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► **B** REGULATION (EC) No 1099/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 22 October 2008

on energy statistics

(Text with EEA relevance)

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**REGULATION (EC) No 1099/2008 OF THE EUROPEAN
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THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE
EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and
in particular Article 285(1) thereof,

Having regard to the proposal from the Commission,

Acting in accordance with the procedure laid down in Article 251 of the
Treaty ⁽¹⁾,

Whereas:

- (1) The Community needs to have precise and timely data on energy quantities, their forms, sources, generation, supply, transformation and consumption, for the purpose of monitoring the impact and consequences of its policy work on energy.
- (2) Energy statistics have traditionally been focused on energy supply and on fossil energies. In the coming years, greater focus is needed on increased knowledge and monitoring of final energy consumption, renewable energy and nuclear energy.
- (3) The availability of accurate, up-to-date information on energy is essential for assessing the impact of energy consumption on the environment, in particular in relation to the emission of greenhouse gasses. This information is required by Decision No 280/2004/EC of the European Parliament and of the Council of 11 February 2004 concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol ⁽²⁾.
- (4) Directive 2001/77/EC of the European Parliament and of the Council of 27 September 2001 on the promotion of electricity produced from renewable energy sources in the internal electricity market ⁽³⁾ and Directive 2004/8/EC of the European Parliament and of the Council of 11 February 2004 on the promotion of cogeneration based on a useful heat demand in the internal energy market ⁽⁴⁾ require Member States to report quantitative energy data. In order to monitor progress towards the achievement of the objectives set in those Directives, detailed, up-to-date energy data are required.

⁽¹⁾ Opinion of the European Parliament of 12 March 2008 (not yet published in the Official Journal) and Council Decision of 15 September 2008.

⁽²⁾ OJ L 49, 19.2.2004, p. 1.

⁽³⁾ OJ L 283, 27.10.2001, p. 33.

⁽⁴⁾ OJ L 52, 21.2.2004, p. 50.

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- (5) Directive 2002/91/EC of the European Parliament and of the Council of 16 December 2002 on the energy performance of buildings ⁽¹⁾, Directive 2006/32/EC of the European Parliament and of the Council of 5 April 2006 on energy end-use efficiency and energy services ⁽²⁾ and Directive 2005/32/EC of the European Parliament and of the Council of 6 July 2005 establishing a framework for the setting of ecodesign requirements for energy-using products ⁽³⁾ require Member States to report quantitative energy consumption data. To monitor progress towards the achievement of the objectives set in those Directives, detailed, up-to-date energy data, as well as a better interface between these energy data and related statistical surveys such as the population and housing censuses and transportation data, are required.
- (6) The Green Papers of the Commission of 22 June 2005 on Energy Efficiency and of 8 March 2006 on a European Strategy for Sustainable, Competitive and Secure Energy discuss EU energy policies for which the availability of EU energy statistics are required, including for the purpose of establishing a European Energy Market Observatory.
- (7) The establishment of a public domain energy forecast model, as called for by the European Parliament in its Resolution of 14 December 2006 on a European Strategy for Sustainable, Competitive and Secure Energy ⁽⁴⁾ requires detailed, up-to-date energy data.
- (8) In the coming years, greater attention should be paid to the security of supply of the most important fuels and more timely and more accurate data at EU level is needed to anticipate and coordinate EU solutions to possible supply crises.
- (9) The liberalisation of the energy market and its growing complexity make it increasingly difficult to obtain reliable, timely energy data in the absence, in particular, of a legal basis concerning the provision of such data.
- (10) In order for the energy statistics system to assist political decision-making by the European Union and its Member States and promote public debate which includes citizens, it must afford guarantees of comparability, transparency, flexibility and ability to evolve. Thus, in the near future, statistics on nuclear energy should be incorporated and relevant data concerning renewable energy should be developed more. Similarly, with regard to energy efficiency, the availability of detailed statistics on habitat and transport would be extremely useful.

⁽¹⁾ OJ L 1, 4.1.2003, p. 65.

⁽²⁾ OJ L 114, 27.4.2006, p. 64.

⁽³⁾ OJ L 191, 22.7.2005, p. 29.

⁽⁴⁾ OJ C 317 E, 23.12.2006, p. 876.

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- (11) The production of Community statistics is governed by the rules set out in Council Regulation (EC) No 322/97 of 17 February 1997 on Community Statistics ⁽¹⁾.
- (12) Since the objective of this Regulation, namely establishing a common framework for the production, transmission, evaluation and dissemination of comparable energy statistics in the Community cannot be sufficiently achieved by the Member States and can therefore be better achieved at Community level, the Community may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty. In accordance with the principle of proportionality, as set out in that Article, this Regulation does not go beyond what is necessary to achieve that objective.
- (13) In the production and dissemination of Community statistics under this Regulation, the national and Community statistical authorities should take account of the principles set out in the European Statistics Code of Practice, which was adopted on 24 February 2005 by the Statistical Programme Committee, established by Council Decision 89/382/EEC, Euratom ⁽²⁾ and attached to the Recommendation of the Commission on the independence, integrity and accountability of the national and Community statistical authorities.
- (14) The measures necessary for the implementation of this Regulation should be adopted in accordance with Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission ⁽³⁾.
- (15) In particular, power should be conferred on the Commission to modify the list of data sources, the national statistics and the applicable clarifications or definitions as well as the transmission arrangements and to establish and modify the annual nuclear statistics, once incorporated, to modify the renewable energy statistics, once incorporated, and to establish and modify the final energy consumption statistics. Since those measures are of general scope and are designed to amend non-essential elements of this Regulation, inter alia, by supplementing it with new non-essential elements, they must be adopted in accordance with the regulatory procedure with scrutiny provided for in Article 5(a) of Decision 1999/468/EC.
- (16) It is necessary to provide that the Commission may grant exemptions or derogations to Member States from those aspects of the energy data collection that would lead to an excessive burden on respondents. The exemptions or derogations should be granted only upon receipt of a proper justification which indicates the present situation and the excessive burden transparently. The period for which they remain in force should be limited to the shortest time necessary.
- (17) The measures provided for in this Regulation are in accordance with the opinion of the Statistical Programme Committee,

⁽¹⁾ OJ L 52, 22.2.1997, p. 1.

⁽²⁾ OJ L 181, 28.6.1989, p. 47.

⁽³⁾ OJ L 184, 17.7.1999, p. 23.

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HAVE ADOPTED THIS REGULATION:

*Article 1***Subject matter and scope**

1. This Regulation establishes a common framework for the production, transmission, evaluation and dissemination of comparable energy statistics in the Community.
2. This Regulation shall apply to statistical data concerning energy products and their aggregates in the Community.

*Article 2***Definitions**

For the purpose of this Regulation, the following definitions shall apply:

- (a) ‘Community statistics’ mean Community statistics as defined in the first indent of Article 2 of Regulation (EC) No 322/97;
- (b) ‘production of statistics’ means production of statistics as defined in the second indent of Article 2 of Regulation (EC) No 322/97;
- (c) ‘Commission (Eurostat)’ means the Community authority as defined in the fourth indent of Article 2 of Regulation (EC) No 322/97;
- (d) ‘energy products’ mean combustible fuels, heat, renewable energy, electricity, or any other form of energy;
- (e) ‘aggregates’ mean data aggregated at national level on the treatment or use of energy products, namely production, trade, stocks, transformation, consumption, and structural characteristics of the energy system such as installed capacities for electricity generation or production capacities for oil products;
- (f) ‘quality of data’ means the following aspects of statistical quality: relevance, accuracy, timeliness and punctuality, accessibility and clarity, comparability, coherence and completeness.

*Article 3***Data sources**

1. While applying the principles of maintaining a reduced burden on respondents and of administrative simplification, Member States shall compile data concerning energy products and their aggregates in the Community from the following sources:
 - (a) specific statistical surveys addressed to the primary and transformed energy producers and traders, distributors and transporters, importers and exporters of energy products;

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- (b) other statistical surveys addressed to final energy users in the sectors of manufacturing industry, transport, and other sectors, including households;
 - (c) other statistical estimation procedures or other sources, including administrative sources, such as regulators of the electricity and gas markets.
2. Member States shall lay down the detailed rules concerning the reporting of the data needed for the national statistics as specified in Article 4 by undertakings and other sources.
3. The list of data sources may be modified in accordance with the regulatory procedure with scrutiny referred to in Article 11(2).

*Article 4***Aggregates, energy products and the transmission frequency of national statistics**

1. The national statistics to be reported shall be as set out in the Annexes. They shall be transmitted with the following frequencies:
- (a) annual, for the energy statistics in Annex B;
 - (b) monthly, for the energy statistics in Annex C;
 - (c) short-term monthly, for the energy statistics in Annex D.
2. Applicable clarifications or definitions of the technical terms used are provided in the individual Annexes and also in Annex A (Clarifications of terminology).
3. The data to be forwarded and the applicable clarifications or definitions may be modified in accordance with the regulatory procedure with scrutiny referred to in Article 11(2).

*Article 5***Transmission and dissemination**

1. Member States shall transmit to the Commission (Eurostat) the national statistics referred to in Article 4.
2. The arrangements for their transmission, including the applicable time limits, derogations and exemptions therefrom, shall be as set out in the Annexes.
3. The arrangements for the transmission of the national statistics may be modified in accordance with the regulatory procedure with scrutiny referred in Article 11(2).
4. At the duly justified request of a Member State, additional exemptions or derogations may be granted by the Commission in accordance with the regulatory procedure referred to in Article 11(3), for those parts of the national statistics for which the collection would lead to an excessive burden on respondents.

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5. The Commission (Eurostat) shall disseminate yearly energy statistics by 31 January of the second year following the reported period.

*Article 6***Quality assessment and reports**

1. Member States shall ensure the quality of the data transmitted.

2. Every reasonable effort shall be undertaken to ensure coherence between energy data declared in accordance with Annex B and data declared in accordance with Commission Decision 2005/166/EC of 10 February 2005 laying down the rules for implementing Decision No 280/2004/EC of the European Parliament and of the Council concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol ⁽¹⁾.

3. For the purposes of this Regulation, the following quality assessment dimensions shall apply to the data to be transmitted:

- (a) 'relevance' shall refer to the degree to which statistics meet current and potential needs of the users;
- (b) 'accuracy' shall refer to the closeness of estimates to the unknown true values;
- (c) 'timeliness' shall refer to the delay between the availability of the information and the event or phenomenon it describes;
- (d) 'punctuality' shall refer to the delay between the date of the release of the data and the target date when it should have been delivered;
- (e) 'accessibility' and 'clarity' shall refer to the conditions and modalities by which users can obtain, use and interpret data;
- (f) 'comparability' shall refer to the measurement of the impact of differences in applied statistical concepts and measurement tools and procedures where statistics are compared between geographical areas, sectoral domains or over time;
- (g) 'coherence' shall refer to the adequacy of the data to be reliably combined in different ways and for various uses.

4. Every five years, Member States shall provide the Commission (Eurostat) with a report on the quality of the data transmitted as well as on any methodological changes that have been made.

5. Within six months of receipt of a request from the Commission (Eurostat), and in order to allow it to assess the quality of the data transmitted, Member States shall send to the Commission (Eurostat) a report containing any relevant information concerning the implementation of this Regulation.

⁽¹⁾ OJ L 55, 1.3.2005, p. 57.

*Article 7***Time reference and frequency**

Member States shall compile all data specified in this Regulation from the beginning of the calendar year following the adoption of this Regulation, and shall transmit them from then onwards with the frequencies laid down in Article 4(1).

*Article 8***Annual nuclear statistics**

The Commission (Eurostat) shall, in cooperation with the nuclear energy sector in the EU, define a set of annual nuclear statistics which shall be reported and disseminated from 2009 onwards, that year being the first reported period, without prejudice to confidentiality, where it is necessary, and avoiding any duplication of data collection, while at the same time keeping production costs low and the reporting burden reasonable.

The set of annual nuclear statistics shall be established and may be modified in accordance with the regulatory procedure with scrutiny referred to in Article 11(2).

*Article 9***Renewable energy statistics and final energy consumption statistics**

1. With a view to improving the quality of renewable energy and final energy consumption statistics, the Commission (Eurostat), in collaboration with the Member States, shall make sure that these statistics are comparable, transparent, detailed and flexible by:

- (a) reviewing the methodology used to generate renewable energy statistics in order to make available additional, pertinent, detailed statistics on each renewable energy source, annually and in a cost-effective manner. The Commission (Eurostat) shall present and disseminate the statistics generated from 2010 (reference year) onwards;
- (b) reviewing and determining the methodology used at national and Community level to generate final energy consumption statistics (sources, variables, quality, costs) based on the current situation, existing studies and feasibility pilot studies, as well as cost-benefit analyses yet to be conducted, and evaluating the findings of the pilot studies and cost-benefit analyses with a view to establishing breakdown keys for final energies by sector and main energy uses and gradually integrating the resulting elements into the statistics from 2012 (reference year) onwards.

2. The set of renewable energy statistics may be modified in accordance with the regulatory procedure with scrutiny referred to in Article 11(2).

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3. The set of final energy consumption statistics shall be established and may be modified in accordance with the regulatory procedure with scrutiny referred to in Article 11(2).

*Article 10***Implementing measures**

1. The following measures necessary for implementation of this Regulation, designed to amend non-essential elements of this Regulation, inter alia, by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 11(2):

- (a) modifications to the list of data sources (Article 3(3));
- (b) modifications to the national statistics and to the applicable clarifications or definitions (Article 4(3));
- (c) modifications to the transmission arrangements (Article 5(3));
- (d) establishment of and modifications to the annual nuclear statistics (Article 8(2));
- (e) modifications to the renewable energy statistics (Article 9(2));
- (f) establishment of and modifications to the final energy consumption statistics (Article 9(3)).

2. Additional exemptions or derogations (Article 5(4)) shall be granted in accordance with the regulatory procedure referred to in Article 11(3).

3. Consideration is to be given to the principle that additional costs and the reporting burden remain within reasonable limits.

*Article 11***Committee**

1. The Commission shall be assisted by the Statistical Programme Committee.

2. Where reference is made to this paragraph, Article 5a(1) to (4) and Article 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

3. Where reference is made to this paragraph Articles 5 and 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

The period provided for in Article 5(6) of Decision 1999/468/EC shall be three months.

*Article 12***Entry into force**

This Regulation shall enter into force on the 20th day following its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

▼ **M1***ANNEX A***CLARIFICATIONS OF TERMINOLOGY**

This Annex supplies explanations or definitions of terms that are used in the other Annexes.

1. GEOGRAPHICAL NOTES

For statistical reporting purposes only, the following geographical definitions apply:

- Australia excludes the overseas territories,
- Denmark excludes the Faeroe Islands and Greenland,
- France includes Monaco and excludes the French overseas territories Guadeloupe, Martinique, Guyane, Reunion, St.-Pierre and Miquelon, New Caledonia, French Polynesia, Wallis and Futuna, Mayotte,
- Italy includes San Marino and the Vatican,
- Japan includes Okinawa,
- The Netherlands excludes Suriname and the Netherlands Antilles,
- Portugal includes the Açores and Madeira,
- Spain includes the Canary Islands, the Balearic Islands, and Ceuta and Melilla,
- Switzerland does not include Liechtenstein,
- United States includes the 50 States, the District of Columbia, the US Virgin Islands, Puerto Rico and Guam.

2. AGGREGATES

Producers are classified according to the purpose of production:

- Main activity producer: enterprises, both privately or publicly owned, which generate electricity and/or heat for sale to third parties, as their principal activity,
- Autoproducers: enterprises, both privately or publicly owned, which generate electricity and/or heat wholly or partly for their own use as an activity which supports their primary activity.

Note: the Commission may further clarify terminology by adding relevant NACE references in accordance with the regulatory procedure with scrutiny referred to in Article 11(2) after a revision of the NACE classification has entered into force.

2.1. Supply and Transformation Sectors**Production/Indigenous Production**

Quantities of fuels extracted or produced, calculated after any operation for removal of inert matter. Production includes the quantities consumed by the producer in the production process (e.g. for heating or operation of equipment and auxiliaries) as well as supplies to other producers of energy for transformation or other uses.

Indigenous means: production from resources within the concerned state.

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Imports/Exports

For geographical definitions see 'Geographical Notes' section.

Unless specified differently, 'imports' refer to ultimate origin (the country in which the energy product was produced) for use in the country and 'exports' to the ultimate country of consumption of the produced energy product.

Amounts are considered as imported or exported when they have crossed the political boundaries of the country, whether customs clearance has taken place or not.

Where no origin or destination can be reported 'Other' may be used.

Statistical differences may arise if only total import and export are available on the above basis, while the geographical breakdown is based on a different survey, source or concept. In this case, differences shall be included under 'Other'.

International Marine Bunkers

Quantities of fuels delivered to 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. Excluded is:

- consumption by ships engaged in domestic navigation. The domestic/international split should be determined on the basis of port of departure and port of arrival, and not by the flag or nationality of the ship
- consumption by fishing vessels
- consumption by military forces.

Stock Changes

The difference between the opening stock level and closing stock level for stocks held on national territory.

Gross Consumption (calculated)

Calculated value, defined as:

Indigenous production + From other sources + Imports – Exports – International marine bunkers + Stock changes

Gross Consumption (observed)

The quantity actually recorded in surveys of end-use sectors.

Statistical Differences

Calculated value, defined as:

Calculated gross consumption – observed gross consumption.

Includes changes in stocks at final consumers when this cannot be specified as part of the 'Stock changes'.

Reasons for any major differences should be stated.

Main Activity Producer Electricity Plants

Fuel quantities used to produce electricity.

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Fuels used by plants containing at least one CHP unit are to be reported under Main Activity Producer CHP Plants.

Main Activity Producer Combined Heat and Power (CHP) Plants

Quantities of fuels used to produce electricity and heat.

Main Activity Producer Heat Plants

Quantities of fuels used to produce heat.

Autoproducer Electricity Plants

Quantities of fuels used to produce electricity.

Fuels used by plants containing at least one CHP unit are to be reported under Autoproducer CHP Plants.

Autoproducer Combined Heat and Power (CHP) Plants

Quantities of fuels that correspond to the quantity of electricity produced and heat sold.

Autoproducer Heat Plants

Quantities of fuels that correspond to the quantity of heat sold.

Patent Fuel Plants

Quantities used to produce fuels.

Quantities used for heating and operation of equipment should not be declared here, but declared as consumption in the Energy sector.

Coke Ovens

Quantities used in coke ovens.

Quantities used for heating and operation of equipment should not be declared here, but declared as consumption in the Energy sector.

BKB/PB plants

Quantities of lignite or brown coal used to produce brown coal briquettes (BKB) or of peat to produce peat briquettes (PB).

Quantities used for heating and operation of equipment should not be declared here, but declared as consumption in the Energy sector.

Gas Works

Quantities used to produce gas in gas works and coal gasification plants.

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Quantities used as a fuel for heating and operation of equipment should not be included here, but declared as consumption in the Energy sector.

Blast furnace

Quantities of coking coal and/or bituminous coal (generally referred to as PCI) and coke oven coke transformed in blast furnaces.

Quantities used as a fuel for heating and operation of blast furnaces (e.g.: blast furnaces gas) should not be included here, but declared as consumption in the Energy sector.

Coal Liquefaction

Quantities of fuel used to produce synthetic oil.

Petroleum refineries

Quantities used to produce petroleum products.

Quantities used as a fuel for heating and operation of equipment should not be declared here, but declared as consumption in the Energy sector.

Not Elsewhere Specified – Transformation

Quantities used for transformation activities not included elsewhere. If used, what is included under this heading should be explained in the report.

2.2. Energy sector and final consumption

Total Energy Sector

Quantities consumed by the energy industry to support the extraction (mining, oil and gas production) or plant operations of transformation activities. This corresponds to NACE Divisions 05, 06, 08.92, 07.21, 09.1, 19 and 35.

Excludes quantities of fuels transformed into another energy form (which should be reported under the Transformation sector) or used in support of the operation of oil, gas and coal slurry pipelines (which should be reported in the Transport Sector).

Includes the manufacture of chemical materials for atomic fission and fusion and the products of these processes.

Electricity, CHP and Heat Plants

Quantities consumed as energy at electricity plants, combined heat and power plants (CHP) and heat plants.

Coal Mines

Quantities consumed as energy to support the extraction and preparation of coal within the coal mining industry.

Coal burned in pithead power stations should be reported in the Transformation Sector.

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Patent fuel plants

Quantities consumed as energy at patent fuel plants.

Coke Ovens

Quantities consumed as energy at coking plants.

BKB/PB plants

Quantities used as energy in BKP/PB plants.

Gas Works/gasification works

Quantities consumed as energy at gas works and coal gasification plants.

Blast Furnaces

Quantities consumed as energy at blast furnaces.

Coal Liquefaction

Quantities consumed as energy at coal liquefaction plants.

Petroleum Refineries

Quantities consumed as energy at petroleum refineries.

Oil and Gas extraction

Quantities consumed as fuel in the oil and gas extraction process and in natural gas processing plants.

Excludes pipeline losses (to be reported as distribution losses) and energy quantities used to operate pipelines (to be reported in the Transport sector).

Total Final Consumption

Defined (calculated) as:

= Total non-energy use + Final Energy Consumption (Industry + Transport + Other sectors)

It excludes deliveries for transformation, use by the energy producing industries, and distribution losses.

Non-Energy Use

Energy products used as raw materials in the different sectors; that is, not consumed as a fuel or transformed into another fuel.

2.3. Energy end-use Specification

Final Energy Consumption

Total energy consumption in industry, transport and other sectors.

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Industry Sector

This refers to fuel quantities consumed by the industrial undertaking in support of its primary activities.

For heat only or CHP plants, only quantities of fuels consumed for the production of heat used by the plant itself are applicable. Quantities of fuels consumed for the production of heat that is sold, and for the production of electricity, should be reported under the appropriate Transformation sector.

Iron and Steel: NACE Divisions 24.1, 24.2, 24.3, 24.51 and 24.52.

Chemical (including Petrochemical)

Chemical and petrochemical industries; NACE Divisions 20 and 21.

Non-Ferrous Metals

Non-ferrous metals industries; NACE Divisions 24.4, 24.53 and 24.54.

Non-Metallic Minerals

Glass, ceramic, cement and other building materials industries; NACE Division 23.

Transport Equipment

Industries related to the equipment used for transport; NACE Divisions 29 and 30.

Machinery

Fabricated metal products, machinery and equipment other than transport equipment; NACE Divisions 25, 26, 27 and 28.

Mining and Quarrying

NACE Divisions 07 (except 07.21), 08 (except 08.92) and 09.9; it excludes energy producing industries.

Food, Beverages and Tobacco: NACE Divisions 10, 11 and 12.

Pulp, Paper and Printing

Includes production of recorded media; NACE Divisions 17 and 18.

Wood and Wood Products (other than pulp and paper): NACE Division 16.

Construction: NACE Division 41, 42 and 43.

Textile and Leather; NACE Divisions 13, 14 and 15.

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Not Elsewhere Specified – Industry

Consumption in sectors which is not covered above.

Transport Sector

Energy used in all transport activities irrespective of the economic sector in which the activity occurs; NACE Divisions 49, 50 and 51.

Transport Sector – Rail

All consumption for use in rail traffic, including industrial railways; NACE Divisions 49.1 and 49.2.

Transport Sector – Domestic Navigation

Quantities delivered to vessels of all flags not engaged in international navigation (see International marine bunkers). The domestic/international split should be determined on the basis of port of departure and port of arrival and not by the flag or nationality of the ship. NACE Division 50.

Transport Sector – Road

Quantities used in road vehicles.

Includes fuel used by agricultural vehicles on highways and lubricants for use in road vehicles.

Excludes energy used in stationary engines (see Other sector), for non-highway use in tractors (see Agriculture), military use in road vehicles (see Other sector – Not elsewhere specified), bitumen used in road surfacing and energy used in engines at construction sites (see Industry sub-sector Construction). NACE Divisions 49.3 and 49.4.

Transport Sector – Pipeline Transport

Quantities used as energy in the support and operation of pipelines transporting gases, liquids, slurries and other commodities; NACE Division 49.5.

Includes energy used for pump stations and maintenance of the pipeline.

Excludes energy used for the pipeline distribution of natural or manufactured gas, hot water or steam from the distributor to final users (to be reported in the energy sector), energy used for the final distribution of water to household, industrial, commercial and other users (to be included in Commercial and Public Services) and losses occurring during this transport between distributor and final users (to be reported as distribution losses).

Transport Sector – International Aviation

Quantities of aviation fuels delivered to aircraft for international aviation. The domestic/international split should be determined on the basis of departure and landing locations and not by the nationality of the airline. Part of NACE Division 51.

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Excludes fuels used by airlines for their road vehicles (to be reported in the transport sector – Not elsewhere specified) and military use of aviation fuels (to be reported in the Other sectors – Not elsewhere specified).

Transport Sector – Domestic Aviation

Quantities of aviation fuels delivered to aircraft for domestic aviation – commercial, private, agricultural, etc. Part of NACE Division 51.

Includes fuel used for purposes other than flying, e.g. bench testing of engines. The domestic/international split should be determined on the basis of departure and landing locations and not by the nationality of the airline.

Excludes fuels used by airlines for their road vehicles (to be reported in the transport sector – Not elsewhere specified) and military use of aviation fuels (to be reported in the Other sector – Not elsewhere specified).

Transport Sector – Not Elsewhere Specified

Quantities used for transport activities not included elsewhere.

Includes fuels used by airlines for their road vehicles and fuels used in ports for ships' unloaders, various types of cranes.

To be declared is what is included under this heading.

Other Sectors

Sectors not specifically mentioned or not belonging to energy, industry or transport.

Other Sectors – Commercial and Public Services

Fuels consumed by business and offices in the public and private sectors.

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, 85, 86, 87, 88, 90, 91, 92, 93, 94, 95, 96 and 99.

Other Sectors – Residential

To be declared are fuels consumed by all households including 'households with employed persons'. NACE Divisions 97 and 98.

Other Sectors – Agriculture/Forestry

Fuels consumed by users classified as agriculture, hunting and forestry; NACE Divisions 01 and 02.

Other Sectors – Fishing

Fuels 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) and energy used in the fishing industry. NACE Division 03.

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Other Sectors – Not Elsewhere Specified

These are activities not included elsewhere. This category includes military fuel use for all mobile and stationary consumption (e.g. ships, aircraft, road and energy used in living quarters), regardless of whether the fuel delivered is for the military of that country or for the military of another country. If used, what is included under this heading should be explained in the report.

3. OTHER TERMS

The meaning of the following abbreviations applies:

- TML: tetramethyl lead,
- TEL: tetraethyl lead,
- SBP: special boiling point,
- LPG: liquified petroleum gas,
- NGL: natural gas liquids,
- LNG: liquefied natural gas,
- CNG: compressed natural gas.



ANNEX B

ANNUAL ENERGY STATISTICS

This Annex describes the scope, units, reported period, frequency, deadline and transmission modalities for the annual collection of energy statistics.

Annex A applies for explanations of terms for which a specific explanation is not supplied in this Annex.

1. SOLID FOSSIL FUELS AND MANUFACTURED GASES

1.1. **Applicable energy products**

Unless otherwise specified this data collection applies to all of the following energy products:

Energy Product	Definition
1. Anthracite	High rank coal used for industrial and residential applications. It has generally less than 10 % volatile matter and a high carbon content (about 90 % fixed carbon). Its gross calorific value is greater than 23 865 kJ/kg (5 700 kcal/kg) on an ash-free but moist basis.
2. Coking Coal	Bituminous coal with a quality that allows the production of a coke suitable to support a blast furnace charge. Its gross calorific value is greater than 23 865 kJ/kg (5 700 kcal/kg) on an ash-free but moist basis.
3. Other Bituminous Coal (Steam coal)	Coal used for steam raising purposes and includes all bituminous coal that is not included under coking coal nor anthracite. It is characterised by higher volatile matter than anthracite (more than 10 %) and lower carbon content (less than 90 % fixed carbon). Its gross calorific value is greater than 23 865 kJ/kg (5 700 kcal/kg) on an ash-free but moist basis. If bituminous coal is used in coke ovens it should be reported as coking coal.
4. Sub-Bituminous Coal	Refers to non-agglomerating coal with a gross calorific value between 17 435 kJ/kg (4 165 kcal/kg) and 23 865 kJ/kg (5 700 kcal/kg) containing more than 31 % volatile matter on a dry mineral matter free basis.
5. Lignite/Brown Coal	Non-agglomerating coal with a gross calorific value less than 17 435 kJ/kg (4 165 kcal/kg) and greater than 31 % volatile matter on a dry mineral matter free basis. Oil shale and tar sands produced and combusted directly should be reported in this category. Oil shale and tar sands used as inputs for other transformation processes should also be reported in this category. This includes the portion of the oil shale or tar sands consumed in the transformation process.

▼ M1

Energy Product	Definition
	Shale oil and other products derived from liquefaction should be reported on the Annual Oil Questionnaire.
6. Peat	A combustible soft, porous or compressed, sedimentary deposit of plant origin with high water content (up to 90 % in the raw state), easily cut, of light to dark brown colour. Peat used for non-energy purposes is not included. This definition is without prejudice to the definition of renewable energy sources in Directive 2009/28/EC and to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories.
7. Patent Fuel	A composition fuel manufactured from hard coal fines with the addition of a binding agent. The amount of patent fuel produced may, therefore, be slightly higher than the actual amount of coal consumed in the transformation process.
8. Coke Oven Coke	The solid product obtained from carbonisation of coal, principally coking coal, at high temperature, it is low in moisture and volatile matter. Coke oven coke is used mainly in the iron and steel industry acting as energy source and chemical agent. Coke breeze and foundry coke are included in this category. Semi-coke (a solid product obtained from carbonisation of coal at low temperature) should be included in this category. Semi-coke is used as a domestic fuel or by the transformation plant itself. This heading also includes coke, coke breeze and semi-coke made from lignite/brown coal.
9. Gas Coke	By-product of hard coal used for production of town gas in gas works. Gas Coke is used for heating purposes.
10. Coal Tar	A result of the destructive distillation of bituminous coal. Coal tar is the liquid by-product of the distillation of coal to make coke in the coke oven process or it is produced from brown coal ('low-temperature tar'). Coal tar can be further distilled into different organic products (e.g. benzene, toluene, naphthalene), which normally would be reported as a feedstock to the petrochemical industry.
11. BKB (Brown Coal Briquettes)	BKB is a composition fuel manufactured from lignite/brown coal, produced by briquetting under high pressure without the addition of a binding agent. These figures include peat briquettes, dried lignite fines and dust.
12. Gas Works Gas	Covers all types of gases produced in public utility or private plants, whose main purpose is manufacture, transport and distribution of gas. It includes gas produced by carbonisation (including gas produced by coke ovens and transferred to gas

▼ **M1**

Energy Product	Definition
	<p>works gas), by total gasification with or without enrichment with oil products (LPG, residual fuel oil, etc.), and by reforming and simple mixing of gases and/or air, reported under the rows 'From Other Sources'. Under the transformation sector identify amounts of gas works gas transferred to blended natural gas which will be distributed and consumed through the natural gas grid.</p> <p>The production of other coal gases (i.e. coke oven gas, blast furnace gas and oxygen steel furnace gas) should be reported in the columns concerning such gases, and not as production of gas works gas. The coal gases transferred to gas works plants should then be reported (in their own column) in the transformation sector in the gas works plants row. The total amount of gas works gas resulting from transfers of other coal gases should appear in the production line for gas works gas.</p>
13. Coke Oven Gas	Obtained as a by-product of the manufacture of coke oven coke for the production of iron and steel.
14. Blast Furnace Gas	Produced during the combustion of coke in blast furnaces in the iron and steel industry. It is recovered and used as a fuel partly within the plant and partly in other steel industry processes or in power stations equipped to burn it. The quantity of fuel should be reported on a gross calorific value basis.
15. Oxygen Steel Furnace Gas	By-product of the production of steel in an oxygen furnace, recovered on leaving the furnace. The gas is also known as converter gas, LD gas or BOS gas.
16. Hard coal	The term 'hard coal' refers to coal of gross calorific value greater than 23 865 kJ/kg (5 700 kcal/kg) on an ashfree but moist basis and with a mean random reflectance of vitrinite of at least 0,6. Hard coal comprises all energy products from 1 to 3 together (anthracite, coking Coal and other Bituminous Coal).

1.2. **List of aggregates**

The following list of aggregates shall be declared for all energy products listed in the previous paragraph unless otherwise specified.

Annex A applies for explanations of terms for which a specific explanation is not supplied in this annex.

1.2.1. *Supply and Transformation Sectors*

1. Production

1.1. Of which: underground

Applicable only for anthracite, coking coal, other bituminous coal, subbituminous coal and lignite/brown coal.

▼ M1

-
- 1.2. Of which: surface
Applicable only for anthracite, coking coal, other bituminous coal, subbituminous coal and lignite/brown coal.
-
2. From Other Sources
This consists of two components:
- recovered slurries, middlings and other low-grade coal products, which cannot be classified according to type of coal. This includes coal recovered from waste piles and other waste receptacles,
 - supplies of fuel of which production is covered in other fuel energy balances, but for which consumption will occur in the coal energy balance.
-
- 2.1. Of which: from oil products
Not applicable for anthracite, coking coal, other bituminous coal, subbituminous coal and lignite/brown coal and peat.
E.g.: petroleum coke addition to coking coal for coke ovens
-
- 2.2. Of which: from natural gas
Not applicable for anthracite, coking coal, other bituminous coal, subbituminous coal and lignite/brown coal and peat.
E.g.: natural gas addition to gas works gas for direct final consumption
-
- 2.3. Of which: from renewables
Not applicable for anthracite, coking coal, other bituminous coal, subbituminous coal and lignite/brown coal and peat.
E.g.: industrial waste as binding agent in the manufacturing of patent fuel
-
3. Imports
-
4. Exports
-
5. International Marine Bunkers
-
6. Stock changes
A stock build is shown as a negative number and a stock draw is shown as a positive number.
-
7. Gross consumption
-
8. Statistical differences
-
9. Total transformation Sector
Quantities of fuels used for the primary or secondary conversion of energy (e.g. coal to electricity, coke oven gas to electricity) or used for the transformation to derived energy products (e.g.: coking coal to coke).
-
- 9.1. Of which: Main Activity Producer Electricity Plants
-
- 9.2. Of which: Main Activity Producer CHP Plants
-
- 9.3. Of which: Main Activity Producer Heat Plants
-
- 9.4. Of which: Autoproducer Electricity plants
-

▼ **M1**

9.5.	Of which: Autoproducer CHP plants
9.6.	Of which: Autoproducer Heat plants
9.7.	Of which: Patent Fuel Plants
9.8.	Of which: Coke Ovens
9.9.	Of which: BKB/PB Plants
9.10.	Of which: Gas Works
9.11.	Of which: Blast Furnaces Quantities of coking coal and/or bituminous coal (generally referred to as PCI) and coke oven coke transformed in blast furnaces. Amounts used as a fuel for heating and operation of blast furnaces (e.g.: blast furnaces gas) should not be included in the transformation sector, but reported as consumption in the energy sector.
9.12.	Of which: Coal Liquefaction Shale oil and other products derived from liquefaction should be reported as per Chapter 4 of this annex.
9.13.	Of which: For Blended Natural Gas Quantities of coal gases blended with natural gas.
9.14.	Of which: Not Elsewhere Specified – Transformation

1.2.2. *Energy Sector*

1.	Total Energy Sector
1.1.	Of which: Electricity, CHP and Heat plants
1.2.	Of which: Coal Mines
1.3.	Of which: Patent Fuel Plants
1.4.	Of which: Coke Ovens
1.5.	Of which: BKB/PB Plants
1.6.	Of which: Gas Works
1.7.	Of which: Blast Furnaces
1.8.	Of which: Petroleum Refineries
1.9.	Of which: Coal Liquefaction
1.10.	Of which: Not Elsewhere Specified – Energy
2.	Distribution losses Losses occurred due to transport and distribution, as well as flaring of manufactured gases.
3.	Total Final Consumption
4.	Total Non-energy use
4.1.	Of which: Industry, Transformation and Energy Sectors Non-energy use in all industry, transformation and energy sub-sectors, e.g. coal used to make methanol or ammonia.

▼ M1

4.1.1. From 4.1, of which: in the petrochemical sector
Non-energy use e.g. coal use as feedstocks to produce fertiliser
and as feedstocks for other petrochemical products.

4.2. Of which: Transport Sector
Non-energy use in all Transport sub-sectors.

4.3. Of which: Other Sectors
Non-energy use in Commercial and Public Services, Residential,
Agriculture and Not Elsewhere Specified Other.

1.2.3. *Energy end-use specification*

-
1. Final Energy Consumption
-
2. Industry Sector
-
- 2.1. Of which: Iron and Steel
-
- 2.2. Of which: Chemical and Petrochemical
-
- 2.3. Of which: Non-Ferrous Metals
-
- 2.4. Of which: Non-Metallic Minerals
-
- 2.5. Of which: Transport Equipment
-
- 2.6. Of which: Machinery
-
- 2.7. Of which: Mining and Quarrying
-
- 2.8. Of which: Food, Beverages and Tobacco
-
- 2.9. Of which: Pulp, Paper and printing
-
- 2.10. Of which: Wood and Wood Products
-
- 2.11. Of which: Construction
-
- 2.12. Of which: Textile and Leather
-
- 2.13. Of which: Not Elsewhere Specified – Industry
-
3. Transport Sector
-
- 3.1. Of which: Rail
-
- 3.2. Of which: Domestic Navigation
-
- 3.3. Of which: Not Elsewhere Specified – Transport
-
4. Other Sectors
-
- 4.1. Of which: Commercial and Public Services
-
- 4.2. Of which: Residential
-
- 4.3. Of which: Agriculture/Forestry
-
- 4.4. Of which: Fishing
-
- 4.5. Of which: Not Elsewhere Specified – Other
-

1.2.4. *Imports and exports*

Imports by country of origin, and exports by country of destination.

Not applicable to peat, gas coke, gas works gas, coke oven gas, blast furnace gas nor oxygen steel furnace gas.

▼ M11.2.5. *Inputs to autoproducers of electricity and heat generation*

Inputs to autoproducers of electricity and heat generation are to be declared separately for electricity only plants, for CHP plants, and for heat only plants.

These inputs to autoproducers are separated for the main activities listed in the following table:

1.	Total Energy Sector
1.1.	Of which: Coal Mines
1.2.	Of which: Patent Fuel Plants
1.3.	Of which: Coke Ovens
1.4.	Of which: BKB/PB Plants
1.5.	Of which: Gas Works
1.6.	Of which: Blast Furnaces
1.7.	Of which: Petroleum Refineries
1.8.	Of which: Coal Liquefaction
1.9.	Of which: Not Elsewhere Specified – Energy
2.	Industry Sector
2.1.	Of which: Iron and Steel
2.2.	Of which: Chemical and Petrochemical
2.3.	Of which: Non-Ferrous Metals
2.4.	Of which: Non-Metallic Minerals
2.5.	Of which: Transport Equipment
2.6.	Of which: Machinery
2.7.	Of which: Mining and Quarrying
2.8.	Of which: Food, Beverages and Tobacco
2.9.	Of which: Pulp, Paper and printing
2.10.	Of which: Wood and Wood Products
2.11.	Of which: Construction
2.12.	Of which: Textile and Leather
2.13.	Of which: Not Elsewhere Specified – Industry
3.	Transport Sector
3.1.	Of which: Rail
3.2.	Of which: Not Elsewhere Specified – Transport
4.	Other Sectors:
4.1.	Of which: Commercial and Public Services
4.2.	Of which: Residential
4.3.	Of which: Agriculture/Forestry

▼ M1

4.4. Of which: Fishing

4.5. Of which: Not Elsewhere Specified

1.3. Calorific values

Both gross and net calorific values are to be declared for the energy products mentioned in paragraph 1.1 for the following main aggregates.

Not applicable for gas works gas, coke oven gas, blast furnace gas and oxygen steel furnace gas:

1. Production

2. Imports

3. Exports

4. Used in coke ovens

5. Used in blast furnaces

6. Used in Main Activity Producer Electricity, CHP and Heat Plants

7. Used in Industry

8. For Other Uses

1.4. Production and stocks in coal mines

Only applicable for hard coal and for lignite/brown coal.

The following quantities must be declared:

1. Underground production

2. Surface production

3. From other sources

4. Stocks at end of period

4.1. Of which: stocks at mines

1.5. Units of measurement

1. Energy quantities	10 ³ tonnes Exception: for gases (gas works gas, coke oven gas, blast furnace gas, oxygen steel furnace gas) the measurement is directly in energy content and the unit to be used is therefore TJ (based on gross calorific values).
2. Calorific values	MJ/tonne

1.6. Derogations and exemptions

Not applicable.

2. NATURAL GAS**2.1. Applicable energy products**

This data collection applies to natural gas, which 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) or from coal seams (coal seam gas).

▼ M1

It does not include gases created by anaerobic digestion of biomass (e.g. municipal or sewage gas) nor gas works gas.

2.2. List of aggregates

The following list of aggregates shall be declared for all energy products listed in the previous paragraph unless otherwise specified.

2.2.1. Supply and Transformation Sectors

To be declared are quantities expressed in both volume and energy units, and including the gross and net calorific values, for the following aggregates:

-
1. Indigenous Production

All dry marketable production within national boundaries, including offshore production. Production is measured after purification and extraction of NGLs and sulphur.

Excludes extraction losses and quantities reinjected, vented or flared.

Includes quantities used within the natural gas industry; in gas extraction, pipeline systems and processing plants.

 - 1.1. Of which: Associated Gas

Natural gas produced in association with crude oil.

 - 1.2. Of which: Non-Associated Gas

Natural gas originating from fields producing hydrocarbons only in gaseous form.

 - 1.3. Of which: Colliery Gas

Methane produced at coal mines or from coal seams, piped to the surface and consumed at collieries or transmitted by pipeline to consumers.

 2. From Other Sources

Fuel which are blended with natural gas, and consumed as a blend.

 - 2.1. Of which: from oil products

LPG for upgrading the quality e.g. heat content

 - 2.2. Of which: from coal

manufactured gas for blending with natural gas

 - 2.3. Of which: from renewables

biogas for blending with natural gas

 3. Imports

 4. Exports

 5. International Marine Bunkers

 6. Stock changes

A stock build is shown as a negative number and a stock draw is shown as a positive number.

 7. Gross consumption

 8. Statistical differences

The requirement of declaring calorific values is not applicable here.

▼ M1

9. Recoverable gas: opening and closing stocks

Quantities of gas available for delivery during any input-output cycle. This refers to recoverable natural gas stored in special storage facilities (depleted gas and/or oil field, aquifer, salt cavity, mixed caverns, or other) as well as liquefied natural gas storage. Cushion gas should be excluded.

The requirement of declaring calorific values is not applicable here.

10. Gas Vented

The volume of gas released into the air on the production site or at the gas processing plant.

The requirement of declaring calorific values is not applicable here.

11. Gas Flared

The volume of gas burned in flares on the production site or at the gas processing plant.

The requirement of declaring calorific values is not applicable here.

12. Total transformation Sector

Quantities of fuels used for the primary or secondary conversion of energy (e.g. natural gas to electricity) or used for the transformation to derived energy products (e.g. natural gas to methanol).

12.1. Of which: Main Activity Producer Electricity Plants

12.2. Of which: Autoproducer Electricity plants

12.3. Of which: Main Activity Producer CHP Plants

12.4. Of which: Autoproducer CHP plants

12.5. Of which: Main Activity Producer Heat Plants

12.6. Of which: Autoproducer Heat plants

12.7. Of which: Gas Works

12.8. Of which: Coke Ovens

12.9. Of which: Blast Furnaces

12.10. Of which: Gas to liquids

Quantities of natural gas used as feedstock for the conversion to liquids e.g. the quantities of fuel entering the methanol production process for transformation into methanol.

12.11. Of which: Non specified – Transformation

2.2.2. *Energy Sector*

1. Total Energy Sector

1.1. Of which: Coal Mines

1.2. Of which: Oil and Gas extraction

▼ M1

1.3.	Of which: Inputs to oil refineries
1.4.	Of which: Coke Ovens
1.5.	Of which: Blast Furnaces
1.6.	Of which: Gas Works
1.7.	Of which: Electricity, CHP and Heat Plants
1.8.	Of which: Liquefaction (LNG) or Gasification
1.9.	Of which: Gas to Liquids
1.10.	Of which: Not Elsewhere Specified – Energy
2.	Losses of distribution and transport

2.2.3. Energy end-use specification

Consumption of natural gas needs to be reported for both energy use and (wherever applicable) non-energy use separately, for all of the following aggregates:

1.	Total Final Consumption Final energy consumption and non-energy use to be declared separately under this heading.
2.	Transport Sector
2.1.	Of which: Transport by road Includes both CNG and biogas.
2.1.1.	Of which: Biogas fraction in Transport by Road
2.2.	Of which: Pipeline transport
2.3.	Of which: Not Elsewhere Specified – Transport
3.	Industry Sector
3.1.	Of which: Iron and Steel
3.2.	Of which: Chemical and Petrochemical
3.3.	Of which: Non-Ferrous Metals
3.4.	Of which: Non-Metallic Minerals
3.5.	Of which: Transport Equipment
3.6.	Of which: Machinery
3.7.	Of which: Mining and Quarrying
3.8.	Of which: Food, Beverages and Tobacco
3.9.	Of which: Pulp, Paper and printing
3.10.	Of which: Wood and Wood Products
3.11.	Of which: Construction
3.12.	Of which: Textile and Leather
3.13.	Of which: Not Elsewhere Specified – Industry
4.	Other Sectors

▼ M1

4.1. Of which: Commercial and Public Services

4.2. Of which: Residential

4.3. Of which: Agriculture/Forestry

4.4. Of which: Fishing

4.5. Of which: Not Elsewhere Specified – Other

2.2.4. *Imports and exports*

To be declared are both the quantities of the total natural gas and of the LNG part of it, per country of origin for imports and per country of destination for exports.

2.2.5. *Inputs to autoproducers of electricity and heat generation*

Inputs to autoproducers of electricity and heat generation are to be declared separately for Autoproducer Electricity Plants, Autoproducer CHP Plants and Autoproducer Heat Plants.

Inputs apply to the following plants or activities:

1. Total Energy Sector

1.1. Of which: Coal Mines

1.2. Of which: Oil and Gas Extraction

1.3. Of which: Inputs to Oil Refineries

1.4. Of which: Coke Ovens

1.5. Of which: Gas Works

1.6. Of which: Blast Furnaces

1.7. Of which: Liquefaction (LNG) & Regasification Plants

1.8. Of which: Gas to Liquids

1.9. Of which: Not Elsewhere Specified – Energy

2. Industry Sector

2.1. Of which: Iron and Steel

2.2. Of which: Chemical and Petrochemical

2.3. Of which: Non-Ferrous Metals

2.4. Of which: Non-Metallic Minerals

2.5. Of which: Transport Equipment

2.6. Of which: Machinery

2.7. Of which: Mining and Quarrying

2.8. Of which: Food, Beverages and Tobacco

2.9. Of which: Pulp, Paper and printing

2.10. Of which: Wood and Wood Products

2.11. Of which: Construction

2.12. Of which: Textile and Leather

▼ M1

2.13. Of which: Not Elsewhere Specified – Industry

3. Transport Sector

3.1. Of which: Pipeline Transport

3.2. Of which: Not Elsewhere Specified – Transport

4. Other Sectors

4.1. Of which: Commercial and Public Services

4.2. Of which: Residential

4.3. Of which: Agriculture/Forestry

4.4. Of which: Fishing

4.5. Of which: Not Elsewhere Specified

2.2.6. Gas Storage Capacities

1. Name

Name of the site of the storage facility.

2. Type

Type of storage, such as depleted gas field, salt cavern, etc.

3. Working Capacity

Total gas storage capacity, minus the cushion gas. The 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.

4. Peak Output

Maximum rate at which gas can be withdrawn from the concerned storage; this corresponds to the maximum withdrawal capacity.

2.3. Units of measurement

1. Energy quantities	Unless indicated differently, quantities of natural gas are declared by its energy content, i.e. in TJ, based on the gross calorific value. Where physical quantities are required, the unit is in 10^6 m ³ assuming reference gas conditions (15 °C, 101,325 kPa).
2. Calorific values	KJ/m ³ , assuming reference gas conditions (15 °C, 101,325 kPa).
3. Storage working capacity	10^6 m ³ , assuming reference gas conditions (15 °C, 101,325 kPa).
4. Peak output	10^6 m ³ /day, assuming reference gas conditions (15 °C, 101,325 kPa).

2.4. Derogations and exemptions

Not applicable.

▼ M1

3. ELECTRICITY AND HEAT

3.1. **Applicable energy products**

This chapter covers heat and electricity.

3.2. **List of aggregates**

The following list of aggregates shall be declared for all energy products listed in the previous paragraph unless otherwise specified.

Annex A applies for explanations of terms for which a specific explanation is not supplied in this chapter. The definitions and units mentioned in Chapters 1, 2, 4 and 5 apply to energy products belonging to solid fuels and manufactured gases, natural gas, oil and petroleum products, and renewable energy and energy from waste.

3.2.1. *Supply and Transformation Sectors*

The following specific definitions apply to aggregates for electricity and heat in this chapter:

- Gross Electricity Production: the sum of the electrical energy production by all the generating sets concerned (including pumped storage) measured at the output terminals of the main generators.
- Gross Heat Production: the total heat produced by the installation and includes the heat used by the installation's auxiliaries which use a hot fluid (space heating, liquid fuel heating etc) and losses in the installation/network heat exchanges, as well as heat from chemical processes used as a primary energy form.
- Net Electricity Production: the gross electricity production less the electrical energy absorbed by the generating auxiliaries and the losses in the main generator transformers.
- Net Heat Production: the heat supplied to the distribution system as determined from measurements of the outgoing and return flows.

The aggregates mentioned in the next table must be declared separately for main activity producer plants and for autoproducer plants. Within these two types of plants, both gross and net electricity and heat production must be declared for electricity only, for CHP and for heat only plants separately wherever applicable, for the following aggregates:

1.	Total production
1.1.	Of which: Nuclear
1.2.	Of which: Hydro
1.2.1.	Of which: part of hydro produced from pumped storage
1.3.	Of which: Geothermal
1.4.	Of which: Solar
1.5.	Of which: Tide, wave, ocean
1.6.	Of which: Wind

▼ M1

-
- 1.7. Of which: Combustible fuels
Fuels capable of igniting or burning, i.e. reacting with oxygen to produce a significant rise in temperature and combusted directly for the production of electricity and/or heat.
-
- 1.8. Of which: Heat Pumps
Heat output from heat pumps only where the heat is sold to third parties (i.e. in cases where production occurs in the Transformation Sector).
-
- 1.9. Of which: Electric Boilers
Quantities of heat from electric boilers where the output is sold to third parties.
-
- 1.10. Of which: Heat from Chemical Processes
Heat originating from processes without input energy, such as a chemical reaction.

Excludes waste heat originating from energy driven processes, which should be reported as heat produced from the corresponding fuel.
-

- 1.11. Of which: Other Sources – Electricity (please specify)
-

The aggregates mentioned in the next table must be declared as totals, for electricity and heat separately, wherever applicable. For the three first aggregates in the next table, quantities should be calculated from and be compatible with the values declared according to the previous table.

-
1. Total Gross Production
-
2. Own Use by Plant
-
3. Total Net Production
-
4. Imports
See also explanation under 5 'Exports'.
-
5. Exports
Amounts of electricity are considered as imported or exported when they have crossed the political boundaries of the country, whether customs clearance has taken place or not. If electricity is transited through a country, the amount should be reported as both an import and an export.
-
6. Used for Heat Pumps
-
7. Used for Electric Powered Steam Boilers
-
8. Used for Pumped Storage
-
9. Used for Electricity Production
-
10. Energy Supplied
For electricity: the sum of the net electrical energy production supplied by all power stations within the country, reduced by the amount used simultaneously for heat pumps, electrically powered steam boilers, pumping and reduced or increased by exports to or imports from abroad.

For heat: the sum of the net heat production for sale by all plants within a country, reduced by heat used for electricity production and reduced or increased by exports or imports from abroad.
-

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- | | |
|-----|--|
| 11. | Transmission and Distribution Losses |
| | All losses due to transport and distribution of electrical energy and heat. |
| | For electricity, includes losses in transformers which are not considered as integral parts of the power plants. |
-
- | | |
|-----|--------------------------------|
| 12. | Total Consumption (calculated) |
|-----|--------------------------------|
-
- | | |
|-----|------------------------|
| 13. | Statistical Difference |
|-----|------------------------|
-
- | | |
|-----|------------------------------|
| 14. | Total Consumption (observed) |
|-----|------------------------------|
-

The electricity produced, the heat sold and the fuel quantities used including their corresponding total energy (based on their net calorific value except for natural gas which is based on gross calorific value) from the combustibles listed in the next table must be declared separately for main activity producer plants and for autoproducer plants. Within these two types of plants, this electricity and heat production must be declared for electricity (only) plants, for CHP and for heat (only) plants separately wherever applicable:

1.	Solid fuels and manufactured gases:
----	-------------------------------------

- | | |
|------|------------|
| 1.1. | Anthracite |
|------|------------|
-
- | | |
|------|-------------|
| 1.2. | Coking Coal |
|------|-------------|
-
- | | |
|------|-----------------------|
| 1.3. | Other Bituminous Coal |
|------|-----------------------|
-
- | | |
|------|---------------------|
| 1.4. | Sub-Bituminous Coal |
|------|---------------------|
-
- | | |
|------|--------------------|
| 1.5. | Lignite/Brown Coal |
|------|--------------------|
-
- | | |
|------|------|
| 1.6. | Peat |
|------|------|
-
- | | |
|------|-------------|
| 1.7. | Patent Fuel |
|------|-------------|
-
- | | |
|------|----------------|
| 1.8. | Coke Oven Coke |
|------|----------------|
-
- | | |
|------|----------|
| 1.9. | Gas Coke |
|------|----------|
-
- | | |
|-------|----------|
| 1.10. | Coal Tar |
|-------|----------|
-
- | | |
|-------|-----------------------------|
| 1.11. | BKB (Brown Coal Briquettes) |
|-------|-----------------------------|
-
- | | |
|-------|---------------|
| 1.12. | Gas Works Gas |
|-------|---------------|
-
- | | |
|-------|---------------|
| 1.13. | Coke Oven Gas |
|-------|---------------|
-
- | | |
|-------|-------------------|
| 1.14. | Blast Furnace Gas |
|-------|-------------------|
-
- | | |
|-------|--------------------------|
| 1.15. | Oxygen Steel Furnace Gas |
|-------|--------------------------|
-
- | | |
|----|-----------------------------|
| 2. | Oil and Petroleum Products: |
|----|-----------------------------|
-
- | | |
|------|-----------|
| 2.1. | Crude Oil |
|------|-----------|
-
- | | |
|------|-----|
| 2.2. | NGL |
|------|-----|
-
- | | |
|------|--------------|
| 2.3. | Refinery Gas |
|------|--------------|
-
- | | |
|------|-----|
| 2.4. | LPG |
|------|-----|
-
- | | |
|------|---------|
| 2.5. | Naphtha |
|------|---------|
-
- | | |
|------|------------------------|
| 2.6. | Kerosene Type Jet Fuel |
|------|------------------------|
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- | | |
|------|----------------|
| 2.7. | Other Kerosene |
|------|----------------|
-

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2.8.	Gas/Diesel (Distillate Fuel Oil)
2.9.	Heavy Fuel Oil
2.10.	Bitumen (Including Orimulsion)
2.11.	Petroleum Coke
2.12.	Other Oil Products
3.	Natural Gas
4.	Renewable Energy and Energy from Waste
4.1.	Industrial Waste (Non-Renewable)
4.2.	Municipal Waste (Renewable)
4.3.	Municipal Waste (Non-Renewable)
4.4.	Wood, Wood Waste And Other Solid Waste
4.5.	Landfill Gas
4.6.	Sewage Sludge Gas
4.7.	Other Biogas
4.8.	Liquid Biofuels

3.2.2. *Electricity and heat consumption in the Energy Sector*

1.	Total Energy Sector Excludes own use by plant, used for pumped storage, heat pumps and electric boilers.
1.1.	Of which: Coal Mines
1.2.	Of which: Oil and Gas Extraction
1.3.	Of which: Patent Fuel Plants
1.4.	Of which: Coke Ovens
1.5.	Of which: BKB/PB Plants
1.6.	Of which: Gas Works
1.7.	Of which: Blast Furnaces
1.8.	Of which: Petroleum Refineries
1.9.	Of which: Nuclear Industry
1.10.	Of which: Coal Liquefaction Plants
1.11.	Of which: Liquefaction (LNG)/Regasification Plants
1.12.	Of which: Gasification Plants (biogas)
1.13.	Of which: Gas-to-Liquids
1.14.	Of which: Not Elsewhere Specified – Energy

3.2.3. *Energy end-use specification*

1.	Industry Sector
1.1.	Of which: Iron and Steel
1.2.	Of which: Chemical and Petrochemical

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1.3.	Of which: Non-Ferrous Metals
1.4.	Of which: Non-Metallic Minerals
1.5.	Of which: Transport Equipment
1.6.	Of which: Machinery
1.7.	Of which: Mining and Quarrying
1.8.	Of which: Food, Beverages and Tobacco
1.9.	Of which: Pulp, Paper and printing
1.10.	Of which: Wood and Wood Products
1.11.	Of which: Construction
1.12.	Of which: Textile and Leather
1.13.	Of which: Not Elsewhere Specified – Industry
2.	Transport Sector
2.1.	Of which: Rail
2.2.	Of which: Pipeline transport
2.3.	Of which: Not Elsewhere Specified – Transport
3.	Residential Sector
4.	Commercial and Public Services
5.	Agriculture/Forestry
6.	Fishing
7.	Not Elsewhere Specified – Other

3.2.4. *Imports and exports*

Imports and exports of energy quantities of electricity and heat by country.

3.2.5. *Net production of electricity generation and net heat production from autoproducers*

Net production of electricity and net generation of heat from autoproducers of electricity generation and heat production are to be declared, for CHP plants, for electricity (only) plants and for heat (only) plants separately, in the following plants or activities:

1.	Total Energy Sector
1.1.	Of which: Coal Mines
1.2.	Of which: Oil and Gas Extraction
1.3.	Of which: Patent Fuel Plants
1.4.	Of which: Coke Ovens
1.5.	Of which: BKB/PB Plants
1.6.	Of which: Gas Works
1.7.	Of which: Blast Furnaces
1.8.	Of which: Petroleum Refineries
1.9.	Of which: Coal Liquefaction Plants

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-
- 1.10. Of which: Liquefaction (LNG)/Regasification Plants

 - 1.11. Of which: Gasification Plants (biogas)

 - 1.12. Of which: Gas-to-Liquids

 - 1.13. Of which: Charcoal Production Plants

 - 1.14. Of which: Not Elsewhere Specified – Energy

 - 2. All other sectors: identical to the aggregate list as per ‘3.2.3 Energy end-use specification’.

3.2.6. *Inputs to autoproducers of electricity and heat generation*

Inputs to autoproducers of electricity and heat generation are to be declared separately for Autoproducer Electricity Plants, Autoproducer CHP Plants and Autoproducer Heat Plants.

- 1. For solid fuels and manufactured gases used by autoproducers, quantities must be reported from the following energy products: anthracite, coking coal, other bituminous coal, sub-bituminous coal, lignite/brown coal, peat, patent fuel, coke oven coke, gas coke, coal tar, BKB/PB, gas works gas, coke oven gas, blast furnace gas and oxygen steel furnace gas. Their input quantities must be reported for the plants in the following activities:

-
- 1. Total Energy Sector

 - 1.1. Of which: Coal Mines

 - 1.2. Of which: Patent Fuel Plants

 - 1.3. Of which: Coke Ovens

 - 1.4. Of which: BKB/PB Plants

 - 1.5. Of which: Gas Works

 - 1.6. Of which: Blast Furnaces

 - 1.7. Of which: Petroleum Refineries

 - 1.8. Of which: Coal Liquefaction

 - 1.9. Of which: Not Elsewhere Specified – Energy

 - 2. Industry Sector

 - 2.1. Of which: Iron and Steel

 - 2.2. Of which: Chemical and Petrochemical

 - 2.3. Of which: Non-Ferrous Metals

 - 2.4. Of which: Non-Metallic Minerals

 - 2.5. Of which: Transport Equipment

 - 2.6. Of which: Machinery

 - 2.7. Of which: Mining and Quarrying

 - 2.8. Of which: Food, Beverages and Tobacco

▼ M1

2.9.	Of which: Pulp, Paper and printing
2.10.	Of which: Wood and Wood Products
2.11.	Of which: Construction
2.12.	Of which: Textile and Leather
2.13.	Of which: Not Elsewhere Specified – Industry
3.	Transport Sector:
3.1.	Of which: Rail
3.2.	Of which: Not Elsewhere Specified – Transport
4.	Other Sectors
4.1.	Of which: Commercial and Public Services
4.2.	Of which: Residential
4.3.	Of which: Agriculture/Forestry
4.4.	Of which: Fishing
4.5.	Of which: Not Elsewhere Specified
2. For oil products used by autoproducers, quantities must be reported from the following energy products: crude oil, NGL, refinery gas, LPG, naphtha, kerosene type jet fuel, other kerosene, gas/diesel (distillate fuel oil), heavy fuel oil, bitumen (including Orimulsion), petroleum coke and other oil products. Their input quantities must be reported for the plants in the following activities:	
1.	Total Energy Sector
1.1.	Of which: Coal Mines
1.2.	Of which: Oil and Gas Extraction
1.3.	Of which: Coke Ovens
1.4.	Of which: Blast Furnaces
1.5.	Of which: Gas Works
1.6.	Of which: Not Elsewhere Specified – Energy
2.	Industry Sector
2.1.	Of which: Iron and Steel
2.2.	Of which: Chemical and Petrochemical
2.3.	Of which: Non-Ferrous Metals
2.4.	Of which: Non-Metallic Minerals
2.5.	Of which: Transport Equipment
2.6.	Of which: Machinery
2.7.	Of which: Mining and Quarrying
2.8.	Of which: Food, Beverages and Tobacco
2.9.	Of which: Pulp, Paper and printing
2.10.	Of which: Wood and Wood Products
2.11.	Of which: Construction
2.12.	Of which: Textile and Leather
2.13.	Of which: Not Elsewhere Specified – Industry

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3.	Transport Sector:
3.1.	Of which: Pipeline Transport
3.2.	Of which: Not Elsewhere Specified – Transport
4.	Other Sectors
4.1.	Of which: Commercial and Public Services
4.2.	Of which: Residential
4.3.	Of which: Agriculture/Forestry
4.4.	Of which: Fishing
4.5.	Of which: Not Elsewhere Specified

3. For natural gas used by autoproducers, quantities must be reported for the plants in the following activities:

1.	Total Energy Sector
1.1.	Of which: Coal Mines
1.2.	Of which: Oil and Gas Extraction
1.3.	Of which: Inputs to Oil Refineries
1.4.	Of which: Coke Ovens
1.5.	Of which: Gas Works
1.6.	Of which: Blast Furnaces
1.7.	Of which: Liquefaction (LNG) & Regasification Plants
1.8.	Of which: Gas to Liquids
1.9.	Of which: Not Elsewhere Specified – Energy
2.	Industry Sector
2.1.	Of which: Iron and Steel
2.2.	Of which: Chemical and Petrochemical
2.3.	Of which: Non-Ferrous Metals
2.4.	Of which: Non-Metallic Minerals
2.5.	Of which: Transport Equipment
2.6.	Of which: Machinery
2.7.	Of which: Mining and Quarrying
2.8.	Of which: Food, Beverages and Tobacco
2.9.	Of which: Pulp, Paper and printing
2.10.	Of which: Wood and Wood Products
2.11.	Of which: Construction
2.12.	Of which: Textile and Leather
2.13.	Of which: Not Elsewhere Specified – Industry
3.	Transport Sector:
3.1.	Of which: Pipeline Transport
3.2.	Of which: Not Elsewhere Specified – Transport

▼ M1

4.	Other Sectors:
4.1.	Of which: Commercial and Public Services
4.2.	Of which: Residential
4.3.	Of which: Agriculture/Forestry
4.4.	Of which: Fishing
4.5.	Of which: Not Elsewhere Specified
4.	For renewable energy and energy from waste used by autoproducers, quantities must be reported from the following energy products: geothermal energy, solar thermal, industrial waste (non-renewable), municipal waste (renewable), municipal waste (non-renewable), wood/wood waste/other solid waste, landfill gas, sewage sludge gas, other biogas and liquid biofuels. Their input quantities must be reported for the plants in the following activities:
1.	Total Energy Sector
1.1.	Of which: Gasification plants
1.2.	Of which: Coal Mines
1.3.	Of which: Patent Fuel Plants
1.4.	Of which: Coke Ovens
1.5.	Of which: Petroleum refineries
1.6.	Of which: BKB/PB Plants
1.7.	Of which: Gas Works
1.8.	Of which: Blast Furnaces
1.9.	Of which: Charcoal Production Plants
1.10.	Of which: Not Elsewhere Specified – Energy
2.	Industry Sector
2.1.	Of which: Iron and Steel
2.2.	Of which: Chemical and Petrochemical
2.3.	Of which: Non-Ferrous Metals
2.4.	Of which: Non-Metallic Minerals
2.5.	Of which: Transport Equipment
2.6.	Of which: Machinery
2.7.	Of which: Mining and Quarrying
2.8.	Of which: Food, Beverages and Tobacco
2.9.	Of which: Pulp, Paper and printing
2.10.	Of which: Wood and Wood Products
2.11.	Of which: Construction
2.12.	Of which: Textile and Leather
2.13.	Of which: Not Elsewhere Specified – Industry

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-
- | | |
|-------|---|
| 3. | Transport Sector: |
| <hr/> | |
| 3.1. | Of which: Rail |
| <hr/> | |
| 3.2. | Of which: Not Elsewhere Specified – Transport |
| <hr/> | |
| 4. | Other Sectors: |
| <hr/> | |
| 4.1. | Of which: Commercial and Public Services |
| <hr/> | |
| 4.2. | Of which: Residential |
| <hr/> | |
| 4.3. | Of which: Agriculture/Forestry |
| <hr/> | |
| 4.4. | Of which: Fishing |
| <hr/> | |
| 4.5. | Of which: Not Elsewhere Specified |
| <hr/> | |

3.3. Structural data on electricity and heat generation**3.3.1. Net Maximum Electrical Capacity And Peak Load**

The capacity should be reported at 31 December of the relevant reported year.

Includes electrical capacity of both electricity (only) and CHP plants.

The Net Maximum Electrical Capacity is the sum of the net maximum capacities of all stations taken individually throughout a given period of operation. The period of operation assumed for present purposes is continuous running: in practice 15 hours or more per day. The net maximum capacity is the maximum power assumed to be solely active power that can be supplied, continuously, with all plant running, at the point of outlet to the network. The Peak Load is defined as the highest value of the power absorbed or supplied by a network or combination of networks within the country.

The Net Maximum Electrical Capacity must be declared for both main activity producers and autoproducers:

-
- | | |
|-------|-------------------------------|
| 1. | Total |
| <hr/> | |
| 2. | Nuclear |
| <hr/> | |
| 3. | Hydro |
| <hr/> | |
| 3.1. | Of which: pumped storage |
| <hr/> | |
| 4. | Geothermal |
| <hr/> | |
| 5. | Solar |
| <hr/> | |
| 6. | Tide, wave, ocean |
| <hr/> | |
| 7. | Wind |
| <hr/> | |
| 8. | Combustible fuels |
| <hr/> | |
| 8.1. | Of which: Steam |
| <hr/> | |
| 8.2. | Of which: Internal combustion |
| <hr/> | |
| 8.3. | Of which: Gas turbine |
| <hr/> | |
| 8.4. | Of which: Combined cycle |
| <hr/> | |
| 8.5. | Of which: Other |
| | To be specified if declared. |
| <hr/> | |

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The following information about the peak load must be declared for the network:

-
9. Peak load
-
10. Available capacity at time of peak
-
11. Date and time of peak load occurrence
-

3.3.2. *Net Maximum Electrical Capacity Of Combustible Fuels*

Net maximum electrical capacity of combustible fuels must be declared for both main activity producers and autoproducers, and separately for each type of single-fired or multi-fired plant mentioned in the next table. Indications on which type of fuel is used as primary and alternate fuels must be added for all cases of multi-fired plants.

-
1. Single Fuel Fired:
-
- 1.1. Fired with Coal or coal products
Includes coke oven gas, blast furnace and oxygen steel furnace gas capacity.
-
- 1.2. Fired with Liquids fuels
Includes refinery gas capacity.
-
- 1.3. Fired with Natural gas
Includes gas works gas capacity.
-
- 1.4. Fired with Peat
-
- 1.5. Fired with Combustible renewables and wastes
-
2. Multi-Fired, Solids And Liquids
-
3. Multi-Fired, Solids And Natural Gas
-
4. Multi-Fired, Liquids And Natural Gas
-
5. Multi-Fired, Solids Liquids And Natural Gas
-

Multi-fired systems include only units which can burn more than one fuel type on a continuous basis. Stations which have separate units using different fuels should be divided into the appropriate single-fuel categories.

3.4. **Data on nuclear energy**

The following data concerning the civil use of nuclear energy must be declared:

-
1. Enrichment capacity
The annual separative work capacity of operational enrichment plants (isotopic separation of Uranium).
-
2. Production capacity of fresh fuel elements
The annual production capacity of fuel fabrication plants. MOX fuel fabrication plants are excluded.
-
3. Production capacity of MOX fuel fabrication plants
The annual production capacity of MOX fuel fabrication plants. MOX fuel contains a mixture of Plutonium and Uranium (Mixed Oxide).
-

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-
4. Production of fresh fuel elements
Production of finished fresh fuel elements in nuclear fuel fabrication plants. Rods or other partial products are not included. Fabrication plants producing MOX fuel are also excluded.
-
5. Production of MOX fuel elements
Production of finished fresh fuel elements in MOX fuel fabrication plants. Rods or other partial products are not included.
-
6. Production of nuclear heat
The total amount of heat generated by nuclear reactors for the production of electricity or for other useful applications of heat.
-
7. Annual average burnup of definitively discharged irradiated fuel elements
Calculated average of the burnup of the fuel elements which have been definitively discharged from the nuclear reactors during the concerned reference year. Excludes fuel elements which are temporarily discharged and are likely to be reloaded again later.
-
8. Production of Uranium and Plutonium in reprocessing plants
Uranium and Plutonium produced during the reference year in reprocessing plants.
-
9. Capacity (Uranium and Plutonium) of reprocessing plants
Annual reprocessing capacity of Uranium and Plutonium.
-

3.5. Units of measurement

1. Energy quantities	Electricity: GWh Heat: TJ Solid fuels and manufactured gases: the units of measurement in Chapter 1 of this annex apply. Natural gas: the units of measurement in chapter 2 of this annex apply. Oil and petroleum products: the units of measurement in chapter 4 of this annex apply. Renewables and waste: the units of measurement in chapter 5 of this annex apply. Uranium and Plutonium: tHM (tons of heavy metal).
2. Capacity	Electrical generation capacity: MWe Heat generation capacity: MWt Enrichment capacity (isotopic separation of Uranium): tSWU (tons of Separative Work Units). Production capacity of nuclear fuel elements: tHM (tons of heavy metal).

3.6. Derogations and exemptions

France has a derogation for reporting the aggregates relating to heat. That derogation shall lapse as soon as France is able to forward this report and, at all events, no more than 4 years after the date of entry into force of this Regulation.

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4. OIL AND PETROLEUM PRODUCTS

4.1. **Applicable energy products**

Unless otherwise specified this data collection applies to all of the following energy products:

Energy Product	Definition
1. Crude Oil	Crude oil is a mineral oil of natural origin comprising a mixture of hydrocarbons and associated impurities, such as sulphur. It exists in the liquid phase under normal surface temperature and pressure and its physical characteristics (density, viscosity, etc.) are highly variable. This category includes field or lease condensate recovered from associated and non-associated gas where it is commingled with the commercial crude oil stream.
2. NGL	NGL are liquid or liquefied hydrocarbons recovered from natural gas in separation facilities or gas processing plants. Natural gas liquids include ethane, propane, butane (normal and iso-), (iso) pentane and pentanes plus (sometimes referred to as natural gasoline or plant condensate).
3. Refinery Feedstocks	A refinery feedstock is a processed oil destined for further processing (e.g. straight run fuel oil or vacuum gas oil) excluding blending. With further processing, it will be transformed into one or more components and/or finished products. This definition also covers returns from the petrochemical industry to the refining industry (e.g. pyrolysis gasoline, C4 fractions, gasoil and fuel oil fractions).
4. Additives/ Oxygenates	<p>Additives are non-hydrocarbon compounds added to or blended with a product to modify fuel properties (octane, cetane, cold properties, etc.):</p> <ul style="list-style-type: none"> — oxygenates, such as alcohols (methanol, ethanol), ethers (such as MTBE (methyl tertiary butyl ether), ETBE (ethyl tertiary butyl ether), TAME (tertiary amyl methyl ether)); — esters (e.g. rapeseed oil or dimethylester, etc.); — chemical compounds (such as TML, TEL and detergents). <p><i>Note:</i> Quantities of additives/oxygenates (alcohols, ethers, esters and other chemical compounds) reported in this category should relate to the quantities destined for blending with fuels or for fuel use.</p>
4.1. Of Which: Biofuels	Biogasoline and Biodiesels. The definitions of Chapter 5, Renewable Energy and Energy from Waste, apply.

▼ M1

Energy Product	Definition
	<p>Quantities of liquid biofuels reported in this category relate to the biofuel and not to the total volume of liquids into which the biofuels are blended.</p> <p>Excludes all trade of biofuels which have not been blended with transport fuels (i.e. in their pure form); these should be reported as per Chapter 5. The biofuels traded as part of transport fuels should be reported in the appropriate product indicating the biofuel portion.</p>
5. Other Hydrocarbons	<p>Synthetic crude oil from tar sands, shale oil, etc., liquids from coal liquefaction, (see Chapter 1), output of liquids from natural gas conversion into gasoline (see Chapter 2), hydrogen and emulsified oils (e.g. Orimulsion).</p> <p>Excludes oil shale production, for which Chapter 1 applies.</p> <p>The production of shale oil (secondary product) is to be reported as 'From other sources' in the 'Other hydrocarbons category'.</p>
6. Refinery Gas (not liquefied)	<p>Refinery gas includes a mixture of non-condensable gases mainly consisting of hydrogen, methane, ethane and olefins obtained during distillation of crude oil or treatment of oil products (e.g. cracking) in refineries. This also includes gases which are returned from the petrochemical industry.</p>
7. Ethane	<p>A naturally gaseous straight-chain hydrocarbon, (C₂H₆) extracted from natural gas and refinery gas streams.</p>
8. LPG	<p>LPG are light paraffinic hydrocarbons derived from the refinery processes, crude oil stabilisation and natural gas processing plants. They consist mainly of propane (C₃H₈) and butane (C₄H₁₀) or a combination of the two. They could also include propylene, butylene, isopropylene and isobutylene. LPG are normally liquefied under pressure for transportation and storage.</p>
9. Naphtha	<p>Naphtha is a feedstock destined for either the petrochemical industry (e.g. ethylene manufacture or aromatics production) or for gasoline production by reforming or isomerisation within the refinery.</p> <p>Naphtha comprises material in the 30 °C and 210 °C distillation range or part of this range.</p>
10. Motor Gasoline	<p>Motor gasoline consists of a mixture of light hydrocarbons distilling between 35 °C and 215 °C. It is used as a fuel for land based spark ignition engines. Motor gasoline may include</p>

▼ M1

Energy Product	Definition
	<p>additives, oxygenates and octane enhancers, including lead compounds such as TEL and TML.</p> <p>Includes motor gasoline blending components (excluding additives/oxygenates), e.g. alkylates, isomerate, reformat, cracked gasoline destined for use as finished motor gasoline.</p>
10.1. Of which: Biogasoline	The definitions of Chapter 5, Renewable Energy and Energy from Waste, apply.
11. Aviation Gasoline	Motor spirit prepared especially for aviation piston engines, with an octane number suited to the engine, a freezing point of – 60 °C and a distillation range usually within the limits of 30 °C and 180 °C.
12. Gasoline Type Jet Fuel (Naphtha Type Jet Fuel or JP4)	This includes all light hydrocarbon oils for use in aviation turbine power units, distilling between 100 °C and 250 °C. They are obtained by blending kerosenes and gasoline or naphthas in such a way that the aromatic content does not exceed 25 % in volume, and the vapour pressure is between 13,7kPa and 20,6kPa.
13. Kerosene Type Jet Fuel	<p>Distillate used for aviation turbine power units. It has the same distillation characteristics between 150 °C and 300°C (generally not above 250 °C) and flash point as kerosene. In addition, it has particular specifications (such as freezing point) which are established by the International Air Transport Association (IATA).</p> <p>Includes kerosene blending components.</p>
14. Other Kerosene	Refined petroleum distillate used in sectors other than aircraft transport. It distils between 150 °C and 300 °C.
15. Gas/Diesel Oil (Distillate Fuel Oil)	Gas/diesel oil is primarily a medium distillate distilling between 180 °C and 380 °C. Includes blending components. Several grades are available depending on uses:
15.1. Of which: Transport Diesel	On-road diesel oil for diesel compression ignition (cars, trucks, etc.), usually of low sulphur content;
15.1.1. From 15.1, of which: Biodiesels	The definitions of Chapter 5, Renewable Energy and Energy from Waste, apply.

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Energy Product	Definition
15.2. Of which: Heating and Other Gasoil	Light heating oil for industrial and commercial uses, marine diesel and diesel used in rail traffic, other gas oil including heavy gas oils which distil between 380 °C and 540 °C and which are used as petrochemical feedstocks.
16. Fuel Oil	All residual (heavy) fuel oils (including those obtained by blending). Kinematic viscosity is above 10 cSt at 80 °C. The flash point is always above 50 °C and density is always more than 0,90 kg/l.
16.1. Of which: Low Sulphur Content	Heavy fuel oil with sulphur content lower than 1 %.
16.2. Of which: High Sulphur Content	Heavy fuel oil with sulphur content of 1 % or higher.
17. White Spirit And SBP	<p>Refined distillate intermediates with a distillation in the naphtha/kerosene range. They are subdivided as:</p> <ul style="list-style-type: none"> — Industrial Spirit (SBP): Light oils distilling between 30 °C and 200 °C. There are 7 or 8 grades of industrial spirit, depending on the position of the cut in the distillation range. The grades are defined according to the temperature difference between the 5 % volume and 90 % volume distillation points (which is not more than 60 °C). — White Spirit: Industrial spirit with a flash point above 30 °C. The distillation range of white spirit is 135 °C to 200 °C.
18. Lubricants	<p>Hydrocarbons produced from distillate by product; they are mainly used to reduce friction between bearing surfaces.</p> <p>Includes all finished grades of lubricating oil, from spindle oil to cylinder oil, and those used in greases, motor oils and all grades of lubricating oil base stocks.</p>
19. Bitumen	<p>Solid, semi-solid or viscous hydrocarbon with a colloidal structure, being brown to black in colour, obtained as a residue in the distillation of crude oil, by vacuum distillation of oil residues from atmospheric distillation. Bitumen is often referred to as asphalt and is primarily used for construction of roads and for roofing material.</p> <p>Includes fluidised and cut back bitumen.</p>

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Energy Product	Definition
20. Paraffin Waxes	These are saturated aliphatic hydrocarbons. These waxes are residues extracted when dewaxing lubricant oils. They have a crystalline structure which is more-or-less fine according to the grade. Their main characteristics are as follows: they are colourless, odourless and translucent, with a melting point above 45 °C.
21. Petroleum Coke	Black solid by-product, obtained mainly by cracking and carbonising petroleum derived feedstock, vacuum bottoms, tar and pitches in processes such as delayed coking or fluid coking. It consists mainly of carbon (90 to 95 %) and has a low ash content. It is used as a feedstock in coke ovens for the steel industry, for heating purposes, for electrode manufacture and for production of chemicals. The two most important qualities are 'green coke' and 'calcinated coke'. Includes 'catalyst coke' deposited on the catalyst during refining processes; this coke is not recoverable and is usually burned as refinery fuel.
22. Other Products	All products not specifically mentioned above, for example: tar and sulphur. Includes aromatics (e.g. BTX or benzene, toluene and xylene) and olefins (e.g. propylene) produced within refineries.

4.2. List of aggregates

The following list of aggregates shall be declared for all energy products listed in the previous paragraph unless otherwise specified.

4.2.1. Supply and Transformation Sectors

The following table applies to crude oil, NGL, refinery feedstocks, additives, biofuels and other hydrocarbons only:

1. Indigenous Production	Not applicable for refinery feedstocks and for biofuels.
2. From Other Sources Additives, Biofuels and Other hydrocarbons, the production of which has already been covered in other fuel balances.	Not applicable for crude oil, NGL and refinery feedstocks.
2.1. Of which: from Coal	Includes liquids produced from coal liquefaction plants, liquid output from coke ovens.
2.2. Of which: from Natural Gas	The manufacture of synthetic gasoline may require natural gas as feedstock. The amount of gas for methanol manufacture is declared according to Chapter 2, while the receipts of methanol are declared here.

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-
- 2.3. Of which: from Renewables
Includes biofuels which are for blending with transport fuels.
Production is declared as per Chapter 5, while amounts for blending are declared here.
-

3. Backflows From Petrochemical Sector
Finished or semi-finished products which are returned from final consumers to refineries for processing, blending or sale. They are usually by-products of petrochemical manufacturing.
Only applicable for refinery feedstocks.
-

4. Products Transferred
Imported petroleum products which are reclassified as feedstocks for further processing in the refinery, without delivery to final consumers.
Only applicable for refinery feedstocks.
-

5. Imports and exports
Includes quantities of crude oil and products imported or exported under processing agreements (i.e. refining on account). Crude oil and NGLs should be reported as coming from the country of ultimate origin; refinery feedstocks and finished products should be reported as coming from the country of last consignment.
Includes any gas liquids (e.g. LPG) extracted during the regasification of imported liquefied natural gas and petroleum products imported or exported directly by the petrochemical industry.

Note: All trade of biofuels which have not been blended with transport fuels (i.e. in their pure form) should be reported in the Renewables Questionnaire.

Re-exports of oil imported for processing within bonded areas should be included as an export of product from the processing country to the final destination.

6. Direct Use
Crude oil, NGL, Additives and Oxygenates (and the part which are biofuels), and other hydrocarbons used directly without being processed in petroleum refineries.
Includes crude oil burned for electricity generation.
-

7. Stock changes
A stock build is shown as a negative number and a stock draw is shown as a positive number.
-

8. Calculated Refinery Intake
Total amount of product calculated to have entered the refinery process. It is defined as:
Indigenous production + From other sources + Backflows from industry + Products transferred + Imports – Exports – Direct use + Stock changes
-

▼ M1

-
9. Statistical differences
Defined as the calculated refinery intake minus the observed one.
-

10. Observed Refinery Intake
Amounts measured as input to refineries
-

11. Refinery Losses
The difference between Refinery intake (observed) and Gross refinery output. Losses may occur during the distillation processes due to evaporation. Reported losses are positive. There may be volumetric gains but no gains in mass.
-

12. Opening and Closing Total Stocks On National Territory
All stocks on national territory, including stocks held by governments, by major consumers or by stockholding organisations, stocks held on board incoming ocean vessels, stocks held in bonded areas and stocks held for others, whether under bilateral government agreement or not. Opening and closing refers to the first and to the last day of the reporting period respectively.
-

13. Net Calorific Value
Production, imports and exports, and overall average.
-

The following table applies only to finished products (Refinery gas, Ethane, LPG, Naphtha, Motor gasoline, Aviation gasoline, Gasoline type jet fuel, Kerosene type jet fuel, Other kerosene, Gas/Diesel oil, Low and High sulphur fuel oil, White Spirit and SBP, Lubricants, Bitumen, Paraffin waxes, Petroleum coke and Other products). Crude oil and NGL used for direct burn should be included in deliveries of finished products and interproduct transfers:

1. Primary Product Receipts
Includes quantities of indigenous or imported crude oil (including condensate) and indigenous NGL used directly without being processed in a petroleum refinery and quantities of Backflows from the Petrochemical industry which, although not primary fuel, are used directly.
-

2. Gross Refinery Output
Production of finished products at a refinery or blending plant. Excludes refinery losses, but includes Refinery fuel.
-

3. Recycled Products
Finished products which pass a second time through the marketing network, after having been once delivered to final consumers (e.g. used lubricants which are reprocessed). These quantities should be distinguished from petrochemical Backflows.
-

▼ M1

-
4. Refinery Fuel
- Petroleum products consumed in support of the operation of a refinery.
- Excludes products used by oil companies outside the refining process, e.g. bunkers or oil tankers.
- Includes fuels used for the production at the refineries of electricity and heat sold.
-
- 4.1. Of which: used for electricity generation
- Amounts used to generate electricity in plants at refineries.
-
- 4.2. Of which: used for CHP production
- Amounts used in CHP plants at refineries.
-
5. Imports and Exports
-
6. International Marine Bunkers
-
7. Interproduct Transfers
- Quantities reclassified either because their specification has changed or because they are blended into another product.
- A negative entry for one product is compensated by a positive entry (or several entries) for one or several products and vice versa; the total net effect should be zero.
-
8. Products Transferred
- Imported petroleum products which are reclassified as feedstocks for further processing in the refinery, without delivery to final consumers.
-
9. Stock Changes
- A stock build is shown as a negative number and a stock draw is shown as a positive number.
-
10. Calculated Gross Inland Deliveries
- This is defined as:
- Primary product receipts + Gross refinery output + Recycled products – Refinery fuel + Imports – Exports – International marine bunkers + Interproduct transfers – Products transferred + Stock changes
-
11. Statistical Difference
- Defined as the calculated gross inland delivery minus the observed one.
-
12. Observed Gross Inland Deliveries
- The observed delivery of finished petroleum products from primary sources (e.g. refineries, blending plants, etc.) to the inland market.
- This figure may differ from the calculated figure due, for example, to differences in coverage and/or differences of definition in different reporting systems.
-

▼ M1

-
- 12.1. Of which: Gross Deliveries To The Petrochemical Sector
Quantities of fuels delivered to the Petrochemical sector.
-
- 12.2. Of which: Energy Use In The Petrochemical Sector
Quantities of oil used as fuel for petrochemical processes such as steam cracking.
-
- 12.3. of which: Non-Energy Use In The Petrochemical Sector
Quantities of oil used in the petrochemical sector for the purpose of producing ethylene, propylene, butylene, synthesis gas, aromatics, butadiene and other hydrocarbon-based raw materials in processes such as steam cracking, aromatics plants and steam reforming. Excludes amounts of oil used for fuel purposes.
-
13. Backflows From Petrochemical Sector To Refineries
-
14. Opening and Closing Stock Levels
All stocks on national territory, including stocks held by governments, by major consumers or by stockholding organisations, stocks held on board incoming ocean vessels, stocks held in bonded areas and stocks held for others, whether under bilateral government agreement or not. Opening and closing refers to the first and to the last day of the reporting period respectively.
-
15. Stock Changes At Public Utilities
Changes in stocks which are held by public utilities and not included in the Stock levels and Stock changes reported elsewhere. A stock build is shown as a negative number and a stock draw is shown as a positive number.
Includes Crude oil and NGL used for direct burn, if applicable.
-
16. Net Calorific Value Of Gross Inland Deliveries
-
- For the transformation sector the following aggregates apply for all fuels, except for refinery feedstocks, additives/oxygenates, biofuels and other hydro-carbons, but including fuels used for non energy purposes (petroleum cokes and others, to be declared separately):
-
1. Total transformation Sector
Total quantities of fuels used for the primary or secondary conversion of energy.
-
- 1.1. Of which: Main Activity Producer Electricity Plants
-
- 1.2. Of which: Autoproducer Electricity plants
-
- 1.3. Of which: Main Activity Producer CHP Plants
-
- 1.4. Of which: Autoproducer CHP plants
-
- 1.5. Of which: Main Activity Producer Heat Plants
-
- 1.6. Of which: Autoproducer Heat plants
-

▼ **M1**

-
- 1.7. Of which: Gas Works/Gasification Plants

 - 1.8. Of which: Blended Natural Gas

 - 1.9. Of which: Coke Ovens

 - 1.10. Of which: Blast Furnaces

 - 1.11. Of which: Petrochemical Industry

 - 1.12. Of which: Patent Fuel Plants

 - 1.13. Of which: Not Elsewhere Specified – Transformation

4.2.2. *Energy Sector*

For the energy sector the following aggregates apply for all fuels, except for refinery feedstocks, additives/oxygenates, biofuels and other hydrocarbons, but including fuels used for non energy purposes (petroleum cokes and others, to be declared separately):

-
- 1. Total Energy Sector
Total quantity used as energy in the energy sector

 - 1.1. Of which: Coal Mines

 - 1.2. Of which: Oil and Gas Extraction

 - 1.3. Of which: Coke Ovens

 - 1.4. Of which: Blast Furnaces

 - 1.5. Of which: Gas Works

 - 1.6. Of which: Power Plants
Electricity, CHP and heat plants.

 - 1.7. Of which: Not Elsewhere Specified – Energy

 - 2. Distribution losses
Losses occurred outside the refinery due to transport and distribution.
Includes pipeline losses.

4.2.3. *Energy end-use specification*

For the energy end-use specification the following aggregates apply for all fuels, except for refinery feedstocks, additives/oxygenates, biofuels and other hydrocarbons, but including fuels used for non energy purposes (petroleum cokes and others, to be declared separately):

-
- 1. Final Energy Consumption

 - 2. Industry Sector

 - 2.1. Of which: Iron and Steel

 - 2.2. Of which: Chemical and Petrochemical

 - 2.3. Of which: Non-Ferrous Metals

 - 2.4. Of which: Non-Metallic Minerals

 - 2.5. Of which: Transport Equipment

 - 2.6. Of which: Machinery

▼ M1

2.7.	Of which: Mining and Quarrying
2.8.	Of which: Food, Beverages and Tobacco
2.9.	Of which: Pulp, Paper and printing
2.10.	Of which: Wood and Wood Products
2.11.	Of which: Construction
2.12.	Of which: Textile and Leather
2.13.	Of which: Not Elsewhere Specified – Industry
3.	Transport Sector
3.1.	Of which: International Aviation
3.2.	Of which: Domestic Aviation
3.3.	Of which: Road
3.4.	Of which: Rail
3.5.	Of which: Domestic Navigation
3.6.	Of which: Pipeline Transport
3.7.	Of which: Not Elsewhere Specified – Transport
4.	Other Sectors
4.1.	Of which: Commercial and Public Services
4.2.	Of which: Residential
4.3.	Of which: Agriculture/Forestry
4.4.	Of which: Fishing
4.5.	Of which: Not Elsewhere Specified – Other
5.	Total Non-Energy Use Quantities used as raw materials in the different sectors and not consumed as a fuel or transformed into another fuel. These quantities are included into the aggregates listed above.
5.1.	Of which: Transformation Sector
5.2.	Of which: Energy Sector
5.3.	Of which: Transport Sector
5.4.	Of which: Industry Sector
5.4.1.	Industry Sector of which: Chemical (incl. Petrochemical)
5.5.	Of which: Other Sectors

4.2.4. *Imports and exports*

Imports by country of origin, and exports by country of destination. See also notes under point 4.2.1, aggregate 5.

4.2.5. *Inputs to autoproducers of electricity and heat generation*

Inputs to autoproducers of electricity and heat generation are to be declared separately for electricity only plants, for CHP plants, and for heat only plants.

▼ M1

Excludes the following energy products: refinery feedstocks, additives/oxygenates, biofuels, other hydro-carbons, ethane, motor gasoline, biogasoline, aviation gasoline, gasoline type jet fuel (naphtha type jet fuel or JP4), white spirit and SBP, and lubricants.

Inputs apply to the following plants or activities:

1.	Total Energy Sector
	Total quantity used as energy in the energy sector
1.1.	Of which: Coal Mines
1.2.	Of which: Oil and Gas Extraction
1.3.	Of which: Coke Ovens
1.4.	Of which: Blast Furnaces
1.5.	Of which: Gas Works
1.6.	Of which: Not Elsewhere Specified – Energy
2.	Industry Sector
2.1.	Of which: Iron and Steel
2.2.	Of which: Chemical and Petrochemical
2.3.	Of which: Non-Ferrous Metals
2.4.	Of which: Non-Metallic Minerals
2.5.	Of which: Transport Equipment
2.6.	Of which: Machinery
2.7.	Of which: Mining and Quarrying
2.8.	Of which: Food, Beverages and Tobacco
2.9.	Of which: Pulp, Paper and printing
2.10.	Of which: Wood and Wood Products
2.11.	Of which: Construction
2.12.	Of which: Textile and Leather
2.13.	Of which: Not Elsewhere Specified – Industry
3.	Transport Sector
3.1.	Of which: Pipeline Transport
3.2.	Of which: Not Elsewhere Specified – Transport
4.	Other Sectors
4.1.	Of which: Commercial and Public Services
4.2.	Of which: Residential
4.3.	Of which: Agriculture/Forestry
4.4.	Of which: Fishing
4.5.	Of which: Not Elsewhere Specified – Other

4.3. Units of measurement

1. Energy quantities	10 ³ tonnes
2. Calorific values	MJ/tonne

▼ **M1****4.4. Derogations and exemptions**

Cyprus is exempted from reporting the aggregates defined in Section 4.2.3 under point 4 (Other Sectors) and point 5 (Total Non-Energy Use); only the total values shall be applicable.

Cyprus has a derogation of 3 years following the date of entry into force of this Regulation, for reporting the aggregates defined in Section 4.2.3 under point 2 (Industry Sector) and point 3 (Transport Sector); only the total values shall be applicable during this derogation period.

5. RENEWABLE ENERGY AND ENERGY FROM WASTE**5.1. Applicable energy products**

Unless otherwise specified this data collection applies to all of the following energy products:

Energy Product	Definition
1. Hydro power	Potential and kinetic energy of water converted into electricity in hydroelectric plants. Pumped storage must be included. Production must be reported for plant sizes of < 1 MW, 1 to < 10 MW, \geq 10 MW and from pumped storage.
2. Geothermal	Energy available as heat emitted from within the earth's crust, usually in the form of hot water or steam. This energy production is the difference between the enthalpy of the fluid produced in the production borehole and that of the fluid eventually disposed of. It is exploited at suitable sites: <ul style="list-style-type: none"> — for electricity generation using dry steam or high enthalpy brine after flashing — directly as heat for district heating, agriculture etc.
3. Solar Energy	Solar radiation exploited for hot water production and electricity generation. This energy production is the heat available to the heat transfer medium, i.e. the incident solar energy less the optical and collectors losses. Passive solar energy for the direct heating, cooling and lighting of dwellings or other buildings is not included.
3.1. Of which: Solar Photo-voltaic	Sunlight converted into electricity by the use of solar cells usually made of semi-conducting material which exposed to light will generate electricity.
3.2. Of which: Solar Thermal	Heat from solar radiation; can consist of: <ul style="list-style-type: none"> (a) solar thermal-electric plants, or (b) equipment for the production of domestic hot water or for the seasonal heating of swimming pools (e.g. flat plate collectors, mainly of the thermosyphon type).

▼ M1

Energy Product	Definition
4. Tide, Wave, Ocean	Mechanical energy derived from tidal movement, wave motion or ocean current and exploited for electricity generation.
5. Wind	Kinetic energy of wind exploited for electricity generation in wind turbines.
6. Industrial Waste (non-renewable)	Report wastes of industrial non-renewable origin (solids or liquids) combusted directly for the production of electricity and/or heat. The quantity of fuel used should be reported on a net calorific value basis. Renewable industrial waste should be reported in the Solid Biomass, Biogas and/or Liquid Biofuels categories.
7. Municipal Waste:	Wastes produced by households, hospitals and the tertiary sector incinerated at specific installations, on a net calorific value basis.
7.1. Of which: Renewable	The portion of municipal waste which is of biological origin.
7.2. Of which: Non-Renewable	The portion of municipal waste which is of non-biological origin.
8. Solid Biomass:	Covers organic, non-fossil material of biological origin which may be used as fuel for heat production or electricity generation. It comprises:
8.1. Of which: Charcoal	The solid residue of the destructive distillation and pyrolysis of wood and other vegetal material.
8.2. Of which: Wood, Wood Wastes, Other Solid Wastes	Purpose-grown energy crops (poplar, willow etc.), a multitude of woody materials generated by an industrial process (wood/paper industry in particular) or provided directly by forestry and agriculture (firewood, wood chips, wood pellets, bark, sawdust, shavings, chips, black liquor etc.) as well as wastes such as straw, rice husks, nut shells, poultry litter, crushed grape dregs etc. Combustion is the preferred technology for these solid wastes. The quantity of fuel used should be reported on a net calorific value basis.
9. Biogas:	A gas composed principally of methane and carbon dioxide produced by anaerobic digestion of biomass.
9.1. Of which: Landfill Gas	A biogas formed by the digestion of landfilled wastes.
9.2. Of which: Sewage Sludge Gas	A biogas produced from the anaerobic fermentation of sewage sludge.

▼ **M1**

Energy Product	Definition
9.3. Of which: Other Biogas	Biogas produced from the anaerobic fermentation of animal slurries and of wastes in abattoirs, breweries and other agro-food industries.
10. Liquid Biofuels	<p>The quantities of liquid biofuels reported in this category should relate to the quantities of biofuel and not to the total volume of liquids into which the biofuels are blended. For the particular case of imports and exports of liquid biofuels, only trade of quantities that have not been blended with transport fuels is concerned (i.e. in their pure form); trade of liquids biofuels blended to transport fuels should be reported in the oil data in Chapter 4.</p> <p>The following liquid biofuels are concerned:</p>
10.1. Of which: Biogasoline	This category includes bioethanol (ethanol produced from biomass and/or the biodegradable fraction of waste), biomethanol (methanol produced from biomass and/or the biodegradable fraction of waste), bioETBE (ethyl-tertio-butyl-ether produced on the basis of bioethanol; the percentage by volume of bioETBE that is calculated as biofuel is 47 %) and bioMTBE (methyl-tertio-butyl-ether produced on the basis of biomethanol: the percentage by volume of bioMTBE that is calculated as biofuel is 36 %).
10.2. Of which: Biodiesels	This category includes biodiesel (a methyl-ester produced from vegetable or animal oil, of diesel quality), biodimethylether (dimethylether produced from biomass), Fischer Tropsch (Fischer Tropsch produced from biomass), cold extracted bio-oil (oil produced from oil seed through mechanical processing only) and all other liquid biofuels which are added to, blended with or used straight as transport diesel.
10.3. Of which: Other Liquid Biofuels	Liquid biofuels, used directly as fuel, not included in biogasoline or biodiesels.

5.2. **List of aggregates**

The following list of aggregates shall be declared for all energy products listed in the previous paragraph unless otherwise specified.

5.2.1. *Gross Electricity and Heat Production*

Electricity and heat produced from the energy products mentioned in Section 5.1 (except for charcoal and including the total sum only of the liquid biofuels) must be declared, wherever applicable, separately:

- for main activity producer plants and for autoproducer plants;
- for electricity-only producing plants, for heat-only producing plants, and for combined heat and power (CHP) plants.

▼ M15.2.2. *Supply and Transformation Sectors*

Quantities of energy products that are mentioned in Section 5.1 (except for hydro power, solar photovoltaic energy, energy from tides, waves and oceans and wind energy) and used in the Supply and Transformation Sectors must be declared for the following aggregates:

1. Production

2. Imports

3. Exports

4. Stock changes

A stock build is shown as a negative number and a stock draw is shown as a positive number.

5. Gross consumption

6. Statistical differences

7. Total transformation Sector

Quantities of renewables and wastes used for the conversion of primary forms of energy to secondary (e.g. landfill gases to electricity) or used for the transformation to derived energy products (e.g.: biogas used for blended natural gas).

7.1. Of which: Main Activity Producer Electricity Plants

7.2. Of which: Main Activity Producer CHP Plants

7.3. Of which: Main Activity Producer Heat Plants

7.4. Of which: Autoproducer Electricity plants

7.5. Of which: Autoproducer CHP plants

7.6. Of which: Autoproducer Heat plants

7.7. Of which: Patent Fuel Plants

Quantities of renewables and wastes used to produce patent fuel. Renewables and wastes used for heating and operation of equipment must be reported as consumption in the Energy sector.

7.8. Of which: BKB/PB Plants

Quantities of renewables and wastes used to produce BKB. Renewables and wastes used for heating and operation of equipment must be reported as consumption in the Energy sector.

7.9. Of which: Gas Works Gas

Quantities of renewables and wastes used to produce gas works gas. Renewables and wastes used for heating and operation of equipment must be reported as consumption in the Energy sector.

▼ M1

-
- 7.10. Of which: For blended natural gas
Quantities of biogases blended with natural gas.
-
- 7.11. Of which: For Blending to Motor Gasoline/Diesel
Quantities of liquid biofuels which are not delivered for final consumption but are used with other petroleum products reported as per chapter 4 of this annex.
-
- 7.12. Of which: Charcoal production plants
Quantities of wood used for the production of Charcoal.
-
- 7.13. Of which: Not Elsewhere Specified – Transformation
-

5.2.3. *Energy Sector*

Quantities of energy products that are mentioned in Section 5.1 (except for hydro power, solar photovoltaic energy, energy from tides, waves and oceans and wind energy) and used in the energy sector or for final consumption must be declared for the following aggregates:

-
1. Total Energy Sector
Renewable energies and wastes consumed by the energy industry to support the transformation activity. For example renewable energies and wastes used for heating, lighting or operating pumps/compressors.
Quantities of renewable energies and wastes transformed into another energy form should be reported under the Transformation sector.
-
- 1.1. Of which: Gasification plants
-
- 1.2. Of which: Public Electric, CHP & Heat plants
-
- 1.3. Of which: Coal Mines
-
- 1.4. Of which: Patent Fuel Plants
-
- 1.5. Of which: Coke Ovens
-
- 1.6. Of which: Petroleum Refineries
-
- 1.7. Of which: BKB/PB Plants
-
- 1.8. Of which: Gas Works Gas
-
- 1.9. Of which: Blast Furnaces
-
- 1.10. Of which: Charcoal production plants
-
- 1.11. Of which: Not Elsewhere Specified
-
2. Distribution Losses
All losses occurred due to transport and distribution.
-

5.2.4. *Energy end-use*

Quantities of energy products that are mentioned in Section 5.1 (except for hydro power, solar photovoltaic energy, energy from tides, waves and oceans and wind energy) must be declared for the following aggregates:

-
1. Final Energy Consumption
-
2. Industry Sector
-

▼ **M1**

2.1.	Of which: Iron and Steel
2.2.	Of which: Chemical and Petrochemical
2.3.	Of which: Non-Ferrous Metals
2.4.	Of which: Non-Metallic Minerals
2.5.	Of which: Transport Equipment
2.6.	Of which: Machinery
2.7.	Of which: Mining and Quarrying
2.8.	Of which: Food, Beverages and Tobacco
2.9.	Of which: Pulp, Paper and printing
2.10.	Of which: Wood and Wood Products
2.11.	Of which: Construction
2.12.	Of which: Textile and Leather
2.13.	Of which: Not Elsewhere Specified – Industry
3.	Transport Sector
3.1.	Of which: Rail
3.2.	Of which: Road
3.3.	Of which: Domestic Navigation
3.4.	Of which: Not Elsewhere Specified – Transport
4.	Other Sectors
4.1.	Of which: Commercial and Public Services
4.2.	Of which: Residential
4.3.	Of which: Agriculture/Forestry
4.4.	Of which: Fishing
4.5.	Of which: Not Elsewhere Specified – Other

5.2.5. *Technical Characteristics of Installations*

The following electricity generation capacities are to be declared as applicable at the end of the reported year:

1.	Hydro power Capacity must be reported for plant sizes of < 1 MW, 1 to < 10 MW, ≥ 10 MW and from pumped storage, as well as for all sizes combined. Detailed plant sizes should be reported net of pumped storage.
2.	Geothermal
3.	Solar Photovoltaic
4.	Solar Thermal
5.	Tide, Wave, Ocean
6.	Wind
7.	Industrial Waste (non-renewable)
8.	Municipal Waste

▼M1

9. Wood, Wood Wastes, Other Solid Wastes

10. Landfill Gas

11. Sewage Sludge Gas

12. Other Biogas

13. Liquid Biofuels

The total surface installed of solar collectors are to be declared.

The following biofuel production capacities are to be declared:

1. Liquid Biofuels:

1.1. Of which: Biogasoline

1.2. Of which: Biodiesels

1.3. Of which: Other Liquid Biofuels

5.2.6. *Inputs to autoproducers of electricity and heat generation*

Inputs to autoproducers of electricity and heat generation are to be declared separately for electricity only plants, for CHP plants, and for heat only plants.

Quantities of energy products that are mentioned in Section 5.1 (except for hydro power, solar photovoltaic energy, energy from tides, waves and oceans and wind energy) must be declared for the following aggregates:

1. Total Energy Sector

1.1. Of which: Gasification plants

1.2. Of which: Coal Mines

1.3. Of which: Patent Fuel Plants

1.4. Of which: Coke Ovens

1.5. Of which: Petroleum Refineries

1.6. Of which: BKB/PB Plants

1.7. Of which: Gas Works Gas

1.8. Of which: Blast Furnaces

1.9. Of which: Charcoal production plants

1.10. Of which: Not Elsewhere Specified

2. Industry Sector

2.1. Of which: Iron and Steel

2.2. Of which: Chemical and Petrochemical

2.3. Of which: Non-Ferrous Metals

2.4. Of which: Non-Metallic Minerals

2.5. Of which: Transport Equipment

2.6. Of which: Machinery

▼ M1

2.7.	Of which: Mining and Quarrying
2.8.	Of which: Food, Beverages and Tobacco
2.9.	Of which: Pulp, Paper and printing
2.10.	Of which: Wood and Wood Products
2.11.	Of which: Construction
2.12.	Of which: Textile and Leather
2.13.	Of which: Not Elsewhere Specified – Industry
3.	Transport Sector
3.1.	Of which: Rail
3.2.	Of which: Not Elsewhere Specified – Transport
4.	Other Sectors
4.1.	Of which: Commercial and Public Services
4.2.	Of which: Residential
4.3.	Of which: Agriculture/Forestry
4.4.	Of which: Fishing
4.5.	Of which: Not Elsewhere Specified – Other

5.3. Calorific values

Average net calorific values are to be declared for the following products:

1.	Biogasoline
2.	Biodiesel
3.	Other liquid biofuels
4.	Charcoal

5.4. Units of measurement

1. Electricity generation	MWh
2. Heat production	TJ
3. Renewable energy products	Biogasoline, biodiesels and other liquid biofuels: tonnes Charcoal: 1 000 tonnes All others: TJ (on the basis of net calorific values).
4. Solar collectors surface	1 000 m ²
5. Plants capacity	Biofuels: tonnes/year All others: MWe
6. Calorific values	KJ/kg (net calorific value).

5.5. Derogations and exemptions

Not applicable.

▼ M1

6. APPLICABLE PROVISIONS

The following provisions apply for the data collection as described in all preceding chapters:

1. Reported period:

A calendar year (1 January to 31 December).

2. Frequency

Annual.

3. Deadline for transmission of data

30 November of the year following the reported period.

4. Transmission format and method

The transmission format shall conform to an appropriate interchange standard specified by Eurostat.

Data shall be transmitted or uploaded by electronic means to the single entry point for data at Eurostat.



ANNEX C

MONTHLY ENERGY STATISTICS

This Annex describes the scope, units, reported period, frequency, deadline and transmission modalities for the monthly collection of energy statistics.

Annex A applies for explanations of terms for which a specific explanation is not supplied in this Annex.

1. SOLID FUELS

1.1. Applicable energy products

Unless otherwise specified this data collection applies to all of the following energy products:

Energy product	Definition
1. Hard coal	Black, combustible, solid, organic, fossil sediment with a gross calorific value greater than 24 MJ/kg in ash-free condition with the moisture content obtained at a temperature of 30 °C and a relative air humidity of 96 %.
2. Lignite	Combustible, brown to black, organic fossil sediment with a gross calorific value lower than 24 MJ/kg in ash-free condition with the moisture content obtained at a temperature of 30 °C and a relative air humidity of 96 %.
2.1. Of which: black lignite	Lignite with a moisture content of 20 to 25 % and an ash content of 9 to 13 %. Black lignite was formed in the secondary era. Within the Union, it is now produced only by France from deep mining in Provence.
2.2. Of which: brown coal	Lignite with a moisture content of 40 to 70 % and an ash content normally between 2 and 6 %; the latter, however, may be as high as 12 % depending on the deposit. Brown coal was mainly formed in the tertiary era. This fuel is mostly mined in opencast workings.
3. Peat	Soft, loose to compressed, natural, combustible sediment of vegetable origin with a high moisture content (up to 90 %), light to dark brown in colour. This definition is without prejudice to the definition of renewable energy sources in Directive 2001/77/EC and to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories.
4. Patent fuel	Patent fuels of hard coal are artefacts of specified shape produced by hot milling under pressure, with the addition of binding material (pitch).
5. Lignite briquettes	Artefacts of even shape produced after crushing and drying of lignite, moulded under high pressure without the addition of binders. This includes dried lignite and lignite breeze.

▼B

Energy product	Definition
6. Coke derived from hard coal	Artificial solid fuel derived from hard coal and obtained by dry distillation of the coal in the total or partial absence of air. Includes: — hard coke: obtained by carbonisation at high temperatures, — semi-coke: obtained by carbonisation at low temperatures, — gasworks coke: produced in gasworks.
7. Lignite coke	Solid residue obtained by dry distillation of lignite in the absence of air.

1.2. List of aggregates

The following list of aggregates shall be declared for all energy products listed in the previous paragraph unless otherwise specified.

Annex A applies for explanations of terms for which a specific explanation is not supplied in this Annex.

1.2.1. Supply sector

The following aggregates apply to hard coal, total and black lignite, brown coal and peat:

1. Production**2. Recovered products**

Slurries and waste-heap shale recovered by mines.

3. Imports**3.1. Of which: intra-EU imports****4. Exports****4.1. Of which: intra-EU exports****5. Stock changes**

Quantities held by mines and importers.

Excludes consumer stocks (e.g. those held in power stations and coking plants) except stocks held by consumers who import directly.

A stock build is shown as a negative number and a stock draw is shown as a positive number.

6. Calculated inland deliveries

Total amount of product calculated to have been delivered for inland consumption. It is defined as:

production + recovered products + imports - exports + stock changes

7. Observed internal deliveries

Quantities delivered to the internal market. Equal to the total of the deliveries to the different types of consumers. A difference may occur between the calculated and observed deliveries.

▼B

-
- 7.1. Of which: producers' own use
Internal use in production units.
Excludes consumption in pit-head power stations, pit-head patent fuel plants, pit-head coke oven plants and deliveries to colliery staff.
-
- 7.2. Of which: main activity power stations
-
- 7.3. Of which: autoproducer power stations in coal mines
-
- 7.4. Of which: coking plants
-
- 7.5. Of which: patent fuel plants
Quantities used for transformation in patent fuel plants (pithead and independent).
-
- 7.6. Of which: total industry (without iron and steel industry)
-
- 7.7. Of which: iron and steel industry
-
- 7.8. Of which: others (services, households, etc.)
Quantities of fuel to households (including colliery coal supplied to workers in mines and associated plants) and services (administrations, shops, etc.) and also to sectors not elsewhere specified (district heating, transport, etc.).
-
8. Closing stocks
-
- 8.1. Of which: mines
-
- 8.2. Of which: importers
-
- 8.3. Of which: at coking plants
Applies to hard coal only.
-

The following aggregates apply to coke derived from hard coal, lignite coke, patent fuels and lignite briquettes:

-
1. Production
-
2. Imports
-
3. Exports
-
- 3.1. Of which: intra-EU exports
-
4. Stock change
Quantities held in coking plants (coke) and patent fuel plants (patent fuels) as well as at the importers.
Excludes consumers' stocks excepted stocks held by consumers which import directly.
A stock build is shown as a negative number and a stock draw is shown as a positive number.
-
5. Calculated inland deliveries
Total amount of product calculated to have been delivered for inland consumption. It is defined as:
production + imports - exports + stock changes
-

▼B

-
6. Observed internal deliveries
- Quantities delivered to the internal market. Equal to the total of the deliveries to the different types of consumers. A difference may occur between the calculated and observed deliveries.
-
- 6.1. Of which: total industry (without iron and steel industry)
-
- 6.2. Of which: iron and steel industry
-
- 6.3. Of which: others (services, households, etc.)
- Quantities of fuel to households (including coke and patent fuels supplied to workers in mines and associated plants) and services (administrations, shops, etc.)
-
7. Closing stocks
- Stocks are the quantities held:
- by coking plants (applicable only to coke of coal and lignite),
 - patent fuel plants (applicable only to patent fuels of coal and lignite),
 - importers.
-

1.2.2. Imports

For lignite, lignite coke, patent fuels and lignite briquettes the total intra-EU and total extra-EU import quantities must be declared.

For hard coal, imports must be declared from the following countries of origin:

-
1. Intra-EU import quantities
-
- 1.1. Of which: Germany
-
- 1.2. Of which: United Kingdom
-
- 1.3. Of which: Poland
-
- 1.4. Of which: other EU
- The relevant countries must be specified.
-
2. Extra-EU import quantities
-
- 2.1. Of which: USA
-
- 2.2. Of which: Australia
-
- 2.3. Of which: South Africa
-
- 2.4. Of which: CIS
-
- 2.4.1. From 2.4, of which: Russia
-
- 2.4.2. From 2.4, of which: Ukraine
-
- 2.5. Of which: Canada
-
- 2.6. Of which: Colombia
-
- 2.7. Of which: China
-
- 2.8. Of which: other extra-EU
- The relevant countries must be specified.
-

1.3. Units of measurement

All product quantities are expressed in 10³ tonnes.

▼B**1.4. Derogations and exemptions**

Not applicable.

2. ELECTRICITY**2.1. Applicable energy products**

This chapter covers electrical energy.

2.2. List of aggregates

The following list of aggregates shall be declared.

2.2.1. Production sector

For the following aggregates both gross and net quantities must be declared:

-
1. Total electricity production
-
- 1.1. Of which: nuclear
-
- 1.2. Of which: hydro
-
- 1.2.1. From 1.2, of which: part of hydro produced from pumped storage
-
- 1.3. Of which: geothermal
-
- 1.4. Of which: conventional thermal
-
- 1.5. Of which: wind
-

Also the following quantities of electrical energy must be declared:

-
2. Imports
-
- 2.1. Of which: intra-EU imports
-
3. Exports
-
- 3.1. Of which: extra-EU exports
-
4. Used for pumped storage
-
5. Used for the internal market
- This is calculated as:
- total net production + imports - exports - used for pumped storage
-

For the fuel consumption in main activity producer plants the following aggregates apply (refer to Annex B for the definitions of hard coal and lignite):

-
6. Total fuel consumption in main activity producer plants
- Total quantity of fuel consumed for the purpose of producing electricity and also for the production of heat to be sold to third parties exclusively.
-
- 6.1. Of which: hard coal
-
- 6.2. Of which: lignite
-
- 6.3. Of which: petroleum products
-
- 6.4. Of which: natural gas
-
- 6.5. Of which: derived gas (these are manufactured gases)
-
- 6.6. Of which: other fuels
-

▼B**2.2.2. Fuel stocks in main activity producers**

By main activity producers are meant public utilities generating electricity by using fuels. The following closing stocks (stocks at the end of the reported month) must be declared:

- | | |
|----|--------------------|
| 1. | Hard coal |
| 2. | Lignite |
| 3. | Petroleum products |

2.3. Units of measurement

1. Energy quantities	<p>Electricity: GWh</p> <p>Hard coal, lignite and petroleum products: both in 10³ tonnes and in TJ on the basis of the net calorific value.</p> <p>Natural gas and derived gases: TJ on the basis of the gross calorific value.</p> <p>Other fuels: TJ on the basis of the net calorific value.</p> <p>Nuclear heat: TJ.</p>
2. Stocks	10 ³ tonnes

2.4. Derogations and exemptions

Not applicable.

3. OIL AND PETROLEUM PRODUCTS**3.1. Applicable energy products**

Unless otherwise specified this data collection applies to all of the following energy products, for which the definitions in Annex B Chapter 4 apply: crude oil, NGL, refinery feedstocks, other hydrocarbons, refinery gas (not liquefied), ethane, LPG, naphtha, motor gasoline, aviation gasoline, gasoline type jet fuel (naphtha type jet fuel or JP4), kerosene type jet fuel, other kerosene, gas/diesel oil (distillate fuel oil), transport diesel, heating and other gasoil, fuel oil (both low and high sulphur content), white spirit and SBP, lubricants, bitumen, paraffin waxes and petroleum coke.

Where applicable, motor gasoline must be declared in two categories namely:

- Unleaded motor gasoline: motor gasoline where lead compounds have not been added to enhance octane rating. It may contain traces of organic lead.
- Leaded motor gasoline: motor gasoline with TEL and/or TML added to enhance octane rating.

‘Other products’ include both the quantities that correspond to the definition in Annex B Chapter 4 and in addition the quantities of white spirit and SBP, lubricants, bitumen and paraffin waxes; these products must not be declared separately.

3.2. List of aggregates

The following list of aggregates shall be declared for all energy products listed in the previous paragraph unless otherwise specified.

▼B3.2.1. *Supply sector*

The following table applies only to crude oil, NGL, refinery feedstocks, additives/oxygenates, biofuels and other hydrocarbons only:

-
- | | |
|----|--|
| 1. | Indigenous production
Not applicable for refinery feedstocks. |
|----|--|
-
- | | |
|----|--|
| 2. | From other sources
Additives, biofuels and other hydrocarbons, the production of which has already been covered in other fuel balances.
Not applicable for crude oil, NGL and refinery feedstocks. |
|----|--|
-
- | | |
|----|---|
| 3. | Backflows from petrochemical sector
Finished or semi-finished products which are returned from final consumers to refineries for processing, blending or sale.
They are usually by-products of petrochemical manufacturing.
Only applicable for refinery feedstocks. |
|----|---|
-
- | | |
|----|---|
| 4. | Products transferred
Imported petroleum products which are reclassified as feedstocks for further processing in the refinery, without delivery to final consumers.
Only applicable for refinery feedstocks. |
|----|---|
-
- | | |
|----|---|
| 5. | Imports and exports
Includes quantities of crude oil and products imported or exported under processing agreements (i.e. refining on account). Crude oil and NGLs should be reported as coming from the country of ultimate origin; refinery feedstocks and finished products should be reported as coming from the country of last consignment.
Includes any gas liquids (e.g. LPG) extracted during the regasification of imported liquefied natural gas and petroleum products imported or exported directly by the petrochemical industry.
<i>Note:</i> all trade of biofuels which have not been blended with transport fuels (i.e. in their pure form) should be reported in the Renewables Questionnaire. |
|----|---|
-
- | | |
|----|---|
| 6. | Direct use
Crude oil, NGL and other hydrocarbons used directly without being processed in petroleum refineries.
Includes crude oil burned for electricity generation. |
|----|---|
-
- | | |
|----|--|
| 7. | Stock changes
A stock build is shown as a positive number and a stock draw is shown as a negative number. |
|----|--|
-
- | | |
|----|---|
| 8. | Calculated refinery intake
Total amount of product calculated to have entered the refinery process. It is defined as:
indigenous production + from other sources + backflows from industry + products transferred + imports - exports - direct use - stock changes. |
|----|---|
-

▼B

-
9. Statistical differences
Defined as the calculated refinery intake minus the observed one.
-

10. Observed refinery intake
Amounts measured as input to refineries.
-

11. Refinery losses
The difference between refinery intake (observed) and gross refinery output. Losses may occur during the distillation processes due to evaporation. Reported losses are positive. There may be volumetric gains but no gains in mass.
-

12. Production of oxygenates
That part of production or from other sources which is ethers such as MTBE (methyl tertiary butyl ether), TAME (tertiary amyl methyl ether), alcohols such as ethanol and esters and which are used for blending into gasoline and gasoil.
-

The following table does not apply to refinery feedstocks nor to additive-s/oxygenates:

1. Primary product receipts
Includes quantities of indigenous or imported crude oil (including condensate) and indigenous NGL used directly without being processed in a petroleum refinery and quantities of backflows from the petrochemical industry which, although not primary fuel, are used directly.
-

2. Gross refinery output
Production of finished products at a refinery or blending plant.
Excludes refinery losses, but includes refinery fuel.
-

3. Recycled products
Finished products which pass a second time through the marketing network, after having been once delivered to final consumers (e.g. used lubricants which are reprocessed). These quantities should be distinguished from petrochemical backflows.
-

4. Refinery fuel
Petroleum products consumed in support of the operation of a refinery.

Excludes products used by oil companies outside the refining process, e.g. bunkers or oil tankers.

Includes fuels used for the production at the refineries of electricity and heat sold.
-

5. Imports and exports
-

6. International marine bunkers
-

▼B

-
7. Interproduct transfers
- Quantities reclassified either because their specification has changed or because they are blended into another product.
- A negative entry for one product is compensated by a positive entry (or several entries) for one or several products and vice versa; the total net effect should be zero.
-
8. Products transferred
- Imported petroleum products which are reclassified as feedstocks for further processing in the refinery, without delivery to final consumers.
-
9. Stock changes
- A stock build is shown as a positive number and a stock draw is shown as a negative number.
-
10. Calculated gross inland deliveries
- This is defined as:
- primary product receipts + gross refinery output + recycled products - refinery fuel + imports - exports - international marine bunkers + interproduct transfers - products transferred - stock changes.
-
11. Statistical difference
- Defined as the calculated gross inland delivery minus the observed one.
-
12. Observed gross inland deliveries
- The observed delivery of finished petroleum products from primary sources (e.g. refineries, blending plants, etc.) to the inland market.
- This figure may differ from the calculated figure due, for example, to differences in coverage and/or differences of definition in different reporting systems.
-
- 12.1. Of which: deliveries to international civil aviation
-
- 12.2. Of which: deliveries to public power plants
-
- 12.3. Of which: deliveries of automotive LPG
-
- 12.4. Of which: deliveries (gross) to petrochemical sector
-
13. Backflows from petrochemical sector to refineries
-
14. Total net inland deliveries
-

3.2.2. *Stocks*

The following opening and closing stocks must be declared for all energy products except for refinery gas:

1. Stocks on national territory
- Stocks in the following locations: refinery tanks, bulk terminals, pipeline tankage, barges and coastal tankers (when port of departure and destination are in the same country), tankers in a port of a member country (if their cargo is to be discharged at the port), inland ship bunkers. Exclude stocks of oil held in pipelines, in rail tanks cars, in truck tanks cars, in sea-going ships' bunkers, in service stations, in retail stores and in bunkers at sea.
-

▼B

-
2. Stocks held for other countries under bilateral government agreements

Stocks on national territory which belong to another country and to which the access is guaranteed by an agreement between the respective governments.

3. Stocks with known foreign destination

Stocks not included in point 2 on national territory which belong to and are destined for another country. These stocks may be located inside or outside bonded areas.

4. Other stocks held in bonded areas

Includes stocks neither included in point 2 nor 3 irrespective of whether they have received customs clearance or not.

5. Stocks held by major consumers

Include stocks which are subject to government control. This definition does not include other consumer stocks.

6. Stocks held on board incoming ocean vessels in port or at mooring

Stocks irrespective of whether they have been cleared by customs or not. This category excludes stocks on board vessels at high seas.

Includes oil in coastal tankers if both their port of departure and destination are in the same country. In the case of incoming vessels with more than one port of unloading, only report the amount to be unloaded in the reporting country.

7. Stocks held by government on national territory

Includes non-military stocks held within the national territory by government, which are government-owned or controlled and held exclusively for emergency purposes.

Excludes stocks held by state oil companies or electric utilities or stocks held directly by oil companies on behalf of governments.

8. Stocks held by stock holding organisation on national territory

Stocks held by both public and private corporations established to maintain stocks exclusively for emergency purposes.

Excludes mandatory stocks held by private companies.

9. All other stocks held on national territory

All other stocks satisfying the conditions described in point 1 above.

10. Stocks held abroad under bilateral government agreements

Stocks belonging to the reporting country but held in another country, to which access is guaranteed by an agreement between the respective governments.

- 10.1. Of which: government stocks
-

- 10.2. Of which: holding organisation's stocks
-

- 10.3. Of which: other stocks
-

▼B

-
11. Stocks held abroad designated definitely for import stocks
Stocks not included in category 10 which belong to the reporting state but which are held in another state and awaiting import there.
-
12. Other stocks in bonded areas
Other stocks in the national territory not included in the above categories.
-
13. Pipeline fill
Oil (crude oil and petroleum products) contained in pipelines, necessary to maintain the flow in the pipelines.
-

In addition, a breakdown of quantities per corresponding country must be declared for:

- closing stocks held for other countries under bilateral government agreements,
- other closing stocks with known foreign destination,
- closing stocks held abroad under bilateral government agreements,
- other closing stocks held abroad designated definitely for import into the reporting country.

By opening stocks are meant the stocks on the last day of the month preceding the reported one. By closing stocks are meant the stocks on the last day of the reported month.

3.2.3. *Imports and exports*

Imports by country of origin, and exports by country of destination.

3.3. **Units of measurement**

Energy quantities: 10³ tonnes.

3.4. **Geographical notes**

For statistical reporting purposes only, the clarifications of Annex A Chapter 1 apply with the following specific exceptions:

1. Denmark includes the Faeroe Islands and Greenland.
2. Switzerland includes Liechtenstein.

3.5. **Derogations and exemptions**

Not applicable.

4. NATURAL GAS

4.1. **Applicable energy products**

Natural gas is defined in Annex B Chapter 2.

4.2. **List of aggregates**

The following list of aggregates shall be declared for all energy products listed in the previous paragraph unless otherwise specified.

▼B4.2.1. *Supply sector*

-
1. Indigenous production
All dry marketable production within national boundaries, including offshore production. Production is measured after purification and extraction of NGLs and sulphur.
Excludes extraction losses and quantities reinjected, vented or flared.
Includes quantities used within the natural gas industry; in gas extraction, pipeline systems and processing plants.

 2. Imports

 3. Exports

 4. Stock changes
A stock build is shown as a positive number and a stock draw is shown as a negative number.

 5. Calculated gross inland deliveries
This is defined as:
indigenous production + imports - exports - stock change.

 6. Statistical difference
Defined as the calculated gross inland delivery minus the observed one.

 7. Observed gross inland deliveries
Includes 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 losses in distribution.

 8. Opening and closing levels of stocks held on national territory
Quantities stored in special storage facilities (depleted gas and/or oil field, aquifer, salt cavity, mixed caverns or other) as well as liquefied natural gas storage. By opening stocks are meant the stocks on the last day of the month preceding the reported one. By closing stocks are meant the stocks on the last day of the reported month.

 9. Own use and losses of the natural gas industry
Own used quantities by the gas industry for heating and operation of its equipment (i.e. consumption in gas extraction, in the pipeline system and in processing plants).
Includes losses in distribution.

4.2.2. *Imports and exports*

Imports by country of origin, and exports by country of destination.

4.3. **Units of measurement**

Quantities must be declared in two units:

— in physical quantity, in 10^6 m³ assuming reference gas conditions (15 °C, 101,325 kPa),

— in energy content, i.e. in TJ, based on the gross calorific value.

▼B**4.4. Derogations and exemptions**

Not applicable.

5. APPLICABLE PROVISIONS

The following provisions apply for the data collection as described in all preceding chapters:

1. Reported period:

A calendar month.

2. Frequency:

Monthly.

3. Deadline for transmission of data:

Within three months following the reported month.

4. Transmission format and method:

The transmission format shall conform to an appropriate interchange standard specified by Eurostat.

Data shall be transmitted or uploaded by electronic means to the single entry point for data at Eurostat.



ANNEX D

SHORT-TERM MONTHLY STATISTICS

This Annex describes the scope, units, reported period, frequency, deadline and transmission modalities for the short-term monthly collection of statistical data.

Annex A applies for explanations of terms for which a specific explanation is not supplied in this Annex.

1. **NATURAL GAS**

1.1. **Applicable energy products**

This chapter covers natural gas only. Natural gas is defined in Chapter 2 of Annex B.

1.2. **List of aggregates**

The following list of aggregates shall be declared.

1.	Production
2.	Imports
3.	Exports
4.	Stock change A stock build is shown as a negative number and a stock draw is shown as a positive number.
5.	Supply This is calculated as: production + imports - exports + stock change.

1.3. **Units of measurement**

Quantities of natural gas must be declared in TJ, based on the gross calorific value.

1.4. **Other applicable provisions**

1. Reported period:

A calendar month.

2. Frequency:

Monthly.

3. Deadline for transmission of data:

Within one month following the reported month.

4. Transmission format and method:

The transmission format shall conform to an appropriate interchange standard specified by Eurostat.

Data shall be transmitted or uploaded by electronic means to the single entry point for data at Eurostat.

1.5. **Derogations and exemptions**

Germany is exempted from this data collection.

2. **ELECTRICITY**

2.1. **Applicable energy products**

This chapter covers electricity only.

▼ B**2.2. List of aggregates**

The following list of aggregates shall be declared.

-
1. Total electricity production
Total gross quantity of electricity generated.
Includes own consumption of power plants.

 2. Imports

 3. Exports

 4. Gross electricity supply
This is calculated as:
total electricity production + imports - exports.

2.3. Units of measurement

Energy quantities must be expressed in GWh.

2.4. Other applicable provisions

1. Reported period:
A calendar month.
2. Frequency:
Monthly.
3. Deadline for transmission of data:
Within one month following the reported month.
4. Transmission format and method:

The transmission format shall conform to an appropriate interchange standard specified by Eurostat.

Data shall be transmitted or uploaded by electronic means to the single entry point for data at Eurostat.

2.5. Derogations and exemptions

Germany is exempted from this data collection.

3. OIL AND PETROLEUM PRODUCTS

This data collection is commonly known as the 'JODI Questionnaire'.

3.1. Applicable energy products

Unless otherwise specified, this data collection applies to all of the following energy products, for which the definitions in Chapter 4 of Annex B apply: crude oil, LPG, gasoline (which is the sum of motor gasoline and aviation gasoline), kerosene (which is the sum of kerosene type jet fuel and other kerosene), gas/diesel oil and fuel oil (both low and high sulphur content).

In addition, this data collection also applies to 'total oil', by which is meant the sum of all these products except crude oil, and must also include other petroleum products such as refinery gas, ethane, naphtha, petroleum coke, white spirit and SBP, paraffin waxes, bitumen, lubricants and others.

3.2. List of aggregates

The following list of aggregates shall be declared for all energy products listed in the previous paragraph unless otherwise specified.

▼B3.2.1. *Supply sector*

The following table applies only to crude oil:

1.	Production
2.	Imports
3.	Exports
4.	Closing stock
5.	Stock change A stock build is shown as a positive number and a stock draw is shown as a negative number.
6.	Refinery intake Observed refinery throughput.

The following table applies to crude oil, LPG, gasoline, kerosene, gas/diesel oil, fuel oil and total oil:

1.	Refinery output Gross output, including refinery fuel.
2.	Imports
3.	Exports
4.	Closing stock
5.	Stock change A stock build is shown as a positive number and a stock draw is shown as a negative number.
6.	Demand Deliveries or sales to the inland market (domestic consumption) plus refinery fuel plus international marine and aviation bunkers. Demand for total oil includes crude.

3.3. **Units of measurement**

Energy quantities: 10³ tonnes

3.4. **Other applicable provisions**

1. Reported period:

A calendar month.

2. Frequency:

Monthly.

3. Deadline for transmission of data:

Within 25 days following the reported month.

4. Transmission format and method:

The transmission format shall conform to an appropriate interchange standard specified by Eurostat.

Data shall be transmitted or uploaded by electronic means to the single entry point for data at Eurostat.

3.5. **Derogations and exemptions**

Not applicable.