COMMISSION OF THE EUROPEAN COMMUNITIES



Brussels, 10.1.2007 COM(2006) 850 final

2007/0002 (COD)

Proposal for a

REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

on energy statistics

(presented by the Commission)

EXPLANATORY MEMORANDUM

1) CONTEXT OF THE PROPOSAL

1.1. Grounds for and objectives of the proposal

The development of Community policy and legislation on energy highlights the need for comprehensive and comparable European statistics on a range of energy related issues. Directives with clear quantitative targets and deadlines on energy in the EU implicitly require the need of monitoring the energy situation in order to verify if and how well such goals are met.

The huge influence of energy transformation and consumption on our environment is bound to remain an issue of concern in the long-term future which emphasizes the requirement of accurate energy data. A correct and precise energy accountancy has become particularly relevant following the entry-into-force of the Kyoto Protocol on 16 February 2005 : our energy use is responsible for 80 % of the total EU emissions of greenhouse gases.

The proposal also takes into full consideration the cooperation of the Commission with the International Energy Agency (IEA) on energy statistics: the proposed data collection covers entirely the part that is shared with the IEA in the context of this cooperation.

1.2. General context

At the Hampton Court Summit the Heads of State called for a European Energy Policy. In response to that the Commission prepares a package of measures as they are highlighted in the recent green paper on energy.

The availability of timely and reliable data on the energy situation in the EU is of paramount importance for succeeding in this objective. This importance justifies a stable, institutional basis for the collection of energy data which is at present still undertaken by voluntary agreements.

The subject proposal also takes attention to minimize the burden on enterprises : although this regulation does not reduce the existing burden, it does not add new obligations nor increase the existing scope of energy data collection in the EU. The objective of the proposed Regulation is therefore not to modify the statistical work that is already being done, but to provide a legal framework for it.

This legal framework is proposed at a time when Member States experience more and more difficulties in the subject data collection. The liberalisation of the energy market resulted i.a. in the appearance of large numbers of energy producers and resellers which made the data collection far more complex. This put the resources allocated to energy data collection under pressure, particularly since energy has remained one of the few unregulated statistical domains.

The fact that this market liberalisation also causes issues with commercial confidentiality makes it more difficult for Member States officials to perform their statistical work on the basis of a gentlemen's agreement.

In recent years, a general decline of the statistical quality (completeness, accuracy, timeliness) is being noticed. It is considered appropriate that initiatives be taken to underline the essential needs of reliable energy data i.a. by providing a regulated confirmation of the requirement for such important data collection work.

The significant recent increases of the energy prices have increased the awareness of the European citizens and policy makers on the complexity of our energy situation. Insight in this energy situation requires availability of accurate, timely and complete statistical data on energy.

1.3. Existing provisions in the area of the proposal

Commission Recommendation 88/96/ECSC concerning coal statistics, expired together with the ECSC on 23 July 2002.

Council Regulation (EC) No 2964/95 of 20 December 1995, introducing registration for crude oil imports and deliveries in the Community. The proposed Regulation includes these data in an aggregated manner and confidentiality problems which prevent timely dissemination are solved by the data collection to which this Regulation proposal refers.

It has to be noted that, even if the present proposal does not cover energy prices, several legal provisions exist on energy prices. They are listed here for easy reference:

- Commission Decision 1999/566/EC of 26 July 1999 implementing Council Decision 1999/280/EC regarding a Community procedure for information and consultation on crude oil supply costs and the consumer prices of petroleum products. The proposed Regulation does not include the data referred to in this Decision.
- Council Directive 90/377/EEC of 29 June 1990 concerning a Community procedure to improve the transparency of gas and electricity prices charged to industrial end-users.

1.4. Consistency with the other policies and objectives of the Union

Detailed reference to the extensive EU energy policies is made in the justification part of this proposal. The Kyoto protocol imposes high quality requirements on the inventory data of greenhouse gasses, for which energy consumption is extensively responsible. The EU policies on intelligent energy and on renewable energy require detailed quantitative monitoring to measure progress towards targets. Also the Community strategy for sustainable development includes important ambitions notably on the development of biofuels and other renewable fuels, the data of which are covered by this Regulation as well.

2) CONSULTATION OF INTERESTED PARTIES AND IMPACT ASSESSMENT

2.1 Consultation of interested parties

Consultation methods, main sectors targeted and general profile of respondents

The subject proposal has been discussed in a work group meeting on 13-14 June 2005 in

Luxembourg, by subsequent correspondence with the existing data providers of the Member States and during the meeting of 18-19 May 2006 of the Statistical Programme Committee.

Summary of responses and how they have been taken into account

A very positive and supportive response has been noted.

2.2. Collection and use of expertise

There was no need for external expertise.

2.3. Impact assessment

The implementation of the proposed Regulation will have a limited impact on the Member States, because the described data collection is already carried out in its entirety on a voluntary basis.

This proposal is quite meaningful for environmental considerations because of the huge influence of the use of energy on the environment. Accurate and timely data on the energy situation in the EU will permit to draw a clear and quantitative picture of this impact and of the current trends.

The economic influence is limited. However, this proposal may contribute to supply a clearer picture on energy imports and exports as well as on production and consumption by type of fuel.

3) LEGAL ELEMENTS OF THE PROPOSAL

3.1. Summary of the proposed action

The objective of this proposal for a Regulation of the European Parliament and the Council is to establish a common framework for the collection and compilation of Community statistics on energy production, imports and exports, transformation and consumption. This framework makes extensive use of the existing data collection and also of the cooperation at international level with other relevant organisations, so that a methodological uniformity and data comparability are guaranteed. The objective is therefore not to open a new statistical domain, but rather to provide a helpful legal basis for an existing, quite important effort of making reliable data available in a timely manner for Community policy on energy.

3.2. Legal basis

Article 285 of the Treaty establishing the European Community provides the legal basis for Community statistics. The Council, acting in accordance with the codecision procedure, shall adopt measures for the production of statistics where necessary for the performance of the activities of the Community. This Article sets out requirements relating to the production of Community statistics and requires conformity to standards of impartiality, reliability, objectivity, scientific independence, cost-effectiveness and statistical confidentiality.

3.3. Subsidiarity principle

Since the objectives of the proposed action, 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 on the basis of a Community legal act because only the Commission can coordinate the necessary harmonisation of statistical information at Community level, while the collection of data and compilation of comparable statistics on energy can be organised by the Member Sates, the Community may adopt measures, in accordance with the principle of subsidiary as set out in Article 5 of the Treaty.

3.4. Proportionality principle

The proposal complies with the proportionality principle for the following reason(s).

In accordance with the principle of proportionality this Regulation confines itself to the minimum required to achieve this objective and does not go beyond what is necessary for that purpose. This Regulation does not legislate the data collection mechanisms for each Member State; it merely defines the energy data to be supplied in a harmonised structure and timing.

There is no obligation for the Member States to make any changes in their administrative systems related to the production of energy statistics. No new items are proposed for data collection in this Regulation beyond what is already being undertaken on a voluntary basis at EU level.

It is appreciated that the legislation may, for some Member States, imply some developments or additions to their existing energy statistics systems. Eurostat will continue to work closely with the competent national authorities and will seek to minimise any potential difficulties caused by the implementation of this Regulation.

3.5. Choice of instruments

Proposed instruments: regulation.

Other means would not be adequate for the following reason(s).

In taking into account the particular characteristics of each type of legislative act as described in Article 249 of the EC Treaty, it may be suggested that Regulations are the most appropriate tool for the production of Community Statistics.

In fact, almost all the requirements of statistics need direct and immediate execution in Member States. They generally concern specifically identified statistical units in the Member States, the objective being clear and immediately applicable and all the elements to be surveyed being specified in the act together with methodology, timing and periodicity. As such they are not in general dependant on national measures for harmonisation. National authorities, being concerned by the measures, simply have to apply them.

4) **BUDGETARY IMPLICATION**

The proposal has no implication for the Community budget.

5) ADDITIONAL INFORMATION

5.1. European Economic Area

The proposed act concerns an EEA matter and should therefore extend to the European Economic Area.

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on energy statistics

(Text with EEA relevance)

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 Commission¹,

Acting in accordance with the procedure laid down in Article 251 of the Treaty²,

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)Availability of accurate and 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 the 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 Protocol³.
- (3) 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 market⁴ 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 and amending Directive 92/42/EEC⁵ require Member States to report quantitative energy data. To follow the evolution towards these objectives, detailed and uptodate energy data are required.
- (4) The Green Papers COM(2005) 265 of the Commission of 22 June 2005 on Energy Efficiency or Doing More With Less and COM(2006) 105 of 8 March 2006 on a

¹ $\begin{array}{l} OJ \ C \ , \ , \ p. \\ OJ \ C \ , \ , \ p. \end{array}$ 2

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OJ L 49, 19.2.2004, p. 1. 4

OJ L 283, 27.10.2001, p. 33.

⁵ OJ L 167, 22.6.1992, p. 17. Directive as last amended by Directive 2004/08/EC of the European Parliament and of the Council (OJ L 52, 21.2.2004, p. 50).

European Strategy for Sustainable, Competitive and Secure Energy lay down EU energy policies for which the availability of EU energy statistics are required (among others, for the purpose of establishing a European Supply Observatory).

- (5) The liberalisation of the energy market makes it increasingly difficult to obtain reliable and timely energy data in the absence of a legal basis concerning the provision of such data.
- (6) It is essential that a system of statistics relating to energy can adapt flexibly to a situation that is expected to evolve in the future.
- (7) 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 Statistics⁶.
- (8) Since the objectives 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 those objectives.
- (9) In the production and dissemination of Community statistics under this Regulation, the national and Community statistical authorities will take account of the principles set out in the European Statistics Code of Practice, which was adopted by the Statistical Programme Committee on 24 February 2005 and attached to the Recommendation of the Commission on the independence, integrity and accountability of the national and Community statistical authorities⁷.
- (10) 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 Commission⁸.
- (11) In particular, the measures of general scope designed to amend non-essential elements of the regulation should be adopted in accordance with the regulatory procedure with scrutiny. Other measures of general scope applying essential elements of the regulation should be adopted in accordance with the regulatory procedure.
- (12) It is necessary to foresee that the Commission may grant exemptions or derogations to Member States from those parts of the energy data collection that would lead to excessive burden on respondents.
- (13) The measures provided for in this Regulation are in accordance with the opinion of the Statistical Programme Committee (SPC), established by Council Decision 89/382/EEC of 19 June 1989⁹.

⁶ OJ L 52, 22.2.1997, p. 1.

⁷ COM(2005) 217.

⁸ OJ L 184, 17.7.1999, p. 45. Decision as last amended by Council Decision 2006/512/EC of 17 July 2006 (OJ L 200, 22.7.2006, p. 11).

⁹ OJ L 181, 28.6.1989, p. 47.

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) "Community authority" means 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 physical form of energy;
- (e) "aggregates" mean data aggregated at national level on treatment or use of energy products, namely production, trade, stocks, transformation, consumption, and structural characteristics of the energy system such as e.g. 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 reduced burden on respondents and on 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, distributors and transporters, importers and exporters of energy products;

- (b) other statistical surveys addressed to 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.
- 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 procedure specified in Article 9(2).

Article 4

Aggregates, energy products and applicable transmittal frequency of national statistics

- 1. The national statistics to be collected shall be as set out in the Annexes. They shall be transmitted with the following periodicities :
 - (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 to the technical terms used are provided in the individual annexes and also in Annex A ("Clarifications of Terminology").
- 3. The national statistics and the applicable clarifications or definitions may be modified in accordance with the procedure referred to in Article 9(2).

Article 5

Transmission

- 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 thereof, 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 procedure referred in Article 9(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 procedure referred to in Article 9(3), for those parts of the national statistics for which the collection would lead to excessive burden on respondents.

Article 6 Quality criteria 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 Annexe 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 Protocol¹⁰.
- 3. Methodological specifications designed to ensure the quality of the data transmitted may be developed and later updated in accordance with the procedure specified in Article 9(3).
- 4. Within 6 months following 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 transmit to the Commission (Eurostat) a report containing any relevant information concerning the implementation of this Regulation.

Article 7

Time reference and periodicity

Member States shall compile all data specified in this Regulation from the very beginning of the calendar year following the adoption of this Regulation, and shall transmit them from there onwards with the periodicities defined in accordance with in Article 4(1).

Article 8

Implementing measures

- 1. The following measures necessary for implementation of this Regulation shall be laid down in accordance with the procedure referred to in Article 9(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)).
- 2. The following measures necessary for implementation of this Regulation shall be laid down in accordance with the procedure referred to in Article 9(3) :
 - (a) the granting of additional exemptions or derogations (Article 5(4)).
 - (b) The development and the updating of the methodological specifications (Article 6(3));

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OJ L 55, 1.3.2005, p. 57.

3. Consideration is to be given to the principle that the benefits of updating must outweigh its costs, and to the principle that additional costs and burden remain within a reasonable limit.

Article 9 Committee

- 1. The Commission shall be assisted by the Statistical Programme Committee.
- 2. Where reference is made to this paragraph, the regulatory procedure with scrutiny laid down in Article 5a of Decision 1999/468/EC shall apply.
- 3. Where reference is made to this paragraph, the regulatory procedure laid down in 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.

4. The committee shall adopt its rules of procedure.

Article 10 Entry into force

This Regulation shall enter into force on the twentieth day following that of 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.

Done at Brussels, [...]

For the European Parliament The President [...] For the Council The President [...]

ANNEXE A – CLARIFICATIONS ON 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 Danish Faroes 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.
- Switzerland does not include Liechtenstein.
- United States includes the 50 States, the District of Columbia, the U.S. 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 by Comitology procedure after a revision of the NACE classification has entered into force.

2.1. Supply And Transformation Sector

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.

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.

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.

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.

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.
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.

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

Chemical (including Petrochemical) Chemical and petrochemical industries.

Non-Ferrous Metals

Non-ferrous metals industries.

Non-Metallic Minerals

Glass, ceramic, cement and other building materials industries.

Transport Equipment

Industries related to the equipment used for transport.

Machinery

Fabricated metal products, machinery and equipment other than transport equipment.

Mining and Quarrying

Excludes energy producing industries.

Food, Beverages and Tobacco

Pulp, Paper and Printing

Includes production of recorded media.

Wood and Wood Products (other than pulp and paper)

Construction

Textile and Leather

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.

Transport Sector – Rail

All consumption for use in rail traffic, including industrial railways.

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.

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).

Transport Sector - Pipeline Transport

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

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 the Commercial/Public sector) 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.

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.

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.

Include fuels used by airlines for their road vehicles and fuels used in the 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.

Other Sectors - Residential

To be declared are fuels consumed by all households including "households with employed persons".

Other Sectors - Agriculture/Forestry

Fuels consumed by users classified as agriculture, hunting and forestry.

Other Sectors - Fishing

Fuels delivered for inland, coastal and deep-sea fishing. Fishing should cover fuels delivered to ships of all flags that have refueled in the country (include international fishing) and energy used in the fishing industry.

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 to 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 characterized 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. Shale oil and other products derived from liquefaction should be reported on the Annual Oil Questionnaire.

6	Peat	A combustible soft, porous or compressed, fossil 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.
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 carbonization 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 carbonization 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 carbonization (including gas produced by coke ovens and transferred to gas 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 work gas transferred to blended natural gas which will be distributed and consumed through the natural gas grid.
		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.
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 to terms, for which a specific explanation is not supplied in this annex.

1.2.1. Supply and Transformation Sector

1.	Production
1.1	of which: underground
	Applicable only for anthracite, coking coal, other bituminous coal, subbituminous coal and lignite/brown coal.
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:

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	- 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 work 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
- 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.
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.

1.2.5. 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, of which:

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

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).

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 Sector

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.
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. Gas Flared 11. 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 127 Of which. Gas Works 12.8 Of which: Coke Ovens 129 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
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	Distribution losses Losses due to transport and distribution as well as pipeline losses.

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
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
2.13	Of which: Not Elsewhere Specified – Industry
3	Transport Sector, of which:
3.1	Of which: Pipeline Transport
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3.2	Of which: Not Elsewhere Specified – Transport
4	Other Sectors, of which:
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	Туре
	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.

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.

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 to 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 fossil fuels and manufactured gases, natural gas, oil and petroleum products, and renewable energy and energy from waste.

3.2.1. Supply and Transformation Sector

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
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 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

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

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	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.
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 fossil 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
2.7	Other Kerosene
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) Municipal Waste (Non-Renewable) 4.3 Wood, Wood Waste And Other Solid Waste 4.4 4.5 Landfill Gas Sewage Sludge Gas 4.6 Other Biogas 4.7 Liquid Biofuels 4.8

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

1Industry Sector1.1Of which: Iron and Steel1.2Of which: Chemical and Petrochemical1.3Of which: Non-Ferrous Metals1.4Of which: Non-Metallic Minerals1.5Of which: Transport Equipment1.6Of which: Machinery1.7Of which: Machinery1.8Of which: Food, Beverages and Tobacco1.9Of which: Pulp, Paper and printing1.10Of which: Construction1.11Of which: Textile and Leather1.13Of which: Not Elsewhere Specified – Industry2Transport Sector2.1Of which: Not Elsewhere Specified – Transport2.3Of which: Not Elsewhere Specified – Transport3Residential Sector4Commercial and Public Services5Agriculture/Forestry6Fishing	1	Lu deseture Constant
1.2Of which: Chemical and Petrochemical1.3Of which: Non-Ferrous Metals1.4Of which: Non-Metallic Minerals1.5Of which: Transport Equipment1.6Of which: Machinery1.7Of which: Machinery1.8Of which: Food, Beverages and Tobacco1.9Of which: Pulp, Paper and printing1.10Of which: Wood and Wood Products1.11Of which: Textile and Leather1.12Of which: Not Elsewhere Specified – Industry2Transport Sector2.1Of which: Not Elsewhere Specified – Transport3Residential Sector4Commercial and Public Services5Agriculture/Forestry	1	Industry Sector
1.3Of which: Non-Ferrous Metals1.4Of which: Non-Metallic Minerals1.5Of which: Transport Equipment1.6Of which: Machinery1.7Of which: Machinery1.8Of which: Food, Beverages and Tobacco1.9Of which: Pulp, Paper and printing1.10Of which: Wood and Wood Products1.11Of which: Construction1.12Of which: Textile and Leather1.13Of which: Not Elsewhere Specified – Industry2Transport Sector2.1Of which: Not Elsewhere Specified – Transport3Residential Sector4Commercial and Public Services5Agriculture/Forestry	1.1	Of which: Iron and Steel
1.4Of which: Non-Metallic Minerals1.5Of which: Transport Equipment1.6Of which: Machinery1.7Of which: Mining and Quarrying1.8Of which: Food, Beverages and Tobacco1.9Of which: Pulp, Paper and printing1.10Of which: Wood and Wood Products1.11Of which: Construction1.12Of which: Textile and Leather1.13Of which: Not Elsewhere Specified – Industry2Transport Sector2.1Of which: Not Elsewhere Specified – Transport2.3Of which: Not Elsewhere Specified – Transport3Residential Sector4Commercial and Public Services5Agriculture/Forestry	1.2	Of which: Chemical and Petrochemical
1.5Of which: Transport Equipment1.6Of which: Machinery1.7Of which: Machinery1.7Of which: Mining and Quarrying1.8Of which: Food, Beverages and Tobacco1.9Of which: Pulp, Paper and printing1.10Of which: Wood and Wood Products1.11Of which: Construction1.12Of which: Textile and Leather1.13Of which: Not Elsewhere Specified – Industry2Transport Sector2.1Of which: Pipeline transport2.3Of which: Not Elsewhere Specified – Transport3Residential Sector4Commercial and Public Services5Agriculture/Forestry	1.3	Of which: Non-Ferrous Metals
1.6Of which: Machinery1.7Of which: Mining and Quarrying1.8Of which: Food, Beverages and Tobacco1.9Of which: Pulp, Paper and printing1.10Of which: Wood and Wood Products1.11Of which: Construction1.12Of which: Textile and Leather1.13Of which: Not Elsewhere Specified – Industry2Transport Sector2.1Of which: Pipeline transport2.3Of which: Not Elsewhere Specified – Transport3Residential Sector4Commercial and Public Services5Agriculture/Forestry	1.4	Of which: Non-Metallic Minerals
1.7Of which: Mining and Quarrying1.8Of which: Food, Beverages and Tobacco1.9Of which: Pulp, Paper and printing1.10Of which: Wood and Wood Products1.11Of which: Construction1.12Of which: Textile and Leather1.13Of which: Not Elsewhere Specified – Industry2Transport Sector2.1Of which: Pipeline transport2.3Of which: Not Elsewhere Specified – Transport3Residential Sector4Commercial and Public Services5Agriculture/Forestry	1.5	Of which: Transport Equipment
1.8Of which: Food, Beverages and Tobacco1.9Of which: Pulp, Paper and printing1.10Of which: Wood and Wood Products1.11Of which: Construction1.12Of which: Textile and Leather1.13Of which: Not Elsewhere Specified – Industry2Transport Sector2.1Of which: Pipeline transport2.3Of which: Not Elsewhere Specified – Transport3Residential Sector4Commercial and Public Services5Agriculture/Forestry	1.6	Of which: Machinery
1.9Of which: Pulp, Paper and printing1.10Of which: Wood and Wood Products1.11Of which: Construction1.12Of which: Construction1.13Of which: Not Elsewhere Specified – Industry2Transport Sector2.1Of which: Rail2.2Of which: Pipeline transport2.3Of which: Not Elsewhere Specified – Transport3Residential Sector4Commercial and Public Services5Agriculture/Forestry	1.7	Of which: Mining and Quarrying
1.10Of which: Wood and Wood Products1.11Of which: Construction1.12Of which: Textile and Leather1.13Of which: Not Elsewhere Specified – Industry2Transport Sector2.1Of which: Rail2.2Of which: Pipeline transport2.3Of which: Not Elsewhere Specified – Transport3Residential Sector4Commercial and Public Services5Agriculture/Forestry	1.8	Of which: Food, Beverages and Tobacco
1.11Of which: Construction1.12Of which: Textile and Leather1.13Of which: Not Elsewhere Specified – Industry2Transport Sector2.1Of which: Rail2.2Of which: Pipeline transport2.3Of which: Not Elsewhere Specified – Transport3Residential Sector4Commercial and Public Services5Agriculture/Forestry	1.9	Of which: Pulp, Paper and printing
1.12Of which: Textile and Leather1.13Of which: Not Elsewhere Specified – Industry2Transport Sector2.1Of which: Rail2.2Of which: Pipeline transport2.3Of which: Not Elsewhere Specified – Transport3Residential Sector4Commercial and Public Services5Agriculture/Forestry	1.10	Of which: Wood and Wood Products
1.13Of which: Not Elsewhere Specified – Industry2Transport Sector2.1Of which: Rail2.2Of which: Pipeline transport2.3Of which: Not Elsewhere Specified – Transport3Residential Sector4Commercial and Public Services5Agriculture/Forestry	1.11	Of which: Construction
 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 	1.12	Of which: Textile and Leather
 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 	1.13	Of which: Not Elsewhere Specified – Industry
 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 	2	Transport Sector
 2.3 Of which: Not Elsewhere Specified – Transport 3 Residential Sector 4 Commercial and Public Services 5 Agriculture/Forestry 	2.1	Of which: Rail
3 Residential Sector 4 Commercial and Public Services 5 Agriculture/Forestry	2.2	Of which: Pipeline transport
 4 Commercial and Public Services 5 Agriculture/Forestry 	2.3	Of which: Not Elsewhere Specified – Transport
5 Agriculture/Forestry	3	Residential Sector
	4	Commercial and Public Services
6 Fishing	5	Agriculture/Forestry
	6	Fishing
7 Not Elsewhere Specified – Other	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
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, subbituminous 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
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

- 2.9 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

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
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
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

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 31st 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 following quantities must be declared for both main activity producers and autoproducers:

1.	Total
2.	Nuclear
3.	Hydro
3.1	Of which: pumped storage
4.	Geothermal
5.	Solar
6.	Tide, wave, ocean

7.	Wind
8.	Combustible fuels
8.1	Of which: Steam
8.2	Of which: Internal combustion
8.3	Of which: Gas turbine
8.4	Of which: Combined cycle
8.5	Of which: Other
	To be specified if declared.

The following quantities must be declared for main activity producers only:

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. UNITS OF MEASUREMENT

1 Energy quantities	Electricity: GWh
	Heat: TJ
	Solid fossil 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.
2 Capacity	Electrical generation capacity: MWe
	Heat generation capacity: MWt

3.5. DEROGATIONS AND EXEMPTIONS

France has a derogation of 4 years following the date of entry-into-force of this Regulation, for reporting the aggregates related to heat.

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
	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	Additives are non-hydrocarbon compounds added to or blended with a product to modify fuel properties (octane, cetane, cold properties, etc.):
	• 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 or dimethylester, etc.);
	• chemical compounds (such as TML, TEL and detergents).
	Note: 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.
4.1 Of Which: Biofuels	Biogasoline and Biodiesels. The definitions of Chapter 5, Renewable Energy and Energy from Waste, apply.
	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.
	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.
5 Other Hydro- carbons	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).
	Excludes oil shale production, for which Chapter 1 applies.
	The production of shale oil (secondary product) is to be reported as

		"From other sources" in the "Other hydrocarbons category".
6	Refinery Gas (not liquefied)	Refinery gas includes a mixture of non-condensible 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.
7	Ethane	A naturally gaseous straight-chain hydrocarbon, (C2H6) extracted from natural gas and refinery gas streams.
8	LPG	LPG are light paraffinic hydrocarbons derived from the refinery processes, crude oil stabilisation and natural gas processing plants. They consist mainly of propane (C_3H_8) and butane (C_4H_{10}) 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.
9	Naphtha	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.
		Naphtha comprises material in the 30°C and 210°C distillation range or part of this range.
10	Motor Gasoline	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 additives, oxygenates and octane enhancers, including lead compounds such as TEL and TML.
		Includes motor gasoline blending components (excluding additives/ oxygenates), e.g. alkylates, isomerate, reformate, cracked gasoline destined for use as finished motor gasoline.
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	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

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		particular specifications (such as freezing point) which are established by the International Air Transport Association (IATA).
		Includes kerosene blending components.
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.
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	Refined distillate intermediates with a distillation in the naphtha/kerosene range. They are sub-divided as:
		- 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	Hydrocarbons produced from distillate by product; they are mainly used to reduce friction between bearing surfaces.

	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.
19 Bitumen	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.
	Includes fluidized and cut back bitumen.
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 Sector

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. 21 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. 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: Imports or exports of ethanol (reported in the Additives/Oxygenates column) should relate to the quantities destined for fuel use. 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
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.
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.

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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.
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. Exclude 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
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 hydro-carbons, 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 hydro-carbons, 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

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 4.2.1, aggregate No. 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.

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

4.4. DEROGATIONS AND EXEMPTIONS

Cyprus is exempted from reporting the aggregates defined in § 4.2.3 under 4 (Other Sectors) and 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 § 4.2.3 under 2 (Industry) and 3 (Transport); 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, ≥ 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: 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 Photovoltaic	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 : 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)
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
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	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.
		The following liquid biofuels are concerned:
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 Subtitle 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.
- 5.2.2. Supply and Transformation Sectors

Quantities of energy products that are mentioned in Subtitle 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.
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 to the 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.
9.13	Of which: Not Elsewhere Specified – Transformation

5.2.3. Energy Sector

Quantities of energy products that are mentioned in Subtitle 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 Subtitle 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

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, \geq 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
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 Subtitle 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
1	
2.6	Of which: Machinery
2.6 2.7	Of which: Machinery Of which: Mining and Quarrying
2.7	Of which: Mining and Quarrying

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: 1000 tonnes All others: TJ (on the basis of net calorific values).
4 Solar collectors surface	1000 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.

6. APPLICABLE PROVISIONS

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

- 1. Reported period:
- A calendar year (January 1st to December 31st).
- 2. Frequency

Annual.

3. Deadline for transmission of data

November 30th 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 to 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 fossil sediment of vegetable origin with a high moisture content (up to 90 %), light to dark brown in colour.
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.
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 carbonization at high temperatures
	- Semi-coke: obtained by carbonization 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 to 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.

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 plantsQuantities used for transformation in patent fuels plants (pithead and independent).
- 7.6 Of which: Total industry (without iron & steel industry)
- 7.7 Of which: Iron & 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 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
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 & steel industry)
6.2	Of which: Iron & 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: C.I.S.
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 10^3 tonnes.

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 public thermal power stations the following aggregates apply (refer to Annex B for the definitions of hard coal and lignite):

6	Total fuel consumption in public thermal power stations
	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

2.2.2. Fuel stocks in public thermal power stations

By public thermal power stations 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

2.2.3. Nuclear Heat Production

To be declared is the total nuclear heat generated in the reported period for the purpose of generating electricity.

2.3. UNITS OF MEASUREMENT

1 Energy quantities	Electricity: GWh
	Hard coal, lignite and petroleum products: both in 10^3 tonnes and in TJ on the basis of the net calorific value.
	Natural gas and derived gases: TJ on the basis of the gross calorific value.
	Other fuels: TJ on the basis of the net calorific value.
	Nuclear heat: TJ.
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 hydro-carbons, 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.

3.2.1. 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.
	Note: Imports or exports of ethanol (reported in the Additives/Oxygenates column) should relate to the quantities destined for fuel use.
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
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 additives/ 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
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.
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 not 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 your 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 your 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
- 11 Stocks held abroad designated definitely for import stocks

Stocks not included in category 10 which belonging 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 your 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 Annexe A Chapter 1 apply with the following specific exceptions:

- (1) Denmark includes the Danish Faroes 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.

4.2.1. 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.

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 to 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 1 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.

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 PRODUCTS PETROLEUM

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.

3.2.1. 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.

3.4. DEROGATIONS AND EXEMPTIONS

Not applicable.