NATURAL GAS INFORMATION
2024 EDITION

Database documentation

This document provides support information for the IEA *Annual Natural Gas Statistics* database. This document can be found online at: http://wds.iea.org/wds/pdf/gas_documentation.pdf.
Please address your inquiries to GASAQ@iea.org.

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Changes from last edition

In the current release, the files are updated with complete information for 2022 and preliminary supply data for 2023.

A number of OECD countries have provisional sectoral demand data available for 2023. These data may have breaks in the time series due to the provisional nature.

In this online data service, the default data display is figures rounded to zero decimal places. However, from 2017 data onwards, further detail, up to the three decimal place level, is available where reported by the national administrations, upon selecting View > Decimals in the Menu bar. Please note that the constituent data summed to produce regional and flow aggregates may be reported at differing levels of precision. Therefore, care should be taken when using data for aggregated flows beyond the level of 0 decimal places. Data up to and including 2016 has been rounded to 0 decimal places. Note: Periods (.) are used to separate decimal places.

Geographical coverage

There are no changes in Geographical coverage in this edition.

Database structure

The Natural Gas Information database contains five files with the following annual data.

OECD files (Last updated in July 2024)

- Countries: 52 countries and 7 regional aggregates
  (see section *Geographical coverage*)
- Years: 1960-2022, preliminary data for 2023
  (unless otherwise specified, see section *Geographical coverage*)

NGBALCON.IVT **OECD and selected countries Supply and Consumption by Sector**

Natural gas statistics on production, total imports and exports, stock changes, stock levels, gross inland consumption and consumption in the transformation sector, energy sector, and end-use. (80 flows)
(Mcm; TJ)

NGIMPORT.IVT **OECD and selected countries Imports**

Breakdown of imports by country of origin (167 different origins). Data are shown for total trade, pipeline, and LNG.
(Mcm; TJ)

NGEXPORT.IVT **OECD and selected countries Exports**

Breakdown of exports by country of destination (167 different destinations). Data are shown for total trade, pipeline, and LNG.
(Mcm; TJ)

WORLD files (Last updated in July 2024)

- Countries: 152 countries and 24 regional aggregates
  (see section *Geographical coverage*)
- Years: World Supply, 1960-2022 preliminary data for 2023
  World Imports, 1993-2022 preliminary data for 2023
  (unless otherwise specified, see section *Geographical coverage*)

NGWBAL.IVT **World Supply**

Natural gas statistics on production, total imports and exports, and gross inland consumption.
(Mcm; TJ)

NGWIMP.IVT **World Imports**

Breakdown of imports by country of origin
(165 different origins). Data are shown for total trade, pipeline, and LNG.
(Mcm; TJ)

Flow definitions

Supply

Flow	Short name	Definition
Indigenous Production	INDPROD	All dry marketable production within national boundaries, including offshore production. Production is measured after purification and extraction of NGLs and sulphur. Extraction losses and quantities reinjected, vented or flared, are not included. Production includes quantities used within the natural gas industry; in gas extraction, pipeline systems and processing plants.
Associated Gas	AGASPRD	Natural gas produced in association with crude oil.
Non-Associated Gas	NAGASPRD	Natural gas originating from fields producing hydrocarbons only in gaseous form.
Colliery Gas	COLLIERY	Methane produced at coal mines, piped to the surface and consumed at collieries or transmitted by pipeline to consumers.
From Other Sources	OSOURCES	Supplies of fuel of which production is covered in other fuel energy balances but which are blended with natural gas and consumed as a blend. The origin of the fuel could be oil, coal, or renewables.
From Other Sources - Oil	OSOIL	From Other Sources of which from Oil (See “From Other Sources”).
From Other Sources - Coal	OSCOAL	From Other Sources of which from Coal (See “From Other Sources”).
From Other Sources - Renewables	OSRENEW	From Other Sources of which from Renewables (See “From Other Sources”).
Imports (Balance)	TOTIMPSB	Amounts are regarded as imported when they have crossed the political boundaries of the country, whether customs clearance has taken place or not. Imports of liquefied natural gas should cover only the dry marketable equivalent, including amounts used as own consumption in the regasification process. Imports by country of origin shown in NGIMPORT and NGWIMP concern imports of gas by ultimate origin for use in the country.
Exports (Balance)	TOTEXPSB	Amounts are regarded as exported when they have crossed the political boundaries of the country, whether customs clearance has taken place or not. Exports by country of destination shown in NGEXPORT concern exports of domestically produced gas by ultimate destination.
International Marine Bunkers	BUNKERS	Quantities of LNG or natural gas used by ships of all flags that are engaged in international navigation. The international navigation may take place at sea, on inland lakes and waterways, and in coastal waters.

Flow	Short name	Definition
Stock Changes (National territory)	STCHANAT	This is the change in stock level of recoverable gas held on national territory; the difference between opening stock level at the first day of the year and closing stock level at the last day of the year of stocks held on national territory. A stock build is shown as a negative number and a stock draw as a positive number.
Stock Changes (Cushion gas)	STCHANATCU	This is the change in stock level of cushion gas; the difference between opening stock level of cushion gas at the first day of the year and closing stock level of cushion gas at the last day of the year. A stock build is shown as a negative number and a stock draw as a positive number. Changes in cushion gas stock level could include the injection of gas to a new operating facility, the reallocation of cushion gas to marketable gas from stocks, or the reallocation of marketable gas stocks to cushion gas. Cushion gas stock changes can also represent cushion gas made directly available on the supply side and intended for consumption purposes.
Inland Consumption (Calculated)	INDCONC	Inland Consumption (Calculated) is defined as: + Indigenous Production + From Other Sources + Imports - Exports + Stock Changes
Statistical Difference	STATDIFF	This is the difference between calculated and observed Inland Consumption. National administrations sometimes obtain the data components of domestic availability from a variety of sources. Owing to differences in concepts, coverage, timing and definitions, observed and calculated consumption are often not identical.
Inland Consumption (Observed)	INDCONO	Represents deliveries of marketable gas to the inland market, including gas used by the gas industry for heating and operation of their equipment (i.e. consumption in gas extraction, in the pipeline system and in processing plants) and including losses in distribution.
Opening Stock Level (National territory)	OSNATTER	Refers to opening stock levels held on national territory, at the first day of the year (including government controlled stocks).
Closing Stock Level (National territory)	CSNATTER	Refers to closing stock levels held on national territory, at the last day of the year (including government controlled stocks).
Memo: Opening Stock Level (Held abroad)	OSABR	Refers to opening stock levels held abroad, at the first day of the year (including government controlled stocks). These amounts are not included in the stock changes.
Memo: Closing Stock Level (Held abroad)	CSABR	Refers to closing stock levels held abroad, at the last day of the year (including government controlled stocks). These amounts are not included in the stock changes.
Memo: Gas Vented	VENTED	The volume of gas released into the air on the production site or at the gas processing plant.

Flow	Short name	Definition
Memo: Gas Flared	FLARED	The volume of gas burned in flares on the production site or at the gas processing plant.
Memo: Opening Stock Level (Cushion gas)	OSNATCUSH	Refers to opening stock levels of cushion gas at the first day of the year. Cushion gas is the total volume of gas required as a permanent inventory to maintain adequate underground storage reservoir pressures and deliverability rates throughout the output cycle. These amounts are not included in stock levels/changes (national territory).
Memo: Closing Stock Level (Cushion gas)	CSNATCUSH	Refers to closing stock levels of cushion gas at the last day of the year. Cushion gas is the total volume of gas required as a permanent inventory to maintain adequate underground storage reservoir pressures and deliverability rates throughout the output cycle. These amounts are not included in stock levels/changes (national territory).

Transformation processes

Flow	Short name	Definition
Transformation - Total	TOTTRANF	Comprises fuel inputs to both public and private electricity, combined heat and power plants and heat plants. An autoproducer is an industrial establishment which, in addition to its main activities, generates electricity, wholly or partly for its own use. It includes railway's own production of electricity. Heat plants and combined heat and power plants only cover fuel inputs for that part of the heat which is sold to a third party. Transformation sector also comprises fuels used as feedstocks in gas works, coke ovens and blast furnaces.
Main Activity Producer Electricity Plants	MAINELEC	Includes inputs of gas for the production of electricity in main activity producer electricity plants, whose primary purpose is to produce, transmit or distribute electricity.
Autoproducer Electricity Plants	AUTOELEC	Includes inputs of gas for the production of electricity by an enterprise which, in addition to its main activities, generates electricity wholly or partly for its own use, e.g. industrial establishments, railways, refineries, etc.
Main Activity Producer Combined Heat and Power Plants	MAINCHP	Includes inputs of gas to main activity producer combined heat and power plants which generate electricity and useful heat in a single installation.
Autoproducer Combined Heat and Power Plants	AUTOCHP	Includes inputs of gas to autoproducer combined heat and power plants which generate electricity and useful heat in a single installation. All fuel inputs for electricity production are taken into account, while for heat production, only that part of inputs to heat which is sold to third parties (e.g. to a network) is shown.
Main Activity Producer Heat Plants	MAINHEAT	Includes inputs of gas to main activity producer plants which are designed to produce heat only.
Autoproducer Heat Plants	AUTOHEAT	Includes inputs of gas to autoproducer plants which are designed to produce heat only. Data for autoproducer heat plants represent inputs of fuel to plants which sell heat to a third party under the provisions of a contract.

Flow	Short name	Definition
Gas Works (Transformation)	TGASWKS	Natural gas used in gas works and gasification plants. Gas used for heating and operation of equipment is not included here but reported in the Energy sector.
Coke Ovens (Transformation)	TCOKEOVS	Natural gas used in coke ovens. Gas used for heating and operation of equipment is not included here but reported in the Energy sector.
Blast Furnaces (Transformation)	TBLASTFUR	Natural gas used in blast furnaces.
Gas to Liquids (Transformation)	TGTL	Natural gas used as feedstock for the conversion to liquids.
Of which GTL technology (Transformation)	TGTLTECH	Natural gas used specifically in a process featuring reaction of methane with oxygen or steam to produce syngas followed by synthesis of liquid products from the syngas using Fischer-Tropsch catalytic synthesis.
Not Elsewhere Specified (Transformation)	TNONSPEC	Natural gas used in transformation activities not included elsewhere. It usually includes natural gas used to produce hydrogen for hydrocracking or hydrodesulphurization in oil refineries.

Energy industry own use and Losses

Flow	Short name	Definition
Energy Industry Own Use - Total	TOTENGY	Natural gas consumed by energy industry to support the extraction (mining, oil and gas production) or transformation activity. ISIC Divisions 05, 06, 19, 35, Group 091, Class 0892 and 0721 (NACE Divisions 05, 06, 19, 35, Group 09.1, Class 08.92 and 07.21). Quantities of natural gas transformed into another energy form are reported under the Transformation sector. Natural gas consumed in support of the operation of oil and gas pipelines is reported in the Transport sector.
Coal Mines	EMINES	Natural gas consumed to support the extraction and preparation of coal within the coal mining industry.
Oil and Gas Extraction	EOILGASEX	Natural gas consumed in the oil and gas extraction process and in natural gas processing plants. Pipeline losses are reported as distribution losses, and natural gas used to operate the pipelines is reported in the Transport sector.
Inputs to Oil Refineries	EREFINER	Own consumption of natural gas in oil refineries.
Coke Ovens (Energy)	ECOKEOVS	Own consumption of natural gas at coking plants.
Blast Furnaces (Energy)	EBLASTFUR	Natural gas consumed in blast furnaces operations.
Gas Works (Energy)	EGASWKS	Own consumption of natural gas at gas works and gasification plants.
Electricity CHP and Heat Plants	EPOWERPLT	Own consumption of natural gas in electric plants, combined heat and power plants, and heat plants.

Flow	Short name	Definition
Liquefaction (LNG) / Regasification	ELNG	Natural gas consumed as fuel at gas liquefaction and regasification plants.
Gas to Liquids (Energy)	EGTL	Natural gas consumed as fuel at the Gas-to-Liquid conversion plants.
Of which GTL technology (Energy)	EGTLTECH	Natural gas consumed as fuel at the GTL technology plants.
Not Elsewhere Specified (Energy)	ENONSPEC	Natural gas used in energy activities not included elsewhere.
Transmission and Distribution Losses	DISTLOSS	Losses due to transport and distribution, as well as pipeline losses.

Final consumption

Flow	Short name	Definition
Final Consumption	FINCONS	Final consumption is the sum of consumption by the different end-use sectors (in the Transport, Industry and Other sectors). It excludes deliveries for transformation and/or own use of the energy producing industries.
Transport - Total	TOTTRANS	Natural gas consumed for all transport activity irrespective of the economic sector in which the activity occurs. ISIC Divisions 49, 50 and 51 (NACE Divisions 49, 50 and 51).
Road	ROAD	Compressed natural gas (CNG) for use in road vehicles. Excludes natural gas consumed in stationary engines, which is reported under Other Sectors.
of which Biogas	ROADBIOGAS	Amounts of biogas included in road consumption.
Pipeline Transport	PIPELINE	Natural gas used in support of the operation of oil and gas pipelines.
Not Elsewhere Specified (Transport)	TRNONSPE	Natural gas used in transport activities not included elsewhere.
Industry - Total	TOTIND	Natural gas consumed by the industrial undertaking in support of its primary activities. Includes quantities of natural gas consumed in heat only and CHP plants for the production of heat used by the plant itself. Quantities of natural gas consumed for production of heat that is sold and for the production of electricity, are reported under the appropriate Transformation sector.
Mining and Quarrying	MINING	ISIC Divisions 07, 08 and Group 099 (NACE Divisions 07, 08 and Group 09.9).
Construction	CONSTRUC	ISIC Division 41, 42 and 43 (NACE Division 41, 42 and 43).

Flow	Short name	Definition
Manufacturing	MANUFACT	Manufacturing refers to the sum of the following industrial sub-sectors: • Iron and Steel • Chemical and petrochemical • Non-ferrous metals • Non-metallic minerals • Transport equipment • Machinery • Food processing, beverages and tobacco • Paper, pulp and printing • Wood and wood products • Textile and leather Definitions of the sub-sectors themselves can be found under the listing for each respective sub-sector below.
Iron and Steel	IRONSTL	ISIC Group 241 and Class 2431 (NACE Divisions 24.1, 24.2, 24.3, 24.51 and 24.52).
Chemicals including Petrochemicals	CHEMICAL	ISIC Division 20, 21 (NACE Division 20, 21). Excludes petrochemical feedstocks.
Non-Ferrous Metals	NONFERR	ISIC Group 242 and Class 2432 (NACE Group 24.4 and Classes 24.53, 24.54).
Non-Metallic Mineral Products	NONMET	ISIC Division 23 (NACE Division 23). This category includes glass, ceramic, cement and other building materials industries.
Transport Equipment	TRANSEQ	ISIC Divisions 29 and 30 (NACE Divisions 29 and 30).
Machinery	MACHINE	ISIC Divisions 25, 26, 27 and 28 (NACE Divisions 25, 26, 27 and 28). This category includes fabricated metal products, machinery and equipment other than transport equipment.
Food Processing, Beverages and Tobacco	FOODPRO	ISIC Divisions 10, 11 and 12 (NACE Divisions 10, 11 and 12).
Pulp, Paper and Printing	PAPERPRO	ISIC Divisions 17 and 18 (NACE Divisions 17 and 18). This category includes reproduction of recorded media.
Wood and Wood Products	WOODPRO	ISIC Division 16 (NACE Division 16).
Textile and Leather	TEXTILES	ISIC Divisions 13-15 (NACE Divisions 13-15).
Not Elsewhere Specified (Industry)	INONSPEC	Any manufacturing industry not included elsewhere. ISIC and NACE Divisions 22, 31 and 32.
Residential	RESIDENT	Natural gas consumed by all households including “households with employed persons”. (ISIC and NACE Divisions 97 and 98).
Commercial and Public Services	COMMPUB	Natural gas consumed by businesses and offices in the public and private sectors. ISIC and NACE Divisions 33, 36, 37, 38, 39, 45, 46, 47, 52, 53, 55, 56, 58, 59, 60, 61, 62, 63, 64, 65, 66, 68, 69, 70, 71, 72, 73, 74, 75, 77, 78, 79, 80, 81, 82, 84 (excluding Class 8422), 85, 86, 87, 88, 90, 91, 92, 93, 94, 95, 96 and 99.

Flow	Short name	Definition
Agriculture and forestry	AGRICULT	Natural gas consumption by users classified as agriculture, fishing (ocean, coastal and inland fishing), hunting and forestry. ISIC Divisions 01 and 02 (NACE Divisions 01 and 02).
Fishing	FISHING	Natural gas delivered for inland, coastal and deep-sea fishing. Fishing should cover fuels delivered to ships of all flags that have refuelled in the country (include international fishing). Also include energy used in the fishing industry as specified in ISIC Division 03 (NACE Division 03).
Not Elsewhere Specified (Other)	ONONSPEC	All activities not included elsewhere; includes military use.
Total Non-Energy Use	NONENTOTAL	Total non-energy use of natural gas.
Non-Energy Use in Industry	NONENINDUS	Non-energy use of natural gas for Industry.
of which Non-Energy use in the Chemical/ Petrochemical Industry	NONPETCH	Feedstocks to the petrochemical industry (ISIC Rev. 4 Group 201).
Other Non-Energy Use	OTHERNONENUSE	Non-energy use of natural gas in Transport and Other sectors.

Product definitions

Natural gas

Natural gas is expressed in million cubic metres at 15°C and at 760 mmHg, i.e. Standard Conditions and in terajoules on a **gross calorific value** basis.

Flow	Short name	Definition
Natural gas	NATGAS	Natural gas comprises gases, occurring in underground deposits, whether liquefied or gaseous, consisting mainly of methane. It includes both “non-associated” gas originating from fields producing hydrocarbons only in gaseous form, and “associated” gas produced in association with crude oil as well as methane recovered from coal mines (colliery gas). Manufactured gas (produced from municipal or industrial waste, or sewage) and quantities re-injected vented or flared are not included.
Natural gas pipeline trade	PIPE	In trade databases (NGEXPORT, NGIMPORT and NGWIMP), this product includes the natural gas that crossed the border through a pipeline in gaseous form.
Natural gas LNG trade	LNG	In trade databases (NGEXPORT, NGIMPORT and NGWIMP), this product includes the natural gas that crossed the border as LNG.

Geographical coverage

Countries and regions

This document is without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area. In this publication, “country” refers to a country or territory, as the case may be. Data start in 1960 for OECD countries and regions, and in 1971 for non-OECD countries and regions, unless otherwise specified.

Country/Region	Short name	Definition
Australia	AUSTRALI	Excludes the overseas territories. Data are reported on a fiscal year basis. By convention data for the fiscal year that starts on 1 July Y-1 and ends on 30 June Y are labelled as Year Y.
Austria	AUSTRIA	
Belgium	BELGIUM	
Canada	CANADA	
Chile	CHILE	Data start in 1971.
Czech Republic	CZECH	Data start in 1971.
Colombia	COLOMBIA	Data start in 1971.
Costa Rica	COSTARICA	There is no natural gas data for Costa Rica as there is neither production nor consumption of natural gas in this country.
Denmark	DENMARK	Excludes Greenland and the Faroe Islands.
Estonia	ESTONIA	Data start in 1990. Prior to that, they are included within Former Soviet Union.
Finland	FINLAND	
France	FRANCE	From 2011 data onwards, France includes Monaco, and the following overseas departments (Guadeloupe; French Guiana; Martinique; Mayotte; and Réunion); and excludes the overseas collectivities (New Caledonia; French Polynesia; Saint Barthélemy; Saint Martin; Saint Pierre and Miquelon; and Wallis and Futuna). Prior to 2011, France includes Monaco and excludes the following overseas departments and collectivities: Guadeloupe; French Guiana; Martinique; Mayotte and Réunion; New Caledonia; French Polynesia; Saint Barthélemy; Saint Martin; Saint Pierre and Miquelon; and Wallis and Futuna.
Germany	GERMANY	Includes the new federal states of Germany from 1970 onwards.

Country/Region	Short name	Definition
Greece	GREECE	
Hungary	HUNGARY	Data start in 1965.
Iceland	ICELAND	There is no natural gas data for Iceland as there is neither production nor consumption of natural gas in this country.
Ireland	IRELAND	
Israel	ISRAEL	The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law. Data start in 1971.
Italy	ITALY	Includes San Marino and the Holy See.
Japan	JAPAN	Includes Okinawa. Starting 1990, data are reported on a fiscal year basis. By convention data for the fiscal year that starts on 1 April Y and ends on 31 March Y+1 are labelled as Year Y.
Korea	KOREA	Data start in 1971.
Latvia	LATVIA	Data start in 1990. Prior to that, they are included within Former Soviet Union.
Lithuania	LITHUANIA	Data start in 1990. Prior to that, they are included within Former Soviet Union.
Luxembourg	LUXEMBOU	
Mexico	MEXICO	Data start in 1965.
Netherlands	NETHLAND	Excludes Suriname, Aruba and the other former Netherland Antilles (Bonaire, Curaçao, Saba, Saint Eustatius and Sint Maarten[1]).
New Zealand	NZ	
Norway	NORWAY	
Poland	POLAND	
Portugal	PORTUGAL	Includes the Azores and Madeira.
Slovak Republic	SLOVAKIA	Data start in 1968.
Slovenia	SLOVENIA	Data start in 1990. Prior to that, they are included within Former Yugoslavia.

[1]. Netherlands Antilles was dissolved on 10 October 2010, resulting in two new constituent countries, Curaçao and Sint Maarten, with the remaining islands joining the Netherlands as special municipalities. From 2012 onwards, data now account for the energy statistics of Curaçao Island only. Prior to 2012, data remain unchanged and still cover the entire territory of the former Netherlands Antilles.

Country/Region	Short name	Definition
Spain	SPAIN	Includes the Canary Islands.
Sweden	SWEDEN	
Switzerland	SWITLAND	Does not include Liechtenstein.
Republic of Turkiye	TURKEY	
United Kingdom	UK	UK is included in the EU28 aggregate but not the EU27_2020 aggregate. Exports of natural gas to the Isle of Man are included with the exports to Ireland.
United States	USA	Includes the 50 states and the District of Columbia.
OECD Total	OECDTOT	Includes Australia; Austria; Belgium; Canada; Chile; Colombia; Costa Rica; the Czech Republic; Denmark; Estonia; Finland; France; Germany; Greece; Hungary; Iceland; Ireland; Israel; Italy; Japan; Korea; Latvia; Lithuania; Luxembourg; Mexico; the Netherlands; New Zealand; Norway; Poland; Portugal; the Slovak Republic; Slovenia; Spain; Sweden; Switzerland; Republic of Turkiye; the United Kingdom and the United States. Estonia, Latvia, Lithuania and Slovenia are included starting in 1990. Prior to 1990, data for Estonia, Latvia and Lithuania are included in Former Soviet Union and data for Slovenia in Former Yugoslavia.
OECD Americas	OECDAM	Includes Canada; Chile; Colombia; Costa Rica; Mexico and the United States.
OECD Asia Oceania	OECDAO	Includes Australia; Israel; Japan; Korea and New Zealand.
OECD Europe	OECDEUR	Includes Austria; Belgium; the Czech Republic; Denmark; Estonia; Finland; France; Germany; Greece; Hungary; Iceland; Ireland; Italy; Latvia; Lithuania; Luxembourg; the Netherlands; Norway; Poland; Portugal; the Slovak Republic; Slovenia; Spain; Sweden; Switzerland; Republic of Turkiye and the United Kingdom. Estonia, Latvia, Lithuania and Slovenia are included starting in 1990. Prior to 1990, data for Estonia, Latvia and Lithuania are included in Former Soviet Union and data for Slovenia in Former Yugoslavia.
IEA	IEATOT	Includes Australia; Austria; Belgium; Canada; the Czech Republic; Denmark; Estonia; Finland; France; Germany; Greece; Hungary; Ireland; Italy; Japan; Korea; Lithuania; Luxembourg; Mexico; the Netherlands; New Zealand; Norway; Poland; Portugal; the Slovak Republic; Spain; Sweden; Switzerland; Republic of Turkiye; the United Kingdom; and the United States.

Country/Region	Short name	Definition
The IEA and Accession/Association countries	IEAFAMILY	Includes: IEA member countries: Australia; Austria; Belgium; Canada; the Czech Republic; Denmark; Estonia; Finland; France; Germany; Greece; Hungary; Ireland; Italy; Japan; Korea; Lithuania; Luxembourg; Mexico; the Netherlands; New Zealand; Norway; Poland; Portugal; the Slovak Republic; Spain; Sweden; Switzerland; Republic of Turkiye; the United Kingdom; and the United States; Accession countries: Chile; Colombia; Costa Rica; Israel; and Latvia; Association countries: Argentina; Brazil; the People's Republic of China; Egypt; India; Indonesia; Kenya; Morocco; Senegal; Singapore; South Africa; Thailand; and Ukraine.
Memo: European Union – 27	EU27_2020	Data start 1990. Please note that in interest of having comparable data, all of these countries are included since 1990 despite different entry dates into the European Union. Includes: All current EU members: Austria; Belgium; the Czech Republic; Denmark; Estonia; Finland; France; Germany; Greece; Hungary; Ireland; Italy; Latvia; Lithuania; Luxembourg; the Netherlands; Poland; Portugal; the Slovak Republic; Slovenia; Spain; Sweden; Bulgaria; Croatia; Cyprus; Malta; and Romania.
Memo: European Union – 28	EU28	Data start 1990. Please note that in interest of having comparable data, all of these countries are included since 1990 despite different entry dates into the European Union. Includes: All current EU members and the UK: Austria; Belgium; the Czech Republic; Denmark; Estonia; Finland; France; Germany; Greece; Hungary; Ireland; Italy; Latvia; Lithuania; Luxembourg; Netherlands; Poland; Portugal; the Slovak Republic; Slovenia; Spain; Sweden; Bulgaria; Croatia; Cyprus; Malta; Romania; and the UK.
Argentina	ARGENTINA	
Bolivia	BOLIVIA	
Brazil	BRAZIL	
Colombia	COLOMBIA	
Cuba	CUBA	
Netherlands Antilles/ Curaçao	CURACAO	Netherlands Antilles was dissolved on 10 October 2010, resulting in two new constituent countries, Curaçao and Sint Maarten, with the remaining islands joining the Netherlands as special municipalities. From 2012 onwards, data now account for the energy statistics of Curaçao Island only. Prior to 2012, data remain unchanged and still cover the entire territory of the former Netherlands Antilles.
Dominican Republic	DOMINICANR	

Country/Region	Short name	Definition
Ecuador	ECUADOR	
El Salvador	ELSALVADOR	
Guatemala	GUATEMALA	
Guyana	GUYANA	
Haiti	HAITI	
Honduras	HONDURAS	
Jamaica	JAMAICA	
Nicaragua	NICARAGUA	
Panama	PANAMA	
Paraguay	PARAGUAY	
Peru	PERU	
Suriname	SURINAME	Data for Suriname are available starting in 2000. Prior to that, they are included in Other Non-OECD Americas.
Trinidad and Tobago	TRINIDAD	
Uruguay	URUGUAY	
Venezuela	VENEZUELA	
Other Non-OECD Americas	OTHERLATIN	Includes Anguilla; Antigua and Barbuda; Aruba; Bahamas; Barbados; Belize; Bermuda; Bonaire (from 2012); the British Virgin Islands; the Cayman Islands; Dominica; Falkland Islands (Malvinas); French Guiana (until 2010); Grenada; Guadeloupe; Martinique (until 2010); Montserrat; Puerto Rico; Saba (from 2012); Saint Eustatius (from 2012); Saint Kitts and Nevis; Saint Lucia; Saint Pierre and Miquelon; Saint Vincent and the Grenadines; Sint Maarten (from 2012); Suriname (until 1999); and the Turks and Caicos Islands.
Non-OECD Americas	LATAMER	Includes Argentina; Plurinational State of Bolivia (Bolivia); Brazil; Costa Rica; Cuba; Curaçao (from 2012); Dominican Republic; Ecuador; El Salvador; Guatemala; Guyana; Haiti; Honduras; Jamaica; Nicaragua; Panama; Paraguay; Peru; Suriname (from 2000); Trinidad and Tobago; Uruguay; Bolivarian Republic of Venezuela (Venezuela) and Other Non-OECD Americas.
Albania	ALBANIA	
Armenia	ARMENIA	Data for Armenia are available starting in 1990. Prior to that, they are included in Former Soviet Union.

Country/Region	Short name	Definition
Azerbaijan	AZERBAIJAN	Data for Azerbaijan are available starting in 1990. Prior to that, they are included in Former Soviet Union.
Belarus	BELARUS	Data for Belarus are available starting in 1990. Prior to that, they are included in Former Soviet Union.
Bosnia and Herzegovina	BOSNIAHERZ	Data for Bosnia and Herzegovina are available starting in 1990. Prior to that, they are included in Former Yugoslavia.
Bulgaria	BULGARIA	
Croatia	CROATIA	Data for Croatia are available starting in 1990. Prior to that, they are included in Former Yugoslavia.
Cyprus	CYPRUS	Note by Republic of Turkiye: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Republic of Turkiye recognizes the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Republic of Turkiye shall preserve its position concerning the "Cyprus" issue. Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Republic of Turkiye. The information in this report relates to the area under the effective control of the Government of the Republic of Cyprus.
Georgia	GEORGIA	Data for Georgia are available starting in 1990. Prior to that, they are included in Former Soviet Union.
Gibraltar	GIBRALTAR	
Kazakhstan	KAZAKHSTAN	Data for Kazakhstan are available starting in 1990. Prior to that, they are included in Former Soviet Union.
Kosovo	KOSOVO	Data for Kosovo are available starting in 2000. Between 1990 and 1999, data for Kosovo are included in Serbia. Prior to 1990, they are included in Former Yugoslavia.
Kyrgyzstan	KYRGYZSTAN	Data for Kyrgyzstan are available starting in 1990. Prior to that, they are included in Former Soviet Union.
Malta	MALTA	
Republic of Moldova	MOLDOVA	Data for Moldova are available starting in 1990. Prior to that, they are included in Former Soviet Union.
Montenegro	MONTENEGRO	Data for Montenegro are available starting in 2005. Between 1990 and 2004, data for Montenegro are included in Serbia. Prior to 1990, they are included in Former Yugoslavia.

Country/Region	Short name	Definition
Romania	ROMANIA	
Republic of North Macedonia	NORTHMACED	Data for the Republic of North Macedonia are available starting in 1990. Prior to that, they are included in Former Yugoslavia.
Russia	RUSSIA	Data for Russia are available starting in 1990. Prior to that, they are included in Former Soviet Union.
Serbia	SERBIA	Data for Serbia are available starting in 1990. Prior to that, they are included in Former Yugoslavia. Serbia includes Montenegro until 2004 and Kosovo until 1999.
Tajikistan	TAJIKISTAN	Data for Tajikistan are available starting in 1990. Prior to that, they are included in Former Soviet Union.
Turkmenistan	TURKMENIST	Data for Turkmenistan are available starting in 1990. Prior to that, they are included in Former Soviet Union.
Ukraine	UKRAINE	Data for Ukraine are available starting in 1990. Prior to that, they are included in Former Soviet Union.
Uzbekistan	UZBEKISTAN	Data for Uzbekistan are available starting in 1990. Prior to that, they are included in Former Soviet Union.
Former Soviet Union	FSUND	Before 1990, includes Armenia; Azerbaijan; Belarus; Estonia; Georgia; Kazakhstan; Kyrgyzstan; Latvia; Lithuania; Republic of Moldova; Russian Federation; Tajikistan; Turkmenistan; Ukraine and Uzbekistan.
Former Yugoslavia	YUGOND	Before 1990, includes Bosnia and Herzegovina; Croatia; Republic of North Macedonia; Kosovo; Montenegro; Slovenia and Serbia.
Non-OECD Europe and Eurasia	NOECDEUR	Includes Albania; Armenia; Azerbaijan; Belarus; Bosnia and Herzegovina; Bulgaria; Croatia; Cyprus[2,3]; Georgia; Gibraltar; Kazakhstan; Kosovo; Kyrgyzstan; Malta; Republic of Moldova (Moldova); Montenegro; Republic of North Macedonia; Romania; Russian Federation; Serbia[4]; Tajikistan; Turkmenistan; Ukraine; Uzbekistan; Former Soviet Union (prior to 1990) and Former Yugoslavia (prior to 1990).
Algeria	ALGERIA	
Angola	ANGOLA	

[2]. Note by Republic of Turkiye:
The information in this document with reference to “Cyprus” relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Republic of Turkiye recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Republic of Turkiye shall preserve its position concerning the “Cyprus issue”.
[3]. Note by all the European Union Member States of the OECD and the European Union:
The Republic of Cyprus is recognised by all members of the United Nations with the exception of Republic of Turkiye. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.
[4]. Serbia includes Montenegro until 2004 and Kosovo until 1999.

Country/Region	Short name	Definition
Benin	BENIN	
Botswana	BOTSWANA	Data for Botswana are available from 1981. Prior to that, they are included in Other Africa.
Cameroon	CAMEROON	
Congo	CONGO	
Democratic Republic of the Congo	CONGOREP	
Côte d'Ivoire	COTEIVOIRE	
Egypt	EGYPT	Data for Egypt are reported on a fiscal year basis. By convention, data for the fiscal year that starts on 1 July Y and ends on 30 June Y+1 are labelled as year Y.
Eritrea	ERITREA	Data for Eritrea are available from 1992. Prior to that, they are included in Ethiopia.
Kingdom of Eswatini	ESWATINI	
Ethiopia	ETHIOPIA	Ethiopia includes Eritrea prior to 1992.
Gabon	GABON	
Ghana	GHANA	
Kenya	KENYA	
Libya	LIBYA	
Madagascar	MADAGASCAR	
Mauritius	MAURITIUS	
Morocco	MOROCCO	
Mozambique	MOZAMBIQUE	
Namibia	NAMIBIA	Data for Namibia are available starting in 1991. Prior to that, data are included in Other Africa.
Niger	NIGER	Prior to 2000, data for Niger are presented in Other Africa.
Nigeria	NIGERIA	
Rwanda	RWANDA	
Senegal	SENEGAL	
South Africa	SOUTHAFRIC	Nuclear and Hydro electricity generation data are reported on a fiscal year basis, beginning on the 1 April Y and ending on the 31 March Y+1.

Country/Region	Short name	Definition
South Sudan	SSUDAN	Data for South Sudan are available from 2012. Prior to 2012, they are included in Sudan.
Sudan	SUDAN	South Sudan became an independent country on 9 July 2011. From 2012, data for South Sudan are reported separately.
United Republic of Tanzania	TANZANIA	Oil data are reported on a fiscal year basis, beginning on the 1 July Y and ending on the 30 June Y+1.
Togo	TOGO	
Tunisia	TUNISIA	
Uganda	UGANDA	
Zambia	ZAMBIA	
Zimbabwe	ZIMBABWE	
Other Africa	OTHERAFRIC	Includes Botswana (until 1980); Burkina Faso; Burundi; Cape Verde; Central African Republic; Chad; Comoros; Djibouti; Gambia; Guinea; Guinea-Bissau; Lesotho; Liberia; Malawi; Mali; Mauritania; Namibia (until 1990); Niger (until 1999); Réunion; Sao Tome and Principe; Seychelles; Sierra Leone; Somalia; and Swaziland.
Africa	AFRICA	Includes Algeria; Angola; Benin; Botswana (from 1981); Cameroon; the Republic of the Congo (Congo); Côte d'Ivoire; the Democratic Republic of the Congo; Egypt; Equatorial Guinea; Eritrea; Kingdom of Eswatini; Ethiopia; Gabon; Ghana; Kenya; Libya; Madagascar; Mauritius; Morocco; Mozambique; Namibia (from 1991); Niger (from 2000); Nigeria; Rwanda; Senegal; South Africa; South Sudan (from 2012), Sudan; the United Republic of Tanzania (Tanzania); Togo; Tunisia; Uganda; Zambia; Zimbabwe and Other Africa.
Bahrain	BAHRAIN	
Islamic Republic of Iran	IRAN	Data are reported according to the Iranian calendar year. By convention data for the year that starts on 20 March Y and ends on 19 March Y+1 are labelled as year Y.
Iraq	IRAQ	
Jordan	JORDAN	
Kuwait	KUWAIT	
Lebanon	LEBANON	
Oman	OMAN	
Qatar	QATAR	
Saudi Arabia	SAUDIARABI	

Country/Region	Short name	Definition
Syrian Arab Republic	SYRIA	
United Arab Emirates	UAE	
Yemen	YEMEN	
Middle East	MIDEAST	Includes Bahrain; Islamic Republic of Iran; Iraq; Jordan; Kuwait; Lebanon; Oman; Qatar; Saudi Arabia; Syrian Arab Republic; United Arab Emirates and Yemen.
Bangladesh	BANGLADESH	Data are reported on a fiscal year basis. By convention data for the fiscal year that starts on 1 July Y-1 and ends on 30 June Y are labelled as Year Y.
Brunei Darussalam	BRUNEI	
Cambodia	CAMBODIA	Data for Cambodia are available starting in 1995. Prior to that, they are included in Other Asia.
India	INDIA	Data are reported on a fiscal year basis. By convention data for the fiscal year that starts on 1 April Y and ends on 31 March Y+1 are labelled as Year Y.
Indonesia	INDONESIA	
Democratic People's Republic of Korea	KOREADPR	
Lao People's Democratic Republic	LAO	
Malaysia	MALAYSIA	
Mongolia	MONGOLIA	Data for Mongolia are available starting in 1985. Prior to that, they are included in Other Asia.
Myanmar	MYANMAR	Data were reported on a fiscal year basis until 2015 data. By convention data for the fiscal year that starts on 1 April Y and ends on 31 March Y+1 are labelled as Year Y.
Nepal	NEPAL	Data are reported on a fiscal year basis. By convention data for the fiscal year that starts on 1 July Y and ends on 30 June Y+1 are labelled as Year Y.
Pakistan	PAKISTAN	Data are reported on a fiscal year basis. By convention fiscal year Y/Y+1 is labelled as year Y.
Philippines	PHILIPPINE	
Singapore	SINGAPORE	
Sri Lanka	SRILANKA	
Chinese Taipei	TAIPEI	
Thailand	THAILAND	

Country/Region	Short name	Definition
Viet Nam	VIETNAM	
Other Asia	OTHERASIA	Includes Afghanistan; Bhutan; Cambodia (until 1994); Cook Islands; Fiji; French Polynesia; Kiribati; Macau, China; the Maldives; Mongolia (until 1984); New Caledonia; Palau (from 1994); Papua New Guinea; Samoa; the Solomon Islands; Timor-Leste; Tonga and Vanuatu.
Asia (excluding China)	ASIA	Includes Bangladesh; Brunei Darussalam; Cambodia (from 1995); India; Indonesia; Democratic People's Republic of Korea; Lao People's Democratic Republic; Malaysia; Mongolia (from 1985); Myanmar; Nepal; Pakistan; Philippines; Singapore; Sri Lanka; Chinese Taipei; Thailand; Viet Nam and Other Asia.
Hong Kong (China)	HONGKONG	
People's Republic of China	CHINA	
China (Region)	CHINAREG	Includes the People's Republic of China and Hong Kong, China.
Non-OECD Total	NOECDTOT	Includes Africa; Asia (excluding China); China (P.R. of China and Hong Kong, China); Non-OECD Americas; Middle East and Non-OECD Europe and Eurasia.
World	WORLD	Includes OECD Total; Africa; Asia (excluding China); China (P.R. of China and Hong Kong, China); Non-OECD Americas; Middle East; Non-OECD Europe and Eurasia.
Africa (UN)	AFRICATOT	Includes Algeria; Angola; Benin; Botswana; Burkina Faso; Burundi; Cabo Verde; Cameroon; Central African Republic; Chad; Comoros; the Republic of the Congo (Congo); Côte d'Ivoire; the Democratic Republic of the Congo; Djibouti; Egypt; Equatorial Guinea; Eritrea; the Kingdom of Eswatini; Ethiopia; Gabon; Gambia; Ghana; Guinea; Guinea-Bissau; Kenya; Lesotho; Liberia; Libya; Madagascar; Malawi; Mali; Mauritania; Mauritius; Morocco; Mozambique; Namibia; Niger; Nigeria; Réunion (until 2010); Rwanda; Sao Tome and Principe; Senegal; the Seychelles; Sierra Leone; Somalia; South Africa; South Sudan (from 2012), Sudan; the United Republic of Tanzania (Tanzania); Togo; Tunisia; Uganda; Zambia; Zimbabwe.

Country/Region	Short name	Definition
Americas (UN)	AMERICAS	Includes Antigua and Barbuda; Argentina; Aruba; the Bahamas; Barbados; Belize; Bermuda; the Plurinational State of Bolivia (Bolivia); Bonaire (from 2012); the British Virgin Islands; Brazil; Canada; the Cayman Islands; Chile; Colombia; Costa Ric; Dominica; the Dominican Republic; Ecuador; El Salvador; the Falkland Islands (Malvinas); Guatemala; the French Guiana (until 2010); Grenada; Guadeloupe (until 2010); Guyana; Haiti; Honduras; Jamaica; Martinique (until 2010); Mexico; Montserrat; Nicaragua; Panama; Paraguay; Peru; Puerto Rico (for natural gas and electricity); Saba (from 2012); Saint Kitts and Nevis; Saint Lucia; Saint Pierre and Miquelon; Saint Vincent and the Grenadines; Sint Eustatius (from 2012); Sint Maarten (from 2012); Suriname; Trinidad and Tobago; the Turks and Caicos Islands; the United States; Uruguay; the Bolivarian Republic of Venezuela (Venezuela).
Asia (UN)	ASIATOT	Includes Afghanistan; Armenia; Azerbaijan; Bahrain; Bangladesh; Bhutan; Brunei Darussalam; Cambodia; the People's Republic of China; Cyprus; Georgia; Hong Kong, China; India; Indonesia; the Islamic Republic of Iran; Iraq; Israel; Japan; Jordan; the Democratic People's Republic of Korea; Korea; Kazakhstan; Kuwait; Kyrgyzstan; Lao People's Democratic Republic; Lebanon; Macau, China; Malaysia; the Maldives; Mongolia; Myanmar; Nepal; Oman; Pakistan; the Philippines; Qatar; Saudi Arabia; Singapore; Sri Lanka; the Syrian Arab Republic; Tajikistan; Chinese Taipei; Thailand; Timor-Leste; the Republic of Turkiye; Turkmenistan; the United Arab Emirates; Uzbekistan; Viet Nam; and Yemen.
Europe (UN)	EUROPE	Includes Albania; Austria; Belarus; Belgium; Bosnia and Herzegovina; Bulgaria; Croatia; the Czech Republic; Denmark; Estonia; Finland; France; Germany; Gibraltar; Greece; Hungary; Iceland; Ireland; Italy; Kosovo; Latvia; Lithuania; Luxembourg; Malta; the Republic of Moldova (Moldova); Montenegro; the Netherlands; the Republic of North Macedonia; Norway; Poland; Portugal; Romania; the Russian Federation; Serbia; the Slovak Republic; Slovenia; Spain; Sweden; Switzerland; Ukraine; the United Kingdom.
Oceania (UN)	OCEANIA	Includes Australia; New Zealand; Cook Islands; Fiji; French Polynesia; Kiribati; New Caledonia; Palau; Papua New Guinea; Samoa; the Solomon Islands; Tonga; Vanuatu.

Fiscal year

This table lists the countries for which data are reported on a fiscal year basis. More information on beginning and end of fiscal years by country is reported in the column 'Definition'.

This document is without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area. In this publication, 'country' refers to country or territory, as case may be. Data start in 1960 for OECD countries and regions, and in 1971 for non-OECD countries and regions, unless otherwise specified.

Country/Region	Short name	Definition
Australia	AUSTRALI	Data are reported on a fiscal year basis. By convention, data for the fiscal year that starts on 1 July Y-1 and ends on 30 June Y are labelled as year Y.
Bangladesh	BANGLADESH	Data are reported on a fiscal year basis. By convention data for the fiscal year that starts on 1 July Y-1 and ends on 30 June Y are labelled as year Y.
Egypt	EGYPT	Data are reported on a fiscal year basis. By convention, data for the fiscal year that starts on 1 July Y and ends on 30 June Y+1 are labelled as year Y.
Ethiopia	ETHIOPIA	Data are reported on a fiscal year basis. By convention, data for the fiscal year that starts on 1 July Y and ends on 30 June Y+1 are labelled as year Y.
India	INDIA	Data are reported on a fiscal year basis. By convention, data for the fiscal year that starts on 1 April Y and ends on 31 March Y+1 are labelled as year Y. This convention is different from the one used by Government of India, whereby fiscal year starts on 1 April Y and ends on 31 March Y+1 are labelled as year Y+1.
Islamic Republic of Iran	IRAN	Data are reported according to the Iranian calendar year. By convention data for the year that starts on 20 March Y and ends on 19 March Y+1 are labelled as year Y.
Japan	JAPAN	Starting 1990, data are reported on a fiscal year basis. By convention, data for the fiscal year that starts on 1 April Y and ends on 31 March Y+1 are labelled as year Y.
Kenya	KENYA	Electricity data are reported on a fiscal year basis, beginning on the 1 July Y and ending on the 30 June of Y+1.
Myanmar	MYANMAR	Data are reported on a fiscal year basis. By convention data for the fiscal year that starts on 1 April Y and ends on 31 March Y+1 are labelled as year Y.
Nepal	NEPAL	Data are reported on a fiscal year basis. By convention data for the fiscal year that starts on 1 July Y and ends on 30 June Y+1 are labelled as year Y.
Pakistan	PAKISTAN	Data are reported on a fiscal year basis. By convention fiscal year Y/Y+1 is labelled as year Y.
South Africa	SOUTHAFRIC	Nuclear and Hydro electricity generation data are reported on a fiscal year basis, beginning on the 1 April Y and ending on the 31 March Y+1.
United Republic of Tanzania	TANZANIA	Oil data are reported on a fiscal year basis, beginning on the 1 July Y and ending on the 30 June Y+1.

Country notes and sources

OECD Countries

General notes

In this release, the files for OECD countries and the World files in the online data service are updated as of July 2024 (NGBALCON, NGEXPORT, NGIMPORT, NGWBAL, and NGWIMP). The files include data up to 2022 with preliminary supply data for 2023. The notes given in this document refer to data for the years 1960 to 2023 published in the online data service. In general, more detailed notes are available for data starting in 1990.

Data are obtained through annual submission of natural gas questionnaires from National Administrations, as indicated for each country in the sources section.

In some instances, it has been necessary for the IEA to estimate some data. Explanations of the estimates are provided in the country notes.

Australia

Source

Department of Climate Change, Energy, the Environment and Water, Canberra.

General notes

Prior to 1991 **natural gas** data included ethane.

Data after 1973 are based on national surveys.

All data refer to fiscal years, which run from 1 July to 30 June (e.g. 2016 = 1 July 2015 to 30 June 2016).

Prior to 2015 for reasons of data confidentiality, Australia did not provide a breakdown of *exports* by destination and data prior to 2015 are estimated by the IEA Secretariat.

Supply

In 2023, the Bayu-Undan gas field began closing down resulting in a decrease to *total imports.* This is the only source of imported gas.

The GCV of *inland consumption (calculated)* has been falling since 2017 due to increases in liquefaction and the volume lost during this process.

Around 30% of *production* (mainly coal seam gas) is estimated by the Australian administration.

Pipeline *imports* are from the Joint Petroleum Development Area, an area jointly administered by Timor-Leste and Australia pursuant to the Timor Sea Treaty.

Transformation

From 2011 to 2015, *not elsewhere specified (Transformation)* represents gas that is used to produce hydrogen for hydrocracking in refineries.

Prior to 1974 there are no detailed data available for *autoproducers* and for sub-sector industry consumption. *Autoproducer* data are included in *main activity producer* before 1974.

Consumption

Between 2021 and 2022 there is a break in the time series in the *transport sector* due to a change in estimation methodology by the Australian Administration.

Consumption in the *residential* and *agriculture and forestry* sectors are estimated by the Australian administration based on models.

There are breaks between 2002 and 2003 due to major revisions made in the *oil and gas extraction*, and *liquefaction (LNG) / regasification plants*.

Until 2005, **natural gas** consumed to fuel the distribution of natural gas in natural gas networks was reported as transformation for **gas works gas** production.

Between 2001 and 2002 there are breaks in time series for consumption data due to an industry structural shift and changes in methodology.

In 1999 and 2000 end-use consumption data are estimated by the Australian Administration.

Austria

Source

Bundesanstalt Statistik Österreich, Vienna.

General note

Prior to 2000, differences due to measurement are included with *transmission and distribution losses*.

Supply

In the 2023 edition, trade data was revised back to 2005 due to a change in methodology to eliminate the reporting of transit trade. This results in no *exports* reported and a decrease in *imports.*

All *imports* are reported under *not elsewhere specified* since 2009 due to confidentiality reasons.

Consumption

Any inconsistencies in the time series for *commercial/public services* until 2011 are the result of this sub-sector being computed as a residual. Since 2012 the *commercial/public services* consumption figures are surveyed annually and the consumption quantities in small and medium enterprises in industry are the projected results of biannual sample surveys.

Belgium

Source

Service Public Fédéral Économie, Brussels.

Supply

In the 2023 edition, a new methodology was used to report *imports* from Germany. The quantities were redistributed resulting in no *imports* from Germany since 2017.

Since 2020, the consistent increase of *from other sources – renewables* is an expected trend as more injection points of biomethane become active and increase production.

Since 2009 gas trade in Belgium includes *imported* LNG which is regasified and subsequently *exported* to other countries.

Imports include spot purchases.

Transformation

From 2000 **natural gas** began to replace **blast furnace gas** in the *iron and steel* industry.

Consumption

In the 2024 edition, several methodological changes were applied to *total final consumption* data resulting in some discrepancies between 2021 and 2022. Revisions are expected in the next edition to align the time series and resolve these discrepancies.

Consumption in the *transport equipment* sub-sector decreased in 2015 due to the closure of a big industry of this sector in December 2014.

In 2003, the large decrease in *not elsewhere specified (Industry)* is due to improvements in data collection.

Canada

Source

Natural Resources Canada, Ottawa.

General notes

Prior to 1990, data for consumption of **natural gas** for *construction* are not available.

Prior to 1978, consumption in *not elsewhere specified (Industry)* includes gas used as fuel in *oil refineries*.

Supply

2015 is the first year when stock levels were measured in Canada. Based on this measurement and the *stock change* of previous years, Canadian authorities have estimated the stock level back to 2005.

Indigenous production is measured by the Canadian administration by upscaling the marketable production by approximately 11% to account for own-use in the extraction process.

Associated gas has been estimated by the Canadian administration for 2016 and 2017.

Prior to 2005, *non-associated gas* production data includes *colliery gas* as well as *associated gas* produced in Alberta.

Transformation

Due to confidentiality reasons, the Canadian administration estimated **natural gas** consumption in *oil refineries* for 2014-2017.

Gas-to-liquids (Transformation) represents quantities of **natural gas** consumed in the production of synthetic crude oil.

Not elsewhere specified (Transformation) represents quantities of **natural gas** used for the upgrading of refined oil products.

In 2000 the increase in *main activity electricity producer* data is due to new generation plants in Alberta and Ontario.

Consumption

In the 2019 edition, an improved methodology was applied to *industry sector* for 2005 onwards resulting in a share of the *not elsewhere specified (Industry)* being allocated to various industrial sub-sectors and creating breaks between 2004 and 2005.

Due to confidentiality reasons, the Canadian administration estimated **natural gas** consumption in the following sectors for 2014-2017: *iron and steel*, *non-ferrous metals*, *transport equipment* and *machinery*.

In 2011 the increase consumption by *non-metallic minerals* production is due to switching from **coal** to **natural gas** in cement manufacturing.

Significant y-o-y changes in *transmission and distribution losses* are seen due to this flow being used as a balancing variable.

Prior to 1990, *construction* data are not available.

Prior to 1978, consumption in *not elsewhere specified (Industry)* includes gas used as fuel in *oil refineries*.

Prior to 1978, *agriculture/forestry* is included in *not elsewhere specified (Industry)*, and no detailed industry sub-sector data are available.

Chile

Source

Ministerio de Energía, Santiago.

General notes

2023 data are estimated by the IEA Secretariat.

Minor estimations to 2022 *trade* and *transformation* data were necessary to be made by the IEA Secretariat.

The 2017 values for *not elsewhere specified (Transformation)* and *oil refineries* have been estimated by the IEA Secretariat.

Since 2008 *stocks level* data are available.

Supply

Exports of regasified LNG to Argentina started in 2016, after the works to enable reverse flows in the interconnector finished.

From other sources – oil reported between 2009 and 2016 represent **LPG** injected into the **natural gas** distribution network.

Transformation

For 2009 and 2010, inputs of **natural gas** to *autoproducer CHP* plants were estimated by the Chilean administration. For other years these inputs are included in *autoproducer electricity*.

Not elsewhere specified (Transformation) represents **natural gas** that is blended with refinery gas.

Consumption

Natural gas used for *oil and gas extraction* is included in gas consumption for energy sector own use under *oil refineries*.

Not elsewhere specified (Transport) corresponds to marine transport.

Colombia

Source

Ministry of Mines and Energy, Bogota.

General notes

Colombia joined the OECD in April 2020. Data start in 1971.

No 2022 or 2023 data were submitted to the IEA from the Colombian Administration, therefore extensive estimations were required to be made by the IEA Secretariat. The estimations were made using a number of different sources including the Colombia Aggregated National Energy Balance, Colombia Natural Gas Market Manager Annual Report, data from other international organizations, and data from the other fuel questionnaires that were submitted.

In the 2023 edition, revisions were made back to 2006 for many flows in Final Consumption to align with the historical data of the Colombian Administration. This has resulted in a break in the time series between 2005 and 2006.

Costa Rica

There is no **natural gas** data for Costa Rica, as there is neither production nor consumption.

Czech Republic

Source

Czech Statistical Office, Prague.

General notes

Prior to 1994 data in *transport sector* are for former Czechoslovakia.

Between 1993 and 1994 there are some breaks in time series due to a change in the energy balance methodology between former Czechoslovakia and the Czech Republic.

Transformation

In the 2020 data, the large increase in *autoproducer electricity* is due to the cessation of energy gas production (gas works gas) in one company and its replacement being **natural gas**.

Consumption

There is a break in time series in the *industry* and *transformation sectors* between 2009 and 2010 due to new available data from distribution companies.

Since 2008 hydrogen production is reported in petrochemical feedstocks as non-energy use. Up to 2007, *chemical and petrochemical* consumption includes both energy and non-energy use.

Denmark

Source

Danish Energy Agency, Copenhagen.

Supply

The GCV for *stock changes (National territory)* often do not match the data exactly due to the different calorific values in the successive years.

Consumption

The consumption of LNG for marine transport and *international marine bunkers* is not reported due to confidentiality.

Estonia

Source

Statistics Estonia, Tallinn.

General note

Data are available starting in 1990. Prior to that, they are included in Former Soviet Union.

Consumption

Consumption reported under *not elsewhere specified (Energy)* represents consumption of different activities of companies in the *energy sector* (NACE 35) for own uses without transformation.

There are inconsistencies in the time series for *residential* consumption as this sector is computed as a residual.

In 2014, Estonia's main company in the *chemical and petrochemical* sector ceased activity, resulting in no non-energy use of **natural gas**.

In 2009, Estonia's main producer of fertilisers ceased activity, resulting in a sharp decrease in the non-energy use of **natural gas**. The plant reopened in 2012.

Finland

Source

Statistics Finland, Helsinki.

General notes

In 2018, more operators entered the market. As a result, *stock data* stopped being confidential.

Finland *imports* LNG since September 2016. Before 2018 there was only one company operating in this market, LNG supply data was thus confidential and excluded from the supply side flows.

Between 1989 and 1990 and between 1990 and 2000 there are some breaks in the time series as data from 1990 to 1999 were revised by the Finnish administration in 2002.

Supply

The *opening* and *closing stock levels* data are confidential and *stock changes* data for 2017 onwards are estimated by the Finnish administration.

Transformation

Not elsewhere specified (Transformation) data represents **natural gas** used for hydrogen manufacture. This hydrogen is used for hydrodesulphurization and hydrocracking in oil refineries.

Consumption

Transmission and distribution losses include the quantities of boil-off **natural gas** originating from the natural evaporation of LNG in tanks.

Not elsewhere specified (Transport) includes LNG consumption for domestic navigation.

Since 1995, the breakdown between *residential* and *commercial/public services* is available due to new system of data collection.

Prior to 1989, data for consumption in the *residential* and *agriculture/forestry* sectors were estimated by the Finnish administration.

France

Source

Ministère de la Transition Écologique et Solidaire, Paris.

General notes

The data includes the French overseas departments, however **natural gas** is neither produced, nor consumed in these departments.

Between 2017 and 2018 there are some breaks in the time series throughout consumption due to a new methodology for preparing the **natural gas** balances.

Until 2007 some *statistical differences* reported by the French utilities were included in *transmission and distribution losses*. Since 2008 these amounts are included under *statistical difference*.

Between 1999 and 2000 there are some breaks in time series due to a new methodology for preparing the **natural gas** balances.

Supply

From 2000 - 2013 the *exports* breakdown is not available.

There is a break in *stocks* between 2004 and 2005.

Pipeline *imports* from *not elsewhere specified* origin may contain spot purchases of LNG.

The pipeline *imports* and pipeline *exports* data include transit amounts.

From 1990 to 1998 *statistical differences* include gas consumption which is not broken down by sectors.

Consumption

Not elsewhere specified (Transport) is consumption for maritime transport, prior to 2018 this data were included in *commercial and public services.*

The increase in **natural gas** consumption in the electricity sector for 2016 and 2017 was mainly driven by the decrease in nuclear generation due to maintenance operations, which was compensated by gas-fired power plants.

Germany

Source

Federal Statistical Office (DESTATIS), Wiesbaden.

General notes

Between 2016 and 2017 there is a break in the gross calorific value of **natural gas** in the *inland consumption (Observed)*, because the German administration acquired better information on the import amounts of L-Gas (low calorific gas).

Between 2002 and 2003 there are breaks in the time series for some sectors due to modifications in reporting methodology.

Between 1994 and 1995 there are some breaks in time series due to the fact that the industry sub-sector breakdown is based on the 1995 NACE classification. Prior to 1995 the data was based on the Arbeitsgemeinschaft Energiebilanzen.

Supply

Due to a structural change, *from other sources – renewables* are reported starting in 2021. In previous years, biomethane was implicitly reported under Biogas in the Renewables Questionnaire.

Between 2017 and 2018 there is a break in the time series for *imports* and *exports* due to an updated methodology to eliminate the reporting of transit trade. Prior to 2018, trade data includes transit trade.

Since 2018, *indigenous production* is being phased out, leading to a decrease in *non-associated gas.*

Since 2016, *not elsewhere specified imports* include *imports* from the Netherlands, UK, and Denmark due to confidentiality.

The low GCV of the *vented gas* is due to its high sulphur content.

Transformation

In 2003 there is a break in time series for the *transformation sector*.

Prior to 1995 inputs of **natural gas** for *main activity producer heat* plants are included with *main activity producer CHP* plants.

Consumption

Between 2021 and 2022 there is a break in the time series for *agriculture/forestry* due to an adjustment to the methodology.

Since 2018, gas distribution networks are included in *pipeline transport*, while it was only covering transmission networks before.

Between 2003 - 2009 consumption in *construction* and *agriculture/forestry* are not available.

Since 2003, transmission and distribution losses have been included in statistical difference.

Since 2003, gas consumption in *coke ovens* was negligible.

Before 1970, there is no detailed breakdown available for the industry sector with the exception of *iron and steel* and *chemical and petrochemical* industries.

Greece

Source

Ministry for Environment and Energy, Athens.

General notes

In 2020, the Trans Adriatic Pipeline (TAP) became operational, running through Greece to Albania and Italy. Moreover, the Interconnector Greece – Bulgaria (IBG) pipeline was connected to the TAP and became operational in 2022.

Between 2016 and 2017 there is a break in the time series due to more disaggregated data and a revised methodology.

Natural gas produced in Greece has a higher than average GCV due to a high content of C2/C4 hydrocarbons.

In 1997, a new pipeline between Russia and Greece became operational.

Supply

The significant increase of *exports* in 2022 is due to the regasification and subsequent export of *LNG imports*.

Stocks (Held abroad) refers to stocks of natural gas held in underground storage facilities in Italy and Bulgaria.

In November 1998 the production of natural gas stopped and started again in December 1999.

Consumption

Between 2021 and 2020 there is a break in the time series for many flows in the *industry sector* due to more detailed data becoming available.

Prior to 2017, consumption of liquefaction (LNG) / regasification plants is included in transmission and distribution losses.

Between 2010 and 2011 there is a break in time series for the *non-ferrous metals* due to a new methodology for measuring gas consumed by this sub-sector.

In 1998 consumption in the *residential* sector is included with *commercial/public services*.

Hungary

Source

Hungarian Energy and Public Utility Regulatory Authority, Budapest.

General note

Between 1996 and 1997 some breaks in time series exist due to a new methodology applied by the Hungarian administration.

Supply

In 2022, the value reported for *stock changes (cushion gas)* in TJ is due to a technical reclassification.

Between 2015 and 2016 there is a break in the time series for trade data due to a new methodology which eliminates the reporting of transit trade.

Between 2012 and 2013 there is a break in the time series for *stock levels* due to a change in the methodology.

Between 2001 and 2002 there is a break in the time series for *stock levels*.

From 2001 to 2004 *statistical difference* includes **natural gas** used for refilling cushion gas.

Transformation

Since 2010, data reported for *not elsewhere specified (Transformation)* represent **natural gas** used for hydrogen manufacture used in refineries for hydrodesulphurization. Prior to this year, these quantities are reported under *oil refineries*.

Prior to 2004, *iron and steel* consumption includes transformation of **natural gas** in *blast furnaces*.

The increase in *main activity producer CHP* plants data in 2000 is due to a reclassification of *autoproducer plants* into *main activity producer plants.*

In 1997, two *autoproducer heat* plants were reclassified to *main activity producer heat* plants.

Consumption

Consumption under the *not elsewhere specified (Other)* sector includes military usage.

Between 2012 and 2013 there are some breaks in the time series for the *energy*, *transport* and *industry sectors* due to a new methodology.

Iceland

There is no **natural gas** data for Iceland, as there is neither production nor consumption.

Ireland

Sources

Sustainable Energy Authority of Ireland, Cork.

General note

Since April 2017 there is no gas storage facility in Ireland.

Supply

Natural gas *indigenous production* increased in 2016 when the Corrib Gas field began production. Production from the field peaked in 2017 and is expected to decline throughout the 2020s.

Since 1996 the increase in *imports* is due to the depletion of the Kinsale gas field and the availability of a new pipeline system to the United Kingdom.

Transformation

Between 2005 and 2006 there is a break in the time series for *autoproducer CHP* due to a new methodology for allocating unsold steam.

Not elsewhere specified (Transformation) corresponds to **natural gas** blended with **refinery gas**.

Consumption

Since 2009, the disaggregation of consumption into all the industry sub-sectors is done according to data from the Census of Industrial Production (CIP).

In 2007, the increase in *machinery* consumption is due to changes in industry sub-sector structure and fuel usage.

In 2004, *chemical and petrochemical* non-energy use stopped due to the shut-down of a fertiliser plant.

In 2002, **natural gas** consumption in the *iron and steel* industry stopped due to the shutdown of Ireland's main steel plant.

Prior to 1986, detailed figures for the consumption of **natural gas** in *industry* and *other sectors* are not available.

Israel

Source

Israel Central Bureau of Statistics, Jerusalem.

General note

From 2012 all **natural gas** data, except inputs to electricity production, are estimated by the IEA Secretariat.

Between 2012 and 2013 there is a break in the time series.

Supply

In the 2020 data, the large increase in *indigenous production* and *exports* are due to more gas fields coming online and exports beginning to Egypt.

Imports of **natural gas** began in 2008.

Transformation

Not elsewhere specified (Transformation) since 2013 refers to quantities of **natural gas** used for the generation of hydrogen, which is subsequently used for hydrodesulphurization in oil refineries. In the previous editions, these figures were reported as energy consumption of gas in *oil refineries*.

2016 and 2017 gas inputs to *main producers* and *autoproducers* of electricity were estimated by the IEA Secretariat.

Italy

Source

Ministry of Economic Development, Rome.

General notes

From 1991 to 1993, data for *transmission and distribution losses* include some *statistical differences*. However, since 1994 improved collection methods have decreased these differences.

Between 1989 and 1990 there is a break in *stocks level.*

Supply

In 2021, the trade outlook changed considerably due to the Trans Adriatic Pipeline (TAP) starting operation.

Imports from Croatia represent **natural gas** transferred with a pipeline directly to Italy from fields in Croatian territory in the Adriatic Sea.

Transformation

Prior to 2008, inputs of **natural gas** to all heat production in *industry* were reported in *final consumption.*

Between 2003 and 2004 there are breaks in time series in *industry* and *transformation* due to a new data reporting methodology.

From 2000 to 2002 no *autoproducer* data are available due to confidentiality reasons. These data are included in *main activity producer plants*.

In 1996 the *production* of gas works gas from **natural gas** ceased.

Consumption

Between 2020 and 2021 there is a break in the time series across *total final consumption* due to a change in methodology to improve data quality and align data between natural gas TSOs and operators collecting data in the distribution network.

Between 2006 and 2007 there is a break in the time series of the energy sector.

Prior to 1990, consumption in *commercial/public services* is included in *residential*.

Prior to 1970, the breakdown of industry data is only available for *iron and steel* and *chemical and petrochemical* industry; all other data are included in *not elsewhere specified (Industry).*

Except for liquefaction plants, data for the energy sector are estimated and include *statistical differences* and *other non-specified consumption*.

Japan

Source

The Institute of Energy Economics, Tokyo.

General notes

Since 1990, data are reported on a fiscal year basis, which runs from 1 April to 31 March (e.g. 2015 = April 2015 to March 2016).

Supply

In certain cases, the country of the last consignment of **natural gas** is reported as the country of origin for the *LNG imports*, instead of the country where the gas was produced.

Transformation

Since 1990 most of the **gas works gas** production and consumption has been included with **natural gas**.

Korea

Source

Korea Energy Economics Institute, Ulsan.

General note

In the 2024 edition, general revisions were made for the entire time series, 1990 to 2022. The revisions were made due to new more reliable data sources being used and a change in methodology to provide more detailed data.

Supply

Since 2013, *from other sources – oil* is estimated.

From other sources – oil represent the amount of liquefied petroleum gases that are either blended with **natural gas** or are directly used in city gas distribution networks.

Transformation

Consumption in *not elsewhere specified (Transformation)* represents gas that is used in hydrogen fuel cell generators.

Consumption

Prior to 2015, consumption in liquefaction (LNG) / regasification plants included transmission and distribution losses and measuring errors

From 1993 to 2006, consumption of **natural gas** in *transport equipment* is included in the *machinery* flow.

Latvia

Source

Central Statistical Bureau, Riga.

General note

Data for Latvia are available starting in 1990. Prior to that, they are included in Former Soviet Union.

Supply

Stock levels in Latvia do not include stocks held in national territory for other countries.

Transformation

Between 2016 and 2017 there is a break in the time series for *main activity producer CHP* and *main activity producer heat* due to a reclassification according to the units of plant rather than the plants as a whole.

Consumption

The consumption in the *iron and steel* industry decreased in 2014 due to the bankruptcy of the major company in the market.

Lithuania

Source

Statistics Lithuania, Vilnius.

General note

Data for Lithuania are available starting in 1990. Prior to that, they are included in Former Soviet Union.

Supply

The *export* quantities since 2014 represent imported LNG which is regasified and subsequently exported to other countries.

Transformation

Natural gas consumption for power generation has been falling significantly from 2010 onwards as gas-fired power and heating plants are being retired, largely replaced by biomass.

Not elsewhere specified (Transformation) data represent **natural gas** used for methanol manufacture, which is used as input in oil refineries.

Consumption

There is a break between 2010 and 2011 in the *not elsewhere specified (Energy)* timeseries due to **natural gas** being consumed for heat that was used to destroy radioactive waste after the decommissioning of the only Lithuanian nuclear plant at the end of 2009.

Luxembourg

Source

STATEC – Institut national de la statistique et des études économiques du Grand-Duché du Luxembourg, Luxembourg.

General note

In 1982 there is a break in the time series in *transformation* and *industry* sectors due to a change in methodology.

Supply

Not elsewhere specified imports include gas purchased on the spot market.

Transformation

The last *main activity producer electricity* gas-consuming plant closed in 2016.

In 2002, the increase of gas consumption in the *transformation sector* is due to a new 350-MW combined cycle power plant.

Consumption

Between 2020 and 2021 there is a break in the time series of the *industry sector* due to a change in methodology in which energy consumption is estimated at the company level and a NACE reallocation of notable companies.

Since 2012, the methodology to determine final consumption was changed in order to integrate basic data from National Accounts.

Since 2000, a more detailed breakdown of final consumption data is available due to a change in methodology.

Since 2000, consumption in the *non-ferrous metals* sub-sector is included in *iron and steel* for reasons of confidentiality.

Since 2000, consumption in *not elsewhere specified (Industry)* includes activity of companies reclassified to preserve the confidentiality.

Prior to 2000, residential consumption includes consumption in commercial/public services and agriculture/forestry.

Mexico

Source

Secretaría de Energía, Mexico City.

General note

Supply data for 2021, 2022, and 2023 are partially estimated by the IEA Secretariat.

Natural gas reported in the IEA publications may be different from what is reported in the Mexican energy publications, as the IEA includes only dry gas and excludes **natural gas liquids**, which are considered as part of **oil products**.

Consumption

Transmission and distribution losses and pipeline transport are included in oil and gas extraction.

From 1993 to 1999 oil and gas extraction and not elsewhere specified (Industry) data were estimated.

Since 1993, the breakdown of the *energy sector* and of *other sectors* is available.

Netherlands

Source

Statistics Netherlands, The Hague.

General note

Between 1981 and 1982, and between 1983 and 1984 there are breaks in time series due to the introduction of more comprehensive surveys on end-use consumption.

Supply

In October 2023, the largest gas field in the country closed resulting in a decrease to *indigenous production.*

*LNG import*s data are obtained from customs by Statistics Netherlands, as a result there may be the reporting of *imports* from countries which do not produce **natural gas**.

In the 2023 edition, the trade methodology was updated to eliminate the reporting of transit trade with Belgium, this has resulted in a break in the time series between 2016 and 2017.

A production cap of **natural gas** was set by the government in 2015, leading to decreasing *production.*

Dutch trade figures include transit volumes.

Transformation

The values for *not elsewhere specified (Energy)* represents **natural gas** combusted by the distribution operator for the purpose of operating the grid.

In 2009 the increase *in main activity electricity* consumption is due to the opening of a new plant in the second half of 2008.

In 2008 the large increase in *autoproducer CHP* plants consumption is due to a new *autoproducer CHP* plant which came on-stream.

Consumption

Data for *not elsewhere specified (Other) non-energy use* represents the volume of gas injected as cushion gas in a new underground storage.

Between 1987 and 1988 there is a break in the time series in the *commercial/public services* consumption due to a major reorganisation of three public utility companies.

New Zealand

Source

Ministry of Business, Innovation and Employment, Wellington.

General notes

Calorific Values of *opening/closing stock level (national territory)* are calculated on the mean calorific value of **natural gas** produced in the year.

2018 data was estimated based on monthly data submitted to the IEA Secretariat.

Between 2012 and 2013 there are breaks in series for the final consumption breakdown due to the introduction of a new survey.

From 1977 to 1979 and from 1986 to 1989 *transmission and distribution losses* are included in the *statistical difference*.

Supply

There are no *imports* or *exports* of **natural gas** for New Zealand.

Transformation

In 1998 there is a large increase in *autoproducer CHP* plants consumption as two new *autoproducer CHP plants* came on-stream.

Consumption

In 2005 the decline in *chemical and petrochemical* industry consumption was due to the closure of the Motunui methanol production plant. The Motunui plant was then reopened in late 2008.

Prior to 2003 **natural gas** consumed in industry includes some gas for energy industry own use.

In February 1997 production of synthetic gasoline from **natural gas** ended.

Since 1990 a detailed consumption breakdown for *industry* is available.

Norway

Source

Statistics Norway, Oslo.

General note

Between 2009 and 2010 there is a break in the time series due to a new system for energy balance and energy accounts.

Data on *stocks* became available in 2008.

Supply

For Norway, the supply of **natural gas** is the residual of two very large and opposite amounts: *indigenous production* and *exports*. As a result, large *statistical differences* in some years may lead to discrepancies in the growth rates of supply and demand of **natural gas**.

Between 2007 and 2008 there is a break in the time series for *indigenous production* as the production of gas amounts consumed by the offshore platforms began to be included.

In 2000, *non-associated gas* production ceased.

In 1992, the large increase in *oil and gas extraction* is due to the start-up of new fields.

For the years 2010 - 2012 no split between countries of origin of *imports* was provided, therefore these were estimated by the IEA Secretariat.

Consumption

In 2007 the increase in *not elsewhere specified (Transport)* is due to the wider use of gas-powered sea vessels.

Since 2002 domestic navigation is included under *not elsewhere specified (Transport).*

Before 2000 *oil and gas extraction* consumption also included some data which should have been included under *total final consumption*.

Consumption for pipeline transport is included in oil and gas extraction.

Poland

Source

Central Statistical Office, Warsaw.

General notes

Transmission and distribution losses may include some statistical differences.

Supply

In 2023, certain *imports* and *exports* were grouped into country blocks due to confidentiality reasons.

Exports include **natural gas** that is injected into underground storage facilities abroad. This process was very economically favourable for the years 2016 – 2020.

Exports include all the gas sold by companies operating in Poland (these are mainly re-exports).

Imports from Germany mainly represent **natural gas** purchased through virtual reverse flow in the Polish section of the Yamal-Europe pipeline.

Since 2010 gas *imports* from Russia include gas produced in Azerbaijan, Turkmenistan, Kazakhstan or Uzbekistan.

In 2009 *imports* reported from Other Former Soviet Union are from Turkmenistan, Kazakhstan or Uzbekistan.

Natural gas reported in *associated gas* production contains some heavier hydrocarbons. This results in a high gross calorific value for this flow.

Transformation

Not elsewhere specified (Transformation) data represent **natural gas** used for hydrogen manufacture. This hydrogen is used for hydrodesulphurization in oil refineries.

In 2013 and 2014, some CHP plants were used as backup reserve plants, resulting in a decrease in consumption under *main activity producers CHP* plants.

In 2004 and 2005, small amounts of gas were used to start up *main activity electricity producer* plants.

Consumption

Not elsewhere specified (Energy) own use includes gas used for heating and pumping operations in the distribution network.

Portugal

Source

Direção-Geral de Energia e Geologia, Lisbon.

Supply

The increase in 2017 *imports* is attributed to the consumption of gas-fired power plants that filled in the gap of decreased hydro-generation due to a drought.

The *imports* reported under *not elsewhere specified* represent gas entering Portugal through the pipeline from Spain.

Prior to February 2004 most *LNG imports* from Nigeria arrived via the Huelva terminal in Spain, where they were regasified and sent by pipeline to Portugal. From February 2004 *LNG imports* arrive directly at the Sines terminal.

Transformation

Since 2012, data reported for *not elsewhere specified (Transformation)* represent **natural gas** used for hydrogen manufacture. Prior to this year, these quantities are reported under *oil refineries*.

In 2002 the decrease in **natural gas** used for *gas works* is due to the closing of the Lisbon gas works plant in May 2001.

Slovak Republic

Source

Statistical Office of the Slovak Republic, Bratislava.

General notes

In the 2024 edition, 2022 data were submitted with an updated methodology leading to a minor break in the time series for some flows between 2021 and 2022. In the next edition a revision is expected to eliminate these breaks.

Data for *transmission and distribution losses* were not available between 2009 and 2013.

Between 1970 and 1971, and between 1978 and 1979 there are breaks in time series due to a revision of data for 1968-1969 and 1979-92 made in 2003. Data for 1970 were estimated by the Secretariat.

Supply

In 2021, *exports* are reported for the first time in the past 8 years due to large movements in stocks.

In 2002, the GCV of *indigenous production* increased significantly as extraction from a field with a low GCV ended.

Imports include gas used for pipeline compressor stations.

Transformation

In 2014, the decrease in *autoproducer CHP* plants consumption was due to a plant closure.

The last *autoproducer electricity* plant stopped operation in 2016.

Not elsewhere specified (Transformation) data represents **natural gas** used for hydrogen manufacture. This hydrogen is used for hydrodesulphurization and for hydrocracking in oil refineries.

Consumption

In 2018, following a change in the nature of its economic activity (as per the NACE classification), a big consuming company is now accounted for in the natural gas consumption for *mining and quarrying*, leading to a substantial increase.

In 2016, non-energy use of **natural gas** in the *chemical and petrochemical* industry decreased due to a two-month stoppage in ammonia production.

In 2001, there is a break in time series for energy use in *oil and gas extraction* due to the application of the IEA's definition starting that year.

There are inconsistencies in the time series for *commercial/public services* as this sub-sector is computed as a residual.

Slovenia

Source

Statistical Office of the Republic of Slovenia, Ljubljana.

General notes

From 1990 data for Slovenia are available. Prior to that, they are included in Former Yugoslavia.

Between 1999 and 2000 there are some breaks in series due to the implementation of a new energy data collection system in January 2001.

Supply

The country of the trading station where the gas was purchased is often reported as the country of origin for the *imports*, instead of the country where the gas was produced.

In 2017, Slovenia started exporting small quantities of **natural gas** to Croatia.

Transformation

In 2014, improvements in a *main activity producer CHP* plant resulted in a substantial reduction of **natural gas** consumption in this sector.

Consumption

In 2011, the decrease in the *chemical and petrochemical* sector non-energy use consumption is due to minimal use of gas for production of methanol.

There are inconsistencies in the time series for *commercial/public services* as this sub-sector is computed by the Slovenian administration as a residual.

Spain

Source

Ministry for the Ecological Transition and the Demographical Challenge, Madrid.

General notes

Between 2014 and 2015, there is a break in the time series due to an improvement in data collection for the *industry* sector.

Between 2013 and 2014 there are breaks in series for some *transformation* sectors due to the implementation of a new tool for data collection.

Between 2008 and 2009 there is a break in stock levels due to the exclusion of mechanically recoverable *cushion gas* from the reported levels.

Between 2005 and 2006 there are some breaks in time series for the energy *industry own use* and for *final consumption* due to a change in the estimation methodology.

Between 2002 and 2003 there is a break in *stock levels* due to an improvement in *stock levels* data from 2003 onwards.

Supply

Between 1996 and 1997 total *imports* and domestic supply increased due to the enlargement of the gas grid.

Pipeline *imports* data from France are reported based on the country of last consignment.

Exports include re-exported gas volumes.

Transformation

The increase in the *transformation sector* consumption for 2017 comes from more gas-fired plants being used to compensate decreased hydro generation due to a drought.

Due to the implementation of an updated tool for gathering information on electricity generation plants in 2013 many *autoproducer electricity* plants were reclassified as *autoproducer CHP* plants.

In 1997, the increase in *main activity producer electricity* consumption is due to two *main activity electricity producers* running on **natural gas**.

Between 1993 and 1994 there is a break in time series in *autoproducer CHP* plants consumption, since a new survey revealed a large number of CHP autoproducers that were previously included in industry consumption.

Since 1990 the decrease of **natural gas** inputs into **gas works gas** production is due to the substitution of **natural gas** by manufactured gas.

Consumption

Between 2021 and 2022 there is a break in the time series for *transmission and distribution losses* and *pipeline transport* in which some data was reassigned from the former to the latter.

Between 2021 and 2022 there is a break in the time series for chemical and petrochemical in which an increase in information lead to a decrease in energy use and an increase in non-energy use.

Since 2021, data reported in *liquefaction / regasification plants* represent **LNG** that is used for cooldown of international ships. Previously this data was included in *transmission and distribution losses.*

Since 2001, the final consumption breakdown is estimated by the Spanish administration.

Prior to 1982, **natural gas** consumption in textiles and leather, transportation equipment and machinery are included in not elsewhere specified (Industry).

Sweden

Source

Energimyndigheten, Eskilstuna.

General notes

In 2013, the **natural gas** consumed by *oil refineries* has been estimated by the IEA Secretariat.

In 2008, total final consumption and its breakdown have been estimated by the IEA Secretariat based on other Statistics Sweden publications.

Supply

Natural gas consumption data in *international marine bunkers* are available for the first time for the year 2017.

Transformation

Autoproducer inputs to waste-heat production that are sold are reported in the respective end-use sectors and not in the *transformation sector*.

Consumption

Prior to 1993 *road* transport is included in *commercial/public services*.

Switzerland

Source

Swiss Federal Office of Energy - SFOE, Ittigen.

General notes

Since 2017, consumption reported in *not elsewhere specified (other)* is calculated as residual flow for **natural gas**.

Supply

Imports are attributed according to the importing company's registered office, instead of gas' ultimate country of origin.

Transformation

Since 2013, there are fluctuations in **natural gas** consumption of *main activity producers CHP* plants due to the fuel flexibility of a plant.

In 1996, the increase of gas consumption in *main activity CHP* plants is due to more complete accounting for all producing entities.

Consumption

Between 1998 and 1999 there are breaks in series for the final consumption breakdown due to the introduction of a new survey.

Republic of Turkiye

Source

Petrol İşleri Genel Müdürlüğü, Ankara.

General notes

Between 2008 and 2009 there is a break in the time series due to consumption data being collected by a different institution, the Turkish Energy Market Regulatory Authority.

In 2006, there is a break in time series for non-energy use in *chemical and petrochemical* industry due to classification improvements.

Not elsewhere specified (Industry) includes the **natural gas** distributed by OIZ (Organised Industrial Zones).

In December 2016, the first Floating Storage and Regasification Unit (FSRU) terminal started to work allowing greater *import* quantities and *stock levels*.

Supply

In 2023, the Sakarya gas field became operational leading to a significant increase in *indigenous production*.

LNG Exports to Switzerland is natural gas which is sold to a Swiss-based company by loading it on a cargo ship, the destination of consumption is unknown.

LNG Exports to Serbia are exported by road tanker.

Exports reported the by the Turkish administration represent transit gas.

Transformation

Not elsewhere specified (Transformation) of **natural gas** represents amounts used to produce hydrogen for hydrocracking in refineries.

Consumption

In 2015, a new survey was introduced by the Turkish administration to collect industrial consumption data, resulting in a substantial decrease of consumption reported under *not elsewhere specified (Industry)*.

Prior to 2001, *commercial/public services* consumption was included in the *residential* data.

Between 1999 and 2001 the decrease in **natural gas** consumption in *chemical and petrochemical* non-energy use is due to the fertiliser industry.

Not elsewhere specified (Energy) sector includes gas used for heating and pumping operations in the distribution network.

United Kingdom

Source

Department for Energy Security and Net Zero, London.

General notes

Since 1992, *transmission and distribution losses* include metering differences and losses due to pipeline leakage.

Prior to 1985, transmission and distribution losses include stock changes.

Supply

In 2009, the increase in LNG *imports* is due to the expansion of the Isle of Grain terminal and two new terminals at Milford Haven.

In 2002, the increase in *imports* is due to increased supplies from the Norwegian sector of the North Sea through the Vesterled pipeline, which was commissioned in the 4th quarter of 2001.

Imports from Belgium reflect physical flows from unknown origin through the Bacton-Zeebrugge Interconnector.

Exports reported under *not elsewhere specified* are all delivered to the Isle of Man.

Transformation

The **natural gas** reported in *coke ovens (Transformation)* is used to form synthetic coke oven gas rather than undergoing a coking process.

Consumption

In the 2023 preliminary data, there is a break in the time series for *transmission and distribution losses* and *commercial and public services*. This break will be resolved in the next version in which 2022 data will be revised.

Between 2015 and 2016 there are some breaks in the time series in the *energy, industry,* and *other sectors* due to a change in methodology.

Before 2008 consumption of **natural gas** in the *commercial* sector is included in *not elsewhere specified (Other)* while *public services* consumption is shown separately.

Between 2007 and 2008 there are some breaks in time series in sectoral consumption due to a new methodology of data estimation.

Consumption includes substitute **natural gas** made at gas works and piped into the natural gas distribution system.

Not elsewhere specified (Energy) includes gas used for heating and pumping operations in the distribution network.

Data in *not elsewhere specified (Industry)* refers to sales by independent gas suppliers unallocated by categories.

Natural gas consumed by the mining and quarrying and the wood and wood products sub-sectors is included under not elsewhere specified (Industry).

United States

Source

Energy Information Administration, Washington, DC.

General notes

Puerto Rico is currently not included in US data for natural gas with the exception of gas consumed for electricity generation. LNG imports into Puerto Rico are reported as *Other non-OECD Americas*.

The data for the Industrial Sector consumption is based on models by the EIA.

Between 2001 and 2002 there is a break in the time series for the energy and industry sectors due to a new methodology based on the last historical year of the most recent Annual Energy Outlook (AEO) publication.

Between 1995 and 2001 the detailed breakdown of industry consumption is estimated by the Energy Information Administration using the Manufacturing Energy Consumption Survey (MECS), which is conducted quadrennially.

Supply

The *LNG exports* have been increasing since 2015, due to new liquefaction capacity (i.e. Sabine Pass) coming online which also resulted in numerous new export destinations. *LNG exports* include re-exports.

Transformation

Since 2012, data reported for *not elsewhere specified (Transformation)* represent **natural gas** used for hydrogen manufacture. Prior to 2012, these quantities are reported under the *chemical and petrochemical* sector.

Between 1999 and 2000 there are some breaks in time series for the transformation subsectors due to a new data reporting method.

Between 1990 and 2002 the amounts of **gas works gas** that are blended with **natural gas** have been estimated on the basis of the output efficiency of the process.

Since 1989 consumption by *autoproducer CHP* plants is available, while consumption by *autoproducer electricity* and *main activity producer CHP* plants are available since 1991. Prior to these years these consumptions are included in *industry* and *commercial/public services*.

Consumption

Between 2009 and 2010 then 2020 and 2021 there is a break in the times series for the flow *construction* due to a change in methodology.

Due to revisions made to the iron and steel model, there is a break in the time series between 2014 and 2015 for the consumption in *blast furnaces (Energy)*.

Until 2001, *agriculture/forestry* consumption is included under *industry*.

Prior to 1995 a detailed breakdown of *industry* consumption is not available (between 1990 and 1994 chemical consumption is estimated by the American administration).

In 1991 data on **natural gas** use in the *road sector* were collected for the first time and are not available for previous years.

Consumption in *fisheries* is included under *industry*.

Units and conversions

General conversion factors for energy

To	TJ	Gcal	Mtoe	MBtu	GWh
From:	multiply by:				
terajoule (TJ)	1	$2.388x10^{2}$	$2.388x10^{-5}$	$9.478x10^{2}$	$2.778x10^{-1}$
gigacalorie (Gcal)	$4.187x10^{-3}$	1	$1.000x10^{-7}$	3.968	$1.163x10^{-3}$
million tonnes of oil equivalent (Mtoe)	$4.187x10^{4}$	$1.000x10^{7}$	1	$3.968x10^{7}$	$1.163x10^{4}$
million British thermal units (MBtu)	$1.055x10^{-3}$	$2.520x10^{-1}$	$2.520x10^{-8}$	1	$2.931x10^{-4}$
gigawatt hour (GWh)	3.600	$8.598x10^{2}$	$8.598x10^{-5}$	$3.412x10^{3}$	1

Conversion factors for mass

To	kg	t	lt	st	lb
From:	multiply by:				
kilogramme (kg)	1	$1.000x10^{-3}$	$9.842x10^{-4}$	$1.102x10^{-3}$	2.205
tonne (t)	$1.000x10^{3}$	1	$9.842x10^{-1}$	1.102	$2.205x10^{3}$
long ton (lt)	$1.016x10^{3}$	1.016	1	1.120	$2.240x10^{3}$
short ton (st)	$9.072x10^{2}$	$9.072x10^{-1}$	$8.929x10^{-1}$	1	$2.000x10^{3}$
pound (lb)	$4.536x10^{-1}$	$4.536x10^{-4}$	$4.464x10^{-4}$	$5.000x10^{-4}$	1

Conversion factors for volume

To	gal U.S.	gal U.K.	bbl	ft^3	l	m^3
From:	multiply by:					
U.S. gallon (gal U.S.)	1	$8.327x10^{-1}$	$2.381x10^{-2}$	$1.337x10^{-1}$	3.785	$3.785x10^{-3}$
U.K. gallon (gal U.K.)	1.201	1	$2.859x10^{-2}$	$1.605x10^{-1}$	4.546	$4.546x10^{-3}$
barrel (bbl)	$4.200x10^{1}$	$3.497x10^{1}$	1	5.615	$1.590x10^{2}$	$1.590x10^{-1}$
cubic foot (ft^3)	7.481	6.229	$1.781x10^{-1}$	1	$2.832x10^{1}$	$2.832x10^{-2}$
litre (l)	$2.642x10^{-1}$	$2.200x10^{-1}$	$6.290x10^{-3}$	$3.531x10^{-2}$	1	$1.000x10^{-3}$
cubic metre (m^3)	$2.642x10^{2}$	$2.200x10^{2}$	6.290	$3.531x10^{1}$	$1.000x10^{3}$	1

Conversion factors from mass or volume to heat (Gross calorific value)

	LNG[2]		GAS									
			Norway		Netherlands		Russia		Algeria		Qatar	
To:	MJ	Btu	MJ	Btu	MJ	Btu	MJ	Btu	MJ	Btu	MJ	Btu
From:	multiply by:											
cm[1]	40.00	37 913	40.00	37 913	33.32	31 581	38.23	36 235	39.19	37 145	41.17	39 018
Kg	54.25	51 417	52.22	49 495	42.07	39 875	55.25	52 363	52.46	49 726	54.98	52 107

[1]. At 15ºC and 760 mm Hg
[2]. In gaseous state – average OECD imports

Conversion factors for natural gas

Scm versus Ncm

To:	Standard cm	Normal cm
From:	multiply by:	
Standard cm[3]	1	9.480×10^{-1}
Normal cm[4]	1.055	1

[3]. 1 Scm measured at 15ºC and 760 mm Hg
[4]. 1 Ncm measured at 0ºC and 760 mm Hg

LNG versus GAS

To:	t of LNG	cm of LNG	Standard cm
From:	multiply by:		
t of LNG	1	2.220	1.360×10^{3}
cm of LNG	4.500×10^{-1}	1	6.150×10^{2}
Standard cm[5]	7.350×10^{-4}	1.626×10^{-3}	1

[5]. 1 Scm = 40 MJ

Gross versus net calorific value

1 NCV[6] = 0.9 GCV[7]

[6]. NCV = Net Calorific Value
[7]. GCV = Gross Calorific Value

Conversion factors for natural gas flow rates[8]

To	Bcm per year	Mt per year	Bcf/d	Tcf per year	PJ per year	TWh per year	MBtu per year	Mtoe per year
From:	multiply by:							
Bcm per year	1	$7.350x10^{-1}$	$9.681x10^{-2}$	$3.534x10^{-2}$	$4.000x10^{1}$	$1.111x10^{1}$	$3.790x10^{7}$	$9.554x10^{-1}$
Mt per year	1.360	1	$1.317x10^{-1}$	$4.808x10^{-2}$	$5.440x10^{1}$	$1.511x10^{1}$	$5.160x10^{7}$	1.299
Bcf/d	$1.033x10^{1}$	7.595	1	$3.650x10^{-1}$	$4.132x10^{2}$	$1.148x10^{2}$	$3.910x10^{8}$	9.869
Tcf per year	$2.830x10^{1}$	$2.081x10^{1}$	2.740	1	$1.132x10^{3}$	$3.145x10^{2}$	$1.070x10^{9}$	$2.704x10^{1}$
PJ per year	$2.500x10^{-2}$	$1.838x10^{-2}$	$2.420x10^{-3}$	$8.834x10^{-4}$	1	$2.778x10^{-1}$	$9.470x10^{5}$	$2.388x10^{-2}$
TWh per year	$9.000x10^{-2}$	$6.615x10^{-2}$	$8.713x10^{-3}$	$3.180x10^{-3}$	3.600	1	$3.410x10^{6}$	$8.598x10^{-2}$
MBtu per year	$2.638x10^{-8}$	$1.939x10^{-8}$	$2.554x10^{-9}$	$9.320x10^{-10}$	$1.055x10^{-6}$	$2.930x10^{-7}$	1	$2.520x10^{-8}$
Mtoe per year	1.047	$7.693x10^{-1}$	$1.013x10^{-1}$	$3.698x10^{-2}$	$4.187x10^{1}$	$1.163x10^{1}$	$3.970x10^{7}$	1

[8]. Based on gas with calorific value of 40 MJ/cm at standard conditions

Decimal prefixes

10^{1}	deca (da)	10^{-1}	deci (d)
10^{2}	hecto (h)	10^{-2}	centi (c)
10^{3}	kilo (k)	10^{-3}	milli (m)
10^{6}	mega (M)	10^{-6}	micro (µ)
10^{9}	giga (G)	10^{-9}	nano (n)
10^{12}	tera (T)	10^{-12}	pico (p)
10^{15}	peta (P)	10^{-15}	femto (f)
10^{18}	exa (E)	10^{-18}	atto (a)

Country specific conversion factors

Average[1] Gross Calorific Value of Natural Gas (kJ/m^3)

	Production	Imports	Exports	Consumption
Albania	33 482	37 700	37 700	33 482
Algeria	39 565	-	39 565	39 565
Angola	38 000	38 000	38 000	38 000
Argentina	38 937	38 937	38 937	38 937
Armenia	-	38 498	-	38 498
Australia	38 259	41 989	41 009	38 512
Austria	38 600	38 600	38 600	38 596
Azerbaijan	39 060	39 060	39 060	39 060

Average[1] Gross Calorific Value of Natural Gas (kJ/m^3)

	Production	Imports	Exports	Consumption
Bahrain	38 000	38 000	38 000	38 000
Bangladesh	38 861	38 861	38 861	38 861
Belarus	37 738	37 738	-	37 738
Belgium	35 335	38 283	39 461	38 148
Plurinational State of Bolivia	38 940	38 940	38 940	38 940
Bosnia and Herzegovina	-	37 861	-	37 861
Brazil	40 528	40 528	-	40 528
Brunei Darussalam	36 981	42 000	36 989	36 989
Bulgaria	38 985	38 714	38 733	38 772
Cameroon	38 000	-	38 000	38 000
Canada	39 230	39 230	39 230	39 338
Chile	39 109	39 109	39 109	39 109
People's Republic of China	38 931	38 865	38 931	38 931
Colombia	35 231	35 235	34 598	35 237
Republic of the Congo	38 000	38 000	38 000	38 000
Cote d'Ivoire	37 283	37 283	37 283	37 283
Croatia	38 560	38 560	38 560	38 560
Cuba	36 957	36 957	36 957	36 957
Czech Republic	38 447	38 365	-	38 366
Democratic Republic of the Congo	40 000	40 000	40 000	40 000
Denmark	40 331	40 331	40 331	40 331
Dominican Republic	38 000	34 750	38 000	34 750
Ecuador	34 783	34 783	34 783	34 783
Egypt	38 459	38 000	38 459	38 459
Estonia	-	38 377	-	38 390
Finland	-	38 382	-	38 381
Republic of North Macedonia	-	38 896	-	38 851
France	41 760	41 355	41 760	41 760
Gabon	37 700	37 700	37 700	37 700
Georgia	40 038	40 038	-	40 038
Germany	33 119	37 737	38 988	37 383
Ghana	-	38 000	-	38 000
Greece	49 633	39 444	39 801	39 416
Hong Kong (China)	38 000	38 000	38 000	38 000
Hungary	35 959	38 843	38 853	38 347
India	39 000	41 400	38 520	40 102
Indonesia	40 600	40 600	40 600	40 600
Islamic Republic of Iran	39 356	39 356	39 356	39 356
Iraq	38 000	38 000	38 000	38 000
Ireland	37 673	39 471	-	38 540

Average[1] Gross Calorific Value of Natural Gas (kJ/m^3)

	Production	Imports	Exports	Consumption
Israel	37 950	37 951	37 950	37 951
Italy	38 100	38 100	38 100	38 100
Japan	39 790	41 303	-	41 579
Jordan	31 223	31 223	31 223	31 223
Kazakhstan	40 879	40 888	40 879	40 799
Korea	41 714	41 714	-	41 714
Kuwait	38 000	38 000	38 000	38 000
Kyrgyzstan	36 058	39 023	-	38 801
Latvia	-	37 971	-	37 971
Libya	38 000	38 000	38 000	38 000
Lithuania	-	38 734	38 762	38 729
Luxembourg	-	40 990	-	40 978
Malaysia	39 249	39 249	39 249	39 249
Mexico	39 604	38 767	37 820	37 165
Republic of Moldova	32 302	33 865	-	33 863
Morocco	39 685	39 685	39 685	39 685
Mozambique	41 270	41 270	41 270	41 270
Myanmar	39 269	-	39 269	39 269
Netherlands	33 339	33 339	33 339	33 339
Nigeria	38 000	38 000	38 000	38 000
Norway	39 382	39 229	39 235	42 154
New Zealand	39 892	-	-	39 887
Oman	37 865	41 400	41 700	38 034
Pakistan	-	39 145	-	39 145
Peru	44 922	44 922	44 922	44 922
Philippines	38 549	38 549	38 549	38 549
Poland	28 276	38 598	38 406	35 865
Portugal	-	40 453	-	40 453
Qatar	41 400	41 400	41 400	41 400
Romania	38 124	37 065	37 842	37 843
Russian Federation	38 230	38 230	38 230	38 672
Saudi Arabia	38 000	-	-	38 000
Senegal	34 532	34 532	34 532	34 532
Serbia	37 042	37 042	-	37 042
Singapore	38 000	38 000	38 000	38 000
Slovak Republic	38 706	38 790	-	38 765
Slovenia	39 581	37 862	39 628	37 873
South Africa	38 000	38 000	38 000	38 000
Spain	40 538	40 482	40 487	40 474
Sweden	-	41 986	44 469	39 743

Average[1] Gross Calorific Value of Natural Gas (kJ/m³)

	Production	Imports	Exports	Consumption
Switzerland	-	38 088	-	38 088
Syrian Arab Republic	37 700	37 700	37 700	37 700
Chinese Taipei	37 216	41 868	37 263	41 837
Tajikistan	35 257	39 600	37 700	39 569
United Republic of Tanzania	38 139	38 000	38 139	38 139
Thailand	36 396	36 396	36 396	36 396
Trinidad and Tobago	38 937	38 937	38 937	38 937
Tunisia	39 529	40 211	-	39 901
Republic of Turkiye	38 267	38 302	38 305	38 301
Turkmenistan	37 889	-	37 889	37 889
United Arab Emirates	37 679	38 000	37 679	37 679
United Kingdom	39 144	39 343	39 452	39 713
Ukraine	37 146	38 383	38 000	37 376
Uruguay	38 000	38 000	38 000	38 000
United States	38 632	37 986	38 632	38 650
Uzbekistan	34 001	34 001	34 001	34 001
Bolivarian Republic of Venezuela	35 755	35 755	35 755	35 755
Viet Nam	38 612	38 612	38 612	38 612
Yemen	40 089	40 600	40 089	40 089

[1]. Average values for 2017 to 2021.

Abbreviations

Bcm	:	billion cubic metres
Btu	:	British thermal unit
cm	:	cubic metre
GWh	:	gigawatt hour
kcal	:	kilocalorie
kg	:	kilogramme
kJ	:	kilojoule
m3	:	cubic metre
Mcm	:	million cubic metres
Mt	:	million metric tonnes
Ncm	:	normal cubic metre
Scm	:	standard cubic metre
t	:	metric ton = tonne
TJ	:	terajoule
toe	:	tonne of oil equivalent
CHP	:	combined heat and power
GCV	:	gross calorific value
LNG	:	liquefied natural gas
NCV	:	net calorific value
TPES	:	total primary energy supply
IEA	:	International Energy Agency
OECD	:	Organisation for Economic Co-Operation and Development
c	:	confidential
e	:	estimated
..	:	not available
x	:	not applicable

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