..               | ..             | ..             | ..            |
|                        | 2019        | 5,206            | ..                | 5,184          | ..               | ..             | 22             | ..            |
| Andorra                | 2016        | 99               | 14                | 84             | ..               | ..             | 0              | ..            |
|                        | 2017        | 103              | 17                | 85             | ..               | ..             | 1              | ..            |
|                        | 2018        | 135              | 20                | 114            | ..               | ..             | 1              | ..            |
|                        | 2019        | 107              | 21                | 85             | ..               | ..             | 2              | ..            |
| Austria                | 2016        | 68,307           | 18,952            | 43,009         | ..               | 5,235          | 1,096          | 15            |
|                        | 2017        | 71,324           | 21,296            | 42,175         | ..               | 6,572          | 1,269          | 13            |
|                        | 2018        | 68,618           | 19,900            | 41,219         | ..               | 6,030          | 1,455          | 13            |
|                        | 2019        | 74,234           | 21,208            | 43,833         | ..               | 7,477          | 1,702          | 13            |
| Belarus                | 2016        | 33,566           | 33,321            | 142            | ..               | 75             | 28             | ..            |
|                        | 2017        | 34,515           | 33,924            | 405            | ..               | 97             | 89             | ..            |
|                        | 2018        | 38,986           | 38,386            | 324            | ..               | 99             | 177            | ..            |
|                        | 2019        | 40,465           | 39,756            | 350            | ..               | 178            | 181            | ..            |
| Belgium                | 2016        | 85,813           | 31,744            | 1,489          | 43,523           | 5,438          | 3,095          | 524           |
|                        | 2017        | 86,776           | 32,779            | 1,397          | 42,227           | 6,514          | 3,308          | 551           |
|                        | 2018        | 75,098           | 33,318            | 1,329          | 28,597           | 7,465          | 3,903          | 487           |
|                        | 2019        | 93,746           | 34,633            | 1,181          | 43,524           | 9,726          | 4,247          | 436           |
| Bosnia and Herzegovina | 2016        | 17,767           | 12,102            | 5,641          | ..               | ..             | 24             | ..            |
|                        | 2017        | 16,439           | 12,431            | 3,987          | ..               | ..             | 21             | ..            |
|                        | 2018        | 19,160           | 12,517            | 6,519          | ..               | 103            | 21             | ..            |
|                        | 2019        | 17,493           | 11,037            | 6,172          | ..               | 254            | 30             | ..            |

Table 32

## Production of electricity - by type

Gigawatt-hours

| Autoproducers  |                   |               |               | Main activity producers |                   |                |                  |                |
|----------------|-------------------|---------------|---------------|-------------------------|-------------------|----------------|------------------|----------------|
| Total          | Combustible fuels | Hydro         | Other         | Total                   | Combustible fuels | Hydro          | Nuclear          | Other          |
| ..             | ..                | ..            | ..            | 415                     | 413               | 2              | ..               | 1              |
| ..             | ..                | ..            | ..            | 430                     | 427               | 2              | ..               | 1              |
| ..             | ..                | ..            | ..            | 453                     | 450               | 2              | ..               | 1              |
| ..             | ..                | ..            | ..            | 518                     | 515               | 2              | ..               | *1             |
| 20,662         | 18,635            | 845           | 1,182         | 253,746                 | 166,450           | 66,386         | ..               | 20,910         |
| 20,284         | 17,682            | 967           | 1,636         | 276,993                 | 193,609           | 57,252         | ..               | 26,133         |
| 19,918         | 16,334            | 1,073         | 2,510         | 284,884                 | 192,399           | 58,865         | ..               | 33,620         |
| 22,934         | 18,598            | 1,282         | 3,053         | 280,964                 | 155,443           | 87,540         | ..               | 37,980         |
| ..             | ..                | ..            | ..            | 22,534                  | 22,534            | ..             | ..               | ..             |
| ..             | ..                | ..            | ..            | 22,534                  | 22,531            | 3              | ..               | ..             |
| ..             | ..                | ..            | ..            | 22,534                  | 22,531            | 3              | ..               | ..             |
| ..             | ..                | ..            | ..            | 22,534                  | 22,531            | 3              | ..               | ..             |
| ..             | ..                | ..            | ..            | 129,596                 | 129,287           | ..             | ..               | 309            |
| ..             | ..                | ..            | ..            | 134,553                 | 133,761           | ..             | ..               | 792            |
| ..             | ..                | ..            | ..            | 135,997                 | 134,694           | ..             | ..               | 1,303          |
| ..             | ..                | ..            | ..            | 138,454                 | 134,674           | ..             | ..               | 3,780          |
| ..             | ..                | ..            | ..            | 58,634                  | 51,773            | 6,860          | ..               | 0              |
| ..             | ..                | ..            | ..            | 60,323                  | 52,393            | 7,930          | ..               | 1              |
| ..             | ..                | ..            | ..            | 62,408                  | 56,510            | 5,897          | ..               | 0              |
| ..             | ..                | ..            | ..            | 63,021                  | 56,544            | 6,462          | ..               | 16             |
| 4,914          | 4,832             | *80           | *2            | 176,739                 | 111,412           | 65,108         | ..               | 219            |
| 4,282          | 4,200             | *80           | *2            | 194,217                 | 105,154           | 88,795         | ..               | 268            |
| *4,282         | *4,200            | *80           | *2            | 208,917                 | 124,376           | 84,125         | ..               | 416            |
| *4,282         | *4,200            | *80           | *2            | *223,433                | *138,000          | 85,017         | ..               | 416            |
| 411            | 256               | ..            | 155           | 4,387                   | 4,387             | ..             | ..               | ..             |
| 437            | 243               | ..            | 194           | 3,613                   | 3,613             | ..             | ..               | ..             |
| 729            | 245               | ..            | 484           | 2,758                   | 2,758             | ..             | ..               | ..             |
| 765            | 281               | ..            | 484           | 2,838                   | 2,838             | ..             | ..               | ..             |
| <b>376,489</b> | <b>334,943</b>    | <b>10,420</b> | <b>31,126</b> | <b>4,487,261</b>        | <b>2,150,786</b>  | <b>788,867</b> | <b>1,138,394</b> | <b>409,214</b> |
| <b>388,535</b> | <b>343,330</b>    | <b>9,886</b>  | <b>35,319</b> | <b>4,496,292</b>        | <b>2,150,004</b>  | <b>734,502</b> | <b>1,138,815</b> | <b>472,971</b> |
| <b>406,143</b> | <b>356,636</b>    | <b>10,294</b> | <b>39,213</b> | <b>4,499,024</b>        | <b>2,067,194</b>  | <b>795,338</b> | <b>1,141,487</b> | <b>495,005</b> |
| <b>418,200</b> | <b>364,434</b>    | <b>10,396</b> | <b>43,370</b> | <b>4,431,273</b>        | <b>1,976,368</b>  | <b>752,985</b> | <b>1,139,926</b> | <b>561,994</b> |
| ..             | ..                | ..            | ..            | 7,136                   | ..                | 7,136          | ..               | ..             |
| ..             | ..                | ..            | ..            | 4,526                   | ..                | 4,526          | ..               | ..             |
| ..             | ..                | ..            | ..            | 8,552                   | ..                | 8,552          | ..               | ..             |
| ..             | ..                | ..            | ..            | 5,206                   | ..                | 5,184          | ..               | 22             |
| ..             | ..                | ..            | ..            | 99                      | 14                | 84             | ..               | 0              |
| ..             | ..                | ..            | ..            | 103                     | 17                | 85             | ..               | 1              |
| ..             | ..                | ..            | ..            | 135                     | 20                | 114            | ..               | 1              |
| ..             | ..                | ..            | ..            | 107                     | 21                | 85             | ..               | 2              |
| 7,876          | 7,334             | 527           | 15            | 60,431                  | 11,618            | 42,482         | ..               | 6,331          |
| 8,211          | 7,720             | 478           | 13            | 63,114                  | 13,576            | 41,697         | ..               | 7,841          |
| 7,987          | 7,500             | 474           | 13            | 60,631                  | 12,400            | 40,745         | ..               | 7,486          |
| 7,966          | 7,419             | 535           | 13            | 66,268                  | 13,790            | 43,299         | ..               | 9,180          |
| 3,430          | 3,409             | 14            | 7             | 30,136                  | 29,912            | 128            | ..               | 96             |
| 3,735          | 3,717             | 9             | 9             | 30,780                  | 30,207            | 396            | ..               | 177            |
| 3,960          | 3,876             | 8             | 76            | 35,026                  | 34,510            | 316            | ..               | 200            |
| 4,263          | 4,160             | 7             | 96            | 36,202                  | 35,596            | 343            | ..               | 263            |
| 10,432         | 6,812             | ..            | 3,620         | 75,381                  | 24,932            | 1,489          | 43,523           | 5,437          |
| 11,447         | 7,586             | ..            | 3,861         | 75,329                  | 25,193            | 1,397          | 42,227           | 6,512          |
| 12,128         | 7,711             | ..            | 4,417         | 62,971                  | 25,607            | 1,329          | 28,597           | 7,438          |
| 13,859         | 9,121             | ..            | 4,738         | 79,887                  | 25,512            | 1,181          | 43,524           | 9,671          |
| 394            | 394               | ..            | ..            | 17,373                  | 11,708            | 5,641          | ..               | 24             |
| 441            | 441               | ..            | ..            | 15,998                  | 11,990            | 3,987          | ..               | 21             |
| 438            | 438               | ..            | ..            | 18,722                  | 12,079            | 6,519          | ..               | 124            |
| 412            | 412               | ..            | ..            | 17,081                  | 10,625            | 6,172          | ..               | 284            |

Table 32

## Production of electricity - by type

Gigawatt-hours

| Country or area | Year | Total producers |                   |        |         |         |        |       |
|-----------------|------|-----------------|-------------------|--------|---------|---------|--------|-------|
|                 |      | Total           | Combustible fuels | Hydro  | Nuclear | Wind    | Solar  | Other |
| Bulgaria        | 2016 | 45,277          | 22,088            | 4,568  | 15,776  | 1,425   | 1,386  | 34    |
|                 | 2017 | 45,613          | 23,633            | 3,493  | 15,545  | 1,504   | 1,403  | 34    |
|                 | 2018 | 46,838          | 22,606            | 5,423  | 16,125  | 1,318   | 1,343  | 22    |
|                 | 2019 | 44,302          | 21,573            | 3,383  | 16,555  | 1,317   | 1,442  | 31    |
| Croatia         | 2016 | 12,820          | 4,682             | 7,058  | ..      | 1,014   | 66     | ..    |
|                 | 2017 | 11,984          | 5,193             | 5,508  | ..      | 1,204   | 79     | ..    |
|                 | 2018 | 13,632          | 4,435             | 7,785  | ..      | 1,335   | 75     | 2     |
|                 | 2019 | 12,760          | 5,185             | 5,933  | ..      | 1,467   | 83     | 92    |
| Czechia         | 2016 | 83,309          | 53,279            | 3,202  | 24,104  | 497     | 2,131  | 96    |
|                 | 2017 | 87,050          | 52,783            | 3,040  | 28,340  | 591     | 2,193  | 103   |
|                 | 2018 | 88,032          | 52,338            | 2,679  | 29,921  | 609     | 2,359  | 125   |
|                 | 2019 | 87,031          | 50,474            | 3,175  | 30,246  | 700     | 2,312  | 124   |
| Denmark         | 2016 | 30,541          | 16,996            | 19     | ..      | 12,782  | 744    | ..    |
|                 | 2017 | 31,023          | 15,473            | 18     | ..      | 14,780  | 751    | ..    |
|                 | 2018 | 30,368          | 15,499            | 15     | ..      | 13,902  | 953    | ..    |
|                 | 2019 | 29,526          | 12,395            | 17     | ..      | 16,150  | 963    | ..    |
| Estonia         | 2016 | 12,171          | 11,532            | 35     | ..      | 594     | 10     | ..    |
|                 | 2017 | 13,160          | 12,397            | 26     | ..      | 723     | 14     | ..    |
|                 | 2018 | 12,364          | 11,682            | 15     | ..      | 636     | 31     | ..    |
|                 | 2019 | 7,616           | 6,836             | 19     | ..      | 687     | 74     | ..    |
| Faeroe Islands  | 2016 | 317             | 159               | 106    | ..      | 52      | ..     | ..    |
|                 | 2017 | 334             | 163               | 111    | ..      | 60      | ..     | ..    |
|                 | 2018 | 352             | 180               | 108    | ..      | 64      | ..     | ..    |
|                 | 2019 | 386             | 230               | 104    | ..      | 53      | ..     | ..    |
| Finland         | 2016 | 68,757          | 26,399            | 15,799 | 23,203  | 3,068   | 22     | 266   |
|                 | 2017 | 67,524          | 25,031            | 14,772 | 22,477  | 4,795   | 49     | 401   |
|                 | 2018 | 70,263          | 27,959            | 13,301 | 22,793  | 5,839   | 90     | 281   |
|                 | 2019 | 68,642          | 25,923            | 12,413 | 23,870  | 6,025   | 147    | 264   |
| France          | 2016 | 564,051         | 63,968            | 65,686 | 403,195 | 21,381  | 8,659  | 1,162 |
|                 | 2017 | 561,942         | 72,878            | 55,135 | 398,359 | 24,609  | 9,586  | 1,374 |
|                 | 2018 | 581,785         | 57,647            | 70,472 | 412,942 | 28,599  | 10,891 | 1,235 |
|                 | 2019 | 570,845         | 62,148            | 61,573 | 399,012 | 34,722  | 12,225 | 1,166 |
| Germany         | 2016 | 650,450         | 419,596           | 26,135 | 84,634  | 79,924  | 38,098 | 2,063 |
|                 | 2017 | 653,723         | 404,286           | 26,155 | 76,324  | 105,693 | 39,401 | 1,864 |
|                 | 2018 | 642,900         | 385,552           | 23,863 | 76,005  | 109,951 | 45,784 | 1,745 |
|                 | 2019 | 609,065         | 334,353           | 25,671 | 75,071  | 125,894 | 46,392 | 1,684 |
| Gibraltar       | 2016 | 214             | 214               | ..     | ..      | ..      | ..     | 0     |
|                 | 2017 | 180             | 180               | ..     | ..      | ..      | ..     | 0     |
|                 | 2018 | 215             | 215               | ..     | ..      | ..      | ..     | 0     |
|                 | 2019 | 220             | 220               | ..     | ..      | ..      | ..     | 0     |
| Greece          | 2016 | 54,439          | 39,798            | 5,565  | ..      | 5,146   | 3,930  | ..    |
|                 | 2017 | 55,266          | 41,698            | 4,040  | ..      | 5,537   | 3,991  | ..    |
|                 | 2018 | 53,263          | 37,412            | 5,760  | ..      | 6,300   | 3,791  | ..    |
|                 | 2019 | 48,626          | 32,880            | 4,051  | ..      | 7,266   | 4,429  | ..    |
| Guernsey        | 2016 | 87              | 87                | ..     | ..      | ..      | ..     | ..    |
|                 | 2017 | 77              | 77                | ..     | ..      | ..      | ..     | ..    |
|                 | 2018 | 54              | 54                | ..     | ..      | ..      | ..     | ..    |
|                 | 2019 | 165             | 164               | ..     | ..      | ..      | *1     | ..    |
| Hungary         | 2016 | 31,902          | 14,583            | 259    | 16,054  | 684     | 244    | 78    |
|                 | 2017 | 32,885          | 15,377            | 220    | 16,098  | 758     | 349    | 83    |
|                 | 2018 | 32,039          | 14,697            | 222    | 15,733  | 607     | 629    | 151   |
|                 | 2019 | 34,154          | 15,292            | 219    | 16,288  | 729     | 1,497  | 129   |
| Iceland         | 2016 | 18,550          | 3                 | 13,470 | ..      | 9       | ..     | 5,068 |
|                 | 2017 | 19,239          | 2                 | 14,059 | ..      | 8       | ..     | 5,170 |
|                 | 2018 | 19,830          | 2                 | 13,814 | ..      | 4       | ..     | 6,010 |
|                 | 2019 | 19,489          | 3                 | 13,461 | ..      | 7       | ..     | 6,018 |

Table 32

## Production of electricity - by type

Gigawatt-hours

| Autoproducers |                   |       |       | Main activity producers |                   |        |         |         |
|---------------|-------------------|-------|-------|-------------------------|-------------------|--------|---------|---------|
| Total         | Combustible fuels | Hydro | Other | Total                   | Combustible fuels | Hydro  | Nuclear | Other   |
| 491           | 457               | ..    | 34    | 44,786                  | 21,631            | 4,568  | 15,776  | 2,811   |
| 688           | 654               | ..    | 34    | 44,925                  | 22,980            | 3,493  | 15,545  | 2,907   |
| 708           | 686               | ..    | 22    | 46,130                  | 21,921            | 5,423  | 16,125  | 2,661   |
| 721           | 690               | ..    | 31    | 43,580                  | 20,883            | 3,383  | 16,555  | 2,759   |
| 338           | 331               | 7     | ..    | 12,482                  | 4,351             | 7,051  | ..      | 1,080   |
| 420           | 414               | 6     | ..    | 11,564                  | 4,779             | 5,502  | ..      | 1,283   |
| 373           | 367               | 6     | ..    | 13,259                  | 4,068             | 7,779  | ..      | 1,412   |
| 375           | 370               | 6     | ..    | 12,385                  | 4,816             | 5,927  | ..      | 1,642   |
| 9,445         | 8,776             | 598   | 71    | 73,864                  | 44,503            | 2,604  | 24,104  | 2,653   |
| 9,112         | 8,423             | 611   | 78    | 77,939                  | 44,360            | 2,429  | 28,340  | 2,810   |
| 8,785         | 8,191             | 494   | 99    | 79,247                  | 44,147            | 2,185  | 29,921  | 2,994   |
| 8,737         | 8,065             | 575   | 98    | 78,293                  | 42,409            | 2,600  | 30,246  | 3,038   |
| 2,779         | 2,035             | ..    | 744   | 27,762                  | 14,961            | 19     | ..      | 12,782  |
| 2,831         | 2,079             | ..    | 751   | 28,192                  | 13,394            | 18     | ..      | 14,780  |
| 3,099         | 2,146             | ..    | 953   | 27,270                  | 13,353            | 15     | ..      | 13,902  |
| 3,206         | 2,242             | ..    | 963   | 26,320                  | 10,153            | 17     | ..      | 16,150  |
| 258           | 245               | ..    | 13    | 11,913                  | 11,287            | 35     | ..      | 591     |
| 164           | 164               | ..    | ..    | 12,997                  | 12,233            | 26     | ..      | 737     |
| 124           | 123               | ..    | 1     | 12,241                  | 11,560            | 15     | ..      | 666     |
| 94            | 91                | 1     | 2     | 7,521                   | 6,745             | 18     | ..      | 759     |
| ..            | ..                | ..    | ..    | 317                     | 159               | 106    | ..      | 52      |
| ..            | ..                | ..    | ..    | 334                     | 163               | 111    | ..      | 60      |
| ..            | ..                | ..    | ..    | 352                     | 180               | 108    | ..      | 64      |
| ..            | ..                | ..    | ..    | 386                     | 230               | 104    | ..      | 53      |
| 9,518         | 8,277             | 1,035 | 206   | 59,239                  | 18,122            | 14,764 | 23,203  | 3,150   |
| 9,833         | 8,571             | 1,003 | 259   | 57,691                  | 16,460            | 13,769 | 22,477  | 4,985   |
| 10,711        | 9,474             | 944   | 292   | 59,552                  | 18,484            | 12,357 | 22,793  | 5,918   |
| 10,812        | 9,713             | 752   | 347   | 57,830                  | 16,210            | 11,661 | 23,870  | 6,089   |
| 16,194        | 12,757            | 595   | 2,842 | 547,857                 | 51,211            | 65,091 | 403,195 | 28,360  |
| 16,865        | 13,020            | 527   | 3,318 | 545,077                 | 59,858            | 54,608 | 398,359 | 32,252  |
| 20,821        | 16,443            | 609   | 3,769 | 560,965                 | 41,204            | 69,863 | 412,942 | 36,956  |
| 22,362        | 17,558            | 595   | 4,209 | 548,483                 | 44,590            | 60,978 | 399,012 | 43,904  |
| 54,863        | 53,397            | 176   | 1,290 | 595,587                 | 366,199           | 25,959 | 84,634  | 118,795 |
| 56,777        | 55,489            | 172   | 1,116 | 596,946                 | 348,797           | 25,983 | 76,324  | 145,842 |
| 54,957        | 53,785            | 87    | 1,085 | 587,943                 | 331,767           | 23,776 | 76,005  | 156,395 |
| 53,336        | 52,318            | 98    | 920   | 555,729                 | 282,035           | 25,573 | 75,071  | 173,050 |
| ..            | ..                | ..    | ..    | 214                     | 214               | ..     | ..      | 0       |
| ..            | ..                | ..    | ..    | 180                     | 180               | ..     | ..      | 0       |
| ..            | ..                | ..    | ..    | 215                     | 215               | ..     | ..      | 0       |
| ..            | ..                | ..    | ..    | 220                     | 220               | ..     | ..      | 0       |
| 1,947         | 1,947             | ..    | ..    | 52,492                  | 37,851            | 5,565  | ..      | 9,076   |
| 1,933         | 1,933             | ..    | ..    | 53,333                  | 39,765            | 4,040  | ..      | 9,528   |
| 2,215         | 2,215             | ..    | ..    | 51,048                  | 35,197            | 5,760  | ..      | 10,091  |
| 2,480         | 2,480             | ..    | ..    | 46,146                  | 30,400            | 4,051  | ..      | 11,695  |
| ..            | ..                | ..    | ..    | 87                      | 87                | ..     | ..      | ..      |
| ..            | ..                | ..    | ..    | 77                      | 77                | ..     | ..      | ..      |
| ..            | ..                | ..    | ..    | 54                      | 54                | ..     | ..      | ..      |
| ..            | ..                | ..    | ..    | 165                     | 164               | ..     | ..      | *1      |
| 1,009         | 720               | ..    | 289   | 30,893                  | 13,863            | 259    | 16,054  | 717     |
| 1,269         | 875               | ..    | 394   | 31,616                  | 14,502            | 220    | 16,098  | 796     |
| 1,550         | 955               | ..    | 595   | 30,489                  | 13,742            | 222    | 15,733  | 792     |
| 1,975         | 1,053             | ..    | 922   | 32,179                  | 14,239            | 219    | 16,288  | 1,433   |
| ..            | ..                | ..    | ..    | 18,550                  | 3                 | 13,470 | ..      | 5,077   |
| ..            | ..                | ..    | ..    | 19,239                  | 2                 | 14,059 | ..      | 5,178   |
| ..            | ..                | ..    | ..    | 19,830                  | 2                 | 13,814 | ..      | 6,014   |
| ..            | ..                | ..    | ..    | 19,489                  | 3                 | 13,461 | ..      | 6,025   |

Table 32

## Production of electricity - by type

Gigawatt-hours

| Country or area | Year | Total producers |                   |         |         |        |        |       |
|-----------------|------|-----------------|-------------------|---------|---------|--------|--------|-------|
|                 |      | Total           | Combustible fuels | Hydro   | Nuclear | Wind   | Solar  | Other |
| Ireland         | 2016 | 30,514          | 23,388            | 973     | ..      | 6,147  | 6      | ..    |
|                 | 2017 | 30,875          | 22,525            | 895     | ..      | 7,444  | 11     | ..    |
|                 | 2018 | 31,134          | 21,546            | 932     | ..      | 8,640  | 17     | ..    |
|                 | 2019 | 30,941          | 19,768            | 1,132   | ..      | 10,019 | 21     | ..    |
| Isle of Man     | 2016 | 433             | 430               | 3       | ..      | ..     | ..     | ..    |
|                 | 2017 | 467             | 463               | 4       | ..      | ..     | ..     | ..    |
|                 | 2018 | 493             | 490               | *2      | ..      | ..     | ..     | ..    |
|                 | 2019 | 581             | 578               | 3       | ..      | ..     | ..     | ..    |
| Italy           | 2016 | 289,768         | 198,693           | 44,257  | ..      | 17,689 | 22,104 | 7,025 |
|                 | 2017 | 295,830         | 208,824           | 38,025  | ..      | 17,742 | 24,378 | 6,862 |
|                 | 2018 | 289,708         | 192,129           | 50,503  | ..      | 17,716 | 22,654 | 6,707 |
|                 | 2019 | 293,853         | 195,084           | 48,154  | ..      | 20,202 | 23,689 | 6,725 |
| Jersey          | 2016 | 70              | 70                | ..      | ..      | ..     | ..     | ..    |
|                 | 2017 | 49              | 49                | ..      | ..      | ..     | ..     | ..    |
|                 | 2018 | 45              | 45                | ..      | ..      | ..     | ..     | ..    |
|                 | 2019 | 44              | 44                | ..      | ..      | ..     | ..     | ..    |
| Kosovo          | 2016 | 5,981           | 5,736             | 245     | ..      | ..     | ..     | ..    |
|                 | 2017 | 5,919           | 5,739             | 179     | ..      | 0      | 1      | ..    |
|                 | 2018 | 5,917           | 5,612             | 273     | ..      | 30     | 2      | ..    |
|                 | 2019 | 6,351           | 6,037             | 213     | ..      | 91     | 11     | ..    |
| Latvia          | 2016 | 6,425           | 3,767             | 2,530   | ..      | 128    | ..     | ..    |
|                 | 2017 | 7,531           | 3,000             | 4,381   | ..      | 150    | 0      | ..    |
|                 | 2018 | 6,725           | 4,170             | 2,432   | ..      | 122    | 1      | ..    |
|                 | 2019 | 6,438           | 4,174             | 2,108   | ..      | 154    | 3      | ..    |
| Liechtenstein   | 2016 | 90              | 2                 | 68      | ..      | ..     | 20     | ..    |
|                 | 2017 | 93              | 2                 | 69      | ..      | ..     | 22     | ..    |
|                 | 2018 | 89              | 2                 | 62      | ..      | ..     | 25     | ..    |
|                 | 2019 | 103             | 2                 | 75      | ..      | ..     | 26     | ..    |
| Lithuania       | 2016 | 4,266           | 1,750             | 1,044   | ..      | 1,136  | 66     | 270   |
|                 | 2017 | 4,187           | 1,324             | 1,181   | ..      | 1,364  | 68     | 250   |
|                 | 2018 | 3,511           | 1,089             | 960     | ..      | 1,144  | 87     | 232   |
|                 | 2019 | 3,972           | 1,210             | 948     | ..      | 1,499  | 91     | 223   |
| Luxembourg      | 2016 | 2,196           | 467               | 1,528   | ..      | 101    | 100    | ..    |
|                 | 2017 | 2,235           | 470               | 1,422   | ..      | 235    | 108    | ..    |
|                 | 2018 | 2,201           | 490               | 1,337   | ..      | 255    | 120    | ..    |
|                 | 2019 | 1,908           | 547               | 949     | ..      | 281    | 130    | ..    |
| Malta           | 2016 | 857             | 729               | ..      | ..      | ..     | 128    | ..    |
|                 | 2017 | 1,652           | 1,489             | ..      | ..      | 0      | 162    | ..    |
|                 | 2018 | 1,961           | 1,772             | ..      | ..      | 0      | 189    | ..    |
|                 | 2019 | 2,076           | 1,864             | ..      | ..      | 0      | 212    | ..    |
| Montenegro      | 2016 | 3,141           | 1,298             | 1,843   | ..      | ..     | ..     | ..    |
|                 | 2017 | 2,483           | 1,348             | 1,040   | ..      | 95     | ..     | ..    |
|                 | 2018 | 3,679           | 1,444             | 2,092   | ..      | 141    | 2      | ..    |
|                 | 2019 | 3,423           | 1,506             | 1,621   | ..      | 293    | 2      | ..    |
| Netherlands     | 2016 | 115,168         | 99,952            | 100     | 3,960   | 8,170  | 1,602  | 1,384 |
|                 | 2017 | 117,219         | 99,368            | 61      | 3,402   | 10,569 | 2,208  | 1,612 |
|                 | 2018 | 114,103         | 95,659            | 72      | 3,515   | 10,549 | 3,709  | 599   |
|                 | 2019 | 121,062         | 99,620            | 74      | 3,910   | 11,508 | 5,335  | 614   |
| North Macedonia | 2016 | 5,630           | 3,599             | 1,897   | ..      | 109    | 24     | ..    |
|                 | 2017 | 5,600           | 4,356             | 1,110   | ..      | 110    | 24     | ..    |
|                 | 2018 | 5,607           | 3,696             | 1,791   | ..      | 97     | 23     | ..    |
|                 | 2019 | 5,870           | 4,581             | 1,164   | ..      | 102    | 23     | ..    |
| Norway          | 2016 | 149,042         | 3,201             | 143,417 | ..      | 2,116  | ..     | 308   |
|                 | 2017 | 149,480         | 3,190             | 143,112 | ..      | 2,854  | ..     | 324   |
|                 | 2018 | 146,891         | 3,169             | 139,509 | ..      | 3,876  | 2      | 334   |
|                 | 2019 | 135,292         | 3,010             | 126,404 | ..      | 5,536  | 13     | 328   |

Table 32

## Production of electricity - by type

Gigawatt-hours

| Autoproducers |                   |       |       | Main activity producers |                   |         |         |        |
|---------------|-------------------|-------|-------|-------------------------|-------------------|---------|---------|--------|
| Total         | Combustible fuels | Hydro | Other | Total                   | Combustible fuels | Hydro   | Nuclear | Other  |
| 2,237         | 2,199             | ..    | 38    | 28,277                  | 21,189            | 973     | ..      | 6,115  |
| 2,239         | 2,191             | ..    | 47    | 28,637                  | 20,334            | 895     | ..      | 7,408  |
| 2,209         | 2,153             | ..    | 56    | 28,925                  | 19,393            | 932     | ..      | 8,600  |
| 2,157         | 2,084             | ..    | 73    | 28,784                  | 17,684            | 1,132   | ..      | 9,967  |
| 25            | 25                | ..    | ..    | 408                     | 405               | 3       | ..      | ..     |
| 24            | 24                | ..    | ..    | 443                     | 439               | 4       | ..      | ..     |
| *33           | *33               | ..    | ..    | 460                     | 457               | *2      | ..      | ..     |
| *33           | *33               | ..    | ..    | 548                     | 545               | 3       | ..      | ..     |
| 18,467        | 17,687            | 562   | 218   | 271,301                 | 181,006           | 43,695  | ..      | 46,600 |
| 19,782        | 19,150            | 489   | 143   | 276,048                 | 189,674           | 37,536  | ..      | 48,839 |
| 22,784        | 22,114            | 466   | 204   | 266,925                 | 170,015           | 50,037  | ..      | 46,873 |
| 22,340        | 21,695            | 492   | 153   | 271,513                 | 173,389           | 47,661  | ..      | 50,463 |
| 45            | 45                | ..    | ..    | 24                      | 24                | ..      | ..      | ..     |
| 44            | 44                | ..    | ..    | 4                       | 4                 | ..      | ..      | ..     |
| 43            | 43                | ..    | ..    | 2                       | 2                 | ..      | ..      | ..     |
| 42            | 42                | ..    | ..    | 2                       | 2                 | ..      | ..      | ..     |
| ..            | ..                | ..    | ..    | 5,981                   | 5,736             | 245     | ..      | ..     |
| ..            | ..                | ..    | ..    | 5,919                   | 5,739             | 179     | ..      | 1      |
| ..            | ..                | ..    | ..    | 5,917                   | 5,612             | 273     | ..      | 32     |
| 0             | ..                | ..    | 0     | 6,351                   | 6,037             | 213     | ..      | 101    |
| 211           | 207               | 2     | 2     | 6,214                   | 3,560             | 2,528   | ..      | 126    |
| 194           | 188               | 4     | 3     | 7,337                   | 2,812             | 4,377   | ..      | 148    |
| 190           | 186               | 2     | 2     | 6,535                   | 3,984             | 2,430   | ..      | 121    |
| 187           | 180               | 2     | 5     | 6,251                   | 3,994             | 2,106   | ..      | 152    |
| ..            | ..                | ..    | ..    | 90                      | 2                 | 68      | ..      | 20     |
| ..            | ..                | ..    | ..    | 93                      | 2                 | 69      | ..      | 22     |
| ..            | ..                | ..    | ..    | 89                      | 2                 | 62      | ..      | 25     |
| ..            | ..                | ..    | ..    | 103                     | 2                 | 75      | ..      | 26     |
| 888           | 618               | ..    | 270   | 3,378                   | 1,132             | 1,044   | ..      | 1,202  |
| 826           | 576               | ..    | 250   | 3,361                   | 748               | 1,181   | ..      | 1,432  |
| 647           | 416               | ..    | 232   | 2,864                   | 674               | 960     | ..      | 1,231  |
| 821           | 598               | ..    | 223   | 3,151                   | 612               | 948     | ..      | 1,591  |
| 285           | 177               | 8     | 100   | 1,911                   | 290               | 1,520   | ..      | 101    |
| 278           | 165               | 4     | 108   | 1,957                   | 304               | 1,418   | ..      | 235    |
| 283           | 159               | 4     | 120   | 1,918                   | 331               | 1,332   | ..      | 255    |
| 285           | 150               | 5     | 130   | 1,623                   | 397               | 944     | ..      | 281    |
| 136           | 8                 | ..    | 128   | 721                     | 721               | ..      | ..      | ..     |
| 172           | 10                | ..    | 162   | 1,480                   | 1,480             | ..      | ..      | ..     |
| 198           | 9                 | ..    | 189   | 1,763                   | 1,763             | ..      | ..      | ..     |
| 218           | 6                 | ..    | 212   | 1,858                   | 1,858             | ..      | ..      | ..     |
| ..            | ..                | ..    | ..    | 3,141                   | 1,298             | 1,843   | ..      | ..     |
| ..            | ..                | ..    | ..    | 2,483                   | 1,348             | 1,040   | ..      | 95     |
| ..            | ..                | ..    | ..    | 3,679                   | 1,444             | 2,092   | ..      | 143    |
| ..            | ..                | ..    | ..    | 3,423                   | 1,506             | 1,621   | ..      | 296    |
| 23,069        | 20,356            | ..    | 2,713 | 92,099                  | 79,596            | 100     | 3,960   | 8,443  |
| 25,242        | 21,900            | ..    | 3,342 | 91,977                  | 77,467            | 61      | 3,402   | 11,046 |
| 26,693        | 22,084            | ..    | 4,609 | 87,410                  | 73,575            | 72      | 3,515   | 10,248 |
| 28,721        | 22,599            | ..    | 6,122 | 92,340                  | 77,021            | 74      | 3,910   | 11,335 |
| 0             | 0                 | ..    | ..    | 5,630                   | 3,599             | 1,897   | ..      | 133    |
| 0             | 0                 | ..    | ..    | 5,600                   | 4,356             | 1,110   | ..      | 134    |
| ..            | ..                | ..    | ..    | 5,607                   | 3,696             | 1,791   | ..      | 120    |
| ..            | ..                | ..    | ..    | 5,870                   | 4,581             | 1,164   | ..      | 125    |
| 2,906         | 2,598             | ..    | 308   | 146,136                 | 603               | 143,417 | ..      | 2,116  |
| 2,845         | 2,521             | ..    | 324   | 146,635                 | 669               | 143,112 | ..      | 2,854  |
| 2,922         | 2,586             | ..    | 337   | 143,968                 | 584               | 139,509 | ..      | 3,876  |
| 2,720         | 2,379             | ..    | 341   | 132,571                 | 631               | 126,404 | ..      | 5,536  |

Table 32

## Production of electricity - by type

Gigawatt-hours

| Country or area     | Year | Total producers |                   |         |         |        |        |       |
|---------------------|------|-----------------|-------------------|---------|---------|--------|--------|-------|
|                     |      | Total           | Combustible fuels | Hydro   | Nuclear | Wind   | Solar  | Other |
| Poland              | 2016 | 166,635         | 151,234           | 2,622   | ..      | 12,588 | 124    | 67    |
|                     | 2017 | 170,465         | 152,295           | 3,034   | ..      | 14,909 | 165    | 62    |
|                     | 2018 | 170,039         | 154,428           | 2,387   | ..      | 12,799 | 300    | 125   |
|                     | 2019 | 163,989         | 145,269           | 2,665   | ..      | 15,107 | 711    | 237   |
| Portugal            | 2016 | 60,328          | 29,903            | 16,909  | ..      | 12,474 | 870    | 172   |
|                     | 2017 | 59,432          | 38,344            | 7,632   | ..      | 12,248 | 992    | 217   |
|                     | 2018 | 59,636          | 32,155            | 13,628  | ..      | 12,617 | 1,006  | 230   |
|                     | 2019 | 53,154          | 27,687            | 10,243  | ..      | 13,667 | 1,342  | 215   |
| Republic of Moldova | 2016 | 906             | 862               | 39      | ..      | 3      | 2      | ..    |
|                     | 2017 | 896             | 839               | 48      | ..      | 7      | 2      | ..    |
|                     | 2018 | 952             | 884               | 44      | ..      | 23     | 1      | ..    |
|                     | 2019 | 939             | 830               | 65      | ..      | 43     | 1      | ..    |
| Romania             | 2016 | 65,103          | 26,871            | 18,536  | 11,286  | 6,590  | 1,820  | ..    |
|                     | 2017 | 64,296          | 28,672            | 14,853  | 11,509  | 7,407  | 1,856  | ..    |
|                     | 2018 | 64,876          | 27,308            | 18,097  | 11,377  | 6,322  | 1,771  | ..    |
|                     | 2019 | 59,623          | 23,787            | 16,006  | 11,280  | 6,773  | 1,778  | ..    |
| Russian Federation  | 2016 | 1,090,973       | 706,663           | 186,640 | 196,614 | 148    | 462    | 446   |
|                     | 2017 | 1,094,289       | 702,882           | 187,131 | 203,143 | 140    | 558    | 435   |
|                     | 2018 | 1,115,093       | 716,119           | 193,027 | 204,569 | 232    | 720    | 426   |
|                     | 2019 | 1,121,492       | 713,955           | 196,510 | 208,984 | 331    | 1,279  | 433   |
| Serbia              | 2016 | 39,342          | 27,784            | 11,520  | ..      | 26     | 12     | ..    |
|                     | 2017 | 37,046          | 27,232            | 9,752   | ..      | 48     | 13     | ..    |
|                     | 2018 | 37,426          | 25,870            | 11,393  | ..      | 150    | 13     | ..    |
|                     | 2019 | 37,600          | 26,490            | 10,198  | ..      | 898    | 14     | ..    |
| Slovakia            | 2016 | 27,064          | 7,015             | 4,606   | 14,774  | 6      | 533    | 130   |
|                     | 2017 | 27,738          | 7,367             | 4,623   | 15,081  | 6      | 506    | 155   |
|                     | 2018 | 26,971          | 7,542             | 3,879   | 14,843  | 6      | 585    | 116   |
|                     | 2019 | 28,434          | 7,953             | 4,571   | 15,282  | 6      | 589    | 33    |
| Slovenia            | 2016 | 16,500          | 5,730             | 4,782   | 5,715   | 6      | 267    | ..    |
|                     | 2017 | 16,326          | 5,610             | 4,141   | 6,285   | 6      | 284    | ..    |
|                     | 2018 | 16,327          | 5,397             | 4,893   | 5,776   | 6      | 255    | ..    |
|                     | 2019 | 16,100          | 5,287             | 4,683   | 5,821   | 6      | 303    | ..    |
| Spain               | 2016 | 274,772         | 113,618           | 39,865  | 58,633  | 48,905 | 13,643 | 108   |
|                     | 2017 | 275,726         | 133,002           | 21,070  | 58,039  | 49,127 | 14,397 | 91    |
|                     | 2018 | 274,452         | 118,149           | 36,803  | 55,766  | 50,896 | 12,744 | 94    |
|                     | 2019 | 273,257         | 117,125           | 26,874  | 58,349  | 55,647 | 15,103 | 159   |
| Sweden              | 2016 | 156,010         | 15,150            | 62,137  | 63,101  | 15,479 | 143    | ..    |
|                     | 2017 | 164,250         | 15,547            | 65,168  | 65,696  | 17,609 | 230    | ..    |
|                     | 2018 | 163,400         | 15,571            | 62,250  | 68,549  | 16,623 | 407    | ..    |
|                     | 2019 | 168,439         | 16,390            | 65,393  | 66,130  | 19,847 | 679    | ..    |
| Switzerland         | 2016 | 63,175          | 3,898             | 36,689  | 21,146  | 109    | 1,333  | ..    |
|                     | 2017 | 63,089          | 3,864             | 37,033  | 20,376  | 133    | 1,683  | ..    |
|                     | 2018 | 69,109          | 3,727             | 37,802  | 25,513  | 122    | 1,945  | ..    |
|                     | 2019 | 73,471          | 3,768             | 40,962  | 26,418  | 146    | 2,178  | ..    |
| Ukraine             | 2016 | 164,573         | 72,795            | 9,304   | 80,950  | 954    | 491    | 79    |
|                     | 2017 | 156,037         | 58,173            | 10,520  | 85,576  | 984    | 739    | 45    |
|                     | 2018 | 159,833         | 61,104            | 12,007  | 84,398  | 1,188  | 1,099  | 37    |
|                     | 2019 | 154,141         | 58,201            | 7,855   | 83,003  | 2,020  | 2,933  | 129   |
| United Kingdom      | 2016 | 339,216         | 211,607           | 8,329   | 71,726  | 37,159 | 10,395 | 0     |
|                     | 2017 | 337,934         | 197,741           | 8,754   | 70,336  | 49,641 | 11,457 | 4     |
|                     | 2018 | 332,504         | 189,847           | 7,942   | 65,064  | 56,906 | 12,736 | 9     |
|                     | 2019 | 322,844         | 181,702           | 7,691   | 56,184  | 64,335 | 12,918 | 14    |
| Oceania             | 2016 | 312,980         | 240,319           | 43,193  | ..      | 14,584 | 6,414  | 8,471 |
|                     | 2017 | 314,958         | 239,847           | 43,542  | ..      | 14,736 | 8,330  | 8,503 |
|                     | 2018 | 318,320         | 238,100           | 44,240  | ..      | 17,285 | 10,244 | 8,451 |
|                     | 2019 | 321,905         | 234,537           | 43,532  | ..      | 20,035 | 15,267 | 8,534 |



Table 32

## Production of electricity - by type

Gigawatt-hours

| Autoproducers |                   |            |               | Main activity producers |                   |               |           |               |
|---------------|-------------------|------------|---------------|-------------------------|-------------------|---------------|-----------|---------------|
| Total         | Combustible fuels | Hydro      | Other         | Total                   | Combustible fuels | Hydro         | Nuclear   | Other         |
| 10,457        | 10,263            | 3          | 191           | 156,178                 | 140,971           | 2,619         | ..        | 12,588        |
| 11,912        | 11,681            | 4          | 227           | 158,554                 | 140,614           | 3,030         | ..        | 14,909        |
| 14,847        | 14,418            | 3          | 425           | 155,193                 | 140,010           | 2,384         | ..        | 12,799        |
| 17,214        | 16,263            | 3          | 948           | 146,774                 | 129,006           | 2,662         | ..        | 15,107        |
| 8,205         | 7,799             | 20         | 386           | 52,123                  | 22,104            | 16,889        | ..        | 13,130        |
| 8,436         | 7,952             | 11         | 473           | 50,996                  | 30,392            | 7,621         | ..        | 12,983        |
| 8,324         | 7,814             | 19         | 491           | 51,312                  | 24,341            | 13,610        | ..        | 13,362        |
| 8,678         | 7,998             | 18         | 662           | 44,477                  | 19,689            | 10,225        | ..        | 14,563        |
| 42            | 42                | ..         | ..            | 864                     | 820               | 39            | ..        | 5             |
| 55            | 53                | ..         | 2             | 841                     | 786               | 48            | ..        | 7             |
| 70            | 57                | ..         | 13            | 882                     | 827               | 44            | ..        | 11            |
| 77            | 53                | ..         | 24            | 862                     | 777               | 65            | ..        | 20            |
| 7,125         | 6,310             | 323        | 492           | 57,978                  | 20,561            | 18,213        | 11,286    | 7,918         |
| 7,013         | 6,297             | 244        | 472           | 57,283                  | 22,374            | 14,609        | 11,509    | 8,791         |
| 7,394         | 6,799             | 238        | 357           | 57,482                  | 20,509            | 17,859        | 11,377    | 7,736         |
| 6,405         | 5,715             | 270        | 421           | 53,218                  | 18,072            | 15,736        | 11,280    | 8,130         |
| 74,782        | 73,452            | 1,330      | ..            | 1,016,191               | 633,211           | 185,310       | 196,614   | 1,056         |
| 72,381        | 71,153            | 1,227      | ..            | 1,021,908               | 631,728           | 185,904       | 203,143   | 1,133         |
| 75,447        | 74,293            | 1,154      | ..            | 1,039,647               | 641,826           | 191,873       | 204,569   | 1,378         |
| 76,525        | 75,348            | 1,177      | ..            | 1,044,968               | 638,607           | 195,334       | 208,984   | 2,043         |
| 453           | 453               | ..         | ..            | 38,889                  | 27,331            | 11,520        | ..        | 38            |
| 526           | 526               | ..         | ..            | 36,520                  | 26,706            | 9,752         | ..        | 62            |
| 543           | 543               | ..         | ..            | 36,883                  | 25,327            | 11,393        | ..        | 163           |
| 470           | 470               | ..         | ..            | 37,130                  | 26,020            | 10,198        | ..        | 912           |
| 3,084         | 2,473             | 98         | 513           | 23,980                  | 4,542             | 4,508         | 14,774    | 156           |
| 3,092         | 2,505             | 100        | 487           | 24,646                  | 4,862             | 4,523         | 15,081    | 180           |
| 3,515         | 2,892             | 111        | 512           | 23,456                  | 4,650             | 3,768         | 14,843    | 195           |
| 3,089         | 2,556             | 120        | 413           | 25,345                  | 5,397             | 4,451         | 15,282    | 215           |
| 754           | 267               | 227        | 260           | 15,746                  | 5,463             | 4,555         | 5,715     | 13            |
| 731           | 266               | 189        | 276           | 15,595                  | 5,344             | 3,952         | 6,285     | 14            |
| 724           | 255               | 221        | 248           | 15,603                  | 5,142             | 4,672         | 5,776     | 13            |
| 769           | 261               | 213        | 295           | 15,331                  | 5,026             | 4,470         | 5,821     | 14            |
| 34,042        | 33,088            | 803        | 151           | 240,730                 | 80,530            | 39,062        | 58,633    | 62,505        |
| 36,135        | 35,415            | 477        | 243           | 239,591                 | 97,587            | 20,593        | 58,039    | 63,372        |
| 37,587        | 36,389            | 909        | 289           | 236,865                 | 81,760            | 35,894        | 55,766    | 63,445        |
| 38,316        | 37,059            | 897        | 360           | 234,941                 | 80,066            | 25,977        | 58,349    | 70,549        |
| 5,738         | 5,727             | 11         | ..            | 150,272                 | 9,423             | 62,126        | 63,101    | 15,622        |
| 6,215         | 6,203             | 12         | ..            | 158,035                 | 9,344             | 65,156        | 65,696    | 17,839        |
| 6,139         | 6,128             | 11         | ..            | 157,261                 | 9,443             | 62,239        | 68,549    | 17,030        |
| 6,964         | 6,959             | 5          | ..            | 161,475                 | 9,431             | 65,388        | 66,130    | 20,526        |
| 7,189         | 3,217             | 2,639      | 1,333         | 55,986                  | 681               | 34,050        | 21,146    | 109           |
| 7,497         | 3,202             | 2,612      | 1,683         | 55,592                  | 662               | 34,421        | 20,376    | 133           |
| 7,963         | 3,131             | 2,888      | 1,945         | 61,145                  | 596               | 34,915        | 25,513    | 122           |
| 8,213         | 3,152             | 2,883      | 2,178         | 65,258                  | 616               | 38,079        | 26,418    | 146           |
| 5,767         | 5,659             | 23         | 85            | 158,806                 | 67,136            | 9,281         | 80,950    | 1,439         |
| 3,976         | 3,899             | 4          | 73            | 152,061                 | 54,274            | 10,516        | 85,576    | 1,695         |
| 2,658         | 2,611             | 2          | 45            | 157,175                 | 58,493            | 12,005        | 84,398    | 2,279         |
| 2,262         | 2,124             | ..         | 138           | 151,880                 | 56,077            | 7,855         | 83,003    | 4,944         |
| 51,608        | 35,382            | 1,419      | 14,807        | 287,608                 | 176,225           | 6,910         | 71,726    | 32,747        |
| 55,194        | 36,320            | 1,703      | 17,170        | 282,740                 | 161,420           | 7,051         | 70,336    | 43,932        |
| 57,077        | 37,618            | 1,644      | 17,815        | 275,427                 | 152,229           | 6,299         | 65,064    | 51,836        |
| 61,095        | 41,017            | 1,745      | 18,333        | 261,749                 | 140,685           | 5,946         | 56,184    | 58,934        |
| <b>29,035</b> | <b>22,325</b>     | <b>359</b> | <b>6,351</b>  | <b>283,946</b>          | <b>217,994</b>    | <b>42,834</b> | <b>..</b> | <b>23,118</b> |
| <b>33,739</b> | <b>25,332</b>     | <b>355</b> | <b>8,052</b>  | <b>281,219</b>          | <b>214,514</b>    | <b>43,187</b> | <b>..</b> | <b>23,517</b> |
| <b>36,691</b> | <b>26,840</b>     | <b>213</b> | <b>9,637</b>  | <b>281,629</b>          | <b>211,259</b>    | <b>44,027</b> | <b>..</b> | <b>26,343</b> |
| <b>41,971</b> | <b>28,700</b>     | <b>282</b> | <b>12,990</b> | <b>279,934</b>          | <b>205,837</b>    | <b>43,250</b> | <b>..</b> | <b>30,846</b> |

Table 32

## Production of electricity - by type

Gigawatt-hours

| Country or area             | Year | Total producers |                   |        |         |        |        |       |
|-----------------------------|------|-----------------|-------------------|--------|---------|--------|--------|-------|
|                             |      | Total           | Combustible fuels | Hydro  | Nuclear | Wind   | Solar  | Other |
| American Samoa              | 2016 | 170             | 167               | ..     | ..      | ..     | 3      | ..    |
|                             | 2017 | 167             | 162               | ..     | ..      | ..     | 5      | ..    |
|                             | 2018 | *168            | *163              | ..     | ..      | ..     | 5      | ..    |
|                             | 2019 | *169            | *164              | ..     | ..      | ..     | *5     | ..    |
| Australia                   | 2016 | 256,563         | 222,837           | 15,318 | ..      | 12,199 | 6,209  | 0     |
|                             | 2017 | 258,019         | 221,065           | 16,285 | ..      | 12,597 | 8,071  | 1     |
|                             | 2018 | 260,998         | 219,884           | 16,021 | ..      | 15,164 | 9,929  | 0     |
|                             | 2019 | 264,025         | 215,498           | 15,967 | ..      | 17,712 | 14,848 | ..    |
| Cook Islands                | 2016 | 34              | 30                | ..     | ..      | ..     | 5      | ..    |
|                             | 2017 | 37              | 31                | ..     | ..      | ..     | 6      | ..    |
|                             | 2018 | 41              | 31                | ..     | ..      | ..     | 11     | ..    |
|                             | 2019 | 39              | 29                | ..     | ..      | ..     | 10     | ..    |
| Fiji                        | 2016 | 941             | 435               | 495    | ..      | 4      | 7      | ..    |
|                             | 2017 | 1,017           | 514               | 491    | ..      | 2      | 9      | ..    |
|                             | 2018 | 1,045           | 464               | 567    | ..      | 3      | 12     | ..    |
|                             | 2019 | 1,074           | 498               | 559    | ..      | 3      | 13     | ..    |
| French Polynesia            | 2016 | 691             | 475               | 183    | ..      | 0      | 33     | ..    |
|                             | 2017 | 681             | 470               | 175    | ..      | 0      | 36     | ..    |
|                             | 2018 | 676             | 475               | 164    | ..      | 0      | 37     | ..    |
|                             | 2019 | 693             | 494               | 159    | ..      | 0      | 40     | ..    |
| Guam                        | 2016 | 1,720           | 1,668             | ..     | ..      | *1     | 52     | ..    |
|                             | 2017 | 1,760           | 1,708             | ..     | ..      | *1     | 52     | ..    |
|                             | 2018 | 1,715           | 1,663             | ..     | ..      | *1     | 52     | ..    |
|                             | 2019 | 1,724           | 1,672             | ..     | ..      | *1     | 52     | ..    |
| Kiribati                    | 2016 | *31             | *26               | ..     | ..      | ..     | 5      | ..    |
|                             | 2017 | *31             | *26               | ..     | ..      | ..     | 5      | ..    |
|                             | 2018 | *32             | *27               | ..     | ..      | ..     | 5      | ..    |
|                             | 2019 | *32             | *27               | ..     | ..      | ..     | 5      | ..    |
| Marshall Islands            | 2016 | *88             | *86               | ..     | ..      | ..     | 2      | ..    |
|                             | 2017 | *89             | *87               | ..     | ..      | ..     | 2      | ..    |
|                             | 2018 | *90             | *88               | ..     | ..      | ..     | 2      | ..    |
|                             | 2019 | *90             | *88               | ..     | ..      | ..     | 2      | ..    |
| Micronesia (Fed. States of) | 2016 | *68             | *66               | 0      | ..      | ..     | 2      | ..    |
|                             | 2017 | *67             | *65               | 0      | ..      | ..     | 2      | ..    |
|                             | 2018 | *69             | *65               | 0      | ..      | *1     | 3      | ..    |
|                             | 2019 | *69             | *65               | 0      | ..      | *1     | 3      | ..    |
| Nauru                       | 2016 | 32              | 31                | ..     | ..      | ..     | 0      | ..    |
|                             | 2017 | 35              | 34                | ..     | ..      | ..     | 1      | ..    |
|                             | 2018 | 36              | 35                | ..     | ..      | ..     | 1      | ..    |
|                             | 2019 | 37              | 36                | ..     | ..      | ..     | 1      | ..    |
| New Caledonia               | 2016 | 3,130           | 2,842             | 232    | ..      | 45     | 11     | ..    |
|                             | 2017 | 3,228           | 2,794             | 361    | ..      | 45     | 28     | ..    |
|                             | 2018 | 3,486           | 3,077             | 317    | ..      | 45     | 47     | ..    |
|                             | 2019 | 3,333           | 2,876             | 285    | ..      | 57     | 116    | ..    |
| New Zealand                 | 2016 | 43,824          | 7,466             | 25,920 | ..      | 2,330  | 57     | 8,051 |
|                             | 2017 | 44,323          | 8,901             | 25,177 | ..      | 2,086  | 77     | 8,082 |
|                             | 2018 | 44,412          | 7,926             | 26,290 | ..      | 2,067  | 100    | 8,029 |
|                             | 2019 | 44,811          | 8,765             | 25,575 | ..      | 2,254  | 128    | 8,090 |
| Niue                        | 2016 | *3              | *3                | ..     | ..      | ..     | 0      | ..    |
|                             | 2017 | *3              | *3                | ..     | ..      | ..     | 0      | ..    |
|                             | 2018 | *4              | *3                | ..     | ..      | ..     | 0      | ..    |
|                             | 2019 | *4              | *4                | ..     | ..      | ..     | 0      | ..    |
| Northern Mariana Islands    | 2016 | *387            | *387              | ..     | ..      | ..     | ..     | ..    |
|                             | 2017 | *380            | *380              | ..     | ..      | ..     | ..     | ..    |
|                             | 2018 | *390            | *390              | ..     | ..      | ..     | ..     | ..    |
|                             | 2019 | *392            | *392              | ..     | ..      | ..     | ..     | ..    |

Table 32

## Production of electricity - by type

Gigawatt-hours

| Autoproducers |                   |       |        | Main activity producers |                   |        |         |        |
|---------------|-------------------|-------|--------|-------------------------|-------------------|--------|---------|--------|
| Total         | Combustible fuels | Hydro | Other  | Total                   | Combustible fuels | Hydro  | Nuclear | Other  |
| ..            | ..                | ..    | ..     | 170                     | 167               | ..     | ..      | 3      |
| ..            | ..                | ..    | ..     | 167                     | 162               | ..     | ..      | 5      |
| ..            | ..                | ..    | ..     | *168                    | *163              | ..     | ..      | 5      |
| ..            | ..                | ..    | ..     | *169                    | *164              | ..     | ..      | *5     |
| 24,084        | 18,336            | ..    | 5,748  | 232,479                 | 204,501           | 15,318 | ..      | 12,660 |
| 28,941        | 21,507            | ..    | 7,434  | 229,078                 | 199,558           | 16,285 | ..      | 13,235 |
| 31,974        | 22,969            | ..    | 9,005  | 229,024                 | 196,915           | 16,021 | ..      | 16,088 |
| 36,981        | 24,671            | ..    | 12,310 | 227,044                 | 190,827           | 15,967 | ..      | 20,250 |
| ..            | ..                | ..    | ..     | 34                      | 30                | ..     | ..      | 5      |
| ..            | ..                | ..    | ..     | 37                      | 31                | ..     | ..      | 6      |
| ..            | ..                | ..    | ..     | 41                      | 31                | ..     | ..      | 11     |
| ..            | ..                | ..    | ..     | 39                      | 29                | ..     | ..      | 10     |
| 11            | 11                | ..    | ..     | 931                     | 425               | 495    | ..      | 11     |
| 23            | 23                | ..    | ..     | 994                     | 491               | 491    | ..      | 11     |
| 40            | 40                | ..    | ..     | 1,005                   | 424               | 567    | ..      | 15     |
| 49            | 49                | ..    | ..     | 1,025                   | 450               | 559    | ..      | 16     |
| ..            | ..                | ..    | ..     | 691                     | 475               | 183    | ..      | 33     |
| ..            | ..                | ..    | ..     | 681                     | 470               | 175    | ..      | 36     |
| ..            | ..                | ..    | ..     | 676                     | 475               | 164    | ..      | 37     |
| ..            | ..                | ..    | ..     | 693                     | 494               | 159    | ..      | 40     |
| ..            | ..                | ..    | ..     | 1,720                   | 1,668             | ..     | ..      | 52     |
| ..            | ..                | ..    | ..     | 1,760                   | 1,708             | ..     | ..      | 52     |
| ..            | ..                | ..    | ..     | 1,715                   | 1,663             | ..     | ..      | 52     |
| ..            | ..                | ..    | ..     | 1,724                   | 1,672             | ..     | ..      | 52     |
| *2            | *2                | ..    | ..     | *29                     | *24               | ..     | ..      | 5      |
| *2            | *2                | ..    | ..     | *29                     | *24               | ..     | ..      | 5      |
| *2            | *2                | ..    | ..     | *29                     | *24               | ..     | ..      | 5      |
| *2            | *2                | ..    | ..     | *30                     | *25               | ..     | ..      | 5      |
| ..            | ..                | ..    | ..     | *88                     | *86               | ..     | ..      | 2      |
| ..            | ..                | ..    | ..     | *89                     | *87               | ..     | ..      | 2      |
| ..            | ..                | ..    | ..     | *90                     | *88               | ..     | ..      | 2      |
| ..            | ..                | ..    | ..     | *90                     | *88               | ..     | ..      | 2      |
| ..            | ..                | ..    | ..     | *68                     | *66               | 0      | ..      | 2      |
| ..            | ..                | ..    | ..     | *67                     | *65               | 0      | ..      | 2      |
| ..            | ..                | ..    | ..     | *69                     | *65               | 0      | ..      | 4      |
| ..            | ..                | ..    | ..     | *69                     | *65               | 0      | ..      | 4      |
| ..            | ..                | ..    | ..     | 32                      | 31                | ..     | ..      | 0      |
| ..            | ..                | ..    | ..     | 35                      | 34                | ..     | ..      | 1      |
| ..            | ..                | ..    | ..     | 36                      | 35                | ..     | ..      | 1      |
| ..            | ..                | ..    | ..     | 37                      | 36                | ..     | ..      | 1      |
| ..            | ..                | ..    | ..     | 3,130                   | 2,842             | 232    | ..      | 57     |
| ..            | ..                | ..    | ..     | 3,228                   | 2,794             | 361    | ..      | 73     |
| ..            | ..                | ..    | ..     | 3,486                   | 3,077             | 317    | ..      | 92     |
| ..            | ..                | ..    | ..     | 3,333                   | 2,876             | 285    | ..      | 173    |
| 1,408         | 1,221             | 4     | 183    | 42,416                  | 6,245             | 25,916 | ..      | 10,255 |
| 1,457         | 1,255             | 4     | 198    | 42,866                  | 7,645             | 25,173 | ..      | 10,048 |
| 1,412         | 1,197             | 4     | 210    | 43,001                  | 6,728             | 26,286 | ..      | 9,986  |
| 1,557         | 1,318             | 4     | 236    | 43,254                  | 7,448             | 25,571 | ..      | 10,236 |
| ..            | ..                | ..    | ..     | *3                      | *3                | ..     | ..      | 0      |
| ..            | ..                | ..    | ..     | *3                      | *3                | ..     | ..      | 0      |
| ..            | ..                | ..    | ..     | *4                      | *3                | ..     | ..      | 0      |
| ..            | ..                | ..    | ..     | *4                      | *4                | ..     | ..      | 0      |
| ..            | ..                | ..    | ..     | *387                    | *387              | ..     | ..      | ..     |
| ..            | ..                | ..    | ..     | *380                    | *380              | ..     | ..      | ..     |
| ..            | ..                | ..    | ..     | *390                    | *390              | ..     | ..      | ..     |
| ..            | ..                | ..    | ..     | *392                    | *392              | ..     | ..      | ..     |

Table 32

## Production of electricity - by type

Gigawatt-hours

| Country or area       | Year | Total producers |                   |       |         |      |       |       |
|-----------------------|------|-----------------|-------------------|-------|---------|------|-------|-------|
|                       |      | Total           | Combustible fuels | Hydro | Nuclear | Wind | Solar | Other |
| Palau                 | 2016 | *95             | *95               | ..    | ..      | ..   | 0     | ..    |
|                       | 2017 | *95             | *95               | ..    | ..      | ..   | 0     | ..    |
|                       | 2018 | *97             | *95               | ..    | ..      | ..   | 2     | ..    |
|                       | 2019 | *97             | *95               | ..    | ..      | ..   | 2     | ..    |
| Papua New Guinea      | 2016 | 4,794           | 3,367             | 1,005 | ..      | ..   | 2     | 420   |
|                       | 2017 | 4,595           | 3,155             | 1,018 | ..      | ..   | 2     | 420   |
|                       | 2018 | 4,629           | 3,375             | 830   | ..      | ..   | 2     | 422   |
|                       | 2019 | *4,858          | *3,483            | *928  | ..      | ..   | *2    | *444  |
| Samoa                 | 2016 | 149             | 101               | 33    | ..      | 0    | 16    | ..    |
|                       | 2017 | 154             | 108               | 26    | ..      | 0    | 20    | ..    |
|                       | 2018 | 154             | 90                | 43    | ..      | 0    | 21    | ..    |
|                       | 2019 | 169             | 96                | 50    | ..      | 0    | 24    | ..    |
| Solomon Islands       | 2016 | 100             | 97                | 1     | ..      | ..   | 2     | ..    |
|                       | 2017 | 103             | 99                | 1     | ..      | ..   | 3     | ..    |
|                       | 2018 | 104             | 100               | 1     | ..      | ..   | 3     | ..    |
|                       | 2019 | 107             | 102               | 1     | ..      | ..   | 4     | ..    |
| Tonga                 | 2016 | 60              | 55                | ..    | ..      | 0    | 5     | ..    |
|                       | 2017 | 67              | 61                | ..    | ..      | 0    | 5     | ..    |
|                       | 2018 | 66              | 62                | ..    | ..      | 0    | 4     | ..    |
|                       | 2019 | 71              | 64                | ..    | ..      | 0    | 6     | ..    |
| Tuvalu                | 2016 | 7               | 5                 | ..    | ..      | ..   | 2     | ..    |
|                       | 2017 | 8               | 6                 | ..    | ..      | ..   | 2     | ..    |
|                       | 2018 | 9               | 7                 | ..    | ..      | ..   | 2     | ..    |
|                       | 2019 | *9              | *7                | ..    | ..      | ..   | 2     | ..    |
| Vanuatu               | 2016 | 74              | 62                | 5     | ..      | 5    | 2     | ..    |
|                       | 2017 | 80              | 63                | 7     | ..      | 5    | 4     | ..    |
|                       | 2018 | 80              | 63                | 8     | ..      | 4    | 5     | ..    |
|                       | 2019 | 82              | 63                | 8     | ..      | 6    | *5    | ..    |
| Wallis and Futuna Is. | 2016 | *20             | *20               | 0     | ..      | ..   | 0     | ..    |
|                       | 2017 | *20             | *19               | 0     | ..      | ..   | 0     | ..    |
|                       | 2018 | *20             | *20               | 0     | ..      | ..   | 0     | ..    |
|                       | 2019 | *22             | *21               | 0     | ..      | ..   | 0     | ..    |

## Production of electricity - by type

Gigawatt-hours

| Autoproducers |                   |       |       | Main activity producers |                   |       |         |       |
|---------------|-------------------|-------|-------|-------------------------|-------------------|-------|---------|-------|
| Total         | Combustible fuels | Hydro | Other | Total                   | Combustible fuels | Hydro | Nuclear | Other |
| *6            | *6                | ..    | ..    | *89                     | *89               | ..    | ..      | 0     |
| *7            | *7                | ..    | ..    | *88                     | *88               | ..    | ..      | 0     |
| *7            | *7                | ..    | ..    | *90                     | *88               | ..    | ..      | 2     |
| *7            | *7                | ..    | ..    | *90                     | *88               | ..    | ..      | 2     |
| 3,520         | 2,745             | 355   | 420   | 1,274                   | 622               | 650   | ..      | 2     |
| 3,304         | 2,533             | 351   | 420   | 1,291                   | 622               | 667   | ..      | 2     |
| 3,253         | 2,622             | 209   | 422   | 1,376                   | 753               | 621   | ..      | 2     |
| *3,372        | *2,650            | *278  | *444  | *1,485                  | *833              | *650  | ..      | *2    |
| 0             | ..                | ..    | 0     | 149                     | 101               | 33    | ..      | 16    |
| 0             | ..                | ..    | 0     | 154                     | 108               | 26    | ..      | 20    |
| 0             | ..                | ..    | 0     | 154                     | 90                | 43    | ..      | 21    |
| 0             | ..                | ..    | 0     | 169                     | 96                | 50    | ..      | 24    |
| 4             | 4                 | ..    | ..    | 96                      | 93                | 1     | ..      | 2     |
| 4             | 4                 | ..    | ..    | 99                      | 95                | 1     | ..      | 3     |
| 3             | 3                 | ..    | ..    | 101                     | 97                | 1     | ..      | 3     |
| 3             | 3                 | ..    | ..    | 104                     | 99                | 1     | ..      | 4     |
| ..            | ..                | ..    | ..    | 60                      | 55                | ..    | ..      | 5     |
| ..            | ..                | ..    | ..    | 67                      | 61                | ..    | ..      | 5     |
| ..            | ..                | ..    | ..    | 66                      | 62                | ..    | ..      | 4     |
| ..            | ..                | ..    | ..    | 71                      | 64                | ..    | ..      | 6     |
| ..            | ..                | ..    | ..    | 7                       | 5                 | ..    | ..      | 2     |
| ..            | ..                | ..    | ..    | 8                       | 6                 | ..    | ..      | 2     |
| ..            | ..                | ..    | ..    | 9                       | 7                 | ..    | ..      | 2     |
| ..            | ..                | ..    | ..    | *9                      | *7                | ..    | ..      | 2     |
| ..            | ..                | ..    | ..    | 74                      | 62                | 5     | ..      | 8     |
| ..            | ..                | ..    | ..    | 80                      | 63                | 7     | ..      | 9     |
| ..            | ..                | ..    | ..    | 80                      | 63                | 8     | ..      | 10    |
| ..            | ..                | ..    | ..    | 82                      | 63                | 8     | ..      | 12    |
| ..            | ..                | ..    | ..    | *20                     | *20               | 0     | ..      | 0     |
| ..            | ..                | ..    | ..    | *20                     | *19               | 0     | ..      | 0     |
| ..            | ..                | ..    | ..    | *20                     | *20               | 0     | ..      | 0     |
| ..            | ..                | ..    | ..    | *22                     | *21               | 0     | ..      | 0     |



### Electricity supply and consumption

Gigawatt-hours and kilowatt-hours per capita

**Table Notes**

**Supply** is calculated as **Production** plus **Imports** minus **Exports**.

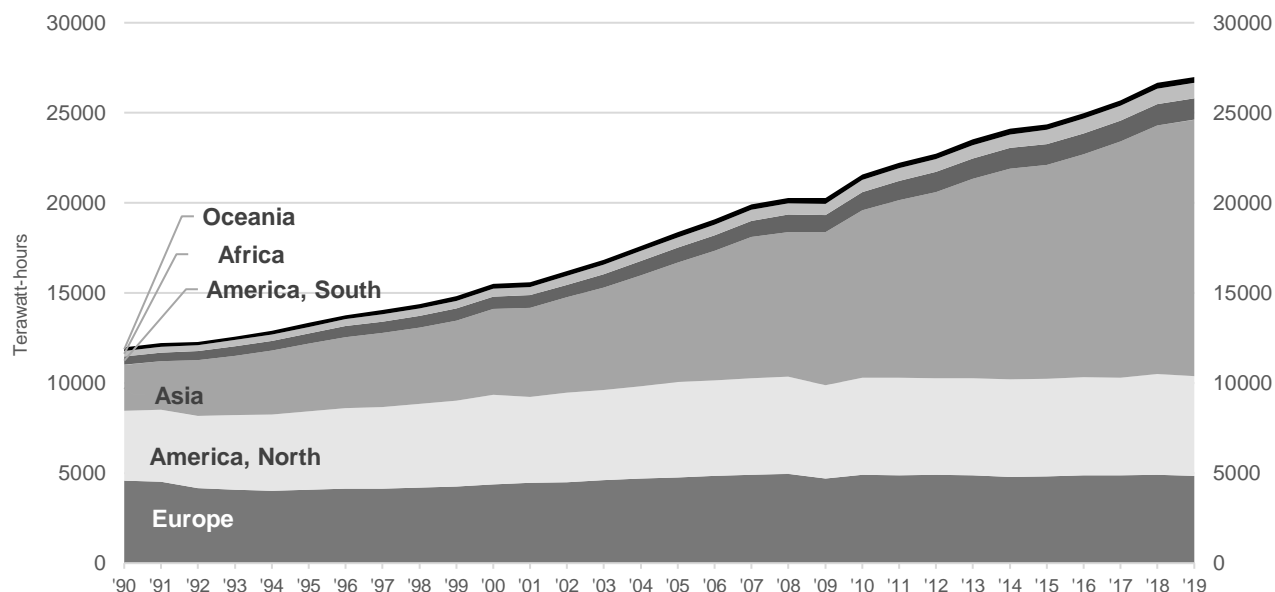
**EIOU and losses** refers to energy industries own use of electricity, including for pumped storage, and losses.

**Total Final Consumption (TFC)** refers to final energy consumption of electricity.

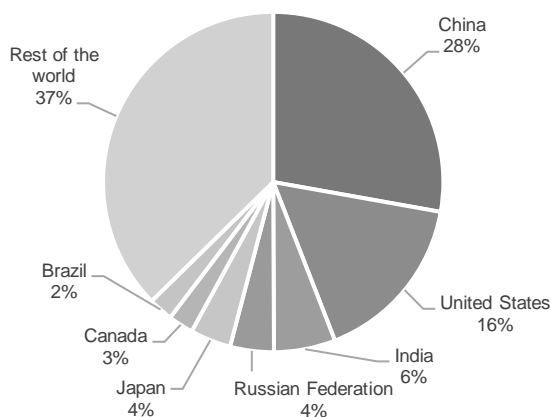
Figures may not add up due to statistical differences, or for some countries quantities transformed into heat in heat pumps and/or electric boilers

Please refer to the Definitions Section on pages ix to xv for the appropriate product description /classification, and xvi to xvii for the descriptions of relevant flows.

**Figure 81: World electricity generation by region, 1990-2019**



**Figure 82: Major electricity producing countries, 2019**



**Figure 83: Major electricity consuming countries, 2019**

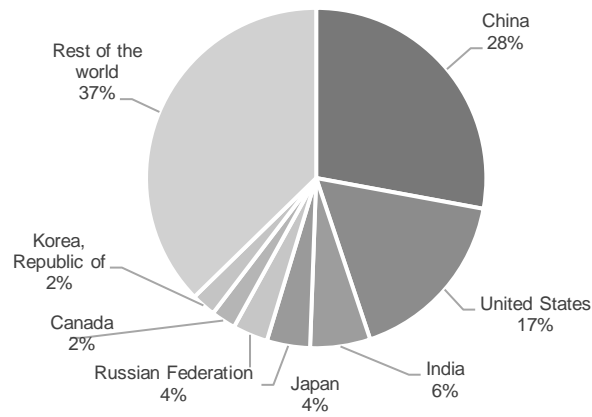


Table 33

## Electricity supply and consumption

Gigawatt-hours and kilowatt-hours per capita

| Country or area      | Year        | Production        | Imports        | Exports        | Supply            |              | Consumption      |                   |
|----------------------|-------------|-------------------|----------------|----------------|-------------------|--------------|------------------|-------------------|
|                      |             |                   |                |                | Total             | Per capita   | EIOU+losses      | TFC               |
| <b>World</b>         | <b>2016</b> | <b>24,986,890</b> | <b>738,377</b> | <b>722,865</b> | <b>25,002,402</b> | <b>3,350</b> | <b>4,151,159</b> | <b>20,757,633</b> |
|                      | <b>2017</b> | <b>25,699,698</b> | <b>740,533</b> | <b>735,528</b> | <b>25,704,704</b> | <b>3,406</b> | <b>4,289,908</b> | <b>21,379,757</b> |
|                      | <b>2018</b> | <b>26,654,467</b> | <b>736,726</b> | <b>722,657</b> | <b>26,668,536</b> | <b>3,495</b> | <b>4,400,284</b> | <b>22,216,350</b> |
|                      | <b>2019</b> | <b>26,982,699</b> | <b>728,846</b> | <b>721,778</b> | <b>26,989,767</b> | <b>3,499</b> | <b>4,436,938</b> | <b>22,579,574</b> |
| <b>Africa</b>        | <b>2016</b> | <b>809,152</b>    | <b>41,884</b>  | <b>37,952</b>  | <b>813,085</b>    | <b>671</b>   | <b>158,807</b>   | <b>647,820</b>    |
|                      | <b>2017</b> | <b>827,879</b>    | <b>39,513</b>  | <b>31,725</b>  | <b>835,668</b>    | <b>672</b>   | <b>182,121</b>   | <b>650,084</b>    |
|                      | <b>2018</b> | <b>852,350</b>    | <b>37,672</b>  | <b>31,388</b>  | <b>858,634</b>    | <b>674</b>   | <b>172,781</b>   | <b>686,997</b>    |
|                      | <b>2019</b> | <b>857,322</b>    | <b>34,677</b>  | <b>34,964</b>  | <b>857,035</b>    | <b>656</b>   | <b>182,889</b>   | <b>668,694</b>    |
| Algeria              | 2016        | 71,092            | 257            | 507            | 70,842            | 1,747        | 18,554           | 52,288            |
|                      | 2017        | 76,018            | 537            | 880            | 75,675            | 1,828        | 19,299           | 56,376            |
|                      | 2018        | 76,662            | 506            | 597            | 76,571            | 1,813        | 18,417           | 58,153            |
|                      | 2019        | 81,533            | 531            | 673            | 81,391            | 1,890        | 19,208           | 62,184            |
| Angola               | 2016        | 10,379            | ..             | ..             | 10,379            | 360          | 1,441            | 8,938             |
|                      | 2017        | 10,737            | ..             | ..             | 10,737            | 360          | 1,490            | 9,247             |
|                      | 2018        | 12,869            | ..             | ..             | 12,869            | 418          | 1,793            | 11,076            |
|                      | 2019        | 15,474            | ..             | ..             | 15,474            | 486          | 2,141            | 13,333            |
| Benin                | 2016        | 276               | 1,089          | ..             | 1,365             | 126          | 288              | 1,071             |
|                      | 2017        | 331               | 1,111          | ..             | 1,442             | 129          | 297              | 1,139             |
|                      | 2018        | 202               | 1,293          | ..             | 1,495             | 130          | 295              | 1,183             |
|                      | 2019        | 529               | 1,093          | 2              | 1,620             | 137          | 363              | 1,256             |
| Botswana             | 2016        | 2,688             | 1,650          | ..             | 4,338             | 2,008        | 871              | 3,479             |
|                      | 2017        | 3,022             | 1,288          | ..             | 4,310             | 1,955        | 1,016            | 3,280             |
|                      | 2018        | 3,105             | 1,189          | ..             | 4,294             | 1,905        | 785              | 3,209             |
|                      | 2019        | 2,508             | 1,746          | ..             | 4,254             | 1,847        | 935              | 3,208             |
| Burkina Faso         | 2016        | 973               | 630            | ..             | 1,603             | 86           | *242             | *1,361            |
|                      | 2017        | 1,095             | 645            | ..             | 1,741             | 91           | *289             | *1,452            |
|                      | 2018        | 1,021             | 837            | ..             | 1,858             | 94           | *274             | *1,568            |
|                      | 2019        | 752               | 1,087          | ..             | 1,840             | 91           | *202             | *1,686            |
| Burundi              | 2016        | 181               | *128           | ..             | 309               | 29           | *61              | *216              |
|                      | 2017        | 192               | *94            | ..             | 286               | 26           | *67              | *225              |
|                      | 2018        | 246               | *100           | ..             | 346               | 31           | *70              | *276              |
|                      | 2019        | 271               | *100           | ..             | 371               | 32           | *75              | *296              |
| Cabo Verde           | 2016        | 444               | ..             | ..             | 444               | 836          | *128             | *315              |
|                      | 2017        | 492               | ..             | ..             | 492               | 915          | *142             | *343              |
|                      | 2018        | *497              | ..             | ..             | *497              | *914         | *141             | *356              |
|                      | 2019        | *513              | ..             | ..             | *513              | *933         | *143             | *370              |
| Cameroon             | 2016        | 7,531             | 17             | ..             | 7,548             | 315          | 1,913            | 5,761             |
|                      | 2017        | 8,082             | 18             | ..             | 8,100             | 330          | 2,026            | 6,182             |
|                      | 2018        | 8,581             | 19             | ..             | 8,600             | 341          | 2,056            | 6,564             |
|                      | 2019        | 8,476             | 19             | ..             | 8,495             | 328          | 2,111            | 6,484             |
| Central African Rep. | 2016        | 143               | ..             | ..             | 143               | 32           | *10              | *133              |
|                      | 2017        | 145               | ..             | ..             | 145               | 32           | *10              | *135              |
|                      | 2018        | 147               | ..             | ..             | 147               | 32           | *10              | *137              |
|                      | 2019        | 149               | ..             | ..             | 149               | 31           | *10              | *139              |
| Chad                 | 2016        | 294               | ..             | ..             | 294               | 20           | *52              | *240              |
|                      | 2017        | 299               | ..             | ..             | 299               | 20           | *53              | *242              |
|                      | 2018        | 303               | ..             | ..             | 303               | 20           | *55              | *245              |
|                      | 2019        | 308               | ..             | ..             | 308               | 19           | *57              | *249              |
| Comoros              | 2016        | *58               | ..             | ..             | *58               | *73          | *23              | *35               |
|                      | 2017        | *91               | ..             | ..             | *91               | *112         | *36              | *55               |
|                      | 2018        | *98               | ..             | ..             | *98               | *118         | *39              | *59               |
|                      | 2019        | *108              | ..             | ..             | *108              | *127         | *43              | *65               |



## Electricity supply and consumption

Gigawatt-hours and kilowatt-hours per capita

| Country or area        | Year | Production | Imports | Exports | Supply  |            | Consumption |         |
|------------------------|------|------------|---------|---------|---------|------------|-------------|---------|
|                        |      |            |         |         | Total   | Per capita | EIOU+losses | TFC     |
| Congo                  | 2016 | 2,953      | 21      | 22      | 2,952   | 593        | 1,694       | 1,439   |
|                        | 2017 | 2,965      | 22      | 22      | 2,964   | 580        | 1,657       | 1,555   |
|                        | 2018 | 3,096      | 28      | 26      | 3,098   | 591        | 1,732       | 1,586   |
|                        | 2019 | 3,655      | 23      | 44      | 3,634   | 675        | 2,034       | 1,596   |
| Côte d'Ivoire          | 2016 | 10,253     | 19      | 1,877   | 8,395   | 352        | 2,140       | 6,615   |
|                        | 2017 | 10,121     | 37      | 1,247   | 8,911   | 365        | 2,617       | 6,318   |
|                        | 2018 | 10,058     | 102     | 1,156   | 9,004   | 359        | 2,067       | 6,926   |
|                        | 2019 | 10,697     | 77      | 1,255   | 9,518   | 370        | 2,339       | 7,297   |
| Dem. Rep. of the Congo | 2016 | 9,135      | 20      | 420     | 8,735   | 111        | 1,876       | 7,001   |
|                        | 2017 | 9,510      | 668     | 62      | 10,116  | 124        | 2,147       | 7,223   |
|                        | 2018 | 12,067     | 799     | 70      | 12,796  | 152        | 2,831       | 9,965   |
|                        | 2019 | 11,107     | 385     | 248     | 11,244  | 130        | 3,212       | 8,283   |
| Djibouti               | 2016 | 88         | 450     | ..      | 537     | 578        | *107        | *423    |
|                        | 2017 | *59        | 508     | ..      | 567     | 600        | *113        | *461    |
|                        | 2018 | *58        | 526     | ..      | 584     | 609        | *115        | *469    |
|                        | 2019 | *60        | *530    | ..      | *590    | *606       | *120        | *470    |
| Egypt                  | 2016 | 191,920    | 54      | 747     | 191,227 | 2,025      | 27,105      | 162,275 |
|                        | 2017 | 195,150    | 65      | 333     | 194,882 | 2,021      | *43,276     | 151,606 |
|                        | 2018 | 202,838    | 81      | 425     | 202,494 | 2,057      | 34,212      | 165,610 |
|                        | 2019 | 194,279    | 74      | 360     | 193,993 | 1,932      | 40,009      | 156,340 |
| Equatorial Guinea      | 2016 | *850       | ..      | ..      | *850    | *699       | *131        | *719    |
|                        | 2017 | *850       | ..      | ..      | *850    | *674       | *131        | *719    |
|                        | 2018 | *736       | ..      | ..      | *736    | *562       | *110        | *626    |
|                        | 2019 | *750       | ..      | ..      | *750    | *553       | *115        | *635    |
| Eritrea                | 2016 | 423        | ..      | ..      | 423     | 125        | 73          | 343     |
|                        | 2017 | 444        | ..      | ..      | 444     | 130        | 77          | 360     |
|                        | 2018 | 467        | ..      | ..      | 467     | 135        | 81          | 379     |
|                        | 2019 | 483        | ..      | ..      | 483     | 138        | 83          | 392     |
| Eswatini               | 2016 | 408        | 1,077   | ..      | 1,485   | 1,333      | 222         | 1,262   |
|                        | 2017 | 414        | 1,048   | ..      | 1,462   | 1,300      | 169         | 1,387   |
|                        | 2018 | 519        | 1,020   | ..      | 1,539   | 1,355      | 195         | 1,323   |
|                        | 2019 | 584        | 947     | ..      | 1,531   | 1,333      | 182         | 1,343   |
| Ethiopia               | 2016 | 12,588     | ..      | 1,303   | 11,285  | 109        | 2,675       | 8,586   |
|                        | 2017 | 13,268     | ..      | 1,432   | 11,836  | 111        | 2,993       | 8,856   |
|                        | 2018 | 14,242     | ..      | 1,000   | 13,242  | 121        | 3,245       | 10,558  |
|                        | 2019 | 15,149     | ..      | 1,000   | 14,149  | 126        | 3,447       | 10,995  |
| Gabon                  | 2016 | 2,338      | 344     | ..      | 2,682   | 1,336      | 665         | 2,017   |
|                        | 2017 | 2,278      | 456     | ..      | 2,734   | 1,324      | 579         | 2,155   |
|                        | 2018 | 2,280      | 511     | ..      | 2,791   | 1,317      | 597         | 2,194   |
|                        | 2019 | 2,284      | 511     | ..      | 2,795   | 1,286      | 537         | 2,258   |
| Gambia                 | 2016 | 302        | ..      | ..      | 302     | 141        | *69         | *233    |
|                        | 2017 | 317        | ..      | ..      | 317     | 143        | *80         | *237    |
|                        | 2018 | *321       | ..      | ..      | *321    | *141       | *82         | *239    |
|                        | 2019 | *325       | ..      | ..      | *325    | *138       | *83         | *242    |
| Ghana                  | 2016 | 13,203     | 745     | 187     | 13,761  | 483        | 1,056       | 12,528  |
|                        | 2017 | 14,248     | 320     | 268     | 14,300  | 491        | 986         | 13,037  |
|                        | 2018 | 16,425     | 140     | 740     | 15,825  | 532        | 1,371       | 14,401  |
|                        | 2019 | 18,368     | 127     | 1,430   | 17,065  | 561        | 1,364       | 15,232  |
| Guinea                 | 2016 | 1,596      | ..      | ..      | 1,596   | 136        | *271        | *1,324  |
|                        | 2017 | 1,753      | ..      | ..      | 1,753   | 145        | *298        | *1,455  |
|                        | 2018 | 1,914      | ..      | ..      | 1,914   | 154        | *325        | *1,588  |
|                        | 2019 | 2,019      | ..      | ..      | 2,019   | 158        | *343        | *1,676  |

Table 33

## Electricity supply and consumption

Gigawatt-hours and kilowatt-hours per capita

| Country or area | Year | Production | Imports | Exports | Supply |            | Consumption |        |
|-----------------|------|------------|---------|---------|--------|------------|-------------|--------|
|                 |      |            |         |         | Total  | Per capita | EIOU+losses | TFC    |
| Guinea-Bissau   | 2016 | *79        | ..      | ..      | *79    | *44        | 0           | *79    |
|                 | 2017 | *80        | ..      | ..      | *80    | *44        | 0           | 79     |
|                 | 2018 | *81        | ..      | ..      | *81    | *43        | 0           | *82    |
|                 | 2019 | *82        | ..      | ..      | *82    | *43        | 0           | *86    |
| Kenya           | 2016 | 10,058     | 86      | 39      | 10,105 | 206        | 2,045       | 8,053  |
|                 | 2017 | 10,360     | 230     | 12      | 10,577 | 211        | 2,022       | 8,410  |
|                 | 2018 | 11,182     | 130     | 35      | 11,277 | 219        | 2,531       | 8,702  |
|                 | 2019 | 11,621     | 212     | 16      | 11,816 | 225        | 2,837       | 8,854  |
| Lesotho         | 2016 | 508        | 373     | 3       | 878    | 423        | 154         | *765   |
|                 | 2017 | 502        | 387     | 1       | 888    | 424        | 117         | 700    |
|                 | 2018 | 517        | 397     | 3       | 911    | 432        | 116         | 807    |
|                 | 2019 | 393        | 542     | 1       | 934    | 439        | 130         | 791    |
| Liberia         | 2016 | *440       | ..      | ..      | *440   | *96        | *64         | *376   |
|                 | 2017 | *440       | ..      | ..      | *440   | *94        | *64         | *376   |
|                 | 2018 | *444       | ..      | ..      | *444   | *92        | *64         | *380   |
|                 | 2019 | *456       | ..      | ..      | *456   | *92        | *66         | *390   |
| Libya           | 2016 | 31,420     | 376     | ..      | 31,796 | 4,898      | 7,331       | 13,988 |
|                 | 2017 | 33,282     | 302     | ..      | 33,584 | 5,103      | 7,682       | 14,133 |
|                 | 2018 | 34,172     | 465     | ..      | 34,637 | 5,186      | 7,736       | 17,605 |
|                 | 2019 | 33,719     | 465     | ..      | 34,184 | 5,044      | 7,603       | 17,864 |
| Madagascar      | 2016 | 1,886      | ..      | ..      | 1,886  | 76         | 162         | 1,757  |
|                 | 2017 | 1,994      | ..      | ..      | 1,994  | 78         | 176         | 1,825  |
|                 | 2018 | 2,095      | ..      | ..      | 2,095  | 80         | *155        | 1,940  |
|                 | 2019 | 2,162      | ..      | ..      | 2,162  | 80         | *163        | 1,999  |
| Malawi          | 2016 | 2,233      | ..      | 24      | 2,208  | 128        | *354        | 1,855  |
|                 | 2017 | 2,142      | ..      | 20      | 2,121  | 120        | *643        | 1,329  |
|                 | 2018 | *1,997     | ..      | 19      | *1,978 | *109       | *544        | 1,384  |
|                 | 2019 | *2,321     | ..      | 20      | *2,301 | *124       | *568        | 1,633  |
| Mali            | 2016 | 2,613      | 113     | *529    | 2,197  | 122        | *322        | *1,875 |
|                 | 2017 | 3,068      | *117    | *535    | 2,650  | 143        | *330        | *2,320 |
|                 | 2018 | *3,261     | *198    | *550    | *2,909 | *152       | *369        | *2,540 |
|                 | 2019 | *3,298     | *200    | *556    | *2,942 | *150       | *373        | *2,569 |
| Mauritania      | 2016 | 1,042      | 221     | 57      | 1,206  | 290        | *255        | 941    |
|                 | 2017 | 1,183      | *185    | ..      | 1,368  | 319        | *305        | 982    |
|                 | 2018 | 1,271      | 198     | ..      | 1,469  | 333        | *325        | 1,023  |
|                 | 2019 | 1,347      | 204     | ..      | 1,551  | 343        | *290        | 1,099  |
| Mauritius       | 2016 | 3,042      | ..      | ..      | 3,042  | 2,411      | 477         | 2,555  |
|                 | 2017 | 3,120      | ..      | ..      | 3,120  | 2,467      | 497         | 2,614  |
|                 | 2018 | 3,132      | ..      | ..      | 3,132  | 2,471      | 476         | 2,650  |
|                 | 2019 | 3,237      | ..      | ..      | 3,237  | 2,549      | 474         | 2,754  |
| Morocco         | 2016 | 32,141     | 5,289   | 135     | 37,295 | 1,046      | 6,233       | 31,063 |
|                 | 2017 | 33,192     | 6,058   | 161     | 39,088 | 1,082      | 6,636       | 32,453 |
|                 | 2018 | 35,822     | 3,724   | 350     | 39,196 | 1,071      | 6,582       | 32,614 |
|                 | 2019 | 41,650     | 526     | 1,453   | 40,723 | 1,099      | 7,272       | 33,451 |
| Mozambique      | 2016 | 18,697     | 9,928   | 14,269  | 14,355 | 516        | 2,538       | 11,383 |
|                 | 2017 | 17,641     | 8,289   | 10,010  | 15,920 | 556        | 2,953       | 12,243 |
|                 | 2018 | 17,140     | 8,327   | 9,738   | 15,729 | 533        | 2,991       | 12,344 |
|                 | 2019 | 18,981     | 8,276   | 10,771  | 16,487 | 543        | 3,131       | 12,836 |
| Namibia         | 2016 | 1,479      | 3,085   | 99      | 4,465  | 1,893      | 505         | 3,909  |
|                 | 2017 | 1,694      | 2,939   | 100     | 4,533  | 1,887      | 449         | 4,057  |
|                 | 2018 | 1,307      | 3,449   | 114     | 4,642  | 1,896      | 445         | 4,171  |
|                 | 2019 | 1,052      | 3,417   | 119     | 4,350  | 1,744      | 270         | 4,040  |

## Electricity supply and consumption

Gigawatt-hours and kilowatt-hours per capita

| Country or area        | Year | Production | Imports | Exports | Supply  |            | Consumption |         |
|------------------------|------|------------|---------|---------|---------|------------|-------------|---------|
|                        |      |            |         |         | Total   | Per capita | EIOU+losses | TFC     |
| Niger                  | 2016 | 442        | 779     | 0       | 1,221   | 59         | *276        | *968    |
|                        | 2017 | 566        | 845     | 0       | 1,412   | 65         | *290        | *1,014  |
|                        | 2018 | 480        | 1,253   | 0       | 1,733   | 77         | *276        | *1,379  |
|                        | 2019 | *555       | 1,057   | ..      | 1,612   | 69         | 363         | 1,239   |
| Nigeria                | 2016 | 36,512     | ..      | ..      | 36,512  | 196        | 6,730       | 25,429  |
|                        | 2017 | 32,221     | ..      | ..      | 32,221  | 169        | 5,993       | 25,992  |
|                        | 2018 | 32,446     | ..      | ..      | 32,446  | 166        | 6,026       | 26,653  |
|                        | 2019 | 31,422     | ..      | ..      | 31,422  | 156        | 5,856       | 27,274  |
| Rwanda                 | 2016 | 633        | 79      | 4       | 708     | 61         | 147         | *561    |
|                        | 2017 | 700        | 82      | 4       | 777     | 65         | 181         | 597     |
|                        | 2018 | 759        | 96      | 5       | 850     | 69         | 168         | 682     |
|                        | 2019 | 798        | 99      | 6       | 892     | 71         | 170         | *722    |
| Sao Tome and Principe  | 2016 | 86         | ..      | ..      | 86      | 424        | 18          | *69     |
|                        | 2017 | *91        | ..      | ..      | *91     | *438       | *19         | *72     |
|                        | 2018 | *91        | ..      | ..      | *91     | *433       | *18         | *73     |
|                        | 2019 | *91        | ..      | ..      | *91     | *425       | *17         | *74     |
| Senegal                | 2016 | 4,097      | 360     | ..      | 4,457   | 297        | 724         | 3,734   |
|                        | 2017 | 4,418      | 360     | ..      | 4,778   | 310        | 726         | 3,472   |
|                        | 2018 | 4,502      | 360     | ..      | 4,862   | 307        | 727         | 3,998   |
|                        | 2019 | *4,453     | 324     | ..      | *4,777  | *293       | 816         | 3,960   |
| Seychelles             | 2016 | 496        | ..      | ..      | 496     | 5,183      | *44         | 452     |
|                        | 2017 | 513        | ..      | ..      | 513     | 5,320      | *43         | 470     |
|                        | 2018 | 518        | ..      | ..      | 518     | 5,334      | *42         | 476     |
|                        | 2019 | 540        | ..      | ..      | 540     | 5,525      | *54         | 486     |
| Sierra Leone           | 2016 | *303       | ..      | ..      | *303    | *41        | *93         | *210    |
|                        | 2017 | 313        | ..      | ..      | 313     | 42         | *100        | *210    |
|                        | 2018 | 315        | ..      | ..      | 315     | 41         | *82         | *232    |
|                        | 2019 | 260        | ..      | ..      | 260     | 33         | *87         | *173    |
| Somalia                | 2016 | 362        | ..      | ..      | 362     | 26         | *43         | *319    |
|                        | 2017 | 367        | ..      | ..      | 367     | 25         | *47         | *320    |
|                        | 2018 | 367        | ..      | ..      | 367     | 24         | *17         | 350     |
|                        | 2019 | 367        | ..      | ..      | 367     | 24         | *16         | *351    |
| South Africa           | 2016 | 255,112    | 9,113   | 16,140  | 248,085 | 4,414      | 55,058      | 203,739 |
|                        | 2017 | 257,769    | 7,321   | 14,423  | 250,667 | 4,397      | 59,437      | 202,672 |
|                        | 2018 | 256,064    | 8,320   | 14,458  | 249,926 | 4,325      | 57,897      | 205,423 |
|                        | 2019 | 252,639    | 7,823   | 14,482  | 245,980 | 4,201      | 58,953      | 187,137 |
| South Sudan            | 2016 | 521        | ..      | ..      | 521     | 48         | 40          | 477     |
|                        | 2017 | 542        | ..      | ..      | 542     | 50         | 39          | 498     |
|                        | 2018 | 584        | ..      | ..      | 584     | 53         | 42          | 501     |
|                        | 2019 | 593        | ..      | ..      | 593     | 54         | 43          | 536     |
| St. Helena and Depend. | 2016 | 12         | ..      | ..      | 12      | 1,946      | *2          | 9       |
|                        | 2017 | 11         | ..      | ..      | 11      | 1,885      | *2          | 9       |
|                        | 2018 | 12         | ..      | ..      | 12      | 1,976      | *1          | 11      |
|                        | 2019 | 12         | ..      | ..      | 12      | 1,965      | *2          | 10      |
| Sudan                  | 2016 | 14,558     | 439     | 6       | 14,991  | 376        | 3,212       | 11,799  |
|                        | 2017 | 15,679     | 891     | ..      | 16,570  | 406        | 3,401       | 12,961  |
|                        | 2018 | 16,395     | 808     | ..      | 17,203  | 412        | 3,503       | 13,700  |
|                        | 2019 | 17,024     | *818    | ..      | 17,842  | 417        | *3,737      | *14,104 |
| Togo                   | 2016 | 950        | 448     | ..      | 1,398   | 186        | 215         | 1,185   |
|                        | 2017 | 692        | 747     | ..      | 1,438   | 187        | 136         | 1,313   |
|                        | 2018 | 589        | 882     | ..      | 1,471   | 186        | 211         | 1,239   |
|                        | 2019 | 723        | 963     | 118     | 1,568   | 194        | 239         | 1,328   |

Table 33

## Electricity supply and consumption

Gigawatt-hours and kilowatt-hours per capita

| Country or area         | Year        | Production       | Imports       | Exports       | Supply           |              | Consumption    |                  |
|-------------------------|-------------|------------------|---------------|---------------|------------------|--------------|----------------|------------------|
|                         |             |                  |               |               | Total            | Per capita   | EIOU+losses    | TFC              |
| Tunisia                 | 2016        | 19,808           | 134           | 255           | 19,687           | 1,742        | 3,976          | 15,569           |
|                         | 2017        | 20,589           | 450           | 483           | 20,556           | 1,798        | 4,364          | 16,113           |
|                         | 2018        | 21,012           | 382           | 484           | 20,910           | 1,808        | 4,416          | 16,504           |
|                         | 2019        | 22,083           | 472           | 631           | 21,924           | 1,875        | 4,478          | 17,397           |
| Uganda                  | 2016        | 3,508            | 54            | 165           | 3,398            | 86           | 765            | 2,594            |
|                         | 2017        | 3,854            | 65            | 317           | 3,602            | 88           | 755            | 2,802            |
|                         | 2018        | 4,040            | 84            | 233           | 3,891            | 91           | 789            | 3,067            |
|                         | 2019        | 4,364            | 104           | 299           | 4,169            | 94           | 826            | 3,233            |
| United Rep. of Tanzania | 2016        | 7,216            | 102           | ..            | 7,318            | 138          | 1,363          | 5,370            |
|                         | 2017        | 7,250            | 106           | ..            | 7,356            | 135          | 1,313          | 5,933            |
|                         | 2018        | 7,396            | 118           | ..            | 7,514            | 133          | 1,193          | 6,372            |
|                         | 2019        | 7,865            | 113           | ..            | 7,978            | 138          | 1,311          | 6,677            |
| Zambia                  | 2016        | 11,695           | 2,185         | 794           | 13,086           | 800          | 2,228          | 10,858           |
|                         | 2017        | 14,185           | 753           | 1,063         | 13,875           | 823          | 1,683          | 12,192           |
|                         | 2018        | 16,191           | 152           | 1,226         | 15,117           | 871          | 2,220          | 12,898           |
|                         | 2019        | 15,041           | 198           | 976           | 14,263           | 799          | *1,922         | 12,341           |
| Zimbabwe                | 2016        | 7,090            | 2,220         | 369           | 8,941            | 637          | 1,767          | 7,276            |
|                         | 2017        | 7,544            | 2,569         | 351           | 9,762            | 686          | 1,872          | 7,880            |
|                         | 2018        | 9,418            | 1,177         | 161           | 10,435           | 723          | 1,923          | 8,506            |
|                         | 2019        | 7,792            | 1,612         | 504           | 8,900            | 608          | 1,662          | 7,255            |
| <b>America, North</b>   | <b>2016</b> | <b>5,445,040</b> | <b>87,663</b> | <b>83,786</b> | <b>5,448,918</b> | <b>9,515</b> | <b>748,578</b> | <b>4,694,004</b> |
|                         | <b>2017</b> | <b>5,406,703</b> | <b>81,867</b> | <b>86,247</b> | <b>5,402,323</b> | <b>9,355</b> | <b>763,338</b> | <b>4,653,751</b> |
|                         | <b>2018</b> | <b>5,606,105</b> | <b>79,172</b> | <b>81,344</b> | <b>5,603,933</b> | <b>9,627</b> | <b>775,300</b> | <b>4,815,140</b> |
|                         | <b>2019</b> | <b>5,524,519</b> | <b>80,772</b> | <b>86,995</b> | <b>5,518,296</b> | <b>9,406</b> | <b>773,701</b> | <b>4,759,076</b> |
| Anguilla                | 2016        | 105              | ..            | ..            | 105              | 7,274        | 14             | *91              |
|                         | 2017        | 82               | ..            | ..            | 82               | 5,594        | *13            | *68              |
|                         | 2018        | 89               | ..            | ..            | 89               | 6,018        | *15            | 74               |
|                         | 2019        | 100              | ..            | ..            | 100              | 6,751        | *17            | *83              |
| Antigua and Barbuda     | 2016        | *353             | ..            | ..            | *353             | *3,735       | *100           | *253             |
|                         | 2017        | *353             | ..            | ..            | *353             | *3,699       | *98            | *255             |
|                         | 2018        | 362              | ..            | ..            | 362              | 3,760        | *82            | *287             |
|                         | 2019        | *362             | ..            | ..            | *362             | *3,728       | *74            | *288             |
| Aruba                   | 2016        | *947             | ..            | ..            | *947             | *9,029       | *158           | *789             |
|                         | 2017        | *978             | ..            | ..            | *978             | *9,286       | *165           | *813             |
|                         | 2018        | *983             | ..            | ..            | *983             | *9,285       | *166           | *817             |
|                         | 2019        | *987             | ..            | ..            | *987             | *9,287       | *158           | *829             |
| Bahamas                 | 2016        | 1,966            | ..            | ..            | 1,966            | 5,202        | *86            | 1,965            |
|                         | 2017        | *1,987           | ..            | ..            | *1,987           | *5,205       | *96            | *1,841           |
|                         | 2018        | *2,280           | ..            | ..            | *2,280           | *5,912       | *89            | *2,209           |
|                         | 2019        | *2,337           | ..            | ..            | *2,337           | *6,000       | *107           | *2,230           |
| Barbados                | 2016        | 1,064            | ..            | ..            | 1,064            | 3,722        | 86             | 978              |
|                         | 2017        | 1,047            | ..            | ..            | 1,047            | 3,658        | 75             | 974              |
|                         | 2018        | 1,055            | ..            | ..            | 1,055            | 3,682        | 38             | 943              |
|                         | 2019        | 1,070            | ..            | ..            | 1,070            | 3,729        | 103            | 944              |
| Belize                  | 2016        | 389              | 243           | ..            | 632              | 1,716        | 82             | 589              |
|                         | 2017        | 406              | 230           | ..            | 636              | 1,692        | 74             | 572              |
|                         | 2018        | 415              | 235           | ..            | 651              | 1,698        | 79             | 586              |
|                         | 2019        | 304              | 384           | ..            | 688              | 1,763        | 78             | 620              |
| Bermuda                 | 2016        | 666              | ..            | ..            | 666              | 10,518       | *80            | 586              |
|                         | 2017        | 676              | ..            | ..            | 676              | 10,727       | 90             | 585              |
|                         | 2018        | 644              | ..            | ..            | 644              | 10,267       | 77             | 568              |
|                         | 2019        | 613              | ..            | ..            | 613              | 9,808        | *57            | 554              |

## Electricity supply and consumption

Gigawatt-hours and kilowatt-hours per capita

| Country or area             | Year | Production | Imports | Exports | Supply  |            | Consumption |         |
|-----------------------------|------|------------|---------|---------|---------|------------|-------------|---------|
|                             |      |            |         |         | Total   | Per capita | EIOU+losses | TFC     |
| Bonaire, St Eustatius, Saba | 2016 | 132        | ..      | ..      | 132     | 5,276      | *31         | *101    |
|                             | 2017 | 137        | ..      | ..      | 137     | 5,382      | *33         | *104    |
|                             | 2018 | *137       | ..      | ..      | *137    | *5,309     | *32         | *105    |
|                             | 2019 | *145       | ..      | ..      | *145    | *5,577     | *35         | *110    |
| British Virgin Islands      | 2016 | *212       | ..      | ..      | *212    | *7,232     | *29         | *183    |
|                             | 2017 | *167       | ..      | ..      | *167    | *5,652     | *26         | *141    |
|                             | 2018 | *171       | ..      | ..      | *171    | *5,736     | *24         | *147    |
|                             | 2019 | *183       | ..      | ..      | *183    | *6,094     | *26         | *157    |
| Canada                      | 2016 | 663,808    | 9,303   | 73,103  | 600,008 | 16,491     | 89,945      | 494,129 |
|                             | 2017 | 662,972    | 9,904   | 72,040  | 600,836 | 16,357     | 92,625      | 513,726 |
|                             | 2018 | 653,780    | 13,195  | 61,401  | 605,574 | 16,334     | 91,094      | 524,370 |
|                             | 2019 | 645,429    | 13,334  | 60,410  | 598,353 | 15,994     | 89,872      | 529,665 |
| Cayman Islands              | 2016 | 666        | ..      | ..      | 666     | 10,645     | 40          | 627     |
|                             | 2017 | 671        | ..      | ..      | 671     | 10,579     | 29          | 642     |
|                             | 2018 | 658        | ..      | ..      | 658     | 10,249     | 9           | 649     |
|                             | 2019 | 696        | ..      | ..      | 696     | 10,711     | 6           | 689     |
| Costa Rica                  | 2016 | 10,932     | 807     | 657     | 11,083  | 2,262      | 1,395       | 9,688   |
|                             | 2017 | 11,359     | 551     | 741     | 11,169  | 2,256      | 1,415       | 9,804   |
|                             | 2018 | 11,528     | 572     | 813     | 11,288  | 2,258      | 1,435       | 9,892   |
|                             | 2019 | 11,508     | 733     | 712     | 11,529  | 2,284      | 1,447       | 10,062  |
| Cuba                        | 2016 | 20,459     | ..      | ..      | 20,459  | 1,805      | 4,175       | 16,283  |
|                             | 2017 | 20,558     | ..      | ..      | 20,558  | 1,813      | 5,068       | 15,490  |
|                             | 2018 | 20,837     | ..      | ..      | 20,837  | 1,838      | 5,248       | 15,589  |
|                             | 2019 | 20,703     | ..      | ..      | 20,703  | 1,827      | 5,372       | 15,331  |
| Curaçao                     | 2016 | 884        | ..      | ..      | 884     | 5,489      | 169         | 715     |
|                             | 2017 | 891        | ..      | ..      | 891     | 5,503      | 156         | 736     |
|                             | 2018 | 866        | ..      | ..      | 866     | 5,320      | 150         | 716     |
|                             | 2019 | 879        | ..      | ..      | 879     | 5,380      | 167         | 712     |
| Dominica                    | 2016 | 157        | ..      | ..      | 157     | 2,200      | 14          | *144    |
|                             | 2017 | 131        | ..      | ..      | 131     | 1,829      | 10          | *122    |
|                             | 2018 | 110        | ..      | ..      | 110     | 1,540      | 10          | *101    |
|                             | 2019 | 138        | ..      | ..      | 138     | 1,926      | *13         | *126    |
| Dominican Republic          | 2016 | 18,690     | ..      | ..      | 18,690  | 1,798      | 3,099       | 15,591  |
|                             | 2017 | 19,036     | ..      | ..      | 19,036  | 1,811      | 3,138       | 15,887  |
|                             | 2018 | 19,651     | ..      | ..      | 19,651  | 1,849      | 3,242       | 16,409  |
|                             | 2019 | 19,857     | ..      | ..      | 19,857  | 1,849      | 3,276       | 18,196  |
| El Salvador                 | 2016 | 6,083      | 1,066   | 77      | 7,071   | 1,113      | *932        | 6,073   |
|                             | 2017 | 5,615      | 1,675   | 90      | 7,200   | 1,127      | *1,006      | 6,153   |
|                             | 2018 | 5,402      | 1,824   | 65      | 7,161   | 1,115      | *883        | 6,221   |
|                             | 2019 | 6,071      | 1,450   | 158     | 7,363   | 1,141      | *959        | 6,343   |
| Greenland                   | 2016 | 490        | ..      | ..      | 490     | 8,691      | 27          | 320     |
|                             | 2017 | 518        | ..      | ..      | 518     | 9,174      | 29          | 328     |
|                             | 2018 | *530       | ..      | ..      | *530    | *9,370     | *25         | *347    |
|                             | 2019 | *520       | ..      | ..      | *520    | *9,178     | *30         | *330    |
| Grenada                     | 2016 | 221        | ..      | ..      | 221     | 2,001      | 32          | 194     |
|                             | 2017 | 230        | ..      | ..      | 230     | 2,071      | 34          | 200     |
|                             | 2018 | 234        | ..      | ..      | 234     | 2,102      | 26          | 208     |
|                             | 2019 | 243        | ..      | ..      | 243     | 2,167      | 20          | 217     |
| Guatemala                   | 2016 | 11,789     | 747     | 1,335   | 11,201  | 675        | 1,251       | 9,907   |
|                             | 2017 | 12,272     | 891     | 1,858   | 11,306  | 668        | 1,259       | 10,115  |
|                             | 2018 | 13,568     | 825     | 2,500   | 11,893  | 690        | 1,678       | 10,220  |
|                             | 2019 | *14,083    | 1,141   | 2,190   | *13,034 | *741       | 2,373       | 10,660  |

Table 33

## Electricity supply and consumption

Gigawatt-hours and kilowatt-hours per capita

| Country or area           | Year | Production | Imports | Exports | Supply  |            | Consumption |         |
|---------------------------|------|------------|---------|---------|---------|------------|-------------|---------|
|                           |      |            |         |         | Total   | Per capita | EIOU+losses | TFC     |
| Haiti                     | 2016 | 1,086      | ..      | ..      | 1,086   | 100        | 634         | 417     |
|                           | 2017 | 1,058      | ..      | ..      | 1,058   | 96         | 642         | 422     |
|                           | 2018 | 1,048      | ..      | ..      | 1,048   | 94         | 651         | 428     |
|                           | 2019 | 1,064      | ..      | ..      | 1,064   | 94         | 661         | 435     |
| Honduras                  | 2016 | 9,219      | 314     | 16      | 9,516   | 1,026      | 3,139       | 6,377   |
|                           | 2017 | 9,385      | 446     | 25      | 9,807   | 1,040      | 2,872       | 6,935   |
|                           | 2018 | 9,629      | 372     | 8       | 9,993   | 1,042      | 3,005       | 6,988   |
|                           | 2019 | 10,439     | 260     | 6       | 10,693  | 1,097      | 3,305       | 7,388   |
| Jamaica                   | 2016 | 4,342      | ..      | ..      | 4,342   | 1,494      | 1,173       | 3,184   |
|                           | 2017 | 4,360      | ..      | ..      | 4,360   | 1,493      | 1,170       | 3,191   |
|                           | 2018 | 4,402      | ..      | ..      | 4,402   | 1,500      | 1,163       | 3,299   |
|                           | 2019 | 4,434      | ..      | ..      | 4,434   | 1,504      | 1,209       | 3,237   |
| Mexico                    | 2016 | 320,565    | 2,232   | 1,968   | 320,829 | 2,601      | 61,534      | 270,367 |
|                           | 2017 | 322,063    | 2,151   | 1,804   | 322,410 | 2,584      | 60,983      | 271,921 |
|                           | 2018 | 357,593    | 3,673   | 2,426   | 358,840 | 2,844      | 61,566      | 273,593 |
|                           | 2019 | 344,176    | 3,907   | 3,084   | 344,999 | 2,704      | 57,595      | 280,076 |
| Montserrat                | 2016 | 14         | ..      | ..      | 14      | 2,720      | 1           | 11      |
|                           | 2017 | 13         | ..      | ..      | 13      | 2,678      | 1           | 11      |
|                           | 2018 | 14         | ..      | ..      | 14      | 2,822      | 1           | 11      |
|                           | 2019 | 14         | ..      | ..      | 14      | 2,827      | 1           | 12      |
| Nicaragua                 | 2016 | 4,591      | 205     | 18      | 4,778   | 758        | 1,157       | 3,665   |
|                           | 2017 | 4,525      | 327     | 1       | 4,851   | 760        | 1,403       | 3,451   |
|                           | 2018 | 4,636      | 201     | 0       | 4,837   | 748        | 1,381       | 3,594   |
|                           | 2019 | 4,574      | 434     | 0       | 5,009   | 765        | 1,567       | 3,713   |
| Panama                    | 2016 | 10,885     | 30      | 398     | 10,518  | 2,605      | 1,719       | 8,761   |
|                           | 2017 | 11,054     | 7       | 318     | 10,743  | 2,616      | 1,689       | 9,095   |
|                           | 2018 | 11,353     | 13      | 326     | 11,040  | 2,643      | 1,916       | 9,296   |
|                           | 2019 | 11,663     | 77      | 427     | 11,313  | 2,664      | 1,506       | 9,786   |
| Puerto Rico               | 2016 | 20,644     | ..      | ..      | 20,644  | 6,288      | *2,002      | 17,311  |
|                           | 2017 | 16,371     | ..      | ..      | 16,371  | 5,175      | *1,656      | 13,559  |
|                           | 2018 | 17,453     | ..      | ..      | 17,453  | 5,742      | 1,187       | 16,375  |
|                           | 2019 | 18,886     | ..      | ..      | 18,886  | 6,438      | *1,803      | 16,077  |
| Sint Maarten (Dutch part) | 2016 | *362       | ..      | ..      | *362    | *8,870     | *12         | 342     |
|                           | 2017 | *300       | ..      | ..      | *300    | *7,239     | *10         | *282    |
|                           | 2018 | *291       | ..      | ..      | *291    | *6,949     | *9          | *270    |
|                           | 2019 | *296       | ..      | ..      | *296    | *6,976     | *9          | *274    |
| St. Kitts-Nevis           | 2016 | *228       | ..      | ..      | *228    | *4,408     | *38         | *189    |
|                           | 2017 | 232        | ..      | ..      | 232     | 4,452      | *50         | *182    |
|                           | 2018 | *232       | ..      | ..      | *232    | *4,418     | *45         | *187    |
|                           | 2019 | *235       | ..      | ..      | *235    | *4,438     | *45         | *189    |
| St. Lucia                 | 2016 | 391        | ..      | ..      | 391     | 2,174      | 43          | 348     |
|                           | 2017 | 400        | ..      | ..      | 400     | 2,212      | 41          | 360     |
|                           | 2018 | 404        | ..      | ..      | 404     | 2,222      | 43          | 362     |
|                           | 2019 | 413        | ..      | ..      | 413     | 2,259      | 44          | 369     |
| St. Pierre-Miquelon       | 2016 | 48         | ..      | ..      | 48      | 8,170      | 4           | 45      |
|                           | 2017 | 49         | ..      | ..      | 49      | 8,272      | 3           | 46      |
|                           | 2018 | 51         | ..      | ..      | 51      | 8,703      | 3           | 47      |
|                           | 2019 | 52         | ..      | ..      | 52      | 8,955      | 3           | 49      |
| St. Vincent-Grenadines    | 2016 | 153        | ..      | ..      | 153     | 1,401      | 15          | 138     |
|                           | 2017 | 151        | ..      | ..      | 151     | 1,372      | 14          | 137     |
|                           | 2018 | 151        | ..      | ..      | 151     | 1,368      | 16          | 135     |
|                           | 2019 | *163       | ..      | ..      | *163    | *1,471     | *15         | *148    |

## Electricity supply and consumption

Gigawatt-hours and kilowatt-hours per capita

| Country or area          | Year        | Production       | Imports       | Exports       | Supply           |              | Consumption    |                |
|--------------------------|-------------|------------------|---------------|---------------|------------------|--------------|----------------|----------------|
|                          |             |                  |               |               | Total            | Per capita   | EIOU+losses    | TFC            |
| Trinidad and Tobago      | 2016        | 9,419            | ..            | ..            | 9,419            | 6,837        | 596            | 8,823          |
|                          | 2017        | 9,323            | ..            | ..            | 9,323            | 6,736        | 614            | 8,709          |
|                          | 2018        | 9,225            | ..            | ..            | 9,225            | 6,637        | 762            | 8,463          |
|                          | 2019        | 9,188            | ..            | ..            | 9,188            | 6,587        | 759            | 8,429          |
| Turks and Caicos Islands | 2016        | *245             | ..            | ..            | *245             | *6,702       | *20            | 230            |
|                          | 2017        | *293             | ..            | ..            | *293             | *7,894       | *13            | 284            |
|                          | 2018        | *258             | ..            | ..            | *258             | *6,849       | *22            | 237            |
|                          | 2019        | *261             | ..            | ..            | *261             | *6,826       | *20            | *241           |
| United States            | 2016        | 4,322,038        | 72,716        | 6,214         | 4,388,540        | 13,586       | 574,599        | 3,813,941      |
|                          | 2017        | 4,286,429        | 65,685        | 9,371         | 4,342,743        | 13,359       | 586,627        | 3,756,115      |
|                          | 2018        | 4,455,439        | 58,261        | 13,804        | 4,499,895        | 13,757       | 599,019        | 3,900,876      |
|                          | 2019        | 4,391,761        | 59,052        | 20,008        | 4,430,805        | 13,465       | 600,853        | 3,829,952      |
| United States Virgin Is. | 2016        | *797             | ..            | ..            | *797             | *7,607       | *149           | *649           |
|                          | 2017        | *611             | ..            | ..            | *611             | *5,829       | *111           | *499           |
|                          | 2018        | *626             | ..            | ..            | *626             | *5,985       | *113           | *521           |
|                          | 2019        | *672             | ..            | ..            | *672             | *6,426       | *117           | *555           |
| <b>America, South</b>    | <b>2016</b> | <b>1,167,384</b> | <b>52,897</b> | <b>51,633</b> | <b>1,168,647</b> | <b>2,810</b> | <b>233,087</b> | <b>933,781</b> |
|                          | <b>2017</b> | <b>1,160,969</b> | <b>47,156</b> | <b>46,646</b> | <b>1,161,479</b> | <b>2,768</b> | <b>227,974</b> | <b>931,550</b> |
|                          | <b>2018</b> | <b>1,185,415</b> | <b>45,273</b> | <b>44,976</b> | <b>1,185,712</b> | <b>2,801</b> | <b>233,360</b> | <b>944,265</b> |
|                          | <b>2019</b> | <b>1,191,139</b> | <b>37,933</b> | <b>37,921</b> | <b>1,191,151</b> | <b>2,790</b> | <b>233,627</b> | <b>946,785</b> |
| Argentina                | 2016        | 146,353          | 11,078        | 327           | 157,104          | 3,611        | 28,324         | 128,781        |
|                          | 2017        | 145,618          | 10,529        | 69            | 156,078          | 3,552        | 27,078         | 129,001        |
|                          | 2018        | 152,224          | 10,030        | 280           | 161,974          | 3,651        | 27,990         | 128,744        |
|                          | 2019        | 145,990          | 10,946        | 261           | 156,675          | 3,499        | 24,995         | 125,619        |
| Bolivia (Plur. State of) | 2016        | 9,307            | ..            | ..            | 9,307            | 844          | 1,102          | 8,201          |
|                          | 2017        | 9,617            | ..            | ..            | 9,617            | 859          | 1,223          | 8,374          |
|                          | 2018        | 9,855            | ..            | ..            | 9,855            | 868          | 1,472          | 8,450          |
|                          | 2019        | 10,172           | ..            | ..            | 10,172           | 884          | 1,624          | 8,217          |
| Brazil                   | 2016        | 578,897          | 41,313        | 518           | 619,692          | 3,006        | 128,089        | 491,605        |
|                          | 2017        | 589,326          | 36,511        | 156           | 625,681          | 3,010        | 127,259        | 498,420        |
|                          | 2018        | 601,396          | 34,980        | 1             | 636,375          | 3,038        | 129,435        | 506,939        |
|                          | 2019        | 626,329          | 25,156        | 199           | 651,286          | 3,086        | 138,411        | 512,874        |
| Chile                    | 2016        | 79,308           | 0             | 2             | 79,306           | 4,355        | 6,386          | 70,171         |
|                          | 2017        | 79,417           | 0             | 39            | 79,377           | 4,298        | 7,290          | 69,624         |
|                          | 2018        | 82,313           | 0             | ..            | 82,313           | 4,395        | 6,624          | 73,034         |
|                          | 2019        | 84,558           | ..            | ..            | 84,558           | 4,462        | 6,775          | 74,097         |
| Colombia                 | 2016        | 74,574           | 378           | 45            | 74,907           | 1,555        | 14,758         | 59,838         |
|                          | 2017        | 75,125           | 78            | 9             | 75,194           | 1,537        | 13,613         | 61,232         |
|                          | 2018        | 78,426           | 122           | 16            | 78,532           | 1,581        | 16,687         | 61,531         |
|                          | 2019        | 80,590           | 1,765         | 6             | 82,349           | 1,636        | 14,815         | 67,171         |
| Ecuador                  | 2016        | 27,314           | 82            | 402           | 26,994           | 1,637        | 3,955          | 23,038         |
|                          | 2017        | 28,033           | 19            | 212           | 27,840           | 1,659        | 3,899          | 23,972         |
|                          | 2018        | 29,198           | 106           | 256           | 29,048           | 1,700        | 4,152          | 24,908         |
|                          | 2019        | 32,267           | 6             | 1,827         | 30,446           | 1,752        | 4,641          | 25,289         |
| Falkland Is. (Malvinas)  | 2016        | 21               | ..            | ..            | 21               | 7,117        | *3             | *18            |
|                          | 2017        | 20               | ..            | ..            | 20               | 6,379        | *2             | *18            |
|                          | 2018        | 19               | ..            | ..            | 19               | 5,954        | *2             | *18            |
|                          | 2019        | 20               | ..            | ..            | 20               | 5,845        | 2              | *18            |
| Guyana                   | 2016        | 1,081            | ..            | ..            | 1,081            | 1,402        | 255            | 826            |
|                          | 2017        | 1,105            | ..            | ..            | 1,105            | 1,425        | 245            | 859            |
|                          | 2018        | 1,136            | ..            | ..            | 1,136            | 1,459        | 268            | 868            |
|                          | 2019        | 1,135            | ..            | ..            | 1,135            | 1,449        | 269            | 869            |

Table 33

## Electricity supply and consumption

Gigawatt-hours and kilowatt-hours per capita

| Country or area           | Year        | Production        | Imports        | Exports        | Supply            |              | Consumption      |                   |
|---------------------------|-------------|-------------------|----------------|----------------|-------------------|--------------|------------------|-------------------|
|                           |             |                   |                |                | Total             | Per capita   | EIOU+losses      | TFC               |
| Paraguay                  | 2016        | 63,771            | ..             | 48,415         | 15,356            | 2,266        | 4,344            | 11,012            |
|                           | 2017        | 59,685            | ..             | 43,635         | 16,051            | 2,337        | 4,496            | 11,555            |
|                           | 2018        | 59,212            | ..             | 42,205         | 17,007            | 2,445        | 4,503            | 12,504            |
|                           | 2019        | 49,448            | ..             | 31,748         | 17,700            | 2,513        | 4,860            | 12,840            |
| Peru                      | 2016        | 52,720            | 22             | 38             | 52,704            | 1,704        | 7,315            | 45,390            |
|                           | 2017        | 52,743            | 17             | 0              | 52,760            | 1,678        | 6,295            | 46,464            |
|                           | 2018        | 54,982            | 21             | ..             | 55,003            | 1,719        | 6,712            | 48,293            |
|                           | 2019        | 57,038            | 60             | ..             | 57,099            | 1,756        | 6,711            | 49,831            |
| Suriname                  | 2016        | 2,031             | ..             | ..             | 2,031             | 3,596        | 255              | 1,940             |
|                           | 2017        | 2,122             | ..             | ..             | 2,122             | 3,720        | 315              | 1,919             |
|                           | 2018        | 2,293             | ..             | ..             | 2,293             | 3,981        | 510              | 1,935             |
|                           | 2019        | 2,337             | ..             | ..             | 2,337             | 4,020        | 513              | 1,976             |
| Uruguay                   | 2016        | 13,885            | 25             | 779            | 13,130            | 3,835        | 1,849            | 11,402            |
|                           | 2017        | 14,363            | 3              | 1,462          | 12,904            | 3,755        | 1,831            | 11,118            |
|                           | 2018        | 14,623            | 14             | 1,195          | 13,442            | 3,897        | 2,105            | 11,454            |
|                           | 2019        | 16,090            | 0              | 3,011          | 13,079            | 3,778        | 1,876            | 11,321            |
| Venezuela (Bolivar. Rep.) | 2016        | 118,122           | 0              | 1,107          | 117,014           | 3,920        | 36,452           | 81,558            |
|                           | 2017        | 103,796           | 0              | 1,064          | 102,732           | 3,494        | 34,428           | 68,995            |
|                           | 2018        | 99,737            | ..             | 1,023          | 98,714            | 3,417        | 32,900           | 65,586            |
|                           | 2019        | 85,166            | ..             | 870            | 84,296            | 2,956        | 28,134           | 56,662            |
| <b>Asia</b>               | <b>2016</b> | <b>12,388,583</b> | <b>104,946</b> | <b>90,263</b>  | <b>12,403,266</b> | <b>2,771</b> | <b>2,046,108</b> | <b>10,296,269</b> |
|                           | <b>2017</b> | <b>13,104,361</b> | <b>109,177</b> | <b>105,898</b> | <b>13,107,641</b> | <b>2,901</b> | <b>2,160,086</b> | <b>10,917,834</b> |
|                           | <b>2018</b> | <b>13,787,110</b> | <b>113,578</b> | <b>102,097</b> | <b>13,798,591</b> | <b>3,026</b> | <b>2,246,631</b> | <b>11,532,900</b> |
|                           | <b>2019</b> | <b>14,238,341</b> | <b>111,605</b> | <b>96,922</b>  | <b>14,253,024</b> | <b>3,098</b> | <b>2,289,043</b> | <b>12,003,448</b> |
| Afghanistan               | 2016        | 1,394             | 4,333          | ..             | 5,726             | 162          | *645             | *5,080            |
|                           | 2017        | 1,420             | 4,611          | ..             | 6,031             | 166          | *670             | *5,357            |
|                           | 2018        | 1,266             | 4,986          | ..             | 6,252             | 168          | *695             | *5,552            |
|                           | 2019        | 1,592             | 4,912          | ..             | 6,504             | 171          | *725             | *5,777            |
| Armenia                   | 2016        | 7,315             | 275            | 1,229          | 6,361             | 2,166        | 1,033            | 5,334             |
|                           | 2017        | 7,765             | 319            | 1,440          | 6,645             | 2,257        | 1,022            | 5,623             |
|                           | 2018        | 7,791             | 204            | 1,627          | 6,368             | 2,157        | 965              | 5,403             |
|                           | 2019        | 7,680             | 293            | 1,251          | 6,721             | 2,272        | 882              | 5,839             |
| Azerbaijan                | 2016        | 24,953            | 114            | 1,096          | 23,972            | 2,462        | 6,311            | 17,618            |
|                           | 2017        | 24,321            | 108            | 1,283          | 23,146            | 2,351        | 6,030            | 17,085            |
|                           | 2018        | 25,229            | 131            | 1,445          | 23,915            | 2,404        | 6,081            | 17,812            |
|                           | 2019        | 26,073            | 137            | 1,491          | 24,719            | 2,460        | 6,024            | 18,666            |
| Bahrain                   | 2016        | 28,479            | 137            | 151            | 28,465            | 19,964       | 636              | 27,749            |
|                           | 2017        | 29,193            | 263            | 260            | 29,196            | 19,541       | 672              | 27,765            |
|                           | 2018        | 29,516            | 448            | 182            | 29,782            | 18,976       | 540              | 28,987            |
|                           | 2019        | 33,453            | 652            | 447            | 33,658            | 20,509       | 875              | 32,783            |
| Bangladesh                | 2016        | 68,909            | 4,051          | ..             | 72,960            | 462          | 11,059           | 59,180            |
|                           | 2017        | 73,249            | 4,935          | ..             | 78,185            | 490          | 11,832           | 65,861            |
|                           | 2018        | 78,612            | 5,070          | ..             | 83,682            | 519          | 12,864           | 70,409            |
|                           | 2019        | 84,551            | 6,786          | ..             | 91,337            | 560          | 14,287           | 78,898            |
| Bhutan                    | 2016        | 7,954             | 84             | 5,763          | 2,275             | 3,088        | *266             | 2,009             |
|                           | 2017        | 7,730             | 92             | 5,701          | 2,121             | 2,845        | 59               | 2,186             |
|                           | 2018        | 6,960             | 134            | 4,581          | 2,514             | 3,332        | 185              | 2,186             |
|                           | 2019        | 8,859             | 96             | 6,147          | 2,808             | 3,680        | 528              | 2,279             |
| Brunei Darussalam         | 2016        | 4,270             | ..             | ..             | 4,270             | 10,172       | 1,043            | 3,227             |
|                           | 2017        | 4,157             | ..             | ..             | 4,157             | 9,793        | 1,043            | 3,112             |
|                           | 2018        | 4,294             | ..             | ..             | 4,294             | 10,010       | 1,043            | 3,250             |
|                           | 2019        | 4,933             | ..             | ..             | 4,933             | 11,384       | 1,028            | 3,906             |



## Electricity supply and consumption

Gigawatt-hours and kilowatt-hours per capita

| Country or area        | Year | Production | Imports | Exports | Supply    |            | Consumption |           |
|------------------------|------|------------|---------|---------|-----------|------------|-------------|-----------|
|                        |      |            |         |         | Total     | Per capita | EIOU+losses | TFC       |
| Cambodia               | 2016 | 5,812      | 1,582   | ..      | 7,394     | 469        | 1,221       | 6,176     |
|                        | 2017 | 6,902      | 1,442   | ..      | 8,344     | 521        | 1,547       | 6,792     |
|                        | 2018 | 8,475      | 1,570   | ..      | 10,045    | 618        | 1,396       | 8,653     |
|                        | 2019 | 8,675      | 3,063   | ..      | 11,738    | 712        | 1,520       | 10,218    |
| China                  | 2016 | 6,133,158  | 6,185   | 18,907  | 6,120,436 | 4,328      | 1,028,045   | 5,092,461 |
|                        | 2017 | 6,604,476  | 6,423   | 19,470  | 6,591,429 | 4,639      | 1,075,720   | 5,515,707 |
|                        | 2018 | 7,166,133  | 5,688   | 20,906  | 7,150,915 | 5,009      | 1,149,860   | 6,000,960 |
|                        | 2019 | 7,503,458  | 4,860   | 21,650  | 7,486,668 | 5,222      | 1,187,949   | 6,298,689 |
| China, Hong Kong SAR   | 2016 | 38,154     | 11,621  | 1,205   | 48,570    | 6,705      | 4,542       | 44,028    |
|                        | 2017 | 36,970     | 12,576  | 1,341   | 48,205    | 6,598      | 4,373       | 43,832    |
|                        | 2018 | 36,565     | 12,599  | 556     | 48,608    | 6,594      | 4,303       | 44,305    |
|                        | 2019 | 36,911     | 12,381  | ..      | 49,292    | 6,629      | 4,373       | 44,919    |
| China, Macao SAR       | 2016 | 988        | 4,306   | ..      | 5,294     | 8,638      | 258         | 5,048     |
|                        | 2017 | 1,465      | 3,952   | ..      | 5,417     | 8,701      | 249         | 5,169     |
|                        | 2018 | 653        | 4,911   | ..      | 5,564     | 8,809      | 250         | 5,319     |
|                        | 2019 | 830        | 4,976   | ..      | 5,806     | 9,065      | 257         | 5,550     |
| Cyprus                 | 2016 | 4,887      | ..      | ..      | 4,887     | 4,176      | 487         | 4,399     |
|                        | 2017 | 5,004      | ..      | ..      | 5,004     | 4,242      | 459         | 4,542     |
|                        | 2018 | 5,061      | ..      | ..      | 5,061     | 4,255      | 397         | 4,665     |
|                        | 2019 | 5,141      | ..      | ..      | 5,141     | 4,290      | 419         | 4,724     |
| Georgia                | 2016 | 11,574     | 1,329   | 1,409   | 11,494    | 2,862      | 1,007       | 10,487    |
|                        | 2017 | 11,531     | 1,751   | 940     | 12,343    | 3,079      | 1,134       | 11,208    |
|                        | 2018 | 12,149     | 1,522   | 602     | 13,069    | 3,265      | 1,113       | 11,937    |
|                        | 2019 | 11,857     | 1,763   | 380     | 13,240    | 3,313      | 1,181       | 12,059    |
| India                  | 2016 | 1,432,358  | 5,617   | 6,710   | 1,431,265 | 1,081      | 349,710     | 1,066,268 |
|                        | 2017 | 1,490,257  | 5,611   | 7,203   | 1,488,665 | 1,112      | 365,609     | 1,130,328 |
|                        | 2018 | 1,521,958  | 4,657   | 8,494   | 1,518,121 | 1,122      | 383,141     | 1,158,311 |
|                        | 2019 | 1,576,740  | 6,351   | 9,491   | 1,573,600 | 1,152      | 381,279     | 1,291,493 |
| Indonesia              | 2016 | 233,367    | 1       | ..      | 233,368   | 892        | 32,618      | 215,781   |
|                        | 2017 | *283,647   | 1,120   | ..      | *284,767  | *1,076     | 38,955      | 244,637   |
|                        | 2018 | 293,203    | ..      | ..      | 293,203   | 1,095      | 44,503      | 251,796   |
|                        | 2019 | 299,603    | ..      | ..      | 299,603   | 1,107      | 41,503      | 258,092   |
| Iran (Islamic Rep. of) | 2016 | 289,116    | 4,221   | 6,688   | 286,649   | 3,603      | 44,734      | 240,452   |
|                        | 2017 | 307,992    | 3,852   | 8,172   | 303,672   | 3,764      | 45,780      | 251,717   |
|                        | 2018 | 307,968    | 2,587   | 6,295   | 304,260   | 3,720      | 43,518      | 259,753   |
|                        | 2019 | 322,778    | 2,738   | 6,365   | 319,151   | 3,849      | 47,003      | 261,366   |
| Iraq                   | 2016 | 80,087     | 11,965  | ..      | 92,052    | 2,514      | 51,038      | 39,433    |
|                        | 2017 | 83,947     | 11,787  | ..      | 95,734    | 2,549      | 56,714      | 38,377    |
|                        | 2018 | 82,507     | 21,793  | ..      | 104,300   | 2,714      | 57,548      | 39,594    |
|                        | 2019 | 95,816     | 14,180  | ..      | 109,996   | 2,798      | 60,913      | 44,415    |
| Israel                 | 2016 | 66,976     | ..      | 5,553   | 61,423    | 7,575      | 5,731       | 55,688    |
|                        | 2017 | 67,674     | ..      | 5,649   | 62,025    | 7,524      | 5,440       | 56,295    |
|                        | 2018 | 68,894     | ..      | 5,863   | 63,031    | 7,520      | 5,643       | 57,481    |
|                        | 2019 | 72,524     | ..      | 6,311   | 66,213    | 7,772      | 5,897       | 60,074    |
| Japan                  | 2016 | 1,070,871  | ..      | ..      | 1,070,871 | 8,382      | 113,960     | 950,703   |
|                        | 2017 | 1,080,974  | ..      | ..      | 1,080,974 | 8,478      | 113,747     | 964,732   |
|                        | 2018 | 1,068,464  | ..      | ..      | 1,068,464 | 8,400      | 113,388     | 945,697   |
|                        | 2019 | 1,044,978  | ..      | ..      | 1,044,978 | 8,237      | 112,406     | 927,657   |
| Jordan                 | 2016 | *19,563    | 334     | 46      | *19,851   | *2,078     | 2,727       | 16,700    |
|                        | 2017 | 19,760     | 51      | 57      | 19,754    | 2,019      | 3,058       | 17,504    |
|                        | 2018 | 19,437     | 188     | 94      | 19,532    | 1,960      | 3,293       | 17,494    |
|                        | 2019 | 20,609     | 239     | 98      | 20,750    | 2,054      | 2,854       | 17,910    |

Table 33

## Electricity supply and consumption

Gigawatt-hours and kilowatt-hours per capita

| Country or area        | Year | Production | Imports | Exports | Supply  |            | Consumption |         |
|------------------------|------|------------|---------|---------|---------|------------|-------------|---------|
|                        |      |            |         |         | Total   | Per capita | EIOU+losses | TFC     |
| Kazakhstan             | 2016 | 106,675    | 1,319   | 2,572   | 105,422 | 5,912      | 22,956      | 65,898  |
|                        | 2017 | 103,195    | 1,327   | 5,692   | 98,830  | 5,466      | 23,202      | 69,576  |
|                        | 2018 | 107,329    | 1,561   | 5,042   | 103,848 | 5,669      | 27,745      | 80,328  |
|                        | 2019 | 106,879    | 1,935   | 2,419   | 106,395 | 5,735      | 24,886      | 71,954  |
| Korea, Dem.Ppl's.Rep.  | 2016 | 16,272     | ..      | ..      | 16,272  | 643        | 4,113       | 12,159  |
|                        | 2017 | 14,451     | ..      | ..      | 14,451  | 568        | 3,653       | 10,798  |
|                        | 2018 | 15,044     | ..      | ..      | 15,044  | 589        | 3,803       | 11,241  |
|                        | 2019 | 13,579     | ..      | ..      | 13,579  | 529        | 3,432       | 10,147  |
| Korea, Republic of     | 2016 | 562,603    | ..      | ..      | 562,603 | 11,035     | 58,581      | 517,271 |
|                        | 2017 | 566,880    | ..      | ..      | 566,880 | 11,094     | 60,497      | 523,237 |
|                        | 2018 | 590,111    | ..      | ..      | 590,111 | 11,532     | 60,665      | 531,374 |
|                        | 2019 | 581,492    | ..      | ..      | 581,492 | 11,352     | 60,413      | 523,815 |
| Kuwait                 | 2016 | 70,085     | 171     | 213     | 70,043  | 17,702     | 29,622      | 40,421  |
|                        | 2017 | 72,790     | 553     | 390     | 72,953  | 17,986     | 30,470      | 42,483  |
|                        | 2018 | 74,107     | 202     | 535     | 73,774  | 17,831     | 31,013      | 42,761  |
|                        | 2019 | 75,184     | *132    | ..      | 75,316  | 17,902     | 31,539      | 43,777  |
| Kyrgyzstan             | 2016 | 13,262     | 330     | 199     | 13,393  | 2,205      | 3,105       | 10,160  |
|                        | 2017 | 15,514     | ..      | 1,215   | 14,299  | 2,310      | 3,162       | 11,008  |
|                        | 2018 | 15,728     | ..      | 755     | 14,973  | 2,375      | 3,109       | 11,864  |
|                        | 2019 | 15,100     | 269     | 271     | 15,098  | 2,353      | 2,742       | 12,356  |
| Lao People's Dem. Rep. | 2016 | 25,068     | 787     | 19,650  | 6,206   | 906        | 1,675       | 4,660   |
|                        | 2017 | 33,227     | 500     | 24,901  | 8,826   | 1,269      | 3,861       | 4,966   |
|                        | 2018 | 36,762     | 302     | 27,216  | 9,848   | 1,395      | *4,432      | 5,417   |
|                        | 2019 | 31,133     | 1,345   | *22,460 | 10,018  | 1,397      | *3,424      | 6,596   |
| Lebanon                | 2016 | 21,457     | 69      | ..      | 21,526  | 3,206      | *1,963      | *19,563 |
|                        | 2017 | 23,411     | 534     | ..      | 23,945  | 3,511      | *2,192      | *21,753 |
|                        | 2018 | 23,150     | 11      | ..      | 23,161  | 3,377      | *2,128      | *21,033 |
|                        | 2019 | 23,819     | 90      | ..      | 23,909  | 3,487      | *2,272      | 21,637  |
| Malaysia               | 2016 | 156,665    | 33      | 694     | 156,004 | 5,084      | 11,419      | 144,024 |
|                        | 2017 | 164,509    | 7       | 1,124   | 163,392 | 5,253      | 16,876      | 146,520 |
|                        | 2018 | 170,578    | 20      | 1,509   | 169,089 | 5,363      | 14,805      | 152,866 |
|                        | 2019 | 175,778    | 19      | 669     | 175,129 | 5,481      | 18,097      | 158,703 |
| Maldives               | 2016 | 672        | ..      | ..      | 672     | 1,413      | *41         | *631    |
|                        | 2017 | 725        | ..      | ..      | 725     | 1,461      | *41         | *684    |
|                        | 2018 | 772        | ..      | ..      | 772     | 1,497      | *42         | *730    |
|                        | 2019 | 847        | ..      | ..      | 847     | 1,595      | *44         | *803    |
| Mongolia               | 2016 | 5,667      | 1,446   | 36      | 7,077   | 2,316      | 1,566       | 5,446   |
|                        | 2017 | 6,027      | 1,574   | 26      | 7,576   | 2,433      | 1,627       | 5,949   |
|                        | 2018 | 6,535      | 1,666   | 27      | 8,174   | 2,578      | 1,725       | 6,450   |
|                        | 2019 | 6,900      | 1,723   | 24      | 8,599   | 2,666      | 1,752       | 6,847   |
| Myanmar                | 2016 | 20,248     | ..      | ..      | 20,248  | 382        | 4,766       | 15,355  |
|                        | 2017 | 20,055     | 116     | 1,393   | 18,778  | 352        | 2,940       | 15,839  |
|                        | 2018 | 22,883     | 152     | 1,527   | 21,507  | 400        | 3,588       | 17,919  |
|                        | 2019 | 23,778     | 122     | 1,281   | 22,619  | 419        | 3,939       | 18,681  |
| Nepal                  | 2016 | 4,244      | 2,175   | 3       | 6,416   | 235        | 1,481       | 4,926   |
|                        | 2017 | 4,639      | 2,582   | 3       | 7,218   | 261        | 1,498       | 5,710   |
|                        | 2018 | 4,902      | 2,813   | 35      | 7,680   | 273        | 1,170       | 6,500   |
|                        | 2019 | 6,181      | 1,729   | 107     | 7,803   | 273        | 1,213       | 6,579   |
| Oman                   | 2016 | 34,232     | ..      | ..      | 34,232  | 7,642      | 3,873       | 30,359  |
|                        | 2017 | 36,130     | ..      | ..      | 36,130  | 7,743      | 3,781       | 32,349  |
|                        | 2018 | 37,718     | ..      | ..      | 37,718  | 7,810      | 4,171       | 33,547  |
|                        | 2019 | 38,337     | ..      | ..      | 38,337  | 7,706      | 4,541       | 33,796  |

## Electricity supply and consumption

Gigawatt-hours and kilowatt-hours per capita

| Country or area      | Year | Production | Imports | Exports | Supply  |            | Consumption |         |
|----------------------|------|------------|---------|---------|---------|------------|-------------|---------|
|                      |      |            |         |         | Total   | Per capita | EIOU+losses | TFC     |
| Other Asia           | 2016 | 264,130    | ..      | ..      | 264,130 | 11,183     | 27,603      | 236,549 |
|                      | 2017 | 270,281    | ..      | ..      | 270,281 | 11,417     | 28,685      | 241,586 |
|                      | 2018 | 275,577    | ..      | ..      | 275,577 | 11,615     | 28,384      | 247,435 |
|                      | 2019 | 274,191    | ..      | ..      | 274,191 | 11,533     | 28,564      | 246,190 |
| Pakistan             | 2016 | 115,503    | 655     | ..      | 116,158 | 570        | 22,326      | 95,530  |
|                      | 2017 | 123,533    | 433     | ..      | 123,966 | 596        | 24,408      | 103,273 |
|                      | 2018 | 134,982    | 297     | ..      | 135,279 | 637        | 21,076      | 109,459 |
|                      | 2019 | 136,461    | 499     | ..      | 136,960 | 632        | 20,285      | 113,546 |
| Philippines          | 2016 | 91,789     | ..      | ..      | 91,789  | 885        | 17,601      | 74,154  |
|                      | 2017 | 95,747     | ..      | ..      | 95,747  | 910        | 17,917      | 77,793  |
|                      | 2018 | 101,223    | ..      | ..      | 101,223 | 949        | 18,596      | 82,617  |
|                      | 2019 | 107,517    | ..      | ..      | 107,517 | 994        | 20,327      | 87,118  |
| Qatar                | 2016 | 42,307     | ..      | ..      | 42,307  | 15,939     | 5,174       | 37,134  |
|                      | 2017 | 45,555     | ..      | ..      | 45,555  | 16,719     | 5,526       | 40,030  |
|                      | 2018 | 47,913     | ..      | ..      | 47,913  | 17,224     | 6,045       | 41,868  |
|                      | 2019 | 49,873     | ..      | ..      | 49,873  | 17,610     | 6,212       | 43,660  |
| Saudi Arabia         | 2016 | 345,149    | 343     | 1,062   | 344,429 | 10,616     | 47,700      | 270,946 |
|                      | 2017 | 355,145    | 3       | 38      | 355,110 | 10,728     | 64,352      | 264,347 |
|                      | 2018 | 343,992    | 2       | 36      | 343,958 | 10,206     | 58,101      | 265,652 |
|                      | 2019 | 343,458    | 3       | 33      | 343,428 | 10,022     | 55,872      | 264,061 |
| Singapore            | 2016 | 51,733     | ..      | ..      | 51,733  | 9,150      | 2,577       | 48,623  |
|                      | 2017 | 52,401     | ..      | ..      | 52,401  | 9,180      | 2,591       | 49,638  |
|                      | 2018 | 53,142     | ..      | ..      | 53,142  | 9,230      | 2,537       | 50,438  |
|                      | 2019 | 54,552     | ..      | ..      | 54,552  | 9,398      | 2,696       | 51,713  |
| Sri Lanka            | 2016 | 14,363     | ..      | ..      | 14,363  | 683        | 1,631       | 12,715  |
|                      | 2017 | 15,004     | ..      | ..      | 15,004  | 710        | 1,516       | 13,489  |
|                      | 2018 | 15,985     | ..      | ..      | 15,985  | 753        | 2,019       | 14,119  |
|                      | 2019 | 16,726     | ..      | ..      | 16,726  | 784        | 1,972       | 14,738  |
| State of Palestine   | 2016 | 537        | 5,473   | ..      | 6,010   | 1,297      | 721         | 5,289   |
|                      | 2017 | 546        | 5,577   | ..      | 6,123   | 1,290      | 735         | 5,388   |
|                      | 2018 | 420        | 5,916   | ..      | 6,336   | 1,303      | 760         | 5,576   |
|                      | 2019 | 811        | 6,249   | ..      | 7,060   | 1,417      | 847         | 6,213   |
| Syrian Arab Republic | 2016 | 18,202     | ..      | 67      | 18,135  | 1,038      | 4,937       | 13,198  |
|                      | 2017 | 18,412     | ..      | 543     | 17,869  | 1,045      | 4,519       | 13,351  |
|                      | 2018 | 18,210     | ..      | 543     | 17,667  | 1,043      | 4,463       | 13,205  |
|                      | 2019 | 17,586     | ..      | 347     | 17,239  | 1,010      | 5,697       | 12,596  |
| Tajikistan           | 2016 | 17,232     | 103     | 1,427   | 15,908  | 1,836      | 2,846       | 12,922  |
|                      | 2017 | 18,144     | 110     | 1,421   | 16,833  | 1,896      | *3,170      | 13,774  |
|                      | 2018 | 19,743     | 559     | 2,945   | 17,357  | 1,907      | *3,172      | 13,890  |
|                      | 2019 | 20,676     | 281     | 3,175   | 17,782  | 1,908      | 2,642       | 14,167  |
| Thailand             | 2016 | 188,265    | 19,825  | 1,436   | 206,654 | 2,996      | 15,525      | 184,960 |
|                      | 2017 | 181,940    | 24,427  | 1,106   | 205,261 | 2,966      | 14,971      | 185,369 |
|                      | 2018 | 182,288    | 26,669  | 1,093   | 207,865 | 2,994      | 15,728      | 188,048 |
|                      | 2019 | 190,681    | 25,547  | 2,882   | 213,346 | 3,064      | 16,218      | 193,176 |
| Timor-Leste          | 2016 | 415        | ..      | ..      | 415     | 340        | *102        | 313     |
|                      | 2017 | 430        | ..      | ..      | 430     | 345        | *108        | 321     |
|                      | 2018 | 453        | ..      | ..      | 453     | 357        | *117        | 335     |
|                      | 2019 | 518        | ..      | ..      | 518     | 400        | *133        | 384     |
| Turkey               | 2016 | 274,408    | 6,330   | 1,452   | 279,286 | 3,499      | 51,116      | 228,170 |
|                      | 2017 | 297,278    | 2,728   | 3,304   | 296,702 | 3,658      | 50,947      | 245,755 |
|                      | 2018 | 304,802    | 2,477   | 3,112   | 304,167 | 3,694      | 49,232      | 254,934 |
|                      | 2019 | 303,898    | 2,212   | 2,789   | 303,320 | 3,636      | 50,113      | 253,207 |

Table 33

## Electricity supply and consumption

Gigawatt-hours and kilowatt-hours per capita

| Country or area        | Year        | Production       | Imports        | Exports        | Supply           |              | Consumption    |                  |
|------------------------|-------------|------------------|----------------|----------------|------------------|--------------|----------------|------------------|
|                        |             |                  |                |                | Total            | Per capita   | EIOU+losses    | TFC              |
| Turkmenistan           | 2016        | 22,534           | ..             | 3,201          | 19,333           | 3,414        | 6,860          | 12,473           |
|                        | 2017        | 22,534           | ..             | 3,201          | 19,333           | 3,358        | 6,857          | 12,476           |
|                        | 2018        | 22,534           | ..             | 3,201          | 19,333           | 3,304        | 6,857          | 12,476           |
|                        | 2019        | 22,534           | ..             | 3,201          | 19,333           | 3,254        | 6,857          | 12,476           |
| United Arab Emirates   | 2016        | 129,596          | 1,141          | 506            | 130,231          | 13,912       | 12,089         | *113,929         |
|                        | 2017        | 134,553          | 514            | 617            | 134,450          | 14,172       | 19,205         | 115,245          |
|                        | 2018        | 135,997          | 488            | 517            | 135,968          | 14,118       | 13,162         | 122,836          |
|                        | 2019        | 138,454          | 245            | 257            | 138,442          | 14,169       | 12,737         | 125,717          |
| Uzbekistan             | 2016        | 58,634           | 5,278          | 6,774          | 57,138           | 1,817        | *4,192         | 48,503           |
|                        | 2017        | 60,323           | 6,945          | 7,585          | 59,684           | 1,867        | *4,344         | 50,350           |
|                        | 2018        | 62,408           | 2,233          | 2,627          | 62,014           | 1,910        | *4,594         | 53,515           |
|                        | 2019        | 63,021           | 3,379          | 2,067          | 64,334           | 1,951        | 4,703          | 54,175           |
| Viet Nam               | 2016        | 181,653          | 3,313          | 2,215          | 182,751          | 1,952        | *19,001        | 159,791          |
|                        | 2017        | 198,499          | 2,352          | 1,825          | 199,026          | 2,104        | 20,777         | 174,653          |
|                        | 2018        | 213,199          | 1,722          | 733            | 214,189          | 2,242        | 21,488         | 192,701          |
|                        | 2019        | *227,715         | 2,401          | 1,311          | *228,805         | *2,372       | 21,756         | 207,049          |
| Yemen                  | 2016        | 4,798            | ..             | ..             | 4,798            | 177          | 1,876          | 2,377            |
|                        | 2017        | 4,050            | ..             | ..             | 4,050            | 146          | 1,545          | 2,297            |
|                        | 2018        | 3,487            | ..             | ..             | 3,487            | 122          | 1,179          | 2,203            |
|                        | 2019        | 3,603            | ..             | ..             | 3,603            | 124          | 1,214          | 2,257            |
| <b>Europe</b>          | <b>2016</b> | <b>4,863,751</b> | <b>450,988</b> | <b>459,231</b> | <b>4,855,507</b> | <b>6,505</b> | <b>913,360</b> | <b>3,923,730</b> |
|                        | <b>2017</b> | <b>4,884,828</b> | <b>462,819</b> | <b>465,012</b> | <b>4,882,635</b> | <b>6,531</b> | <b>903,258</b> | <b>3,965,142</b> |
|                        | <b>2018</b> | <b>4,905,167</b> | <b>461,031</b> | <b>462,852</b> | <b>4,903,347</b> | <b>6,550</b> | <b>918,703</b> | <b>3,972,657</b> |
|                        | <b>2019</b> | <b>4,849,473</b> | <b>463,859</b> | <b>464,976</b> | <b>4,848,356</b> | <b>6,470</b> | <b>902,236</b> | <b>3,935,612</b> |
| Albania                | 2016        | 7,136            | 1,827          | 1,869          | 7,094            | 2,458        | 2,127          | 5,095            |
|                        | 2017        | 4,526            | 2,915          | 0              | 7,441            | 2,580        | 1,483          | 5,956            |
|                        | 2018        | 8,552            | 850            | 1,764          | 7,639            | 2,650        | 1,315          | 6,085            |
|                        | 2019        | 5,206            | 3,177          | 770            | 7,612            | 2,642        | 1,310          | 6,179            |
| Andorra                | 2016        | 99               | 485            | 0              | 584              | 7,553        | 68             | 491              |
|                        | 2017        | 103              | 470            | 0              | 573              | 7,438        | 67             | 490              |
|                        | 2018        | 135              | 439            | 0              | 574              | 7,458        | 68             | 492              |
|                        | 2019        | 107              | 456            | 0              | 563              | 7,301        | 66             | 490              |
| Austria                | 2016        | 68,307           | 26,366         | 19,207         | 75,466           | 8,627        | 13,328         | 62,136           |
|                        | 2017        | 71,324           | 29,362         | 22,817         | 77,870           | 8,829        | 14,788         | 63,083           |
|                        | 2018        | 68,618           | 28,076         | 19,129         | 77,565           | 8,724        | 14,115         | 63,445           |
|                        | 2019        | 74,234           | 26,047         | 22,918         | 77,363           | 8,639        | 13,818         | 63,512           |
| Belarus                | 2016        | 33,566           | 6,319          | 3,298          | 36,587           | 3,873        | 7,211          | 29,376           |
|                        | 2017        | 34,515           | 5,992          | 3,407          | 37,100           | 3,926        | 7,148          | 29,952           |
|                        | 2018        | 38,986           | 3,257          | 4,248          | 37,995           | 4,020        | 7,291          | 30,704           |
|                        | 2019        | 40,465           | 3,059          | 5,398          | 38,126           | 4,033        | 7,196          | 30,930           |
| Belgium                | 2016        | 85,813           | 14,648         | 8,465          | 91,996           | 8,102        | 10,155         | 82,201           |
|                        | 2017        | 86,776           | 14,189         | 8,168          | 92,797           | 8,126        | 10,588         | 82,255           |
|                        | 2018        | 75,098           | 21,636         | 4,308          | 92,426           | 8,049        | 9,881          | 82,974           |
|                        | 2019        | 93,746           | 12,734         | 14,589         | 91,891           | 7,963        | 10,350         | 81,967           |
| Bosnia and Herzegovina | 2016        | 17,767           | 3,084          | 6,841          | 14,010           | 4,137        | 2,922          | 11,088           |
|                        | 2017        | 16,439           | 3,346          | 5,187          | 14,598           | 4,356        | 3,187          | 11,398           |
|                        | 2018        | 19,160           | 3,092          | 7,698          | 14,554           | 4,379        | 3,098          | 11,456           |
|                        | 2019        | 17,493           | 2,825          | 6,565          | 13,753           | 4,166        | 2,760          | 10,993           |
| Bulgaria               | 2016        | 45,277           | 4,568          | 10,940         | 38,905           | 5,440        | 10,063         | 28,898           |
|                        | 2017        | 45,613           | 3,705          | 9,186          | 40,132           | 5,651        | 10,178         | 29,909           |
|                        | 2018        | 46,838           | 2,223          | 10,030         | 39,030           | 5,535        | 9,051          | 29,893           |
|                        | 2019        | 44,302           | 3,045          | 8,855          | 38,492           | 5,499        | 8,853          | 30,119           |

## Electricity supply and consumption

Gigawatt-hours and kilowatt-hours per capita

| Country or area | Year | Production | Imports | Exports | Supply  |            | Consumption |         |
|-----------------|------|------------|---------|---------|---------|------------|-------------|---------|
|                 |      |            |         |         | Total   | Per capita | EIOU+losses | TFC     |
| Croatia         | 2016 | 12,820     | 12,398  | 6,867   | 18,351  | 4,360      | 3,051       | 15,300  |
|                 | 2017 | 11,984     | 12,158  | 5,204   | 18,937  | 4,527      | 2,959       | 15,979  |
|                 | 2018 | 13,632     | 12,693  | 7,306   | 19,019  | 4,576      | 2,844       | 16,175  |
|                 | 2019 | 12,760     | 11,401  | 5,268   | 18,893  | 4,574      | 2,738       | 16,155  |
| Czechia         | 2016 | 83,309     | 13,817  | 24,791  | 72,335  | 6,812      | 14,339      | 55,852  |
|                 | 2017 | 87,050     | 15,072  | 28,109  | 74,013  | 6,955      | 14,795      | 57,407  |
|                 | 2018 | 88,032     | 11,573  | 25,481  | 74,125  | 6,950      | 14,545      | 58,103  |
|                 | 2019 | 87,031     | 11,026  | 24,123  | 73,934  | 6,917      | 14,340      | 58,439  |
| Denmark         | 2016 | 30,541     | 14,976  | 9,919   | 35,598  | 6,233      | 4,283       | 30,902  |
|                 | 2017 | 31,023     | 15,218  | 10,655  | 35,585  | 6,208      | 4,266       | 31,015  |
|                 | 2018 | 30,368     | 15,634  | 10,409  | 35,593  | 6,188      | 4,392       | 30,855  |
|                 | 2019 | 29,526     | 15,982  | 10,171  | 35,337  | 6,122      | 3,695       | 31,192  |
| Estonia         | 2016 | 12,171     | 3,577   | 5,614   | 10,134  | 7,698      | 2,985       | 7,299   |
|                 | 2017 | 13,160     | 2,281   | 5,015   | 10,426  | 7,902      | 3,194       | 7,232   |
|                 | 2018 | 12,364     | 3,053   | 4,950   | 10,467  | 7,912      | 2,669       | 7,491   |
|                 | 2019 | 7,616      | 4,861   | 2,704   | 9,773   | 7,372      | 1,985       | 7,317   |
| Faeroe Islands  | 2016 | 317        | ..      | ..      | 317     | 6,588      | *26         | 291     |
|                 | 2017 | 334        | ..      | ..      | 334     | 6,918      | *28         | 306     |
|                 | 2018 | 352        | ..      | ..      | 352     | 7,258      | *31         | 321     |
|                 | 2019 | 386        | ..      | ..      | 386     | 7,931      | *36         | 350     |
| Finland         | 2016 | 68,757     | 22,110  | 3,159   | 87,708  | 15,954     | 6,367       | 80,953  |
|                 | 2017 | 67,524     | 22,204  | 1,779   | 87,949  | 15,958     | 6,485       | 81,039  |
|                 | 2018 | 70,263     | 22,548  | 2,612   | 90,199  | 16,333     | 7,006       | 82,769  |
|                 | 2019 | 68,642     | 23,938  | 3,896   | 88,684  | 16,031     | 6,643       | 81,650  |
| France          | 2016 | 564,051    | 19,903  | 61,404  | 522,550 | 7,815      | 76,378      | 442,743 |
|                 | 2017 | 561,942    | 21,119  | 61,248  | 521,814 | 7,781      | 77,892      | 439,365 |
|                 | 2018 | 581,785    | 13,512  | 76,479  | 518,819 | 7,717      | 78,679      | 437,102 |
|                 | 2019 | 570,845    | 15,632  | 73,299  | 513,178 | 7,615      | 77,119      | 431,948 |
| Germany         | 2016 | 650,450    | 28,338  | 78,863  | 599,925 | 7,299      | 82,970      | 516,955 |
|                 | 2017 | 653,723    | 27,842  | 80,301  | 601,264 | 7,274      | 82,311      | 518,953 |
|                 | 2018 | 642,900    | 31,727  | 80,463  | 594,164 | 7,148      | 81,509      | 512,656 |
|                 | 2019 | 609,065    | 40,126  | 72,793  | 576,398 | 6,902      | 76,884      | 499,514 |
| Gibraltar       | 2016 | 214        | ..      | ..      | 214     | 6,346      | 10          | 204     |
|                 | 2017 | 180        | ..      | ..      | 180     | 5,341      | 10          | 171     |
|                 | 2018 | 215        | ..      | ..      | 215     | 6,380      | 11          | 204     |
|                 | 2019 | 220        | ..      | ..      | 220     | 6,522      | 11          | 209     |
| Greece          | 2016 | 54,439     | 9,833   | 1,037   | 63,235  | 5,957      | 9,872       | 53,363  |
|                 | 2017 | 55,266     | 8,696   | 2,459   | 61,503  | 5,819      | 7,534       | 53,969  |
|                 | 2018 | 53,263     | 8,550   | 2,272   | 59,541  | 5,659      | 9,373       | 49,470  |
|                 | 2019 | 48,626     | 11,067  | 1,123   | 58,570  | 5,592      | 8,373       | 50,197  |
| Guernsey        | 2016 | 87         | 285     | ..      | 372     | 5,985      | 23          | 349     |
|                 | 2017 | 77         | 294     | ..      | 371     | 5,983      | 17          | 354     |
|                 | 2018 | 54         | 319     | ..      | 372     | 5,979      | 25          | 348     |
|                 | 2019 | 165        | 204     | ..      | 369     | 5,924      | 22          | 348     |
| Hungary         | 2016 | 31,902     | 17,951  | 5,240   | 44,613  | 4,574      | 7,030       | 37,152  |
|                 | 2017 | 32,885     | 19,803  | 6,925   | 45,763  | 4,703      | 6,796       | 38,493  |
|                 | 2018 | 32,039     | 18,613  | 4,265   | 46,387  | 4,778      | 6,699       | 39,418  |
|                 | 2019 | 34,154     | 19,853  | 7,269   | 46,738  | 4,826      | 6,594       | 40,316  |
| Iceland         | 2016 | 18,550     | ..      | ..      | 18,550  | 55,838     | 1,043       | 17,304  |
|                 | 2017 | 19,239     | ..      | ..      | 19,239  | 57,532     | 1,153       | 17,892  |
|                 | 2018 | 19,830     | ..      | ..      | 19,830  | 58,892     | 1,128       | 18,487  |
|                 | 2019 | 19,489     | ..      | ..      | 19,489  | 57,483     | 1,075       | 18,227  |

Table 33

## Electricity supply and consumption

Gigawatt-hours and kilowatt-hours per capita

| Country or area | Year | Production | Imports | Exports | Supply  |            | Consumption |         |
|-----------------|------|------------|---------|---------|---------|------------|-------------|---------|
|                 |      |            |         |         | Total   | Per capita | EIOU+losses | TFC     |
| Ireland         | 2016 | 30,514     | 871     | 1,583   | 29,802  | 6,347      | 3,604       | 26,378  |
|                 | 2017 | 30,875     | 1,116   | 1,795   | 30,197  | 6,353      | 3,475       | 26,636  |
|                 | 2018 | 31,134     | 1,622   | 1,649   | 31,106  | 6,455      | 3,649       | 27,877  |
|                 | 2019 | 30,941     | 2,180   | 1,535   | 31,585  | 6,469      | 3,574       | 28,424  |
| Isle of Man     | 2016 | 433        | 65      | 105     | 393     | 4,718      | *30         | 362     |
|                 | 2017 | 467        | 41      | 95      | 413     | 4,936      | *30         | 363     |
|                 | 2018 | 493        | *65     | 131     | 427     | 5,077      | 60          | 362     |
|                 | 2019 | 581        | *46     | 192     | 435     | 5,143      | 69          | 366     |
| Italy           | 2016 | 289,768    | 43,181  | 6,154   | 326,795 | 5,384      | 40,768      | 286,027 |
|                 | 2017 | 295,830    | 42,895  | 5,134   | 333,591 | 5,495      | 41,625      | 291,965 |
|                 | 2018 | 289,708    | 47,170  | 3,271   | 333,607 | 5,500      | 40,526      | 293,081 |
|                 | 2019 | 293,853    | 43,975  | 5,834   | 331,994 | 5,480      | 40,061      | 291,933 |
| Jersey          | 2016 | 70         | 614     | ..      | 684     | 6,530      | 47          | 637     |
|                 | 2017 | 49         | 626     | ..      | 674     | 6,325      | 53          | 620     |
|                 | 2018 | 45         | 637     | ..      | 682     | 6,298      | 48          | 633     |
|                 | 2019 | 44         | 630     | ..      | 675     | 6,134      | 40          | 632     |
| Kosovo          | 2016 | 5,981      | 557     | 1,064   | 5,474   | 3,080      | 1,604       | 3,871   |
|                 | 2017 | 5,919      | 1,242   | 880     | 6,281   | 3,507      | 1,935       | 4,337   |
|                 | 2018 | 5,917      | 825     | 677     | 6,065   | 3,375      | 1,662       | 4,398   |
|                 | 2019 | 6,351      | 928     | 905     | 6,374   | 3,553      | 1,645       | 4,714   |
| Latvia          | 2016 | 6,425      | 4,828   | 3,795   | 7,458   | 3,778      | 974         | 6,482   |
|                 | 2017 | 7,531      | 4,073   | 4,137   | 7,467   | 3,827      | 981         | 6,485   |
|                 | 2018 | 6,725      | 5,174   | 4,265   | 7,634   | 3,958      | 970         | 6,662   |
|                 | 2019 | 6,438      | 4,611   | 3,493   | 7,556   | 3,963      | 903         | 6,652   |
| Liechtenstein   | 2016 | 90         | 309     | ..      | 399     | 10,596     | 0           | 399     |
|                 | 2017 | 93         | 314     | ..      | 407     | 10,755     | 0           | 407     |
|                 | 2018 | 89         | 321     | ..      | 410     | 10,802     | 0           | 410     |
|                 | 2019 | 103        | 307     | ..      | 410     | 10,784     | 0           | 410     |
| Lithuania       | 2016 | 4,266      | 11,106  | 2,831   | 12,541  | 4,340      | 2,788       | 9,750   |
|                 | 2017 | 4,187      | 11,926  | 3,249   | 12,864  | 4,521      | 2,802       | 10,059  |
|                 | 2018 | 3,511      | 12,848  | 3,215   | 13,144  | 4,692      | 2,743       | 10,398  |
|                 | 2019 | 3,972      | 13,268  | 3,924   | 13,315  | 4,825      | 2,771       | 10,541  |
| Luxembourg      | 2016 | 2,196      | 7,718   | 1,420   | 8,494   | 14,663     | 2,129       | 6,367   |
|                 | 2017 | 2,235      | 7,567   | 1,389   | 8,413   | 14,214     | 2,020       | 6,394   |
|                 | 2018 | 2,201      | 7,553   | 1,392   | 8,362   | 13,839     | 1,902       | 6,460   |
|                 | 2019 | 1,908      | 6,818   | 939     | 7,787   | 12,647     | 1,390       | 6,396   |
| Malta           | 2016 | 857        | 1,527   | ..      | 2,384   | 5,467      | 267         | 2,117   |
|                 | 2017 | 1,652      | 897     | 36      | 2,513   | 5,739      | 196         | 2,317   |
|                 | 2018 | 1,961      | 631     | 11      | 2,582   | 5,878      | 196         | 2,386   |
|                 | 2019 | 2,076      | 657     | 20      | 2,712   | 6,159      | 219         | 2,493   |
| Montenegro      | 2016 | 3,141      | 1,210   | 906     | 3,445   | 5,492      | 659         | 2,671   |
|                 | 2017 | 2,483      | 1,537   | 417     | 3,603   | 5,741      | 631         | 2,855   |
|                 | 2018 | 3,679      | 780     | 976     | 3,483   | 5,548      | 637         | 2,847   |
|                 | 2019 | 3,423      | 1,196   | 943     | 3,676   | 5,853      | 622         | 3,054   |
| Netherlands     | 2016 | 115,168    | 24,258  | 19,343  | 120,083 | 7,071      | 15,427      | 105,359 |
|                 | 2017 | 117,219    | 22,458  | 18,952  | 120,725 | 7,093      | 14,790      | 106,640 |
|                 | 2018 | 114,103    | 26,755  | 18,785  | 122,073 | 7,156      | 14,453      | 108,686 |
|                 | 2019 | 121,062    | 20,403  | 19,548  | 121,917 | 7,131      | 14,148      | 109,554 |
| North Macedonia | 2016 | 5,630      | 2,191   | 160     | 7,660   | 3,681      | 1,467       | 6,193   |
|                 | 2017 | 5,600      | 2,294   | 311     | 7,583   | 3,642      | 1,481       | 6,102   |
|                 | 2018 | 5,607      | 2,297   | 377     | 7,527   | 3,614      | 1,421       | 6,105   |
|                 | 2019 | 5,870      | 2,411   | 583     | 7,698   | 3,695      | 1,457       | 6,241   |

## Electricity supply and consumption

Gigawatt-hours and kilowatt-hours per capita

| Country or area     | Year | Production | Imports | Exports | Supply    |            | Consumption |         |
|---------------------|------|------------|---------|---------|-----------|------------|-------------|---------|
|                     |      |            |         |         | Total     | Per capita | EIOU+losses | TFC     |
| Norway              | 2016 | 149,042    | 5,740   | 22,151  | 132,631   | 25,258     | 18,205      | 113,645 |
|                     | 2017 | 149,480    | 6,111   | 21,276  | 134,315   | 25,360     | 19,197      | 113,696 |
|                     | 2018 | 146,891    | 8,340   | 18,489  | 136,742   | 25,617     | 19,895      | 115,907 |
|                     | 2019 | 135,292    | 12,353  | 12,309  | 135,336   | 25,161     | 18,718      | 115,624 |
| Poland              | 2016 | 166,635    | 14,017  | 12,018  | 168,634   | 4,439      | 35,795      | 132,839 |
|                     | 2017 | 170,465    | 13,271  | 10,984  | 172,752   | 4,552      | 36,964      | 135,788 |
|                     | 2018 | 170,039    | 13,816  | 8,121   | 175,734   | 4,634      | 35,265      | 140,469 |
|                     | 2019 | 163,989    | 17,868  | 7,245   | 174,611   | 4,609      | 34,200      | 140,412 |
| Portugal            | 2016 | 60,328     | 4,616   | 9,701   | 55,243    | 5,350      | 8,852       | 46,395  |
|                     | 2017 | 59,432     | 5,506   | 8,190   | 56,748    | 5,516      | 10,107      | 46,641  |
|                     | 2018 | 59,636     | 5,668   | 8,325   | 56,979    | 5,556      | 9,020       | 47,959  |
|                     | 2019 | 53,154     | 8,099   | 4,700   | 56,553    | 5,530      | 8,674       | 47,880  |
| Republic of Moldova | 2016 | 906        | 3,325   | ..      | 4,231     | 1,041      | 609         | 3,622   |
|                     | 2017 | 896        | 3,412   | ..      | 4,308     | 1,061      | 604         | 3,704   |
|                     | 2018 | 952        | 3,500   | ..      | 4,452     | 1,099      | 611         | 3,841   |
|                     | 2019 | 939        | 3,501   | ..      | 4,440     | 1,098      | 627         | 3,813   |
| Romania             | 2016 | 65,103     | 4,177   | 9,194   | 60,086    | 3,035      | 16,517      | 43,257  |
|                     | 2017 | 64,296     | 4,842   | 7,735   | 61,402    | 3,124      | 16,563      | 44,699  |
|                     | 2018 | 64,876     | 3,697   | 6,241   | 62,332    | 3,196      | 16,532      | 45,566  |
|                     | 2019 | 59,623     | 5,493   | 3,975   | 61,141    | 3,157      | 15,545      | 45,573  |
| Russian Federation  | 2016 | 1,090,973  | 3,194   | 17,694  | 1,076,473 | 7,410      | 329,125     | 743,971 |
|                     | 2017 | 1,094,289  | 6,410   | 17,006  | 1,083,693 | 7,447      | 319,156     | 760,885 |
|                     | 2018 | 1,115,093  | 5,177   | 17,779  | 1,102,491 | 7,565      | 339,002     | 759,582 |
|                     | 2019 | 1,121,492  | 1,618   | 20,049  | 1,103,061 | 7,562      | 344,218     | 755,636 |
| Serbia              | 2016 | 39,342     | 5,068   | 6,990   | 37,420    | 5,288      | 9,818       | 27,602  |
|                     | 2017 | 37,046     | 6,549   | 5,724   | 37,871    | 5,380      | 9,747       | 28,124  |
|                     | 2018 | 37,426     | 6,400   | 6,284   | 37,542    | 5,359      | 9,493       | 28,049  |
|                     | 2019 | 37,600     | 5,417   | 5,341   | 37,676    | 5,399      | 9,681       | 27,994  |
| Slovakia            | 2016 | 27,064     | 13,249  | 10,598  | 29,715    | 5,460      | 4,712       | 24,987  |
|                     | 2017 | 27,738     | 15,563  | 12,535  | 30,766    | 5,647      | 4,940       | 25,803  |
|                     | 2018 | 26,971     | 12,428  | 8,746   | 30,653    | 5,621      | 4,684       | 25,935  |
|                     | 2019 | 28,434     | 13,538  | 11,838  | 30,134    | 5,522      | 4,907       | 25,192  |
| Slovenia            | 2016 | 16,500     | 8,359   | 9,535   | 15,324    | 7,388      | 2,298       | 13,025  |
|                     | 2017 | 16,326     | 9,133   | 9,648   | 15,811    | 7,614      | 2,281       | 13,530  |
|                     | 2018 | 16,327     | 8,930   | 9,432   | 15,825    | 7,616      | 2,113       | 13,712  |
|                     | 2019 | 16,100     | 9,021   | 9,340   | 15,781    | 7,592      | 2,102       | 13,679  |
| Spain               | 2016 | 274,772    | 21,845  | 14,178  | 282,439   | 6,056      | 49,273      | 232,515 |
|                     | 2017 | 275,726    | 23,762  | 14,593  | 284,895   | 6,107      | 45,679      | 239,101 |
|                     | 2018 | 274,452    | 24,018  | 12,916  | 285,554   | 6,116      | 46,724      | 238,465 |
|                     | 2019 | 273,257    | 18,721  | 11,859  | 280,119   | 5,994      | 44,912      | 234,529 |
| Sweden              | 2016 | 156,010    | 14,287  | 26,022  | 144,275   | 14,668     | 15,336      | 127,496 |
|                     | 2017 | 164,250    | 11,896  | 30,888  | 145,258   | 14,665     | 16,460      | 127,254 |
|                     | 2018 | 163,400    | 12,202  | 29,425  | 146,177   | 14,659     | 17,327      | 127,562 |
|                     | 2019 | 168,439    | 9,070   | 35,231  | 142,278   | 14,176     | 16,482      | 124,558 |
| Switzerland         | 2016 | 63,175     | 34,096  | 30,173  | 67,098    | 8,007      | 8,859       | 58,230  |
|                     | 2017 | 63,089     | 36,496  | 30,946  | 68,639    | 8,117      | 10,156      | 58,471  |
|                     | 2018 | 69,109     | 31,020  | 32,607  | 67,522    | 7,920      | 9,875       | 57,645  |
|                     | 2019 | 73,471     | 29,505  | 35,765  | 67,211    | 7,823      | 10,014      | 57,197  |
| Ukraine             | 2016 | 164,573    | 77      | 3,830   | 160,820   | 3,597      | 37,127      | 117,440 |
|                     | 2017 | 156,037    | 50      | 5,226   | 150,861   | 3,391      | 33,495      | 117,366 |
|                     | 2018 | 159,833    | 32      | 6,099   | 153,766   | 3,475      | 35,113      | 118,653 |
|                     | 2019 | 154,141    | 2,238   | 6,283   | 150,096   | 3,412      | 33,407      | 116,689 |

Table 33

## Electricity supply and consumption

Gigawatt-hours and kilowatt-hours per capita

| Country or area             | Year        | Production     | Imports | Exports | Supply         |              | Consumption   |                |
|-----------------------------|-------------|----------------|---------|---------|----------------|--------------|---------------|----------------|
|                             |             |                |         |         | Total          | Per capita   | EIOU+losses   | TFC            |
| United Kingdom              | 2016        | 339,216        | 20,018  | 2,273   | 356,961        | 5,384        | 52,819        | 304,140        |
|                             | 2017        | 337,934        | 18,167  | 3,407   | 352,694        | 5,286        | 53,013        | 299,681        |
|                             | 2018        | 332,504        | 21,332  | 2,225   | 351,612        | 5,237        | 51,052        | 300,559        |
|                             | 2019        | 322,844        | 24,556  | 3,385   | 344,014        | 5,094        | 47,983        | 295,374        |
| Oceania                     | <b>2016</b> | <b>312,980</b> | ..      | ..      | <b>312,980</b> | <b>7,740</b> | <b>51,219</b> | <b>262,030</b> |
|                             | <b>2017</b> | <b>314,958</b> | ..      | ..      | <b>314,958</b> | <b>7,681</b> | <b>53,132</b> | <b>261,394</b> |
|                             | <b>2018</b> | <b>318,320</b> | ..      | ..      | <b>318,320</b> | <b>7,658</b> | <b>53,509</b> | <b>264,391</b> |
|                             | <b>2019</b> | <b>321,905</b> | ..      | ..      | <b>321,905</b> | <b>7,641</b> | <b>55,442</b> | <b>265,959</b> |
| American Samoa              | 2016        | 170            | ..      | ..      | 170            | 3,043        | 23            | 147            |
|                             | 2017        | 167            | ..      | ..      | 167            | 2,998        | 19            | *148           |
|                             | 2018        | *168           | ..      | ..      | *168           | *3,030       | *20           | *149           |
|                             | 2019        | *169           | ..      | ..      | *169           | *3,063       | *24           | *146           |
| Australia                   | 2016        | 256,563        | ..      | ..      | 256,563        | 10,574       | 44,898        | 211,665        |
|                             | 2017        | 258,019        | ..      | ..      | 258,019        | 10,495       | 46,937        | 211,082        |
|                             | 2018        | 260,998        | ..      | ..      | 260,998        | 10,483       | 47,671        | 213,327        |
|                             | 2019        | 264,025        | ..      | ..      | 264,025        | 10,476       | 49,489        | 214,536        |
| Cook Islands                | 2016        | 34             | ..      | ..      | 34             | 1,952        | 0             | 34             |
|                             | 2017        | 37             | ..      | ..      | 37             | 2,097        | 0             | 37             |
|                             | 2018        | 41             | ..      | ..      | 41             | 2,363        | 0             | 41             |
|                             | 2019        | 39             | ..      | ..      | 39             | 2,206        | 0             | 39             |
| Fiji                        | 2016        | 941            | ..      | ..      | 941            | 1,079        | *99           | 842            |
|                             | 2017        | 1,017          | ..      | ..      | 1,017          | 1,159        | *115          | 902            |
|                             | 2018        | 1,045          | ..      | ..      | 1,045          | 1,183        | *120          | 925            |
|                             | 2019        | 1,074          | ..      | ..      | 1,074          | 1,207        | *124          | 950            |
| French Polynesia            | 2016        | 691            | ..      | ..      | 691            | 2,516        | 51            | 639            |
|                             | 2017        | 681            | ..      | ..      | 681            | 2,466        | 43            | 638            |
|                             | 2018        | 676            | ..      | ..      | 676            | 2,436        | 43            | 634            |
|                             | 2019        | 693            | ..      | ..      | 693            | 2,480        | 41            | 652            |
| Guam                        | 2016        | 1,720          | ..      | ..      | 1,720          | 10,554       | 146           | 1,574          |
|                             | 2017        | 1,760          | ..      | ..      | 1,760          | 10,713       | 150           | 1,610          |
|                             | 2018        | 1,715          | ..      | ..      | 1,715          | 10,344       | 148           | 1,567          |
|                             | 2019        | 1,724          | ..      | ..      | 1,724          | 10,303       | 155           | 1,568          |
| Kiribati                    | 2016        | *31            | ..      | ..      | *31            | *275         | *6            | *25            |
|                             | 2017        | *31            | ..      | ..      | *31            | *272         | *6            | *25            |
|                             | 2018        | *32            | ..      | ..      | *32            | *272         | *6            | *25            |
|                             | 2019        | *32            | ..      | ..      | *32            | *270         | *6            | *26            |
| Marshall Islands            | 2016        | *88            | ..      | ..      | *88            | *1,516       | *11           | *76            |
|                             | 2017        | *89            | ..      | ..      | *89            | *1,535       | *12           | *78            |
|                             | 2018        | *90            | ..      | ..      | *90            | *1,532       | *12           | *78            |
|                             | 2019        | *90            | ..      | ..      | *90            | *1,526       | *12           | *78            |
| Micronesia (Fed. States of) | 2016        | *68            | ..      | ..      | *68            | *613         | *22           | *46            |
|                             | 2017        | *67            | ..      | ..      | *67            | *603         | *22           | *46            |
|                             | 2018        | *69            | ..      | ..      | *69            | *609         | *23           | *46            |
|                             | 2019        | *69            | ..      | ..      | *69            | *606         | *23           | *46            |
| Nauru                       | 2016        | 32             | ..      | ..      | 32             | 3,030        | 11            | 21             |
|                             | 2017        | 35             | ..      | ..      | 35             | 3,277        | 9             | 26             |
|                             | 2018        | 36             | ..      | ..      | 36             | 3,388        | 8             | 28             |
|                             | 2019        | 37             | ..      | ..      | 37             | 3,449        | 5             | 32             |
| New Caledonia               | 2016        | 3,130          | ..      | ..      | 3,130          | 11,415       | 90            | 3,040          |
|                             | 2017        | 3,228          | ..      | ..      | 3,228          | 11,647       | 68            | 3,160          |
|                             | 2018        | 3,486          | ..      | ..      | 3,486          | 12,450       | 66            | 3,513          |
|                             | 2019        | 3,333          | ..      | ..      | 3,333          | 11,788       | 61            | 3,369          |



## Electricity supply and consumption

Gigawatt-hours and kilowatt-hours per capita

| Country or area          | Year | Production | Imports | Exports | Supply |            | Consumption |        |
|--------------------------|------|------------|---------|---------|--------|------------|-------------|--------|
|                          |      |            |         |         | Total  | Per capita | EIOU+losses | TFC    |
| New Zealand              | 2016 | 43,824     | ..      | ..      | 43,824 | 9,406      | 4,909       | 39,183 |
|                          | 2017 | 44,323     | ..      | ..      | 44,323 | 9,426      | 5,006       | 38,883 |
|                          | 2018 | 44,412     | ..      | ..      | 44,412 | 9,363      | 4,892       | 39,009 |
|                          | 2019 | 44,811     | ..      | ..      | 44,811 | 9,369      | 4,983       | 39,229 |
| Niue                     | 2016 | *3         | ..      | ..      | *3     | *2,110     | 0           | *3     |
|                          | 2017 | *3         | ..      | ..      | *3     | *2,109     | 0           | *3     |
|                          | 2018 | *4         | ..      | ..      | *4     | *2,403     | *1          | *3     |
|                          | 2019 | *4         | ..      | ..      | *4     | *2,466     | 0           | *3     |
| Northern Mariana Islands | 2016 | *387       | ..      | ..      | *387   | *6,884     | *86         | *301   |
|                          | 2017 | *380       | ..      | ..      | *380   | *6,719     | *85         | *295   |
|                          | 2018 | *390       | ..      | ..      | *390   | *6,855     | *86         | *304   |
|                          | 2019 | *392       | ..      | ..      | *392   | *6,852     | *86         | *306   |
| Palau                    | 2016 | *95        | ..      | ..      | *95    | *5,363     | *17         | *77    |
|                          | 2017 | *95        | ..      | ..      | *95    | *5,347     | *16         | *81    |
|                          | 2018 | *97        | ..      | ..      | *97    | *5,388     | *16         | *80    |
|                          | 2019 | *97        | ..      | ..      | *97    | *5,361     | *16         | *81    |
| Papua New Guinea         | 2016 | 4,794      | ..      | ..      | 4,794  | 580        | 802         | 3,991  |
|                          | 2017 | 4,595      | ..      | ..      | 4,595  | 545        | *597        | *3,998 |
|                          | 2018 | 4,629      | ..      | ..      | 4,629  | 538        | 349         | *4,280 |
|                          | 2019 | *4,858     | ..      | ..      | *4,858 | *553       | 364         | *4,494 |
| Samoa                    | 2016 | 149        | ..      | ..      | 149    | 768        | 19          | 130    |
|                          | 2017 | 154        | ..      | ..      | 154    | 790        | 15          | 138    |
|                          | 2018 | 154        | ..      | ..      | 154    | 783        | 16          | 138    |
|                          | 2019 | 169        | ..      | ..      | 169    | 859        | 18          | 152    |
| Solomon Islands          | 2016 | 100        | ..      | ..      | 100    | 161        | *10         | *90    |
|                          | 2017 | 103        | ..      | ..      | 103    | 162        | *13         | *90    |
|                          | 2018 | 104        | ..      | ..      | 104    | 159        | *16         | *88    |
|                          | 2019 | 107        | ..      | ..      | 107    | 160        | *18         | *88    |
| Tonga                    | 2016 | 60         | ..      | ..      | 60     | 594        | 7           | *53    |
|                          | 2017 | 67         | ..      | ..      | 67     | 652        | 8           | *59    |
|                          | 2018 | 66         | ..      | ..      | 66     | 636        | 8           | *58    |
|                          | 2019 | 71         | ..      | ..      | 71     | 676        | 8           | *63    |
| Tuvalu                   | 2016 | 7          | ..      | ..      | 7      | 658        | 1           | 7      |
|                          | 2017 | 8          | ..      | ..      | 8      | 695        | 1           | 7      |
|                          | 2018 | 9          | ..      | ..      | 9      | 786        | *1          | *8     |
|                          | 2019 | *9         | ..      | ..      | *9     | *741       | *1          | *8     |
| Vanuatu                  | 2016 | 74         | ..      | ..      | 74     | 267        | 7           | 69     |
|                          | 2017 | 80         | ..      | ..      | 80     | 279        | 8           | 72     |
|                          | 2018 | 80         | ..      | ..      | 80     | 275        | 8           | 72     |
|                          | 2019 | 82         | ..      | ..      | 82     | 275        | 8           | 75     |
| Wallis and Futuna Is.    | 2016 | *20        | ..      | ..      | *20    | *1,661     | *3          | *17    |
|                          | 2017 | *20        | ..      | ..      | *20    | *1,648     | *3          | *17    |
|                          | 2018 | *20        | ..      | ..      | *20    | *1,739     | *2          | *19    |
|                          | 2019 | *22        | ..      | ..      | *22    | *1,881     | *1          | *20    |



### Production of heat – by type

Terajoules

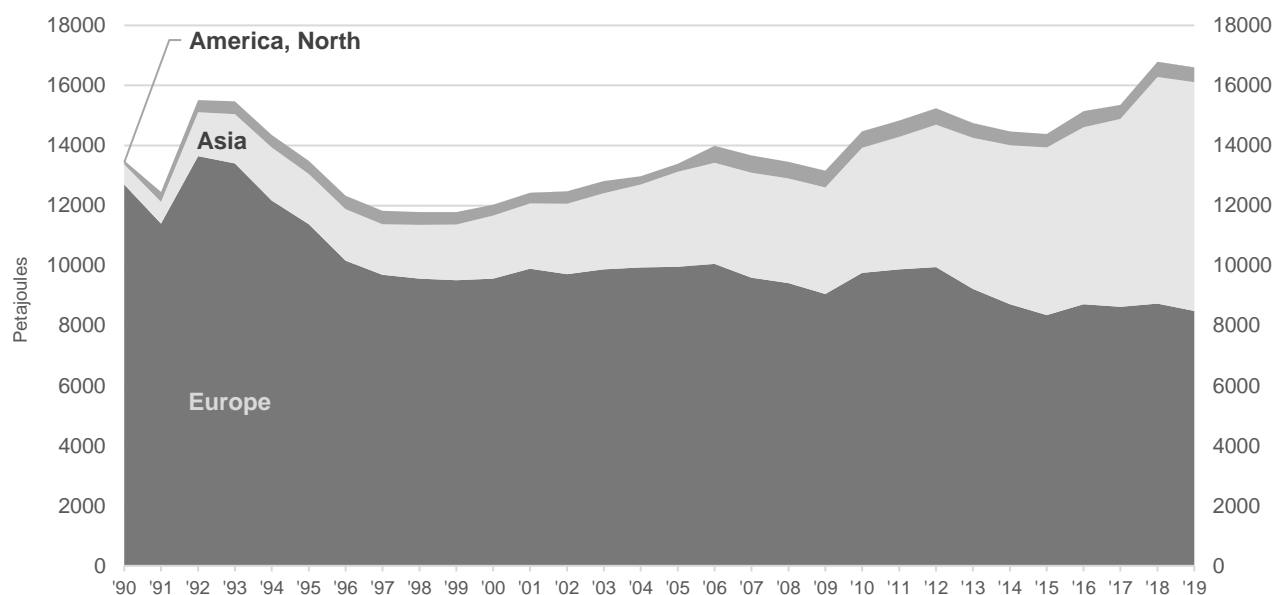
#### Table Notes

**Direct use geothermal** represents heat used directly for district heating, agriculture etc. without a commercial transaction taking place.

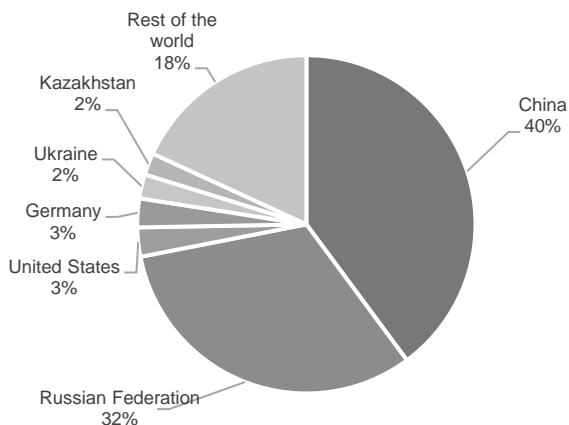
**Direct use solar thermal** represents heat used for the production of domestic hot water or for the seasonal heating of swimming pools (e.g. flat plate collectors, mainly of the thermosyphon type) without a commercial transaction taking place.

Please refer to the Definitions Section on pages ix to xv for the appropriate product description /classification, and xvi to xvii for the descriptions of relevant flows.

**Figure 84: Heat production by region, 1990-2019**



**Figure 85: Major heat producing countries, 2019**



**Figure 86: World heat production by type, 2019**

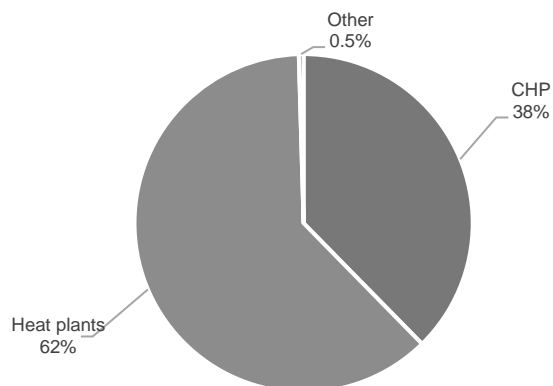


Table 34

## Production of heat - by type

Terajoules

| Country or area       | Year        | Combustible fuels | Geo-thermal   | Solar thermal | Nuclear       | Chemical sources | Heat pumps and electric boilers | Other sources  | Direct use geothermal | Direct use solar thermal |
|-----------------------|-------------|-------------------|---------------|---------------|---------------|------------------|---------------------------------|----------------|-----------------------|--------------------------|
| <b>World</b>          | <b>2016</b> | <b>14,506,526</b> | <b>41,063</b> | <b>7,016</b>  | <b>26,426</b> | <b>71,593</b>    | <b>59,971</b>                   | <b>426,582</b> | <b>137,028</b>        | <b>283,245</b>           |
|                       | <b>2017</b> | <b>14,702,798</b> | <b>40,351</b> | <b>7,508</b>  | <b>26,579</b> | <b>71,396</b>    | <b>62,165</b>                   | <b>445,430</b> | <b>137,248</b>        | <b>284,011</b>           |
|                       | <b>2018</b> | <b>16,117,313</b> | <b>45,064</b> | <b>8,081</b>  | <b>25,956</b> | <b>70,384</b>    | <b>62,861</b>                   | <b>458,792</b> | <b>175,560</b>        | <b>319,317</b>           |
|                       | <b>2019</b> | <b>15,921,408</b> | <b>45,984</b> | <b>8,346</b>  | <b>25,647</b> | <b>76,473</b>    | <b>66,812</b>                   | <b>455,764</b> | <b>148,402</b>        | <b>329,401</b>           |
| <b>Africa</b>         | <b>2016</b> | ..                | ..            | ..            | ..            | <b>3,730</b>     | ..                              | ..             | ..                    | <b>7,124</b>             |
|                       | <b>2017</b> | ..                | ..            | ..            | ..            | <b>3,880</b>     | ..                              | ..             | ..                    | <b>7,551</b>             |
|                       | <b>2018</b> | ..                | ..            | ..            | ..            | <b>5,094</b>     | ..                              | ..             | ..                    | <b>7,836</b>             |
|                       | <b>2019</b> | ..                | ..            | ..            | ..            | <b>4,820</b>     | ..                              | ..             | ..                    | <b>7,991</b>             |
| Namibia               | 2016        | ..                | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | 126                      |
|                       | 2017        | ..                | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | 140                      |
|                       | 2018        | ..                | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | 152                      |
|                       | 2019        | ..                | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | 166                      |
| Senegal               | 2016        | ..                | ..            | ..            | ..            | 513              | ..                              | ..             | ..                    | ..                       |
|                       | 2017        | ..                | ..            | ..            | ..            | 533              | ..                              | ..             | ..                    | ..                       |
|                       | 2018        | ..                | ..            | ..            | ..            | 969              | ..                              | ..             | ..                    | ..                       |
|                       | 2019        | ..                | ..            | ..            | ..            | 630              | ..                              | ..             | ..                    | ..                       |
| South Africa          | 2016        | ..                | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | 4,907                    |
|                       | 2017        | ..                | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | 5,201                    |
|                       | 2018        | ..                | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | 5,241                    |
|                       | 2019        | ..                | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | 5,249                    |
| Tunisia               | 2016        | ..                | ..            | ..            | ..            | 3,217            | ..                              | ..             | ..                    | 2,091                    |
|                       | 2017        | ..                | ..            | ..            | ..            | 3,347            | ..                              | ..             | ..                    | 2,210                    |
|                       | 2018        | ..                | ..            | ..            | ..            | 4,125            | ..                              | ..             | ..                    | 2,443                    |
|                       | 2019        | ..                | ..            | ..            | ..            | 4,191            | ..                              | ..             | ..                    | 2,576                    |
| <b>America, North</b> | <b>2016</b> | <b>528,363</b>    | ..            | ..            | ..            | ..               | <b>340</b>                      | ..             | <b>11,828</b>         | <b>94,420</b>            |
|                       | <b>2017</b> | <b>470,248</b>    | ..            | ..            | ..            | ..               | <b>576</b>                      | ..             | <b>11,108</b>         | <b>90,135</b>            |
|                       | <b>2018</b> | <b>503,595</b>    | ..            | ..            | ..            | ..               | <b>576</b>                      | ..             | <b>43,934</b>         | <b>118,442</b>           |
|                       | <b>2019</b> | <b>487,125</b>    | ..            | ..            | ..            | ..               | <b>576</b>                      | ..             | <b>14,096</b>         | <b>128,528</b>           |
| Canada                | 2016        | 19,628            | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | 1,760                    |
|                       | 2017        | 19,294            | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | 1,797                    |
|                       | 2018        | 25,648            | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | 1,810                    |
|                       | 2019        | 24,047            | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | 1,810                    |
| Greenland             | 2016        | *735              | ..            | ..            | ..            | ..               | *340                            | ..             | ..                    | ..                       |
|                       | 2017        | *625              | ..            | ..            | ..            | ..               | *576                            | ..             | ..                    | ..                       |
|                       | 2018        | *625              | ..            | ..            | ..            | ..               | *576                            | ..             | ..                    | ..                       |
|                       | 2019        | *625              | ..            | ..            | ..            | ..               | *576                            | ..             | ..                    | ..                       |
| Mexico                | 2016        | ..                | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | 10,180                   |
|                       | 2017        | ..                | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | 10,888                   |
|                       | 2018        | ..                | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | 12,531                   |
|                       | 2019        | ..                | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | 13,796                   |
| St. Pierre-Miquelon   | 2016        | ..                | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | ..                       |
|                       | 2017        | ..                | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | ..                       |
|                       | 2018        | ..                | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | ..                       |
|                       | 2019        | 32                | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | ..                       |
| United States         | 2016        | 508,000           | ..            | ..            | ..            | ..               | ..                              | ..             | 11,828                | 82,480                   |
|                       | 2017        | 450,328           | ..            | ..            | ..            | ..               | ..                              | ..             | 11,108                | 77,450                   |
|                       | 2018        | 477,322           | ..            | ..            | ..            | ..               | ..                              | ..             | 43,934                | 104,101                  |
|                       | 2019        | 462,421           | ..            | ..            | ..            | ..               | ..                              | ..             | 14,096                | 112,922                  |
| <b>America, South</b> | <b>2016</b> | ..                | ..            | ..            | ..            | <b>0</b>         | ..                              | ..             | <b>102</b>            | <b>3,128</b>             |
|                       | <b>2017</b> | ..                | ..            | ..            | ..            | ..               | ..                              | ..             | <b>102</b>            | <b>3,464</b>             |
|                       | <b>2018</b> | ..                | ..            | ..            | ..            | ..               | ..                              | ..             | <b>102</b>            | <b>3,902</b>             |
|                       | <b>2019</b> | ..                | ..            | ..            | ..            | ..               | ..                              | ..             | <b>102</b>            | <b>4,400</b>             |

Table 34

## Production of heat - by type

Terajoules

| Country or area    | Year        | Combustible fuels | Geo-thermal | Solar thermal | Nuclear   | Chemical sources | Heat pumps and electric boilers | Other sources | Direct use geothermal | Direct use solar thermal |
|--------------------|-------------|-------------------|-------------|---------------|-----------|------------------|---------------------------------|---------------|-----------------------|--------------------------|
| Chile              | 2016        | ..                | ..          | ..            | ..        | 0                | ..                              | ..            | ..                    | 1,739                    |
|                    | 2017        | ..                | ..          | ..            | ..        | ..               | ..                              | ..            | ..                    | 2,082                    |
|                    | 2018        | ..                | ..          | ..            | ..        | ..               | ..                              | ..            | ..                    | 2,465                    |
|                    | 2019        | ..                | ..          | ..            | ..        | ..               | ..                              | ..            | ..                    | 2,919                    |
| Ecuador            | 2016        | ..                | ..          | ..            | ..        | ..               | ..                              | ..            | *102                  | ..                       |
|                    | 2017        | ..                | ..          | ..            | ..        | ..               | ..                              | ..            | *102                  | ..                       |
|                    | 2018        | ..                | ..          | ..            | ..        | ..               | ..                              | ..            | *102                  | ..                       |
|                    | 2019        | ..                | ..          | ..            | ..        | ..               | ..                              | ..            | *102                  | ..                       |
| Peru               | 2016        | ..                | ..          | ..            | ..        | ..               | ..                              | ..            | ..                    | 1,389                    |
|                    | 2017        | ..                | ..          | ..            | ..        | ..               | ..                              | ..            | ..                    | 1,382                    |
|                    | 2018        | ..                | ..          | ..            | ..        | ..               | ..                              | ..            | ..                    | 1,437                    |
|                    | 2019        | ..                | ..          | ..            | ..        | ..               | ..                              | ..            | ..                    | 1,482                    |
| <b>Asia</b>        | <b>2016</b> | <b>5,855,732</b>  | <b>0</b>    | <b>5,485</b>  | <b>..</b> | <b>2,159</b>     | <b>16,890</b>                   | <b>16,724</b> | <b>91,988</b>         | <b>70,970</b>            |
|                    | <b>2017</b> | <b>6,213,406</b>  | <b>..</b>   | <b>5,632</b>  | <b>..</b> | <b>2,187</b>     | <b>18,329</b>                   | <b>16,870</b> | <b>91,671</b>         | <b>71,662</b>            |
|                    | <b>2018</b> | <b>7,501,898</b>  | <b>..</b>   | <b>5,778</b>  | <b>..</b> | <b>2,172</b>     | <b>17,440</b>                   | <b>18,362</b> | <b>96,643</b>         | <b>70,933</b>            |
|                    | <b>2019</b> | <b>7,562,913</b>  | <b>..</b>   | <b>5,925</b>  | <b>..</b> | <b>2,170</b>     | <b>21,926</b>                   | <b>20,085</b> | <b>97,331</b>         | <b>68,108</b>            |
| Armenia            | 2016        | 34                | ..          | ..            | ..        | ..               | ..                              | ..            | ..                    | 93                       |
|                    | 2017        | 31                | ..          | ..            | ..        | ..               | ..                              | ..            | ..                    | 112                      |
|                    | 2018        | 24                | ..          | ..            | ..        | ..               | ..                              | ..            | ..                    | 216                      |
|                    | 2019        | 27                | ..          | ..            | ..        | ..               | ..                              | ..            | ..                    | 358                      |
| Azerbaijan         | 2016        | 7,282             | ..          | ..            | ..        | ..               | ..                              | ..            | ..                    | ..                       |
|                    | 2017        | 6,580             | ..          | ..            | ..        | ..               | ..                              | ..            | ..                    | ..                       |
|                    | 2018        | 12,236            | ..          | ..            | ..        | ..               | 3                               | ..            | ..                    | ..                       |
|                    | 2019        | 14,013            | ..          | ..            | ..        | ..               | 3                               | ..            | ..                    | ..                       |
| China              | 2016        | 4,967,022         | ..          | ..            | ..        | ..               | ..                              | ..            | ..                    | ..                       |
|                    | 2017        | 5,300,081         | ..          | ..            | ..        | ..               | ..                              | ..            | ..                    | ..                       |
|                    | 2018        | 6,505,618         | ..          | ..            | ..        | ..               | ..                              | ..            | ..                    | ..                       |
|                    | 2019        | 6,617,368         | ..          | ..            | ..        | ..               | ..                              | ..            | ..                    | ..                       |
| Cyprus             | 2016        | 50                | ..          | ..            | ..        | ..               | ..                              | ..            | 65                    | 2,887                    |
|                    | 2017        | 54                | ..          | ..            | ..        | ..               | ..                              | ..            | 65                    | 2,940                    |
|                    | 2018        | 54                | ..          | ..            | ..        | ..               | ..                              | ..            | 65                    | 3,015                    |
|                    | 2019        | 51                | ..          | ..            | ..        | ..               | ..                              | ..            | 65                    | 3,062                    |
| Georgia            | 2016        | 0                 | 0           | ..            | ..        | ..               | ..                              | ..            | 642                   | 127                      |
|                    | 2017        | ..                | ..          | ..            | ..        | ..               | ..                              | ..            | 658                   | 128                      |
|                    | 2018        | ..                | ..          | ..            | ..        | ..               | ..                              | ..            | 670                   | 129                      |
|                    | 2019        | ..                | ..          | ..            | ..        | ..               | ..                              | ..            | 680                   | 130                      |
| Israel             | 2016        | ..                | ..          | ..            | ..        | ..               | ..                              | ..            | ..                    | 16,135                   |
|                    | 2017        | ..                | ..          | ..            | ..        | ..               | ..                              | ..            | ..                    | 16,135                   |
|                    | 2018        | ..                | ..          | ..            | ..        | ..               | ..                              | ..            | ..                    | 15,100                   |
|                    | 2019        | ..                | ..          | ..            | ..        | ..               | ..                              | ..            | ..                    | 15,100                   |
| Japan              | 2016        | 13,869            | ..          | ..            | ..        | ..               | 5,691                           | 2,664         | 5,366                 | 10,387                   |
|                    | 2017        | 13,937            | ..          | ..            | ..        | ..               | 5,754                           | 2,713         | 5,367                 | 9,677                    |
|                    | 2018        | 13,357            | ..          | ..            | ..        | ..               | 6,948                           | 2,462         | 5,367                 | 8,447                    |
|                    | 2019        | 13,357            | ..          | ..            | ..        | ..               | 6,948                           | 2,462         | 5,367                 | 7,736                    |
| Kazakhstan         | 2016        | 361,022           | ..          | ..            | ..        | ..               | ..                              | ..            | ..                    | ..                       |
|                    | 2017        | 371,187           | ..          | ..            | ..        | ..               | ..                              | ..            | ..                    | ..                       |
|                    | 2018        | 389,432           | ..          | ..            | ..        | ..               | ..                              | ..            | ..                    | ..                       |
|                    | 2019        | 347,364           | ..          | ..            | ..        | ..               | ..                              | ..            | ..                    | ..                       |
| Korea, Republic of | 2016        | 219,624           | ..          | ..            | ..        | 2,159            | ..                              | ..            | 6,785                 | 1,193                    |
|                    | 2017        | 237,716           | ..          | ..            | ..        | 2,187            | ..                              | ..            | 7,706                 | 1,665                    |
|                    | 2018        | 250,495           | ..          | ..            | ..        | 2,172            | ..                              | ..            | 8,730                 | 1,880                    |
|                    | 2019        | 236,567           | ..          | ..            | ..        | 2,170            | ..                              | ..            | 9,409                 | 1,848                    |

Table 34

## Production of heat - by type

Terajoules

| Country or area    | Year        | Combustible fuels | Geo-thermal   | Solar thermal | Nuclear       | Chemical sources | Heat pumps and electric boilers | Other sources  | Direct use geothermal | Direct use solar thermal |
|--------------------|-------------|-------------------|---------------|---------------|---------------|------------------|---------------------------------|----------------|-----------------------|--------------------------|
| Kyrgyzstan         | 2016        | 9,904             | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | ..                       |
|                    | 2017        | 7,966             | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | ..                       |
|                    | 2018        | 13,798            | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | ..                       |
|                    | 2019        | 12,424            | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | ..                       |
| Lebanon            | 2016        | ..                | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | 1,017                    |
|                    | 2017        | ..                | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | *1,060                   |
|                    | 2018        | ..                | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | *1,060                   |
|                    | 2019        | ..                | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | 1,060                    |
| Mongolia           | 2016        | 45,213            | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | ..                       |
|                    | 2017        | 47,296            | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | ..                       |
|                    | 2018        | 52,355            | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | ..                       |
|                    | 2019        | 55,589            | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | ..                       |
| Other Asia         | 2016        | 66,802            | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | 4,225                    |
|                    | 2017        | 64,130            | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | 4,262                    |
|                    | 2018        | 97,523            | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | 3,945                    |
|                    | 2019        | 89,906            | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | 3,808                    |
| State of Palestine | 2016        | ..                | ..            | 5,485         | ..            | ..               | ..                              | ..             | ..                    | ..                       |
|                    | 2017        | ..                | ..            | 5,632         | ..            | ..               | ..                              | ..             | ..                    | ..                       |
|                    | 2018        | ..                | ..            | 5,778         | ..            | ..               | ..                              | ..             | ..                    | ..                       |
|                    | 2019        | ..                | ..            | 5,925         | ..            | ..               | ..                              | ..             | ..                    | ..                       |
| Tajikistan         | 2016        | 1,648             | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | ..                       |
|                    | 2017        | 1,793             | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | ..                       |
|                    | 2018        | *3,499            | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | ..                       |
|                    | 2019        | 3,519             | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | ..                       |
| Thailand           | 2016        | ..                | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | 281                      |
|                    | 2017        | ..                | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | 388                      |
|                    | 2018        | ..                | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | 423                      |
|                    | 2019        | ..                | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | 423                      |
| Turkey             | 2016        | 38,839            | ..            | ..            | ..            | ..               | ..                              | 14,060         | 79,130                | 34,625                   |
|                    | 2017        | 43,301            | ..            | ..            | ..            | ..               | ..                              | 14,157         | 77,875                | 35,295                   |
|                    | 2018        | 41,613            | ..            | ..            | ..            | ..               | ..                              | 15,900         | 81,810                | 36,718                   |
|                    | 2019        | 42,991            | ..            | ..            | ..            | ..               | ..                              | 17,623         | 81,810                | 34,583                   |
| Turkmenistan       | 2016        | 9,846             | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | ..                       |
|                    | 2017        | 10,877            | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | ..                       |
|                    | 2018        | 10,877            | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | ..                       |
|                    | 2019        | 10,877            | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | ..                       |
| Uzbekistan         | 2016        | *114,578          | ..            | ..            | ..            | ..               | ..                              | *11,199        | ..                    | ..                       |
|                    | 2017        | *108,458          | ..            | ..            | ..            | ..               | ..                              | *12,575        | ..                    | ..                       |
|                    | 2018        | *111,018          | ..            | ..            | ..            | ..               | ..                              | *10,489        | ..                    | ..                       |
|                    | 2019        | *118,859          | ..            | ..            | ..            | ..               | ..                              | *14,975        | ..                    | ..                       |
| <b>Europe</b>      | <b>2016</b> | <b>8,122,431</b>  | <b>41,063</b> | <b>1,530</b>  | <b>26,426</b> | <b>65,704</b>    | <b>42,741</b>                   | <b>408,549</b> | <b>24,924</b>         | <b>92,133</b>            |
|                    | <b>2017</b> | <b>8,019,144</b>  | <b>40,351</b> | <b>1,876</b>  | <b>26,579</b> | <b>65,330</b>    | <b>43,261</b>                   | <b>427,367</b> | <b>26,309</b>         | <b>94,900</b>            |
|                    | <b>2018</b> | <b>8,111,820</b>  | <b>45,064</b> | <b>2,303</b>  | <b>25,956</b> | <b>63,118</b>    | <b>44,846</b>                   | <b>439,163</b> | <b>26,981</b>         | <b>101,042</b>           |
|                    | <b>2019</b> | <b>7,871,370</b>  | <b>45,984</b> | <b>2,421</b>  | <b>25,647</b> | <b>69,483</b>    | <b>44,310</b>                   | <b>434,512</b> | <b>28,940</b>         | <b>102,277</b>           |
| Albania            | 2016        | *113              | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | 504                      |
|                    | 2017        | 113               | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | 553                      |
|                    | 2018        | 122               | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | 564                      |
|                    | 2019        | 151               | ..            | ..            | ..            | ..               | ..                              | ..             | ..                    | 558                      |
| Austria            | 2016        | 84,528            | 587           | 90            | ..            | 110              | ..                              | ..             | 300                   | 7,571                    |
|                    | 2017        | 87,886            | 591           | 93            | ..            | 89               | ..                              | ..             | 514                   | 7,536                    |
|                    | 2018        | 83,290            | 573           | 93            | ..            | 93               | 30                              | ..             | 473                   | 7,472                    |
|                    | 2019        | 83,937            | 470           | 91            | ..            | 91               | 384                             | ..             | 476                   | 7,393                    |

## Production of heat - by type

Terajoules

| Country or area        | Year | Combustible fuels | Geo-thermal | Solar thermal | Nuclear | Chemical sources | Heat pumps and electric boilers | Other sources | Direct use geothermal | Direct use solar thermal |
|------------------------|------|-------------------|-------------|---------------|---------|------------------|---------------------------------|---------------|-----------------------|--------------------------|
| Belarus                | 2016 | 249,665           | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | ..                       |
|                        | 2017 | 253,365           | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | ..                       |
|                        | 2018 | 260,497           | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | ..                       |
|                        | 2019 | 247,488           | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | ..                       |
| Belgium                | 2016 | 25,393            | 52          | ..            | ..      | 11,320           | ..                              | ..            | ..                    | 1,027                    |
|                        | 2017 | 22,109            | 51          | ..            | ..      | 11,272           | ..                              | ..            | ..                    | 1,062                    |
|                        | 2018 | 24,190            | 53          | ..            | ..      | 10,288           | ..                              | ..            | ..                    | 1,154                    |
|                        | 2019 | 20,915            | 56          | ..            | ..      | 9,901            | ..                              | ..            | ..                    | 1,148                    |
| Bosnia and Herzegovina | 2016 | 5,657             | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | ..                       |
|                        | 2017 | 5,793             | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | ..                       |
|                        | 2018 | 5,759             | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | ..                       |
|                        | 2019 | 5,571             | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | ..                       |
| Bulgaria               | 2016 | 45,663            | ..          | ..            | 612     | 1,927            | ..                              | ..            | 1,450                 | 937                      |
|                        | 2017 | 41,627            | ..          | ..            | 696     | 1,844            | ..                              | ..            | 1,450                 | 983                      |
|                        | 2018 | 35,433            | ..          | ..            | 718     | 1,818            | ..                              | ..            | 1,450                 | 1,044                    |
|                        | 2019 | 35,920            | ..          | ..            | 660     | 2,217            | ..                              | ..            | 1,470                 | 1,092                    |
| Croatia                | 2016 | 11,411            | ..          | ..            | ..      | ..               | ..                              | ..            | 379                   | 484                      |
|                        | 2017 | 12,430            | ..          | ..            | ..      | ..               | ..                              | ..            | 345                   | 538                      |
|                        | 2018 | 12,698            | ..          | ..            | ..      | ..               | ..                              | ..            | 320                   | 584                      |
|                        | 2019 | 13,182            | ..          | ..            | ..      | ..               | ..                              | ..            | 301                   | 647                      |
| Czechia                | 2016 | 124,778           | ..          | ..            | 883     | 325              | 67                              | 1,533         | ..                    | 699                      |
|                        | 2017 | 120,551           | ..          | ..            | 908     | 322              | 101                             | 1,070         | ..                    | 731                      |
|                        | 2018 | 115,419           | ..          | ..            | 864     | 706              | 109                             | 1,135         | ..                    | 753                      |
|                        | 2019 | 113,717           | ..          | ..            | 853     | 669              | 125                             | 1,027         | ..                    | 767                      |
| Denmark                | 2016 | 129,150           | 112         | 1,392         | ..      | ..               | 822                             | 3,457         | ..                    | 589                      |
|                        | 2017 | 128,886           | 76          | 1,733         | ..      | ..               | 1,138                           | 3,774         | ..                    | 597                      |
|                        | 2018 | 127,210           | 55          | 2,157         | ..      | ..               | 1,490                           | 4,087         | ..                    | 603                      |
|                        | 2019 | 122,786           | 34          | 2,270         | ..      | ..               | 1,955                           | 4,338         | ..                    | 611                      |
| Estonia                | 2016 | 24,141            | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | ..                       |
|                        | 2017 | 24,304            | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | ..                       |
|                        | 2018 | 24,889            | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | ..                       |
|                        | 2019 | 21,958            | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | ..                       |
| Finland                | 2016 | 185,583           | ..          | ..            | ..      | 5,080            | 4,106                           | 1,019         | ..                    | 69                       |
|                        | 2017 | 173,685           | ..          | ..            | ..      | 4,731            | 4,429                           | 10,080        | ..                    | 75                       |
|                        | 2018 | 170,696           | ..          | ..            | ..      | 4,446            | 4,344                           | 10,077        | ..                    | 83                       |
|                        | 2019 | 165,855           | ..          | ..            | ..      | 4,567            | 4,283                           | 10,570        | ..                    | 91                       |
| France                 | 2016 | 158,101           | 4,397       | ..            | ..      | ..               | 519                             | 4,499         | 1,681                 | 6,948                    |
|                        | 2017 | 161,535           | 5,613       | ..            | ..      | ..               | 527                             | 3,641         | 1,681                 | 7,207                    |
|                        | 2018 | 150,717           | 5,986       | ..            | ..      | ..               | 982                             | 3,278         | 1,681                 | 7,583                    |
|                        | 2019 | 156,479           | 6,481       | ..            | ..      | ..               | 1,362                           | 4,872         | 1,681                 | 7,843                    |
| Germany                | 2016 | 461,067           | 797         | 6             | ..      | ..               | ..                              | 7,389         | 3,329                 | 27,689                   |
|                        | 2017 | 461,662           | 641         | 7             | ..      | ..               | ..                              | 7,492         | 3,563                 | 28,266                   |
|                        | 2018 | 460,597           | 1,333       | 8             | ..      | ..               | ..                              | 6,133         | 3,558                 | 31,942                   |
|                        | 2019 | 449,395           | 1,732       | 13            | ..      | ..               | ..                              | 6,341         | 3,390                 | 30,525                   |
| Greece                 | 2016 | 2,134             | ..          | ..            | ..      | ..               | ..                              | ..            | 423                   | 11,071                   |
|                        | 2017 | 2,137             | ..          | ..            | ..      | ..               | ..                              | ..            | 370                   | 11,365                   |
|                        | 2018 | 2,167             | ..          | ..            | ..      | ..               | ..                              | ..            | 371                   | 11,607                   |
|                        | 2019 | 2,203             | ..          | ..            | ..      | ..               | ..                              | ..            | 432                   | 11,968                   |
| Hungary                | 2016 | 48,096            | 2,700       | ..            | 649     | ..               | ..                              | 2,321         | 2,120                 | 468                      |
|                        | 2017 | 46,514            | 2,749       | ..            | 637     | ..               | ..                              | 2,588         | 2,588                 | 493                      |
|                        | 2018 | 44,065            | 2,540       | ..            | 620     | ..               | ..                              | 2,641         | 2,761                 | 527                      |
|                        | 2019 | 41,854            | 2,864       | ..            | 585     | ..               | 81                              | 3,069         | 2,832                 | 560                      |

Table 34

## Production of heat - by type

Terajoules

| Country or area | Year | Combustible fuels | Geo-thermal | Solar thermal | Nuclear | Chemical sources | Heat pumps and electric boilers | Other sources | Direct use geothermal | Direct use solar thermal |
|-----------------|------|-------------------|-------------|---------------|---------|------------------|---------------------------------|---------------|-----------------------|--------------------------|
| Iceland         | 2016 | 13                | 30,946      | ..            | ..      | ..               | 959                             | ..            | 3,298                 | ..                       |
|                 | 2017 | 61                | 29,394      | ..            | ..      | ..               | 797                             | ..            | 3,273                 | ..                       |
|                 | 2018 | 19                | 33,223      | ..            | ..      | ..               | 929                             | ..            | 3,277                 | ..                       |
|                 | 2019 | 16                | 33,039      | ..            | ..      | ..               | 947                             | ..            | 3,265                 | ..                       |
| Ireland         | 2016 | ..                | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | 506                      |
|                 | 2017 | ..                | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | 529                      |
|                 | 2018 | ..                | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | 567                      |
|                 | 2019 | ..                | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | 573                      |
| Italy           | 2016 | 223,037           | 810         | 3             | ..      | ..               | ..                              | ..            | 5,222                 | 8,378                    |
|                 | 2017 | 232,623           | 793         | 4             | ..      | ..               | ..                              | ..            | 5,478                 | 8,741                    |
|                 | 2018 | 228,673           | 878         | 6             | ..      | ..               | ..                              | ..            | 5,364                 | 9,145                    |
|                 | 2019 | 230,526           | 870         | 6             | ..      | ..               | ..                              | ..            | 5,477                 | 9,544                    |
| Kosovo          | 2016 | 46                | ..          | ..            | ..      | ..               | 749                             | ..            | ..                    | 14                       |
|                 | 2017 | 45                | ..          | ..            | ..      | ..               | 772                             | ..            | ..                    | 14                       |
|                 | 2018 | 45                | ..          | ..            | ..      | ..               | 787                             | ..            | ..                    | 15                       |
|                 | 2019 | 28                | ..          | ..            | ..      | ..               | 830                             | ..            | ..                    | 16                       |
| Latvia          | 2016 | 28,959            | ..          | ..            | ..      | ..               | 8                               | 0             | ..                    | ..                       |
|                 | 2017 | 29,983            | ..          | ..            | ..      | ..               | 6                               | 12            | ..                    | ..                       |
|                 | 2018 | 29,682            | ..          | ..            | ..      | ..               | 6                               | ..            | ..                    | ..                       |
|                 | 2019 | 28,604            | ..          | 3             | ..      | ..               | 5                               | ..            | ..                    | 2                        |
| Liechtenstein   | 2016 | 388               | ..          | 37            | ..      | ..               | ..                              | ..            | ..                    | ..                       |
|                 | 2017 | 387               | ..          | 38            | ..      | ..               | ..                              | ..            | ..                    | ..                       |
|                 | 2018 | 417               | ..          | 37            | ..      | ..               | ..                              | ..            | ..                    | ..                       |
|                 | 2019 | 432               | ..          | 36            | ..      | ..               | ..                              | ..            | ..                    | ..                       |
| Lithuania       | 2016 | 33,652            | 41          | ..            | ..      | 9,446            | 9                               | ..            | ..                    | ..                       |
|                 | 2017 | 34,957            | 15          | ..            | ..      | 11,765           | 9                               | ..            | ..                    | ..                       |
|                 | 2018 | 34,623            | ..          | ..            | ..      | 11,272           | 9                               | ..            | ..                    | ..                       |
|                 | 2019 | 31,735            | ..          | ..            | ..      | 11,034           | 9                               | ..            | ..                    | ..                       |
| Luxembourg      | 2016 | 2,432             | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | 86                       |
|                 | 2017 | 2,759             | ..          | 0             | ..      | ..               | ..                              | ..            | ..                    | 91                       |
|                 | 2018 | 3,125             | ..          | 0             | ..      | ..               | ..                              | ..            | ..                    | 99                       |
|                 | 2019 | 4,026             | ..          | 0             | ..      | ..               | ..                              | ..            | ..                    | 102                      |
| Malta           | 2016 | 3                 | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | 207                      |
|                 | 2017 | 3                 | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | 209                      |
|                 | 2018 | 0                 | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | 211                      |
|                 | 2019 | 1                 | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | 212                      |
| Netherlands     | 2016 | 116,294           | ..          | ..            | ..      | 8,559            | ..                              | 2,149         | 2,844                 | 1,147                    |
|                 | 2017 | 112,489           | ..          | ..            | ..      | 8,279            | ..                              | 1,506         | 3,047                 | 1,139                    |
|                 | 2018 | 100,247           | ..          | ..            | ..      | 8,047            | ..                              | 341           | 3,731                 | 1,156                    |
|                 | 2019 | 105,081           | ..          | ..            | ..      | 9,031            | ..                              | ..            | 5,564                 | 1,207                    |
| North Macedonia | 2016 | 2,239             | ..          | ..            | ..      | ..               | ..                              | ..            | 210                   | ..                       |
|                 | 2017 | 2,419             | ..          | ..            | ..      | ..               | ..                              | ..            | 198                   | ..                       |
|                 | 2018 | 2,245             | ..          | ..            | ..      | ..               | ..                              | ..            | 190                   | ..                       |
|                 | 2019 | 2,051             | ..          | ..            | ..      | ..               | ..                              | ..            | 184                   | ..                       |
| Norway          | 2016 | 15,948            | ..          | ..            | ..      | 3,360            | 5,458                           | 792           | ..                    | ..                       |
|                 | 2017 | 16,737            | ..          | ..            | ..      | 3,535            | 5,478                           | 829           | ..                    | ..                       |
|                 | 2018 | 17,827            | ..          | ..            | ..      | 3,648            | 5,023                           | 713           | ..                    | ..                       |
|                 | 2019 | 18,418            | ..          | ..            | ..      | 3,581            | 4,824                           | 763           | ..                    | ..                       |
| Poland          | 2016 | 292,247           | ..          | ..            | ..      | 495              | 4                               | 54            | 930                   | 2,189                    |
|                 | 2017 | 299,016           | ..          | ..            | ..      | 659              | 5                               | 78            | 946                   | 2,280                    |
|                 | 2018 | 294,097           | ..          | ..            | ..      | 457              | 5                               | 115           | 991                   | 2,383                    |
|                 | 2019 | 286,234           | ..          | ..            | ..      | 528              | 3                               | 286           | 1,050                 | 3,009                    |



Table 34

## Production of heat - by type

Terajoules

| Country or area     | Year | Combustible fuels | Geo-thermal | Solar thermal | Nuclear | Chemical sources | Heat pumps and electric boilers | Other sources | Direct use geothermal | Direct use solar thermal |
|---------------------|------|-------------------|-------------|---------------|---------|------------------|---------------------------------|---------------|-----------------------|--------------------------|
| Portugal            | 2016 | 18,846            | ..          | ..            | ..      | ..               | ..                              | ..            | 57                    | 3,515                    |
|                     | 2017 | 19,101            | ..          | ..            | ..      | ..               | ..                              | ..            | 65                    | 3,683                    |
|                     | 2018 | 20,180            | ..          | ..            | ..      | ..               | ..                              | ..            | 73                    | 3,953                    |
|                     | 2019 | 20,927            | ..          | ..            | ..      | ..               | ..                              | ..            | 72                    | 4,033                    |
| Republic of Moldova | 2016 | 10,606            | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | ..                       |
|                     | 2017 | 10,251            | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | ..                       |
|                     | 2018 | 10,658            | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | ..                       |
|                     | 2019 | 9,670             | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | ..                       |
| Romania             | 2016 | 76,505            | 256         | ..            | ..      | ..               | ..                              | ..            | 1,071                 | 22                       |
|                     | 2017 | 74,328            | 262         | ..            | ..      | ..               | ..                              | ..            | 1,098                 | 31                       |
|                     | 2018 | 71,225            | 246         | ..            | ..      | ..               | ..                              | ..            | 1,066                 | 31                       |
|                     | 2019 | 61,203            | 243         | ..            | ..      | ..               | ..                              | ..            | 1,045                 | 30                       |
| Russian Federation  | 2016 | 4,988,962         | 207         | ..            | 14,637  | ..               | 12,852                          | 363,085       | ..                    | ..                       |
|                     | 2017 | 4,924,203         | 0           | ..            | 14,593  | ..               | 13,366                          | 373,030       | ..                    | ..                       |
|                     | 2018 | 5,064,879         | 0           | ..            | 14,011  | ..               | 14,646                          | 388,539       | ..                    | ..                       |
|                     | 2019 | 4,914,229         | ..          | ..            | 14,246  | ..               | 13,209                          | 380,746       | ..                    | ..                       |
| Serbia              | 2016 | 36,097            | ..          | ..            | ..      | ..               | ..                              | ..            | 214                   | ..                       |
|                     | 2017 | 37,089            | ..          | ..            | ..      | ..               | ..                              | ..            | 213                   | ..                       |
|                     | 2018 | 36,178            | ..          | ..            | ..      | ..               | ..                              | ..            | 215                   | ..                       |
|                     | 2019 | 33,505            | ..          | ..            | ..      | ..               | ..                              | ..            | 220                   | ..                       |
| Slovakia            | 2016 | 35,325            | 140         | 2             | 1,976   | ..               | 63                              | 10            | 66                    | 232                      |
|                     | 2017 | 35,434            | 148         | 1             | 2,096   | ..               | 95                              | 7             | 63                    | 272                      |
|                     | 2018 | 29,113            | 159         | 2             | 1,917   | ..               | 107                             | 17            | 58                    | 297                      |
|                     | 2019 | 29,079            | 175         | 2             | 1,882   | ..               | 119                             | 14            | 58                    | 316                      |
| Slovenia            | 2016 | 8,982             | 18          | ..            | ..      | ..               | ..                              | ..            | 488                   | 440                      |
|                     | 2017 | 9,434             | 18          | ..            | ..      | ..               | ..                              | ..            | 577                   | 441                      |
|                     | 2018 | 9,296             | 19          | ..            | ..      | ..               | ..                              | ..            | 560                   | 443                      |
|                     | 2019 | 9,124             | 19          | ..            | ..      | ..               | ..                              | ..            | 582                   | 443                      |
| Spain               | 2016 | ..                | ..          | ..            | ..      | ..               | ..                              | ..            | 789                   | 12,278                   |
|                     | 2017 | ..                | ..          | ..            | ..      | ..               | ..                              | ..            | 789                   | 12,912                   |
|                     | 2018 | ..                | ..          | ..            | ..      | ..               | ..                              | ..            | 789                   | 13,597                   |
|                     | 2019 | ..                | ..          | ..            | ..      | ..               | ..                              | ..            | 789                   | 14,265                   |
| Sweden              | 2016 | 176,404           | ..          | ..            | ..      | ..               | 17,025                          | 20,459        | ..                    | 468                      |
|                     | 2017 | 173,473           | ..          | ..            | ..      | ..               | 16,434                          | 21,996        | ..                    | 464                      |
|                     | 2018 | 173,343           | ..          | ..            | ..      | ..               | 16,366                          | 20,707        | ..                    | 457                      |
|                     | 2019 | 170,111           | ..          | ..            | ..      | ..               | 16,175                          | 21,301        | ..                    | 446                      |
| Switzerland         | 2016 | 20,515            | ..          | ..            | 1,330   | ..               | 100                             | ..            | 19                    | 2,450                    |
|                     | 2017 | 20,698            | ..          | ..            | 1,320   | ..               | 102                             | ..            | 17                    | 2,508                    |
|                     | 2018 | 20,431            | ..          | ..            | 1,350   | ..               | 13                              | ..            | 18                    | 2,565                    |
|                     | 2019 | 22,532            | ..          | ..            | 1,380   | ..               | ..                              | ..            | 18                    | 2,642                    |
| Ukraine             | 2016 | 414,323           | ..          | ..            | 6,339   | 25,082           | ..                              | 1,782         | ..                    | ..                       |
|                     | 2017 | 374,362           | ..          | ..            | 6,329   | 22,833           | ..                              | 1,263         | ..                    | ..                       |
|                     | 2018 | 381,170           | ..          | ..            | 6,476   | 22,342           | ..                              | 1,379         | ..                    | ..                       |
|                     | 2019 | 346,992           | ..          | ..            | 6,041   | 27,865           | ..                              | 1,185         | ..                    | ..                       |
| United Kingdom      | 2016 | 65,128            | ..          | ..            | ..      | ..               | ..                              | ..            | 34                    | 2,145                    |
|                     | 2017 | 66,695            | ..          | ..            | ..      | ..               | ..                              | ..            | 34                    | 2,179                    |
|                     | 2018 | 66,597            | ..          | ..            | ..      | ..               | ..                              | ..            | 34                    | 2,208                    |
|                     | 2019 | 65,435            | ..          | ..            | ..      | ..               | ..                              | ..            | 34                    | 2,232                    |
| Oceania             | 2016 | ..                | ..          | ..            | ..      | ..               | ..                              | 1,309         | 8,187                 | 15,470                   |
|                     | 2017 | ..                | ..          | ..            | ..      | ..               | ..                              | 1,193         | 8,058                 | 16,298                   |
|                     | 2018 | ..                | ..          | ..            | ..      | ..               | ..                              | 1,267         | 7,901                 | 17,162                   |
|                     | 2019 | ..                | ..          | ..            | ..      | ..               | ..                              | 1,167         | 7,933                 | 18,096                   |

Table 34

## Production of heat - by type

Terajoules

| Country or area  | Year | Combustible fuels | Geo-thermal | Solar thermal | Nuclear | Chemical sources | Heat pumps and electric boilers | Other sources | Direct use geothermal | Direct use solar thermal |
|------------------|------|-------------------|-------------|---------------|---------|------------------|---------------------------------|---------------|-----------------------|--------------------------|
| Australia        | 2016 | ..                | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | 14,872                   |
|                  | 2017 | ..                | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | 15,698                   |
|                  | 2018 | ..                | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | 16,560                   |
|                  | 2019 | ..                | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | 17,493                   |
| French Polynesia | 2016 | ..                | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | 75                       |
|                  | 2017 | ..                | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | 76                       |
|                  | 2018 | ..                | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | 78                       |
|                  | 2019 | ..                | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | 80                       |
| New Caledonia    | 2016 | ..                | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | 140                      |
|                  | 2017 | ..                | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | 141                      |
|                  | 2018 | ..                | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | 141                      |
|                  | 2019 | ..                | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | 141                      |
| New Zealand      | 2016 | ..                | ..          | ..            | ..      | ..               | ..                              | 1,309         | 8,187                 | 364                      |
|                  | 2017 | ..                | ..          | ..            | ..      | ..               | ..                              | 1,193         | 8,058                 | 364                      |
|                  | 2018 | ..                | ..          | ..            | ..      | ..               | ..                              | 1,267         | 7,901                 | 364                      |
|                  | 2019 | ..                | ..          | ..            | ..      | ..               | ..                              | 1,167         | 7,933                 | 364                      |
| Niue             | 2016 | ..                | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | *16                      |
|                  | 2017 | ..                | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | *16                      |
|                  | 2018 | ..                | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | *16                      |
|                  | 2019 | ..                | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | *16                      |
| Samoa            | 2016 | ..                | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | 3                        |
|                  | 2017 | ..                | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | *3                       |
|                  | 2018 | ..                | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | *3                       |
|                  | 2019 | ..                | ..          | ..            | ..      | ..               | ..                              | ..            | ..                    | *3                       |





**Production of uranium (uranium content)**

Metric tons

**Table Notes**

Data are primarily based on country submissions and Table 1.19 of the OECD and IAEA publication *Uranium 2020: Resources, Production and Demand*, OECD Publishing, available at [https://www.oecd-neo.org/upload/docs/application/pdf/2020-12/7555\\_uranium\\_-\\_resources\\_production\\_and\\_demand\\_2020\\_web.pdf](https://www.oecd-neo.org/upload/docs/application/pdf/2020-12/7555_uranium_-_resources_production_and_demand_2020_web.pdf).

These sources are complemented with data from the World Nuclear Association, available at <http://www.world-nuclear.org/information-library/nuclear-fuel-cycle/mining-of-uranium/world-uranium-mining-production.aspx>.

Production for Bulgaria, France, Germany and Hungary comes from mine rehabilitation efforts only.

Please refer to the Definitions Section on pages ix to xv for the appropriate product description /classification, and xvi to xvii for the descriptions of relevant flows.

Table 35

## Production of uranium (uranium content)

Metric tons

| Country or area        | 2016          | 2017          | 2018          | 2019          |
|------------------------|---------------|---------------|---------------|---------------|
| <b>World</b>           | <b>62,375</b> | <b>59,717</b> | <b>53,503</b> | <b>54,786</b> |
| <b>Africa</b>          | <b>7,622</b>  | <b>8,017</b>  | <b>8,781</b>  | <b>8,804</b>  |
| Malawi                 | 0             | 0             | 0             | 0             |
| Namibia                | 3,654         | 4,224         | 5,525         | 5,476         |
| Niger                  | 3,478         | 3,485         | 2,910         | 2,982         |
| South Africa           | 490           | 308           | 346           | 346           |
| <b>America, North</b>  | <b>15,164</b> | <b>14,056</b> | <b>7,583</b>  | <b>7,005</b>  |
| Canada                 | 14,039        | 13,116        | 7,001         | 6,938         |
| United States          | 1,125         | 940           | 582           | 67            |
| <b>America, South</b>  | <b>0</b>      | <b>0</b>      | <b>0</b>      | <b>0</b>      |
| Brazil                 | 0             | 0             | 0             | 0             |
| <b>Asia</b>            | <b>29,025</b> | <b>28,186</b> | <b>26,533</b> | <b>28,617</b> |
| China                  | 1,616         | 1,885         | 1,885         | 1,885         |
| India                  | 385           | 421           | 423           | 308           |
| Iran (Islamic Rep. of) | 0             | 40            | 71            | 71            |
| Kazakhstan             | 24,575        | 23,391        | 21,705        | 22,808        |
| Pakistan               | 45            | 45            | 45            | 45            |
| Uzbekistan             | 2,404         | 2,404         | 2,404         | 3,500         |
| <b>Europe</b>          | <b>4,249</b>  | <b>3,576</b>  | <b>4,089</b>  | <b>3,747</b>  |
| Czechia                | 138           | 70            | 0             | 0             |
| France                 | 3             | 2             | 0             | 2             |
| Germany                | 45            | 34            | 0             | 30            |
| Hungary                | 4             | 3             | 5             | 3             |
| Romania                | 50            | 0             | 0             | 0             |
| Russian Federation     | 3,004         | 2,917         | 2,904         | 2,911         |
| Ukraine                | 1,005         | 550           | 1,180         | 801           |
| <b>Oceania</b>         | <b>6,315</b>  | <b>5,882</b>  | <b>6,517</b>  | <b>6,613</b>  |
| Australia              | 6,315         | 5,882         | 6,517         | 6,613         |







**Selected energy resources and reserves**

Million metric tons unless otherwise indicated

**Table Notes**

Based on country submissions and the publication *World Energy Resources - 2016*, World Energy Council (WEC), available at <https://www.worldenergy.org/publications/2016/world-energy-resources-2016/>.

Please refer to the Definitions Section on pages ix to xv for the appropriate product description /classification, and xvi to xvii for the descriptions of relevant flows.

Table 36

## Selected energy resources and reserves

Million metric tons unless otherwise indicated

| Country or area          | Bituminous coal / Anthracite |                             |                                      | Sub-bituminous coal / Lignite |                             |                                      | Peat                   |                             |
|--------------------------|------------------------------|-----------------------------|--------------------------------------|-------------------------------|-----------------------------|--------------------------------------|------------------------|-----------------------------|
|                          | Proved amount in place       | Proved recoverable reserves | Estimated additional amount in place | Proved amount in place        | Proved recoverable reserves | Estimated additional amount in place | Proved amount in place | Proved recoverable reserves |
| Afghanistan              | 66                           | 66                          | 400                                  | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Albania                  | ..                           | ..                          | ..                                   | 727                           | 522                         | ..                                   | ..                     | 155                         |
| Algeria                  | 223                          | 59                          | 164                                  | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Angola                   | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Argentina                | 800                          | 500                         | ..                                   | 7,300                         | 500                         | 273                                  | 90                     | *80                         |
| Armenia                  | 317                          | 163                         | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Australia                | 1,598,761                    | 62,095                      | 125,000                              | 443,431                       | 44,164                      | 215,000                              | ..                     | ..                          |
| Austria                  | 1                            | ..                          | 3                                    | 333                           | 25                          | 61                                   | ..                     | ..                          |
| Azerbaijan               | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Bahrain                  | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Bangladesh               | 3,260                        | 293                         | ..                                   | 3                             | ..                          | ..                                   | *138                   | ..                          |
| Barbados                 | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Belarus                  | ..                           | ..                          | ..                                   | 1,500                         | 100                         | ..                                   | 323                    | 323                         |
| Belgium                  | 4,100                        | 410                         | 1,400                                | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Belize                   | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Benin                    | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Bhutan                   | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Bolivia (Plur. State of) | 1                            | 1                           | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Bosnia and Herzegovina   | ..                           | 484                         | ..                                   | 5,274                         | 2,264                       | ..                                   | ..                     | ..                          |
| Botswana                 | 21,240                       | 40                          | 205,253                              | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Brazil                   | 6,212                        | 1,547                       | ..                                   | 17,636                        | 5,049                       | 15,319                               | ..                     | ..                          |
| Brunei Darussalam        | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Bulgaria                 | 4,112                        | 192                         | 1,200                                | 4,574                         | 2,174                       | 2,618                                | 5                      | 5                           |
| Burkina Faso             | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Burundi                  | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | 56                     | 56                          |
| Cambodia                 | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Cameroon                 | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Canada                   | 187,606                      | 4,346                       | 26,045                               | 120,506                       | 2,236                       | 31,990                               | 1,092                  | ..                          |
| Central African Rep.     | ..                           | ..                          | ..                                   | 3                             | 3                           | ..                                   | ..                     | ..                          |
| Chad                     | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Chile                    | 5,316                        | 1,181                       | 125                                  | 7                             | 155                         | 5,000                                | ..                     | ..                          |
| China                    | 5,462,672                    | 124,059                     | 363,200                              | 332,652                       | 7,555                       | 304,700                              | 4,687                  | 328                         |
| Colombia                 | 14,809                       | 4,881                       | 13,173                               | 411                           | 380                         | 3,176                                | ..                     | ..                          |
| Congo                    | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Costa Rica               | 17                           | ..                          | ..                                   | 27                            | ..                          | 22                                   | 48                     | ..                          |
| Côte d'Ivoire            | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Croatia                  | 4                            | 4                           | ..                                   | 300                           | 33                          | ..                                   | ..                     | ..                          |
| Cuba                     | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Cyprus                   | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Czechia                  | 16,526                       | 1,107                       | ..                                   | 9,767                         | 2,604                       | ..                                   | ..                     | ..                          |
| Dem. Rep. of the Congo   | 988                          | 88                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Denmark                  | ..                           | ..                          | ..                                   | 63                            | ..                          | ..                                   | ..                     | ..                          |
| Dominica                 | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Dominican Republic       | ..                           | ..                          | ..                                   | 84                            | ..                          | ..                                   | ..                     | ..                          |
| Ecuador                  | ..                           | ..                          | ..                                   | 24                            | 24                          | 6                                    | ..                     | ..                          |
| Egypt                    | 182                          | 16                          | ..                                   | 27                            | 22                          | 52                                   | ..                     | ..                          |
| El Salvador              | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Equatorial Guinea        | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Estonia                  | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | 2,000                  | 2,000                       |
| Eswatini                 | 4,644                        | 144                         | 793                                  | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Ethiopia                 | ..                           | ..                          | ..                                   | 23                            | 11                          | ..                                   | ..                     | ..                          |
| Faeroe Islands           | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Falkland Is. (Malvinas)  | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Fiji                     | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Finland                  | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | 850                    | 420                         |
| France                   | 160                          | 95                          | 200                                  | 114                           | 21                          | 165                                  | ..                     | ..                          |
| French Guiana            | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| French Polynesia         | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Gabon                    | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Georgia                  | 901                          | 201                         | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |

| Peat    | Proved recoverable reserves                |   |                      |           | Uranium (metric tons) |                                    | Hydropower<br>(Gross theoretical<br>capability)<br>(GWh/Year) |                       |
|---------|--|---|----------------------|-----------|-----------------------|------------------------------------|---|-----------------------|
|         | Estimated<br>additional amount<br>in place | Natural gas<br>(billions cubic<br>metres) | Crude oil and<br>NGL | Oil shale | Bituminous sands      | Reasonably<br>assured<br>resources |   | Inferred<br>Resources |
| ..      | *50  | ..  | ..                   | ..        | ..                    | ..                                 | ..  | 394,000               |
| ..      | *1   | ..  | *26                  | ..        | 5                     | ..                                 | ..  | 40,000                |
| ..      | 4,504                                      | 1,537                                     | ..                   | ..        | ..                    | 19,500                             | ..  | 12,000                |
| ..      | *308                                       | 1,709                                     | ..                   | ..        | 74                    | ..                                 | ..  | 150,000               |
| 50      | 332  | 328                                       | ..                   | 57        | ..                    | 8,600                              | 11,000  | 354,000               |
| ..      | *18  | ..  | ..                   | 44        | ..                    | ..                                 | ..  | 22,000                |
| ..      | 3,471                                      | 442                                       | 4,531                | ..        | ..                    | 1,174,000                          | 558,700   | 265,000               |
| ..      | *10  | *7  | 1                    | ..        | ..                    | ..                                 | ..  | 150,000               |
| ..      | 1,148                                      | 959                                       | ..                   | ..        | 20                    | ..                                 | ..  | 44,000                |
| ..      | 172  | 15  | ..                   | ..        | ..                    | ..                                 | ..  | ..                    |
| *138    | 232  | *4  | ..                   | ..        | ..                    | ..                                 | ..  | 4,000                 |
| ..      | 0  | 0   | ..                   | ..        | ..                    | ..                                 | ..  | ..                    |
| 1,479   | *3   | 27  | 1,000                | ..        | ..                    | ..                                 | ..  | 8,000                 |
| ..      | 0  | ..  | ..                   | ..        | ..                    | ..                                 | ..  | 1,000                 |
| ..      | ..   | 0   | ..                   | ..        | ..                    | ..                                 | ..  | 1,000                 |
| ..      | *1   | 1   | ..                   | ..        | ..                    | ..                                 | ..  | 2,000                 |
| ..      | ..   | ..  | ..                   | ..        | ..                    | ..                                 | ..  | 263,000               |
| ..      | 281  | *22                                       | ..                   | ..        | ..                    | ..                                 | ..  | 178,000               |
| ..      | ..   | ..  | ..                   | ..        | ..                    | ..                                 | ..  | 70,000                |
| ..      | ..   | ..  | ..                   | ..        | ..                    | ..                                 | ..  | ..                    |
| 487     | 424  | 1,890                                     | 11,734               | ..        | ..                    | 23,100                             | 59,100  | ..                    |
| ..      | 276  | *150                                      | ..                   | ..        | ..                    | 155,100                            | 121,000   | 3,040,000             |
| ..      | *6   | *2  | 18                   | ..        | ..                    | ..                                 | ..  | ..                    |
| ..      | ..   | ..  | ..                   | ..        | ..                    | ..                                 | ..  | 27,000                |
| ..      | ..   | ..  | ..                   | ..        | ..                    | ..                                 | ..  | 1,000                 |
| ..      | ..   | ..  | ..                   | ..        | ..                    | ..                                 | ..  | 6,000                 |
| ..      | ..   | ..  | ..                   | ..        | ..                    | ..                                 | ..  | 88,000                |
| ..      | *150                                       | *18                                       | ..                   | ..        | ..                    | ..                                 | ..  | 294,000               |
| 336,908 | 1,987                                      | 27,755                                    | 2,192                | 27,134    | ..                    | 357,500                            | 192,500   | 2,067,000             |
| ..      | ..   | ..  | ..                   | ..        | ..                    | 12,000                             | ..  | 7,000                 |
| ..      | ..   | 216                                       | ..                   | ..        | ..                    | ..                                 | ..  | 150                   |
| ..      | *40  | *20                                       | 3                    | ..        | ..                    | 700                                | 1,200   | 227,000               |
| 952     | 3,841                                      | 2,521                                     | 47,600               | 120       | ..                    | 120,000                            | 56,600  | 6,083,000             |
| ..      | 135  | 333                                       | ..                   | ..        | 5                     | ..                                 | ..  | 1,000,000             |
| ..      | 115  | *190                                      | ..                   | ..        | 81                    | ..                                 | ..  | 50,000                |
| 22      | ..   | ..  | ..                   | ..        | ..                    | ..                                 | ..  | 224,000               |
| ..      | 28   | *14                                       | ..                   | ..        | ..                    | ..                                 | ..  | 46,000                |
| ..      | *25  | *7  | ..                   | ..        | ..                    | ..                                 | ..  | 20,000                |
| 280     | *71  | *3  | ..                   | ..        | 8                     | ..                                 | ..  | 3,000                 |
| ..      | *142                                       | ..  | ..                   | ..        | ..                    | ..                                 | ..  | 59,000                |
| ..      | 4  | *2  | ..                   | ..        | ..                    | 1,300                              | 100   | 13,000                |
| ..      | *1   | *24                                       | 14,310               | ..        | 5                     | 1,400                              | 1,300   | 1,397,000             |
| ..      | 31   | 74  | ..                   | ..        | ..                    | ..                                 | ..  | 120                   |
| ..      | ..   | ..  | ..                   | ..        | ..                    | ..                                 | ..  | 200                   |
| ..      | ..   | ..  | ..                   | ..        | ..                    | ..                                 | ..  | 50,000                |
| ..      | *11  | 1,175                                     | ..                   | ..        | 7                     | ..                                 | ..  | 169,000               |
| ..      | 1,846                                      | 458                                       | 816                  | ..        | 8                     | ..                                 | 1,900   | 125,000               |
| ..      | ..   | ..  | ..                   | ..        | ..                    | ..                                 | ..  | 7,000                 |
| ..      | *37  | 149                                       | ..                   | ..        | ..                    | ..                                 | ..  | ..                    |
| ..      | ..   | ..  | 2,494                | ..        | ..                    | ..                                 | ..  | 2,000                 |
| ..      | ..   | ..  | ..                   | ..        | ..                    | ..                                 | ..  | 4,000                 |
| ..      | *25  | 0   | ..                   | ..        | ..                    | ..                                 | ..  | 650,000               |
| ..      | ..   | ..  | ..                   | ..        | ..                    | ..                                 | ..  | 1,000                 |
| 28      | ..   | ..  | ..                   | ..        | ..                    | ..                                 | ..  | ..                    |
| ..      | ..   | ..  | ..                   | ..        | ..                    | ..                                 | ..  | 3,000                 |
| 2,200   | ..   | ..  | ..                   | ..        | ..                    | 1,100                              | ..  | 31,000                |
| ..      | *10  | *11                                       | 1,002                | ..        | ..                    | 11,500                             | 100   | 270,000               |
| ..      | ..   | ..  | ..                   | ..        | ..                    | ..                                 | ..  | 2,000                 |
| ..      | ..   | ..  | ..                   | ..        | ..                    | ..                                 | ..  | 1,000                 |
| ..      | *28  | 274                                       | ..                   | ..        | ..                    | 4,800                              | 1,000   | 200,000               |
| ..      | *9   | *5  | ..                   | ..        | 0                     | ..                                 | ..  | 136,000               |

Table 36

## Selected energy resources and reserves

Million metric tons unless otherwise indicated

| Country or area        | Bituminous coal / Anthracite |                             |                                      | Sub-bituminous coal / Lignite |                             |                                      | Peat                   |                             |
|------------------------|------------------------------|-----------------------------|--------------------------------------|-------------------------------|-----------------------------|--------------------------------------|------------------------|-----------------------------|
|                        | Proved amount in place       | Proved recoverable reserves | Estimated additional amount in place | Proved amount in place        | Proved recoverable reserves | Estimated additional amount in place | Proved amount in place | Proved recoverable reserves |
| Germany                | 82,982                       | 21                          | 8,065                                | 76,800                        | 36,300                      | 34,100                               | 157                    | 96                          |
| Ghana                  | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Greece                 | ..                           | ..                          | ..                                   | 6,430                         | 2,876                       | ..                                   | 4,000                  | ..                          |
| Greenland              | 383                          | 183                         | ..                                   | 183                           | 183                         | 200                                  | ..                     | ..                          |
| Grenada                | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Guatemala              | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Guinea                 | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Guinea-Bissau          | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Guyana                 | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Haiti                  | ..                           | ..                          | ..                                   | 40                            | ..                          | 27                                   | ..                     | ..                          |
| Honduras               | ..                           | ..                          | ..                                   | 21                            | ..                          | ..                                   | ..                     | ..                          |
| Hungary                | 5,351                        | 276                         | 298                                  | 5,337                         | 2,633                       | 2,630                                | ..                     | ..                          |
| Iceland                | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| India                  | 260,544                      | 85,562                      | 157,435                              | 42,645                        | 4,714                       | 32,893                               | ..                     | ..                          |
| Indonesia              | 109,825                      | 17,394                      | 6,035                                | 40,639                        | 8,274                       | 38,704                               | 49,000                 | ..                          |
| Iran (Islamic Rep. of) | 41,203                       | 1,203                       | ..                                   | 2,295                         | ..                          | ..                                   | ..                     | ..                          |
| Iraq                   | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Ireland                | 40                           | 14                          | 26                                   | ..                            | 9                           | ..                                   | 154                    | 106                         |
| Israel                 | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | 500                    | 386                         |
| Italy                  | 610                          | 10                          | ..                                   | 29                            | 7                           | 600                                  | ..                     | ..                          |
| Jamaica                | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | 200                    | 32                          |
| Japan                  | 13,883                       | 340                         | 6,298                                | 1,036                         | 10                          | 7,122                                | ..                     | ..                          |
| Jordan                 | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Kazakhstan             | 148,695                      | 25,605                      | ..                                   | ..                            | 12,100                      | ..                                   | ..                     | ..                          |
| Kenya                  | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Korea, Dem.Ppl's.Rep.  | 10,600                       | 600                         | 2,700                                | 300                           | 300                         | 2,200                                | ..                     | ..                          |
| Korea, Republic of     | 1,686                        | 326                         | 272                                  | 209                           | 126                         | 812                                  | ..                     | ..                          |
| Kuwait                 | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Kyrgyzstan             | 28,499                       | 971                         | ..                                   | ..                            | 812                         | ..                                   | ..                     | ..                          |
| Lao People's Dem. Rep. | 62                           | 4                           | ..                                   | 521                           | 499                         | ..                                   | ..                     | ..                          |
| Latvia                 | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | 190                    | 94                          |
| Lebanon                | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Lesotho                | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Liberia                | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Libya                  | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Lithuania              | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | 937                    | 269                         |
| Madagascar             | 150                          | ..                          | ..                                   | 37                            | ..                          | ..                                   | ..                     | ..                          |
| Malawi                 | 802                          | 2                           | ..                                   | ..                            | 2                           | ..                                   | ..                     | ..                          |
| Malaysia               | 1,209                        | 141                         | 78                                   | 451                           | 39                          | 575                                  | ..                     | ..                          |
| Mali                   | ..                           | ..                          | ..                                   | 3                             | ..                          | 3                                    | ..                     | ..                          |
| Mauritania             | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Mauritius              | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Mexico                 | 4,160                        | 1,160                       | 1,960                                | 51                            | 51                          | 213                                  | ..                     | ..                          |
| Mongolia               | 41,024                       | 1,170                       | ..                                   | 120,776                       | 1,350                       | ..                                   | ..                     | ..                          |
| Montenegro             | 337                          | 142                         | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Morocco                | 96                           | 14                          | ..                                   | 40                            | ..                          | 2                                    | ..                     | ..                          |
| Mozambique             | 23,636                       | 1,792                       | 155                                  | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Myanmar                | 252                          | 3                           | 120                                  | 5                             | 3                           | 80                                   | ..                     | ..                          |
| Namibia                | 350                          | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Nepal                  | 8                            | 1                           | ..                                   | 1                             | 1                           | 7                                    | ..                     | ..                          |
| Netherlands            | 3,247                        | 497                         | 2,750                                | ..                            | ..                          | ..                                   | 120                    | 120                         |
| New Caledonia          | 2                            | 2                           | 8                                    | ..                            | ..                          | ..                                   | ..                     | ..                          |
| New Zealand            | 3,175                        | 825                         | 942                                  | 11,350                        | 6,750                       | 11,902                               | 1,640                  | ..                          |
| Nicaragua              | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Niger                  | 90                           | 70                          | ..                                   | 6                             | 6                           | ..                                   | ..                     | ..                          |
| Nigeria                | 2,144                        | 287                         | 21                                   | 377                           | 57                          | 1,000                                | ..                     | ..                          |
| North Macedonia        | ..                           | ..                          | ..                                   | 632                           | 332                         | ..                                   | ..                     | ..                          |
| Norway                 | 93                           | 2                           | ..                                   | 64                            | 5                           | 100                                  | 745                    | 350                         |
| Oman                   | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Pakistan               | 5,996                        | 207                         | 5                                    | 179,596                       | 2,857                       | 68,068                               | ..                     | ..                          |

| Peat  | Proved recoverable reserves                |   |                      |           | Uranium (metric tons) |                                    | Hydropower<br>(Gross theoretical<br>capability)<br>(GWh/Year) |
|-------|--|---|----------------------|-----------|-----------------------|------------------------------------|---|
|       | Estimated<br>additional amount<br>in place | Natural gas<br>(billions cubic<br>metres) | Crude oil and<br>NGL | Oil shale | Bituminous sands      | Reasonably<br>assured<br>resources |   |
| 200   | 39   | *31                                       | 286                  | ..        | 3,000                 | 4,000                              | 120,000   |
| ..    | *23  | *90                                       | ..                   | ..        | ..                    | ..                                 | 28,000  |
| ..    | *1   | *1  | ..                   | ..        | 1,000                 | 6,000                              | 80,000  |
| ..    | ..   | ..  | ..                   | ..        | ..                    | 134,700                            | 550,000   |
| ..    | ..   | ..  | ..                   | ..        | ..                    | ..                                 | 38  |
| ..    | 3  | *11                                       | ..                   | ..        | ..                    | ..                                 | 59,000  |
| ..    | ..   | 232                                       | ..                   | ..        | ..                    | ..                                 | 26,000  |
| ..    | ..   | ..  | ..                   | ..        | ..                    | ..                                 | 1,000   |
| ..    | ..   | ..  | ..                   | ..        | ..                    | ..                                 | 81,000  |
| ..    | ..   | ..  | ..                   | ..        | ..                    | ..                                 | 4,000   |
| ..    | ..   | ..  | ..                   | ..        | ..                    | ..                                 | 16,000  |
| 238   | *8   | *4  | 8                    | ..        | ..                    | 8,600                              | 10,000  |
| ..    | ..   | ..  | ..                   | ..        | ..                    | ..                                 | 184,000   |
| ..    | 1,489                                      | 764                                       | ..                   | ..        | 77,000                | 27,900                             | 2,638,000   |
| ..    | 2,839                                      | 498                                       | ..                   | 67        | 8,400                 | 2,200                              | 2,147,000   |
| ..    | 34,020                                     | *21,433                                   | ..                   | ..        | 700                   | 1,800                              | 448,000   |
| ..    | 3,694                                      | 19,308                                    | ..                   | ..        | ..                    | ..                                 | 225,000   |
| 140   | *10  | ..  | ..                   | ..        | ..                    | ..                                 | 1,000   |
| 1,000 | 181  | *2  | 550                  | 0         | ..                    | ..                                 | 0   |
| 2,500 | 45   | 82  | 10,446               | 48        | 4,800                 | 1,300                              | 190,000   |
| ..    | ..   | ..  | ..                   | ..        | ..                    | ..                                 | 1,000   |
| ..    | *21  | *4  | ..                   | ..        | 6,600                 | ..                                 | 718,000   |
| ..    | *6   | 0   | 5,242                | 5         | 0                     | 33,800                             | 4,000   |
| ..    | 936  | 3,932                                     | 400                  | 6,689     | 285,600               | 417,300                            | 170,000   |
| ..    | ..   | ..  | ..                   | ..        | ..                    | ..                                 | 24,000  |
| ..    | ..   | ..  | ..                   | ..        | ..                    | ..                                 | ..  |
| ..    | 6  | ..  | ..                   | ..        | ..                    | ..                                 | 52,000  |
| ..    | 1,784                                      | 13,981                                    | ..                   | ..        | ..                    | ..                                 | ..  |
| ..    | *6   | *5  | ..                   | ..        | ..                    | ..                                 | 163,000   |
| ..    | ..   | ..  | ..                   | ..        | ..                    | ..                                 | 233,000   |
| 760   | ..   | ..  | ..                   | ..        | ..                    | ..                                 | 7,000   |
| ..    | ..   | ..  | ..                   | ..        | ..                    | ..                                 | 2,000   |
| ..    | ..   | ..  | ..                   | ..        | ..                    | ..                                 | 5,000   |
| ..    | ..   | ..  | ..                   | ..        | ..                    | ..                                 | 28,000  |
| ..    | 1,505                                      | 6,297                                     | ..                   | ..        | ..                    | ..                                 | ..  |
| ..    | ..   | *1  | ..                   | ..        | ..                    | ..                                 | 6,000   |
| ..    | 2  | ..  | 5                    | 35        | ..                    | ..                                 | 321,000   |
| ..    | ..   | ..  | ..                   | ..        | 8,200                 | 5,700                              | 15,000  |
| ..    | *1,169                                     | 471                                       | ..                   | ..        | ..                    | ..                                 | 230,000   |
| ..    | ..   | ..  | ..                   | ..        | ..                    | ..                                 | 12,000  |
| ..    | *28  | *3  | ..                   | ..        | ..                    | ..                                 | ..  |
| ..    | ..   | ..  | ..                   | ..        | ..                    | ..                                 | 150   |
| ..    | 324  | 1,496                                     | ..                   | 0         | 2,800                 | 0                                  | 430,000   |
| ..    | ..   | *35                                       | 42                   | ..        | 30,600                | 25,100                             | 57,000  |
| ..    | ..   | ..  | ..                   | ..        | ..                    | ..                                 | 27,000  |
| ..    | *1   | 0   | 8,167                | ..        | ..                    | ..                                 | 12,000  |
| ..    | *2,832                                     | *2  | ..                   | ..        | ..                    | ..                                 | 103,000   |
| ..    | 528  | *3  | 286                  | ..        | ..                    | ..                                 | 348,000   |
| ..    | *62  | ..  | ..                   | ..        | 248,200               | 155,500                            | 23,000  |
| ..    | 0  | ..  | ..                   | ..        | ..                    | ..                                 | 733,000   |
| ..    | 675  | *30                                       | ..                   | ..        | ..                    | ..                                 | 11,000  |
| ..    | ..   | ..  | ..                   | ..        | ..                    | ..                                 | 2,000   |
| ..    | *28  | *17                                       | 3                    | ..        | ..                    | ..                                 | 205,000   |
| ..    | ..   | ..  | ..                   | ..        | ..                    | ..                                 | 33,000  |
| ..    | ..   | *20                                       | ..                   | ..        | 325,000               | 104,900                            | 3,000   |
| ..    | 5,111                                      | 5,003                                     | ..                   | 91        | ..                    | ..                                 | 43,000  |
| ..    | ..   | ..  | ..                   | ..        | ..                    | ..                                 | 9,000   |
| 7,015 | 1,857                                      | 994                                       | ..                   | ..        | ..                    | ..                                 | 600,000   |
| ..    | 688  | 720                                       | ..                   | ..        | ..                    | ..                                 | ..  |
| ..    | 543  | *50                                       | ..                   | ..        | ..                    | ..                                 | 475,000   |

Table 36

## Selected energy resources and reserves

Million metric tons unless otherwise indicated

| Country or area           | Bituminous coal / Anthracite |                             |                                      | Sub-bituminous coal / Lignite |                             |                                      | Peat                   |                             |
|---------------------------|------------------------------|-----------------------------|--------------------------------------|-------------------------------|-----------------------------|--------------------------------------|------------------------|-----------------------------|
|                           | Proved amount in place       | Proved recoverable reserves | Estimated additional amount in place | Proved amount in place        | Proved recoverable reserves | Estimated additional amount in place | Proved amount in place | Proved recoverable reserves |
| Panama                    | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Papua New Guinea          | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Paraguay                  | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Peru                      | 1,567                        | 102                         | ..                                   | 100                           | 100                         | ..                                   | ..                     | ..                          |
| Philippines               | 1,223                        | 211                         | 8                                    | 1,017                         | 105                         | 37                                   | ..                     | ..                          |
| Poland                    | 178,913                      | 16,203                      | 27,405                               | 227,886                       | 5,429                       | 11,837                               | 890                    | ..                          |
| Portugal                  | 3                            | 3                           | ..                                   | 66                            | 33                          | ..                                   | ..                     | ..                          |
| Qatar                     | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Republic of Moldova       | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Romania                   | 2,446                        | 11                          | 2,143                                | 9,920                         | 280                         | 8,177                                | 25                     | 13                          |
| Russian Federation        | 2,727,915                    | 69,634                      | 200,000                              | 1,379,623                     | 90,730                      | 200,000                              | 17,680                 | 11,554                      |
| Rwanda                    | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Samoa                     | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Saudi Arabia              | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Senegal                   | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | 40                     | 24                          |
| Serbia                    | 855                          | 402                         | ..                                   | 20,186                        | 7,112                       | ..                                   | ..                     | ..                          |
| Serbia and Montenegro     | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Sierra Leone              | ..                           | ..                          | ..                                   | 2                             | ..                          | ..                                   | ..                     | ..                          |
| Slovakia                  | 19                           | 2                           | ..                                   | 1,073                         | 135                         | ..                                   | ..                     | ..                          |
| Slovenia                  | 95                           | 56                          | ..                                   | 656                           | 315                         | 40                                   | ..                     | ..                          |
| Solomon Islands           | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Somalia                   | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| South Africa              | 213,560                      | 9,893                       | 5,000                                | 30                            | ..                          | 100                                  | 47                     | 30                          |
| South Sudan               | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Spain                     | 4,231                        | 868                         | 3,000                                | 319                           | 319                         | 1,260                                | 94                     | 70                          |
| Sri Lanka                 | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | 5                      | 5                           |
| Sudan                     | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Sudan (former)            | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Suriname                  | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Sweden                    | 5                            | 1                           | ..                                   | 4                             | 1                           | 20                                   | 700                    | 70                          |
| Switzerland               | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Syrian Arab Republic      | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Tajikistan                | 4,075                        | 375                         | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Thailand                  | ..                           | ..                          | ..                                   | 1,889                         | 1,063                       | 2,857                                | ..                     | ..                          |
| Timor-Leste               | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Togo                      | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Trinidad and Tobago       | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Tunisia                   | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Turkey                    | 1,182                        | 380                         | 249                                  | 12,828                        | 12,466                      | 296                                  | ..                     | ..                          |
| Turkmenistan              | 800                          | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Uganda                    | 800                          | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Ukraine                   | 81,045                       | 32,039                      | 5,170                                | 7,717                         | 2,336                       | 6,174                                | 2,160                  | 684                         |
| United Arab Emirates      | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| United Kingdom            | 186,770                      | 70                          | 190                                  | 1,000                         | 500                         | ..                                   | ..                     | ..                          |
| United Rep. of Tanzania   | 1,410                        | 269                         | *1,500                               | ..                            | ..                          | ..                                   | ..                     | ..                          |
| United States             | 6,680,329                    | 222,641                     | 445,346                              | 1,398,360                     | 30,483                      | 667,415                              | 26,000                 | 13,000                      |
| Uruguay                   | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Uzbekistan                | 10,852                       | 1,375                       | ..                                   | ..                            | 1,853                       | ..                                   | ..                     | ..                          |
| Venezuela (Bolivar. Rep.) | 6,712                        | 731                         | 4,528                                | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Viet Nam                  | 6,635                        | 3,116                       | ..                                   | 200,120                       | 244                         | ..                                   | ..                     | ..                          |
| Yemen                     | ..                           | ..                          | ..                                   | ..                            | ..                          | ..                                   | ..                     | ..                          |
| Zambia                    | 945                          | 45                          | ..                                   | 69                            | 55                          | 18                                   | ..                     | ..                          |
| Zimbabwe                  | 25,502                       | 502                         | 5,820                                | 965                           | ..                          | ..                                   | ..                     | ..                          |

| Peat    | Proved recoverable reserves                |   |                      |           | Uranium (metric tons) |                                    | Hydropower<br>(Gross theoretical<br>capability)<br>(GWh/Year) |                       |
|---------|--|---|----------------------|-----------|-----------------------|------------------------------------|---|-----------------------|
|         | Estimated<br>additional amount<br>in place | Natural gas<br>(billions cubic<br>metres) | Crude oil and<br>NGL | Oil shale | Bituminous sands      | Reasonably<br>assured<br>resources |   | Inferred<br>Resources |
| ..      | ..   | ..  | ..                   | ..        | ..                    | ..                                 | ..  | 26,000                |
| ..      | 141  | *24                                       | ..                   | ..        | ..                    | ..                                 | ..  | 175,000               |
| 200     | ..   | ..  | ..                   | ..        | ..                    | ..                                 | ..  | 111,000               |
| ..      | 414  | 170                                       | ..                   | 1         | 1,300                 | 1,300                              | ..  | 1,577,000             |
| ..      | *99  | *15                                       | ..                   | ..        | ..                    | ..                                 | ..  | 47,000                |
| 2,300   | 95   | 15  | 7                    | ..        | ..                    | ..                                 | ..  | 25,000                |
| ..      | ..   | ..  | ..                   | ..        | 6,000                 | 1,000                              | ..  | 32,000                |
| ..      | 24,528                                     | 2,695                                     | ..                   | ..        | ..                    | ..                                 | ..  | ..                    |
| ..      | ..   | ..  | ..                   | ..        | ..                    | ..                                 | ..  | 2,000                 |
| 10      | 110  | 80  | ..                   | 1         | 3,100                 | 3,600                              | ..  | 70,000                |
| 168,320 | 32,271                                     | 14,024                                    | 35,470               | 4,518     | 216,500               | 432,000                            | ..  | 2,295,000             |
| 2,000   | *57  | ..  | ..                   | ..        | ..                    | ..                                 | ..  | 2,000                 |
| ..      | ..   | ..  | ..                   | ..        | ..                    | ..                                 | ..  | 140                   |
| ..      | 8,325                                      | 36,618                                    | ..                   | ..        | ..                    | ..                                 | ..  | ..                    |
| 52      | 10   | 0   | ..                   | ..        | ..                    | ..                                 | ..  | 11,000                |
| ..      | 31   | *7  | ..                   | ..        | ..                    | ..                                 | ..  | 27,000                |
| ..      | 45   | 22  | ..                   | ..        | ..                    | ..                                 | ..  | 118,000               |
| ..      | ..   | *60                                       | ..                   | ..        | ..                    | ..                                 | ..  | 11,000                |
| ..      | *14  | *1  | ..                   | ..        | 0                     | 9,000                              | ..  | 10,000                |
| ..      | 0  | 0   | ..                   | ..        | 1,700                 | 7,500                              | ..  | 19,000                |
| ..      | ..   | ..  | ..                   | ..        | ..                    | ..                                 | ..  | 3,000                 |
| ..      | *6   | ..  | ..                   | ..        | 5,000                 | 2,600                              | ..  | 2,000                 |
| ..      | 10   | *2  | 19                   | ..        | 175,300               | 179,200                            | ..  | 73,000                |
| ..      | ..   | 472                                       | ..                   | ..        | ..                    | ..                                 | ..  | ..                    |
| ..      | *3   | *19                                       | 40                   | ..        | 14,000                | 0                                  | ..  | 162,000               |
| 46      | ..   | ..  | ..                   | ..        | ..                    | ..                                 | ..  | 21,000                |
| ..      | ..   | 202                                       | ..                   | ..        | ..                    | ..                                 | ..  | ..                    |
| ..      | 85   | 682                                       | ..                   | ..        | ..                    | ..                                 | ..  | 48,000                |
| ..      | ..   | *12                                       | ..                   | ..        | ..                    | ..                                 | ..  | 39,000                |
| ..      | ..   | ..  | 875                  | ..        | 5,000                 | 8,500                              | ..  | 200,000               |
| ..      | ..   | ..  | ..                   | ..        | ..                    | ..                                 | ..  | 125,000               |
| ..      | 285  | *340                                      | ..                   | ..        | ..                    | ..                                 | ..  | 11,000                |
| ..      | *6   | *2  | ..                   | ..        | ..                    | ..                                 | ..  | 527,000               |
| ..      | 220  | 49  | 916                  | ..        | ..                    | ..                                 | ..  | 18,000                |
| ..      | ..   | *59                                       | ..                   | ..        | ..                    | ..                                 | ..  | ..                    |
| ..      | ..   | ..  | ..                   | ..        | ..                    | ..                                 | ..  | 4,000                 |
| ..      | 326  | *113                                      | ..                   | 1         | ..                    | ..                                 | ..  | ..                    |
| ..      | *65  | 55  | ..                   | ..        | ..                    | ..                                 | ..  | 1,000                 |
| ..      | *7   | *46                                       | 284                  | ..        | 7,300                 | ..                                 | ..  | 433,000               |
| ..      | 17,479                                     | 82  | 1,100                | ..        | ..                    | ..                                 | ..  | 24,000                |
| ..      | *14  | *136                                      | ..                   | ..        | ..                    | ..                                 | ..  | 33,000                |
| 1,846   | 604  | *54                                       | 600                  | ..        | 84,800                | 81,300                             | ..  | 45,000                |
| ..      | 6,091                                      | 12,976                                    | ..                   | ..        | ..                    | ..                                 | ..  | ..                    |
| ..      | 206  | 374                                       | 501                  | 12        | ..                    | ..                                 | ..  | 35,000                |
| ..      | *1,317                                     | ..  | ..                   | ..        | 30,100                | 15,600                             | ..  | 39,000                |
| ..      | 10,441                                     | *6,857                                    | 536,931              | 3         | 207,400               | ..                                 | ..  | 2,040,000             |
| 46      | ..   | ..  | ..                   | ..        | ..                    | ..                                 | ..  | 32,000                |
| ..      | 1,086                                      | 81  | 1,200                | ..        | 59,400                | 31,900                             | ..  | 88,000                |
| ..      | 5,617                                      | *26,807                                   | ..                   | 9,212     | ..                    | ..                                 | ..  | 731,000               |
| ..      | 617  | *599                                      | ..                   | ..        | 1,000                 | 5,400                              | ..  | 300,000               |
| ..      | 266  | 409                                       | ..                   | ..        | ..                    | ..                                 | ..  | ..                    |
| ..      | ..   | ..  | ..                   | ..        | 9,900                 | 5,700                              | ..  | 53,000                |
| ..      | ..   | ..  | ..                   | ..        | 1,400                 | ..                                 | ..  | 44,000                |