and products are detailed. Data in the tables are in million tonnes and thousand barrels per day.

Natural gas

Natural gas reserves
Total proved reserves of natural gas are generally taken to be those quantities that geological and engineering information indicates with reasonable certainty can be recovered in the future from known reservoirs under existing economic and operating conditions. The data series for proved natural gas reserves in this year's Review does not necessarily meet the definitions, guidelines and practices used for determining proved reserves at company level, for instance as published by the US Securities and Exchange Commission nor does it necessarily represent the EI's view of proved reserves by country. Rather, the data series has been compiled using a combination of primary official sources and third-party data.

Although every effort is made to come up with a consistent series for reserves based on a common definition, different countries use different methodologies, and the data have varying levels of reliability. R/P ratios represent the length of time that those remaining reserves would last if production were to continue at the previous year's rate. They are calculated by dividing remaining reserves at the end of the year by the production in that year.

As far as possible, the data represents standard cubic metres (measured at 15°C and 1013 mbar) and have been standardised using a gross calorific value (GCV) of 40 MJ/m^3. There is a time series of natural gas reserves, which can be found in the Excel workbook. Data are measured in billion cubic metres.

Please note that these reserves tables have not been updated this year.

Natural gas production
Gas production comprises marketed production and excludes gas flared or recycled gas. It includes natural gas produced for gas-to-liquids transformation. As far as possible, the data above represents standard cubic metres (measured at 15°C and 1013 mbar) as they are derived directly from tonnes of oil equivalent using an average conversion factor and have been standardised using a gross calorific value (GCV) of 40 MJ/m^3 – they do not necessarily equate with gas volumes expressed in specific national terms.

Natural gas production is provided in three different units of measurement to accommodate regional customary usage. World natural gas production PDF tables are in both billion cubic metres and exajoules. Data in the Excel workbook are also in billion cubic feet per day (bcf/d).

Natural gas consumption
Natural gas consumption excludes natural gas converted to liquid fuels but includes derivatives of coal as well as natural gas consumed in gas-to-liquids transformation. As far as possible, the data above represents standard cubic metres (measured at 15°C and 1013 mbar); as they are derived directly from tonnes of oil equivalent using an average conversion factor and have been standardised using a gross calorific value (GCV) of 40 MJ/m^3 – they do not necessarily equate with gas volumes expressed in specific national terms. The difference between these world consumption figures, and the world production statistics is due to variations in stocks at storage facilities and liquefaction plants, together with unavoidable disparities in the definition, measurement, or conversion of gas supply and demand data.

Consumption data in the PDF data table is in billion cubic meters (bcm) and exajoules, data in billion cubic feet per day (bcf/d) can be found in the Excel workbook.

Natural gas prices
Annual prices are given for benchmark natural gas hubs together with contracted pipeline and LNG imports. The benchmark hub prices incorporate US (Henry Hub), Netherlands TTF index, Zeebrugge, and the UK (NBP). Contract prices are represented by LNG imports into Japan, South Korea, and China (mainland). The prices for LNG and European border are calculated as CIF prices, where CIF = cost + insurance + freight (average freight prices) in US dollars per million British thermal units (Btu).

Natural gas trade movements
Trade flows are on a contractual basis and may not correspond to physical gas flows in all cases. The data illustrates the flow of pipeline natural gas and LNG between sources of production and the regions of consumption. LNG trade. As far as possible, the data represents standard cubic metres (measured at 15°C and 1013 mbar) and has been standardised using a gross calorific value (GCV) of 40 MJ/m^3.

Coal

Coal reserves
Total proved reserves of coal are generally taken to be those quantities that geological and engineering information indicates with reasonable certainty can be recovered in the future from known deposits under existing economic and operating conditions.

Total proved coal reserves are shown for anthracite and bituminous (including brown coal) and sub-bituminous and lignite. Reserves-to-production (R/P) ratios represent the length of time that those remaining reserves would last if production were to continue at the previous year's rate. They are calculated by dividing remaining reserves at the end of the year by the production in that year. The R/P ratios are calculated excluding other solid fuels in reserves and production. R/P ratios are available by country and feature in the table of coal reserves. R/P ratios for the region and the world are depicted in the chart above and the Energy charting tool.

Coal reserve data is in million tonnes. Please note that these reserves tables have not been updated this year.

Coal production
Coal production includes data for commercial solid fuels only. Included in the hard coal category are bituminous and anthracite (hard coal). The sub-bituminous coal includes lignite and brown coal. Other commercial solid fuels are also included. The data includes coal produced for coal-to-liquids and coal-to-gas transformations. In the coal production PDF table, the units are in exajoules. The data can also be downloaded from the Excel workbook in million tonnes.

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Commercial solid fuels only, i.e. bituminous coal and anthracite (hard coal), and lignite and brown (sub-bituminous) coal, and other commercial solid fuels. Intra-area movements (for example, between countries in Europe, Other CIS, Other Africa, Other Asia Pacific) are excluded.

Nuclear energy

The data are based on gross generation and not accounting for cross-border electricity supply. Total energy supply is energy content of the primary heat input required by nuclear power stations to generate the reported electricity output. Details on thermal efficiency assumptions are available online. Data for the units are in exajoules in the PDF. The data are available in the Excel workbook in terawatt–hours (TWh).

Hydroelectricity

The data are based on gross generation and not accounting for cross-border electricity supply. Total energy supply is the physical energy content of the gross electrical output of a hydroelectric plant. Details on efficiency assumptions are available online. In the hydroelectricity consumption PDF table, the units are in exajoules. The data are available in the Excel workbook in terawatt-hours (TWh).

Renewable energy

The data are based on gross generation and not accounting for cross-border electricity supply. For non-combustible renewables, total energy supply is the physical energy content of their gross electrical output. Details on efficiency assumptions are available online. For renewables such as geothermal power and concentrating solar, total energy supply is energy content of the primary heat input they require to generate the reported electricity output. Details on thermal efficiency assumptions are available online. Data for the units are in exajoules in the PDF. The data are available in the Excel workbook in terawatt–hours (TWh).

Biofuels production and consumption
The data includes biogasoline (such as ethanol) and biodiesel. Volumes have been adjusted for energy content. The biofuels PDF tables are in thousand barrels of oil equivalent per day figures. The data are available in additional units in the Excel workbook.

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Methodology

The Statistical Review provides a globally consistent data time series. Here we outline the main definitions, conversion factors, and calculations used to produce the report.

Total energy supply

In 2025, the EI switched to using the Physical Energy Content method to calculate Total Energy Supply (TES). The report had previously used a fossil-fuel equivalent method to calculate Primary Energy Consumption. TES is a measure of the total amount of energy that a country needs to supply to meet its final end-use demand. It reflects the energy that is either produced domestically or imported, minus what is exported or stored. Some energy sources are consumed directly while others may be converted into fuels or electricity for final consumption with transmission, distribution, and efficiency losses occurring throughout the system.

The change represents a significant shift in how the contributions of some fuels, particularly non-combustible forms of renewable energy, are measured. The approach is now consistent with the United Nations' International Recommendations for Energy Statistics (IRES) for calculating national energy balances. By tying non-combustible renewables closer to a marketable commodity (electricity generation) rather than the previous arbitrary measure that included conversion losses that did not exist, it better reflects today's global energy system as it continues to transition away from fossil fuels. The primary energy consumption measure, calculated using the old fossil fuel equivalent approach, will continue to be made available online.

Instead of comparing renewable energy to fossil fuels, under the new approach, non-combustible renewable energy such as wind, solar photovoltaic, hydro, ocean, wave etc. become "energy products" in the statistical sense at the point of generation of electricity and their "primary energy equivalent" measured as the gross amount of electricity generated. The kinetic energy of the wind or the water does not enter the statistical "energy balance", although remains "energy" in a scientific sense. Consequently, for these sources of energy, an efficiency assumption of 100% is assumed with kilowatt-hours (kWh) converted to British Thermal Units (BTU) using a standard heat conversion factor for electricity of 3,412 BTU per kWh.

In the case of non-fossil fuel generation such as nuclear, geothermal, and concentrating solar, where the primary energy input is heat, the heat, which is a marketable commodity, is treated as the first point of entry. As it can be difficult to obtain measurements of the heat flow to the turbines, the heat input is estimated based on an efficiency of 33% for nuclear and concentrating solar, and 10% for geothermal. For electricity generation involving the combustion of biomass, an efficiency factor of 33% is used.

The table below summarises the assumptions and treatment of fuels:

Efficiency factors used to calculate Total Energy Supply

Energy Source	Efficiency
Biomass	33%
Concentrating Solar	33%
Geothermal	10%
Hydro	100%
Nuclear	33%
Ocean	100%
Solar PV	100%
Tidal	100%
Wave	100%
Wind	100%

Note: 1 kWh = 3,412 BTU per kWh

The treatment of fossil fuels remains precisely the same as under the previous methodology and their primary energy consumption continues to be reported in net terms. The gross calorific value to net calorific value adjustment is fuel specific. Fuels used as inputs for conversion technologies (gas-to-liquids, coal-to-liquids and coal-to-gas) are counted as production for the source fuel and the outputs are counted as consumption for the converted fuel.

Oil

Oil reserves

Total proved reserves of oil are generally taken to be those quantities that geological and engineering information indicates with reasonable certainty can be recovered in the future from known reservoirs under existing economic and geological conditions. The data series for proved oil reserves in this year's review does not necessarily meet the definitions, guidelines and practices used for determining proved reserves at company level, for instance as published by the US Securities and Exchange Commission nor does it necessarily represent the EI's view of proved reserves by country. Rather the data series has been compiled using a combination of primary official sources and third-party data.

Oil reserves include field condensate and natural gas liquids as well as crude oil. This inclusive approach helps to develop consistency with the oil production numbers published in the Review, which also include these categories of oil. The reserves and R/P ratio for Canada includes Canadian oil sands and the reserves and R/P ratio for Venezuela includes the Orinoco Belt. Liquid hydrocarbon fuels from non-hydrocarbon sources, such as ethanol from corn or sugar or synthetic oil derived from natural gas (so-called GTL or gas-to-liquids), are not included in either the reserves or production series.

R/P ratios represent the length of time that those remaining reserves would last if production were to continue at the previous year's rate. They are calculated by dividing remaining reserves at the end of the year by the production in that year.

Reserves-to-production (R/P) ratios are available by country and feature in the table of oil reserves. There is a time series of crude oil reserves from 1980, which can be found in the Excel workbook. Data are measured in thousand million barrels.

Please note that these reserves tables have not been updated this year.

Oil production

Oil production data includes crude oil, shale oil, oil sands, condensates (lease condensate or gas condensates that require further refining) and NGLs (natural gas liquids – ethane, LPG and naphtha separated from the production of natural gas). It excludes liquid fuels from other sources such as biofuels and synthetic derivatives of coal and natural gas. It also excludes liquid fuel adjustment factors such as refinery processing gain and oil shales/kerogen extracted in solid form.

The split of crude/condensate and natural gas liquids figures are available. The crude condensate table includes crude oil, shale/tight oil, oil sands, lease condensate or gas condensates that require further refining. It excludes liquid fuels from other sources such as biomass and synthetic derivatives of coal and natural gas. The NGL's table includes ethane, LPG and naphtha separated from the production of natural gas and excludes condensates. World oil production tables are available in both thousand barrels daily and million tonnes.

Liquids, oil and oil product consumption

Oil consumption as defined in previous Statistical Reviews (i.e. including biofuels) has been renamed 'liquids' consumption and a table is still included on this original basis. In addition, greater granularity has been included on the product split of both oil products and biofuels (breaking out ethane & LPG and naphtha in oil products and the ethanol/biodiesel split of biofuels). Total liquids consumption comprises inland demand plus international aviation and marine bunkers and refinery fuel and loss. Consumption of biogasoline (such as ethanol), biodiesel and derivatives of coal and natural gas are also included.

Oil consumption figures include inland demand plus international aviation and marine bunkers and refinery fuel and loss. Consumption of biogasoline (such as ethanol), biodiesel and derivatives of coal and natural gas are excluded. Derivatives of coal and natural gas are included.

Oil product consumption – Gasoline includes motor and aviation gasoline, gasolines and light distillate feedstock (LDF). Diesel/gasoil includes marine gasoil. 'Fuel oil' includes marine bunkers and crude oil used directly for fuel. 'Others' consists of refinery gas, solvents, petroleum coke, lubricants, bitumen, wax, other refined products and refinery fuel and loss. Data are supplied in both exajoules and thousand barrels daily figures.

Oil prices

The key crudes quoted are Brent, West Texas Intermediate (WTI), Nigerian Focados and Dubai in US$ per barrel. The spot crude price history from 1972 and annual crude price history from 1861 are available in the historical data Excel workbook.

Refining

The refinery capacity data presented in this Review represents the sum of reported atmospheric crude distillation and condensate splitting capacity. Capacity should comprise the amount of input that a distillation facility can process under usual operating conditions, taking into account scheduled downtime. Figures are in thousand barrels daily at year end per calendar day. Refinery throughputs are based on the quantity of crude and condensate processed in atmospheric distillation units and condensate splitters. Figures are in thousands of barrels per day.

The refining margins presented are benchmark margins for three major global refining centres: US Gulf Coast (USGC), North West Europe (NWE – Rotterdam) and Singapore. In each case they are based on a single crude oil appropriate for that region and have optimised product yields based on a generic refinery configuration (cracking, hydrocracking or coking), again appropriate for that region. The margins are on a semi-variable basis, i.e. the margin after all variable costs and fixed energy costs.

Oil trade movements

The tables exclude the intra-area movements of oil (for example, crude oil and products moving between countries within Europe). They do not include biofuels. Bunkers fuel is not included as exports. Crude imports and exports include condensates. Saudi Arabian exports from 1980 are also available in the oil trade movements table in the Excel workbook. The split of crude oil