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Periodical Part The energy balance of the Republic of Moldova ; 2015

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Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre for Economics



NATIONAL BUREAU OF STATISTICS OF THE REPUBLIC OF MOLDOVA

# THE ENERGY BALANCE OF THE REPUBLIC OF MOLDOVA

# STATISTICAL COMPILATION

2015

Chisinau, 2016

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#### **METHODOLOGICAL NOTES**

#### 1. LEGAL FRAMEWORK

The Republic of Moldova as a full state of the Energy Community has the obligation to calculate and disseminate accurate and updated data on the quantities, types, sources, production, supply, transformation and the consumption, to monitoring the impact and consequences of its policy in the energy field. The common framework for the production, transmission, evaluation and dissemination of comparable energy statistics under the Energy Community is given by Regulation (EC) No. 1099/2008 of the European Parliament and of the Council of October 22, 2008 on energy statistics, with further changes. The Regulation applies to statistical data concerning energy products and their aggregates.

At the national level, the present methodology has been approved by the National Bureau of Statistics Board Decision No. 6/3 of December 23, 2014.

#### 2. COVERAGE AND DATA SOURCE

Data on energy products and their aggregates are collected from annual surveys as follows:

- Specific statistical surveys addressed to producers and suppliers of electricity 6th it; 23-H; PE.
- Specific research addressed to natural gas distributors 1-Gas.
- Specific statistical research addressed to producers and traders of primary and transformed energy, distributors and final consumers -1-BE.
- other sources, including administrative sources (other directions of statistical production, of NBS, ANRE, ministries, etc.)

Data collection is exhaustive for units producing electric and thermal energy also for the largest consumers of energy. In research, according to data for 2014 were included 14 659 statistical units with juridical personality.

Specific statistical surveys are addressed to all economic agents, whatever of their field of activity, according to a catalog prepared by NBS and in the basis of <u>Classification of Activities from</u> <u>national economy CAEM Rev.2.</u> According to this classification, consumptions reported by businesses are grouped in:

- energy sector: CAEM Rev. 2. code 05, code 0892, code 06, code 0910, code 0721, code 19, code 35;
- industry and construction: CAEM Rev. 2. code 0710, code 0729, code 081, code 089, code 0990, code 10-43 (except code 19, code 35);
- transport: CAEM Rev.2. code 49, code 50, code 51;
- agriculture: CAEM Rev. 2. Code 01, Code 02, Code 03;
- other economy branches: CAEM Rev.2. Section E, Section G (code 52, code 53), Section I, Section J, Section K, Section L, Section I, Section O, Section P, Section Q, Section R, Section S, Section T, Section U.

<u>Nomenclature of Goods</u>, developed in accordance with the Harmonized Commodity Description and Coding System (HS-2007) and the Combined Nomenclature (CN). According to this nomenclature are classified imports and exports of energy products.

<u>Nomenclature of industrial products and services PRODMOLD 2013</u>. According to this nomenclature production (primary and transformed) of energy products is classified.

## 3. ENERGY PRODUCTS

Energy product	Definition
1. Solid fossil fuels	and manufactured gases
Anthracite	High rank coal used for industrial and residential applications. Generally, it has 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), measured based on a mass of ash-free but moist coal.
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.
Other bituminous coal (steam coal)	Coal used for steam raising purposes and includes all bituminous coal that is neither included under coking coal nor anthracite. It is characterised by higher volatile matter than anthracite (more than 10 %) and lower carbon content (less than 90 % fixed carbon). Its gross calorific value is greater than 23 865 kJ/kg (5 700 kcal/kg) on an ash-free but moist basis. If bituminous coal is used in coke ovens it should be reported as coking coal.
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.
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
Coke oven coke	<ul> <li>should be reported on the Annual Oil Questionnaire.</li> <li>The solid product obtained from carbonisation of coal, principally coking coal, at high temperature, it is low in moisture and volatile matter. Coke oven coke is used mainly in the iron and steel industry acting as energy source and chemical agent. Coke breeze and foundry coke are included in this category.</li> <li>Semi-coke (a solid product obtained from carbonisation of coal at low temperature) should be included in this category. Semi-coke is used as a domestic fuel or by the transformation plant itself. This heading also includes coke, coke breeze and semi-coke made from lignite/brown coal.</li> </ul>
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.
Gasworks gas	Covers all types of gases produced in public utility or private plants, whose main purpose is manufacture, transport and distribution of gas. It includes gas produced by carbonisation (including gas produced by coke ovens and transferred to gasworks 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 gasworks 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 gasworks gas. The coal gases transferred to gasworks plants should then be reported (in their own column) in the transformation sector in the gasworks plants row. The total amount of gasworks gas resulting from transfers of other coal gases should appear in the production line for gasworks gas.
Coke oven gas	Obtained as a by-product of the manufacture of coke oven coke for the production of iron and steel.
Other gases recovered	It is a secondary product resulted from production of steel in oxygen furnaces, recovered on leaving from furnace. Gases are known as converter

Energy product	Definition	
	gas, LD gas or BOS gas. The amount of recovered fuel should be reported on a gross calorific value basis. It includes also not specified artificial gases which have not been mentioned above, such as fuel gases of solid carbonaceous origin recovered from chemical and manufacturing processes undefined otherwise.	
Peat	<ul> <li>A combustible soft, porous or compressed, sedimentary deposit of plant origin with high water content (up to 90 % in the raw state), easily cut, of light to dark brown colour. Peat used for non-energy purposes is not included.</li> <li>This definition is without prejudice to the definition of renewable energy sources in Directive 2001/77/EC and to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories.</li> </ul>	
2. Natural gas		
Natural gas	<ul> <li>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).</li> <li>It does not include gases created by anaerobic digestion of biomass (e.g. municipal or sewage gas) nor gasworks gas.</li> </ul>	
3. Oil and petroleum p	roducts	
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.	
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).	
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).	
Additives/oxygenates	Additives are non-hydrocarbon compounds added to or blended with a product to modify fuel properties (octane, cetane, cold properties, etc.):	
	<ul> <li>oxygenates, such as alcohols (methanol, ethanol), ethers (such as MTBE (methyl tertiary butyl ether), ETBE (ethyl tertiary butyl ether), TAME (tertiary amyl methyl ether)),</li> </ul>	
	— esters (e.g. rapeseed or dimethylester, etc.),	
	— chemical compounds (such as TML, TEL and detergents).	
	<i>Note:</i> quantities of additives/oxygenates (alcohols, ethers, esters and other chemical compounds) reported in this category should relate to the quantities destined for blending with fuels or for fuel use.	
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.	
Ethane	A naturally gaseous straight-chain hydrocarbon ( $C_2H_6$ ) extracted from natural gas and refinery gas streams.	
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	

Energy product	Definition
	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.
Aviation gasoline	Motor spirit prepared especially for aviation piston engines, with an octane number suited to the engine, a freezing point of - $60 ^{\circ}$ C and a distillation range usually within the limits of 30 $^{\circ}$ C and 180 $^{\circ}$ C.
Gasoline 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 particular specifications (such as freezing point) which are established by the International Air Transport Association (IATA). Includes kerosene blending components.
Other kerosene	Refined petroleum distillate used in sectors other than aircraft transport. It distils between 150 °C and 300 °C.
Diesel oil	Diesel oil is primarily a medium distillate distilling between 180 °C and 380 °C. Includes blending components. Several grades are available depending on uses.
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.
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 fluidised and cut back bitumen.
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.
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.
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.
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.
4. Renewable energy an	propylene) produced within refineries. d anergy from waste
Solid biomass	Covers organic, non-fossil material of biological origin which may be used as fuel
	for heat production or electricity generation. It comprises:
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.
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

Energy product	Definition	
	trade of quantities that have not been blended with transport fuels is concerned (i.e. in their pure form).	
Biogas	A gas composed principally of methane and carbon dioxide produced by anaerobic digestion of biomass.	
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, $\ge 10$ MW and from pumped storage.	
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.	
Wind	Kinetic energy of wind exploited for electricity generation in wind turbines.	
5. Electricity and heat		
Electrical energy	It means electrical energy from all sources of production by type of producers, installations, fuels.	
Thermal energy	Thermal energy destined for sale to third parties by type of producers, installations, fuels.	

#### Name of aggregated indicator Definition This category includes production from the exploitation Primary energy production / national production of existing energy sources in nature (in subsoil assets, forests, water courses, etc.) that can be used as such after or preliminary processing (sorting, washing, cleaning, etc.) t change hat does not the structure of assortment, but improves its quality for use as fuel or as feedstock for producing other combustible products or noncombustible. Coal production from underground and surface mines; recovered slurries, mixed minerals 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; Natural gas production: dry marketable gas, obtained national boundaries, including within offshore production. Production is measured after removal of impurities and NGL extraction and of sulphur. Extraction losses and quantities reinserted, discharged to air or burned are not included in this item. Here are included quantities used in the natural gas industry, in the process of extraction of natural gas, into pipelines and in natural gas processing plants and natural gas obtained with crude oil; natural gas from fields producing hydrocarbons only in gaseous and methane mines produced in coal or extracted from coal layers, brought to the surface and consumed of collieries or transmitted by pipeline to consumers; Crude oil production (including liquids products from natural gas extraction); Electricity production: hydroelectric and wind energy production; is reported gross output (production measured at generator terminals); Heat production: heat production obtained from nuclear reactors; **Biomass** firewood, combustible production: products derived from activities other than energy processing production, such wood cellulose as and paper production, agriculture, etc; Production of other fuels: geothermal energy, solar photovoltaic energy, solar thermal energy, biogas, nonrenewable industrial waste, renewable municipal waste and biofuels. Unless provisions contrary, imports "refers to the Import/export country of initial origin (the country in which the energy product was produced) for use in the country and,, exports" to the country of final consumption of energy product . Are considered as imported or exported quantities that have passed or not customs, who have passed the political boundaries of a country. For electric energy are considered as imported or exported quantities of electricity, quantities that have passed or not customs, who have passed the political boundaries of a country. If the amount of electric

### 4. LIST OF AGGREGATED INDICATORS

energy is transited through a country, it should be

Name of aggregated indicator	Definition
	registered as both import and export. For petroleum products, this category includes quantities of crude oil and products imported or exported in accordance with processing agreements (i.e. refining for account). Crude oil and NGL should be registered as coming from the origin country; in the case of refinery feedstock's and final products should be taken into account by the last country of origin. This includes any gas liquids (i.e. LPG) extracted during the regasification of imported liquefied natural gas and imported or exported petroleum products directly by the petrochemical industry. Re-exports of oil imported for processing within bonded areas should be included as an export of product from the processing country to the country of final destination.
Stock at 1 January/ Stock at 31 December	Stock at the beginning of the reference period include stocks of existing primary and transformed energy stock at producers, distributors and consumers and these left in custody to the economic agents. Stock at the end of the reference period include the quantities of the fuels motor fuels existing at producers, distributors and consumers at the end of the reference period, regardless of their source. Stocks represents all stocks on national territory, including stocks held by governments, by major consumers or of organizations dealing with stock possession, stocks from incoming ocean vessels, stocks held in bonded areas and stocks held for others in accordance or not with bilateral government agreement.
Stock variation	The difference between stocks of 1 January and those of 31 December.
Bunkering	Includes quantities of fuels delivered to marine ships and aircraft engaged in international voyages, regardless of their flag or nationality of the airline company. Are not included the quantities consumed by ships sailing in national waters. Quantities of fuels consumed by fishing vessels are included in consumption in agriculture.
The calculated gross domestic consumption	Total Resources + Import - Export - Bunkering ± stock variation
Total transformation Sector - inputs	<ul> <li>Quantities of fuels used for primary or secondary energy transformation, for example: <ul> <li>coal in electric energy, coke oven gas in electric energy or used for the transformation in derived energy products (eg coking coal in coke);</li> <li>natural gas in electric energy or used for the transformation in derived energy products (eg natural gas in methanol);</li> </ul> </li> <li>Quantities of renewable energy and wastes used for the conversion of primary forms of energy or used for the transformation to derived energy products (eg biogas used for blended natural gas); Quantities of oil entered in the refineries;</li> </ul>

Name of aggregated indicator	Definition
- in stations for producing thermoelectric energy	Are included total quantities of fuels consumed for producing electric energy whatever of type of the producing station, both in the public sector (which includes economic agents of whose main activity is the producing electricity regardless of their form of ownership) and to self- producers (comprising economic agents, whatever their form of ownership, of whose main occupation is other than energy production and electricity producing mainly for domestic needs, the surplus being sold to third parties). Self- producers represents electric station in mining, food industry, refineries, non-metal materials, metallurgy, chemistry, mechanical engineering of the railways and other industries.
- in stations for producing thermal energy	Are included total quantities of fuels consumed for producing thermal energy whatever of type of the producing station, in the public sector (which includes economic agents of whose main activity is the producing thermal energy regardless of their form of ownership) and for producing thermal energy by self-producers sold to third parties. Are not included quantities of fuels consumed in its own industrial activity for heated by direct combustion heaters and the heat consumed in own residential buildings, which are recorded on household consumption. Also not included own consumptions of the station, those being declared consumptions in energy sector. Consumptions for thermal energy produced in the means of transport are not summarized, being included in the consumption of transport.
- in briquetting installations	Includes quantities of coal and binder consumed for the production of charcoal briquettes. Excluded are quantities used for heating and for operation of equipment that should not be registered here, but registered as consumption in the energy sector.
- in coke ovens	Includes quantities of coking coal consumed for the production of coke, semi-coke and of coke oven gas. Excluded are quantities used for heating and for operation of equipment that should not be registered here, but registered as consumption in the energy sector.
- in blast furnaces	Includes fuel quantities used in furnaces (coking coal and / or bituminous coal, with generic name as pulverized coal injection, metallurgical coke) for production of blast furnace gas in the process of reduction of the iron ore. These amounts are subtracted from consumption in metallurgy, to avoid double recordings. Excluded are quantities used for heating and for operation of equipment that should not be registered here, but registered as consumption in the energy sector.
- in oil refineries	Includes quantities of crude oil, gasoline and ethane from extraction scaffolds used for processing and obtaining derivative products (combustible and noncombustible products) namely: gasoline, petroleum, white spirit, diesel and aromatic extract, oil, mineral oil, petroleum coke, petroleum bitumen, paraffin waxes, greases, waxes, liquefied petroleum gas, refinery

Name of aggregated indicator	Definition
- in other domains	gases including propylene from refineries and other petroleum products. Are included processed oil quantities in the activity of "processing". Does not include returns from petrochemical and blanks. Excluded are quantities used for heating and for operation of equipment that should not be registered here, but registered as consumption in the energy sector. Includes quantities of coal, firewood and wood
	waste consumed for producing generator gas and for producing charcoal.
Total energy sector - output from transformation inclusive:	Outputs from transformation represents energy production resulted from the transformation activity: products derived from coal, refined petroleum products, derived gases, thermoelectric energy and thermal energy. Productions included in this sector include own consumption of transformation installations.
- from stations for producing thermoelectric energy	The indicator includes gross thermoelectric energy production (measured at the generator terminals), inclusive that produced by mobile generator sets, regardless of the type of equipment manufacturing (condensing groups or heating groups), both in the public sector as well of the self- producers. To determine the net production, from gross production is subtracted own consumption of station.
- from stations for producing thermal energy	The indicator contains production of thermal energy achieved in stations whose main activity is producing thermal energy as well as thermal energy produced and sold by the self-producers. This includes thermal energy used by the auxiliary's installation of station which uses a hot fluid (space heating, liquid fuel heating etc.) and losses from the heat exchanges of the installation / network, as well as heat from chemical processes used as primary energy form, regardless of the type of producing station. This includes and the amount of thermal energy (hot steam) used for producing thermal energy. Not included thermal energy used for producing electric energy.
- from briquetting installations	Represents production of coal briquettes, regardless of the assortment of coal used
- from coke ovens	Represents fuel production resulting from the processing of coking of hard coal, namely: coke, semi coke, coke oven gas, coke oven pitch, etc.
- from furnaces	Represents production of blast furnace gas obtained by transforming coke in the process of reducing iron ore from blast furnaces;
- from oil refineries	Represents gross production of refined petroleum products.
- from other domains	Includes production of other fuels categories other than those mentioned (production of gases of gasogen and of the charcoal).
Transfer	Represents quantities of products of whose classification has changed either because their specifications were changed, either because these were mixed together to form another product A negative value for one product should be compensated by one (or more) positive value for one or more products

Name of aggregated indicator	Definition
	and vice versa, the total net effect should be zero.
Consumption in the energy sector (for the functioning of generating installations	This indicator includes quantities of energy carriers consumed by primary
and ensuring basic activity)	energy producers or converted for operation of their installations.
	Includes electric energy consumption of aggregates for producing electric and thermic energy, of domestic services (pumps, fans, coal mills, etc.), technological lighting and for various heating devices (relays, contactors), electric energy consumption in the transformers raising voltage in electric stations. Also, includes electric energy consumption of aggregates for producing electric energy, of internal services of station and for heating fuel depots. Not included thermic energy used for producing electric energy. Includes consumption of renewables and waste used by the energy industry to support the transformation activity. For example, renewables and wastes used
	for heating, lighting or operating pumps or of compressors. Are summarized quantities of energy products used as
	energy in refineries and quantities consumed as fuel in the oil extraction process and of natural gas and in installations of processing natural gas.
	Are not taken into account the quantities of fuels transformed into another energy form (which should be registered at the transformation sector) or those used to support the exploitation of the pipeline oil, gas and coal (to be reported in the Transport) and losses of the
	pipes (that should be reported in distribution losses). This sector also includes the production of chemical substances used in atomic fission and fusion and the products of these processes.
Extraction of superior and inferior coal	CAEM Rev. 2. code 05 - Extraction of superior and inferior coal; CAEM Rev. code 0892 – Extraction and agglomeration of peat.
Extraction of crude petroleum, natural gas and services related to extraction	CAEM Rev. 2. code 06 - Extraction of crude petroleum, natural gas (excluding prospections); CAEM Rev. 2. code 0910 – Activities of related services of oil and natural gas extraction
Extraction of uranium and thorium ores	CAEM Rev. 2. code 0721 - Extraction of uranium and thorium ores
Manufacture of coke products and of products from crude oil processing	CAEM Rev. 2. code 19 - Manufacture of coke products and of products from crude oil processing
Production and supply of electric, thermic energy, gases, hot water and air conditioning	CAEM Rev.2. code 35 - Production and supply of electric, thermic energy, gases, hot water and air conditioning
Losses	Are comprised:- at electrical energy: technologicalconsumptionintransportinstallations, transformation and distribution to thepointofseparationbetweensuppliersandconsumers.Technological consumption from the pointofseparationbetweensuppliersandconsumersand to the receivers is comprised
	in technological consumption in analyzed branch (industry, construction, etc.).

Name of aggregated indicator	Definition
	<ul> <li>at thermal energy: the amount of thermal energy from the spent steam and the condensate returned in steam boilers; thermal energy in the form of hot water not returned to the source of producing hot water, exclusively hot water used in mixture exchangers. Also included quantities of thermal energy lost through the insulation of systems.</li> <li>at fuels: quantities lost in transport, handling and storage at producers, distributors and consumers by: leaking into the atmosphere, at burning torch; leakages of transmission and distribution networks; leakages from reservoirs and other manipulations; degradation by infiltration: quantitative and qualitative losses of solid fuels in deposits.</li> </ul>
Available for final consumption (calculated)	Available for final consumption = domestic consumption - inputs in transformation + outputs from transformation ± transfer - (energy sector consumption + losses) + final non- energy consumption.
Nonenergetic	Comprise quantities of energy carriers used for purposes other than those energetic, namely as: consumption of natural gas and petroleum products to obtain chemicals; quantities of natural gas used for injection into resource: crude oil for treatment drilling fluids; products used for lubrication, washing and as insulating materials.
Final energy consumption (gross consumption observed ), total	Is determined by aggregating the quantities of energy carriers used by final consumers in economic activity carried out during the reference period. Comprise quantities of primary and transformed energy carriers used in consumer installations, after which no longer takes place any processing and energy transformation. However, in the case of thermal stations and of cogeneration stations of self-producers, are included here only quantities of fuels consumed for producing thermal energy used by them. Quantities of fuels consumed for producing thermal energy sold and for producing electric energy, should be registered in the relevant rubric form the transformation sector. Comprise consumption for lighting; heating and ventilation, water supply, intended for the production, exclusively those for administrative buildings which are classified under "Other branches of the economy." Distribution of final energy consumption is made according CAEM Rev.2. as follows:
In industry, total	It refers to all activities classified as industrial (including
(including construction)	construction) exclusively the energy sector consumption.
from which: - mining industry	CAEM Rev.2. code 081 - Extraction of stone, sand and clay; CAEM Rev.2. code 089 - Other mining activities (excluding code 0892); CAEM Rev.2. code 09 - Mining support service activities;
- metallurgical industry	CAEM Rev.2. code 24 - Metallurgical industry
- chemical and petrochemical industry	CAEM Rev 2. code 20 – Manufacture of chemicals and chemical products;

Name of aggregated indicator	Definition
	CAEM Rev.2. code 21 – Manufacture of basic pharmaceutical products and pharmaceutical preparations; CAEM Rev.2. code 22 - Manufacture of rubber and plastic products
- nonmetallic minerals	CAEM Rev.2. code 23 - Manufacture of other products from non-metallic mineral
- transport equipment	<ul><li>CAEM Rev.2. code 29 - Manufacture of motor vehicles, trailers and semi-trailers;</li><li>CAEM Rev.2. code 30 - Manufacture of other transport means</li></ul>
- Machine building industry	<ul> <li>CAEM Rev.2. code 25 - The industry of metallic constructions and of metal products, except machinery and equipment;</li> <li>CAEM REV.2.code 26 - Manufacture of computer, of electronic products and optimal;</li> <li>CAEM Rev.2. code 27 - Manufacture of electrical equipment;</li> <li>CAEM Rev.2. code 28 - Manufacture of machinery and instruments equipment n.c.a.;</li> <li>CAEM Rev.2. code 33- Preparation, maintenance and installation of machinery and equipment</li> </ul>
- food, beverages, tobacco industry	CAEM Rev.2. code 10 – Food industry; CAEM Rev.2. code 11 – Manufacture of beverages; CAEM Rev.2. code 12 – Manufacture of tobacco products;
- Pulp, Paper and printing activities	CAEM Rev.2. code 17 - Manufacture of paper and paper products; CAEM Rev.2. code 18 - Printing and reproduction on recorded media
- wood processing and furniture production	CAEM Rev.2. code 16 – Wood processing, manufacture of wood and cork products, except furniture; manufacture of articles of straw and other plaiting materials CAEMRev.2. code 31 - Manufacture of furniture
- Industry of textile and leather products	CAEM Rev.2. code 13-Manufacture of textile products; CAEM Rev.2. code 14-Manufacture of Clothing articles; CAEM Rev.2. code 15 - Tanning and dressing of leather; manufacture of luggage, handbags, saddlery, harness and footwear
- constructions	CAEM Rev.2. code 41 – Construction of buildings; CAEM Rev.2. code 42 – Civil constructions works; CAEM Rev.2. code 43 - Special construction works
- Other industrial activities	CAEM Rev.2. code 32 - Other industrial activities n.c.a. CAEM Rev.2. code 36 - Collection, purification and distribution of water;
- transports	<ul> <li>Comprises consumptions in transport activity (road, rail, air, sea and pipeline), inclusive internal transportation (for economic agents with main activity other than transport). Includes consumption of fuel used by the population for their own means of transport.</li> <li>Not included consumption of marine vessels which sailing in international waters, this is included in "marine bunkers".</li> <li>Consumption of fishing vessels is included in "Fishing and aquaculture".</li> <li>CAEM Rev.2. code 49 - Land transport and transport via pipelines;</li> </ul>

Name of aggregated indicator	Definition
	CAEM Rev.2. code 50 - Water transport; CAEM Rev.2. code 51 - Air transport;
- residential sector (population)	Comprises : - to electric energy: quantity consumed for lighting and other household uses, inclusive for living spaces from the ownership and management of economic agents.
	<ul> <li>to thermal energy: quantity of thermal energy delivered to the population for heating and domestic hot water, both by the public sector as well as by self-producers.</li> <li>to fuels: quantities effective delivered to population for direct flame consumption for heating and cooking and for producing thermal energy in micro stations of real estate. This also includes quantities of coal received by miners as allowances.</li> </ul>
- Agriculture and forestry	<ul> <li>It comprises energy consumption in registered in agriculture, forestry, logging and hunting economy and pisciculture and fishing. It also includes the energy consumption of fishing vessels.</li> <li>CAEM Rev.2. code 01- Agriculture, hunting and related services</li> <li>CAEM Rev.2. code 02 - Silviculture forest harvesting CAEM Rev.2. code 03 - Fishing and aquaculture</li> </ul>
- Other sectors of the economy	It comprises energy consumption reported by economic agents as consumed in other activities than those mentioned above, namely:CAEM Rev.2. Section E - Water supply; sewerage, waste management and remediation activities (excluding division 36)CAEM Rev.2. Section G - Wholesale and retail trade; repair of motor vehicles and motorcycles, CAEM Rev.2. code 52 - Storage and support activities for transportationCAEM Rev.2. code 53 - Postal and courier activities, CAEM Rev.2. Section I - Accommodation and public alimentation activities,CAEM Rev.2. Section I - Accommodation and public alimentation, CAEM Rev.2. Section J - Information and communication,CAEM Rev.2. Section K - Financial and insurance activities, CAEM Rev.2. Section N - Professional, scientific and technical activities,CAEM Rev.2. Section N - Activities of administrative 

Name of aggregated indicator	Definition
	organizations and bodies Also included is electricity used for street lighting, respectively for lighting of streets, squares, parks and public gardens, monuments and public buildings, road signs bright, exclusively firms and advertisements.
Statistical differences	Is calculated as the difference between "Available for final consumption" - Of which was subtracted non- energy consumption - and "final energy consumption" observed by statistical investigation. Statistical differences comprising changes in stocks unregistered statistically, energy consumption for military purposes (excluding those for industrial production, comprised in industrial activities) and the differences generated by the statistical investigation system: while energy producers are registered exhaustive, consumers are investigated based on a representative sample, being admitted a margin of error. Statistical differences may be positive or negative as observed consumption is lower or higher than the funds available in the reference period.

#### 1. THE ENERGY BALANCE

#### 1.1. The energy balance for 2010

					thousands of t	onnes of oil e	equivalent
SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	189	-	-	11	171	7	-
From other sources	258	-	-	-	-	258	-
Imports	1813	113	960	738	-	2	-
Exports	13	-	-	9	4	-	-
International bunkers	-5	-	-	-5	-	-	-
Stock changes	52	3	2	36	11	-	-
Gross consumption	2294	116	962	771	178	267	-
TRANSFORMATION, INPUT	493	2	434	38	12	7	-
Electricity plants	8	-	1	-	-	7	-
Main activity producer combined heat							
and power (CHP) plants	321	-	321	-	-	-	-
Autoproducer combined heat and power (CHP) plants	27	_	8	19	_	_	_
Main activity producer heat plants	27 60	_	60	- 17	_	_	_
Autoproducer heat plants	60 60	2	44	2	12	_	_
Oil refineries	-		-	-	12	_	_
Petrochemical plants	17	_	_	17	_	_	_
Liquefaction plants	1/			17			
Charcoal production plants		_	_	_	_	_	_
Not elsewhere specified - transformation		_	_	_	_	_	_
TRANSFORMATION, OUTPUT	398	_	_	20	_	91	287
Electricity plants	390 7	_	_	-	-	7	-
Main activity producer combined heat	,					1	
and power (CHP) plants	248	-	-	-	-	81	167
Autoproducer combined heat and power							
(CHP) plants	23	-	-	-	-	3	20
Main activity producer heat plants	53	-	-	-	-	-	53
Autoproducer heat plants	47	-	-	-	-	-	47
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	20	-	-	20	-	-	-
Liquefaction plants							
Charcoal production plants	-	-	-	-	-	-	-
Not elsewhere specified — transformation	-	-	-	-	-	-	-
Energy sector	17	-	-	-	-	17	-
LOSSES	176	1	72	4	-	52	47

thousands of tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	2006	113	456	749	166	282	240
INDUSTRY	227	33	63	11	1	68	51
Iron and steel							
Chemical and petrochem.	3	-	-	-	-	2	1
Non-metallic minerals	94	31	47	2	-	14	-
Machinery	4	-	-	-	-	4	-
Transport equipment	-	-	-	-	-	-	-
Mining and quarrying	2	-	-	1	-	1	-
Food and tobacco	90	2	13	3	-	25	47
Paper, pulp and print	3	-	1	-	-	1	1
Wood and wood products	7	-	-	-	1	6	-
Construction	7	-	1	5	-	1	-
Textile and leather	6	-	1	-	-	3	2
Not elsewhere specified	11	-	-	-	-	11	-
TRANSPORT	592	-	7	581	-	4	-
Domestic aviation	14	-	-	14	-	-	-
Road	558	-	1	553	-	4	-
Rail	14	-	-	14	-	-	-
Pipeline transport	6	-	6	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	
OTHER	1155	80	386	125	165	210	189
Residential	808	52	294	44	156	130	132
Comm. and public services	276	28	90	19	8	75	56
Agriculture/forestry	71	-	2	62	1	5	1
Not elsewhere specified	-	-	-	-	-	-	-
NON-ENERGY USE	32	-	-	32	-	-	-
Statistical differences	-	-	-	-	-	-	-

#### 1.2. The energy balance for 2010

							TeraJoule
SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	7913	-	3	465	7160	285	-
From other sources	10827	-	-	-	-	10827	-
Imports	76062	4709	40218	31029	16	90	-
Exports	581	1	-	430	150	-	-
International bunkers	-218	-	-	-218	-	-	-
Stock changes	2117	158	62	1494	403	-	-
Gross consumption	96120	4866	40283	32340	7429	11202	-
TRANSFORMATION, INPUT	20760	96	18220	1641	518	285	-
Electricity plants	327	-	21	21	-	285	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and power	13460	-	13460	-	-	-	-
(CHP) plants	1133	-	346	787	-	-	-
Main activity producer heat plants	2527	-	2527	-	-	-	-
Autoproducer heat plants	2574	96	1866	94	518	-	-
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	739	-	-	739	-	-	-
Liquefaction plants							
Charcoal production plants	-	-	-	-	-	-	-
Not elsewhere specified - transformation	-	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	16705	-	-	831	-	3835	12039
Electricity plants	307	-	-	-	-	307	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and power	10399	-	-	-	-	3413	6986
(CHP) plants	981	-	-	-	-	115	866
Main activity producer heat plants	2222	-	-	-	-	-	2222
Autoproducer heat plants	1965	-	-	-	-	-	1965
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	831	-	-	831	-	-	-
Liquefaction plants							
Charcoal production plants	-	-	-	-	-	-	-
Not elsewhere specified — transformation	-	-	-	-	-	-	-
Energy sector	736	-	-	-	-	715	21
LOSSES	7532	32	3071	231	7	2197	1994

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	TeraJoule Heat
FINAL CONSUMPTION	83797	4738	18992	31299	6904	11840	10024
INDUSTRY	9642	1380	2693	493	27	2841	2208
Iron and steel	6	-	-	-	-	6	-
Chemical and petrochem.	142	-	4	-	-	103	35
Non-metallic minerals	3896	1254	1989	74	-	566	13
Machinery	337	126	19	14	2	169	7
Transport equipment	-	-	-	-	-	-	-
Mining and quarrying	94	-	-	40	-	54	-
Food and tobacco	3718	-	565	142	4	1027	1980
Paper, pulp and print	131	-	33	1	-	39	58
Wood and wood products	270	-	7	3	21	236	3
Construction	316	-	46	214	-	47	9
Textile and leather	259	-	27	3	-	126	103
Not elsewhere specified	473	-	3	2	-	468	-
TRANSPORT	24887	-	319	24397	-	166	5
Domestic aviation	564	-	-	564	-	-	-
Road	23396	-	48	23196	-	152	-
Rail	605	-	-	605	-	-	-
Pipeline transport	293	-	271	3	-	14	5
Domestic navigation	3	-	-	3	-	-	-
Non-specified	26	-	-	26	-	-	-
OTHER	47998	3358	15969	5155	6872	8833	7811
Residential	33850	2168	12308	1849	6522	5455	5548
Comm. and public services	11175	1186	3565	683	329	3184	2228
Agriculture/forestry	2973	4	96	2623	21	194	35
Not elsewhere specified	-	-	-	-	-	-	-
NON-ENERGY USE	1270	-	11	1254	5	-	-

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Statistical differences

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#### 1.3. The energy balance for 2010

				t	housands of to	nnes of coal e	equivalent
SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	272	-	-	16	246	10	-
From other sources	369	-	-	-	-	369	-
Imports	2590	160	1371	1056	-	3	-
Exports	18	-	-	14	4	-	-
International bunkers	-9	-	-	-9	-	-	-
Stock changes	72	6	2	51	13	-	-
Gross consumption	3276	166	1373	1100	255	382	-
TRANSFORMATION, INPUT	707	3	621	55	18	10	-
Electricity plants	12	-	1	1	-	10	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and power	459	-	459	-	-	-	-
(CHP) plants	39	-	12	27	-	-	-
Main activity producer heat plants	86	-	86	-	-	-	-
Autoproducer heat plants	87	3	63	3	18	-	-
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	24	-	-	24	-	-	-
Liquefaction plants							
Charcoal production plants	-	-	-	-	-	-	-
Not elsewhere specified - transformation	-	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	570	-	-	29	-	131	410
Electricity plants	10	-	-	-	-	10	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and power	355	-	-	-	-	117	238
(CHP) plants	33	-	-	-	-	4	29
Main activity producer heat plants	76	-	-	-	-	-	76
Autoproducer heat plants	67	-	-	-	-	-	67
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	29	-	-	29	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	-	-	-	-	-	-	-
Not elsewhere specified — transformation	-	-	-	-	-	-	-
Energy sector	25	-	-	-	-	24	1
LOSSES	258	2	105	7	1	75	68

thousands of tonnes of coal equivalent

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	2856	161	647	1067	236	404	341
INDUSTRY	325	46	92	16	-	97	74
Iron and steel	-	-	-	-	-	-	-
Chemical and petrochem.	5	-	-	-	-	4	1
Non-metallic minerals	133	44	68	2	-	19	-
Machinery	7	-	1	-	-	6	-
Transport equipment	-	-	-	-	-	-	-
Mining and quarrying	3	-	-	1	-	2	-
Food and tobacco	128	2	19	5	-	35	67
Paper, pulp and print	4	-	1	-	-	1	2
Wood and wood products	8	-	-	-	-	8	-
Construction	12	-	2	8	-	2	-
Textile and leather	9	-	1	-	-	4	4
Not elsewhere specified	16	-	-	-	-	16	-
TRANSPORT	846	-	10	831	-	5	-
Domestic aviation	19	-	-	19	-	-	-
Road	797	-	2	790	-	5	-
Rail	21	-	-	21	-	-	-
Pipeline transport	8	-	8	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-
Non-specified	1	-	-	1	-	-	-
OTHER	1641	115	545	176	236	302	267
Residential	1155	74	420	63	223	186	189
Comm. and public services	385	41	122	24	12	109	77
Agriculture/forestry	101	-	3	89	1	7	1
Not elsewhere specified	-	-	-	-	-	-	-
NON-ENERGY USE	44	-	-	44	-	-	-
Statistical differences	-	-	-	-	-	-	-

thousands of tonnes of coal equivalent

#### 1.4. The energy balance for 2011

	thousands of tonnes of oi						
SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	238	-	-	13	218	7	-
From other sources	213	-	-	-	-	213	-
Imports	1937	125	931	824	-	57	-
Exports	14	-	-	14	-	-	-
International bunkers	-6	-	-	-6	-	-	-
Stock changes	-15	-5	-1	-11	2	-	-
Gross consumption	2353	120	930	806	220	277	-
TRANSFORMATION, INPUT	466	2	413	34	10	7	-
Electricity plants	7	-	-	-	-	7	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and power	302	-	302	-	-	-	-
(CHP) plants	24	-	10	14	-	-	-
Main activity producer heat plants	55	-	55	-	-	-	-
Autoproducer heat plants	59	2	46	1	10	-	-
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	19	-	-	19	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	-	-	-	-	-	-	-
Not elsewhere specified - transformation	-	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	377	-	-	18	-	87	272
Electricity plants	7	-	-	-	-	7	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and power	237	-	-	-	-	78	159
(CHP) plants	21	-	-	-	-	2	19
Main activity producer heat plants	48	-	-	-	-	-	48
Autoproducer heat plants	46	-	-	-	-	-	46
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	18	-	-	18	-	-	-
Liquefaction plants							
Charcoal production plants	-	-	-	-	-	-	-
Not elsewhere specified — transformation	-	-	-	-	-	-	-
Energy sector	16	-	-	-	-	16	-
LOSSES	165	1	70	4	-	50	40

thousands of tonnes of oil equivalent

thousands	of tonnes	of oil e	quivalent
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SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	2083	117	447	786	210	291	232
INDUSTRY	235	42	66	9	1	70	47
Iron and steel	-	-	-	-	-	-	-
Chemical and petrochem.	4	-	-	-	-	3	1
Non-metallic minerals	102	40	47	1	-	14	-
Machinery	4	-	-	-	-	4	-
Transport equipment	1	-	1	-	-	-	-
Mining and quarrying	2	-	-	1	-	1	-
Food and tobacco	88	2	15	2	-	26	43
Paper, pulp and print	4	-	2	-	-	1	1
Wood and wood products	7	-	-	-	1	6	-
Construction	6	-	-	5	-	1	-
Textile and leather	6	-	1	-	-	3	2
Not elsewhere specified	11	-	-	-	-	11	-
TRANSPORT	624	-	2	617	-	5	-
Domestic aviation	14	-	-	14	-	-	-
Road	596	-	2	590	-	4	-
Rail	13	-	-	13	-	-	-
Pipeline transport	1	-	-	-	-	1	-
Domestic navigation	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	
OTHER	1194	75	379	130	209	216	185
Residential	848	47	277	59	204	133	128
Comm. and public services	277	28	100	10	5	78	56
Agriculture/forestry	69	-	2	61	-	5	1
Not elsewhere specified	-	-	-	-	-	-	-
NON-ENERGY USE	30	-	-	30	-	-	-
Statistical differences	-	-	-	-	-	-	-

#### 1.5. The energy balance for 2011

							TeraJoule
SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	9800	_	2	•	8997	275	
From other sources	8923	-	-	520		8923	-
Imports	81292	5252	- 39011	- 34618	- 13	2398	-
Exports	601	- 5252		597	4	2390	-
International bunkers	-258	-	-	-258	-	-	-
Stock changes	-238	-229	-25	-468	130	_	-
Gross consumption	98564	5023	38988	33821	9136	11596	
TRANSFORMATION, INPUT	19579	72	17310		400	275	
Electricity plants	304	-	1/010			275	_
Main activity producer combined heat	504		10	17		215	
and power (CHP) plants	12637	-	12637	-	-	-	-
Autoproducer combined heat and power							
(CHP) plants	1028	-	433	595	-	-	-
Main activity producer heat plants	2316	-	2316	-	-	-	-
Autoproducer heat plants	2451	72	1914	65	400	-	-
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	843	-	-	843	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	-	-	-	-	-	-	-
Not elsewhere specified - transformation	-	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	15831	-	-	770	-	3659	11402
Electricity plants	291	-	-	-	-	291	-
Main activity producer combined heat							
and power (CHP) plants	9907	-	-	-	-	3264	6643
Autoproducer combined heat and power	920	_	_	_	_	104	816
(CHP) plants Main activity producer heat plants	2021	-	-	_	_	-	2021
Autoproducer heat plants	1922	-	-	-	-	-	1922
Oil refineries	1722	-	-	-	-	-	1922
Petrochemical plants	- 770	-	-	- 770	-	-	-
Liquefaction plants	//0	-	-	770	-	-	-
Charcoal production plants	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
Not elsewhere specified — transformation		-	-	-	-	-	-
Energy sector	708	-	-	-	-	690 2121	18
LOSSES	7431	14	3441	159	8	2121	1688

							TeraJoule
SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	86677	4937	18237	32910	8728	12169	9696
INDUSTRY	9955	1745	2766	433	47	2931	2033
Iron and steel	8	5	-	1	-	2	-
Chemical and petrochem.	188	-	4	19	-	111	54
Non-metallic minerals	4256	1657	1983	39	-	571	6
Machinery	221	2	27	7	4	171	10
Transport equipment	-	-	-	-	-	-	-
Mining and quarrying	113	-	-	52	-	61	-
Food and tobacco	3718	81	644	91	6	1088	1808
Paper, pulp and print	116	-	37	-	-	41	38
Wood and wood products	308	-	6	11	35	253	3
Construction	304	-	37	206	-	50	11
Textile and leather	261	-	26	5	2	125	103
Not elsewhere specified	462	-	2	2	-	458	-
TRANSPORT	26564	-	484	25899	-	181	-
Domestic aviation	578	-	-	578	-	-	-
Road	24955	-	78	24728	-	149	-
Rail	557	-	-	557	-	-	-
Pipeline transport	443	-	406	5	-	32	-
Domestic navigation	3	-	-	3	-	-	-
Non-specified	28	-	-	28	-	-	-
OTHER	48943	3192	14987	5365	8679	9057	7663
Residential	35429	1955	11663	2499	8365	5572	5375
Comm. and public services	10609	1232	3238	315	287	3292	2245
Agriculture/forestry	2905	5	86	2551	27	193	43
Not elsewhere specified	-	-	-	-	-	-	-
NON-ENERGY USE	1215	-	-	1213	2	-	-
Statistical differences	-	-	-	-	-	-	-

#### 1.6. The energy balance for 2011

				t	housands of to	nnes of coal e	equivalent
SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	334	-	-	18	307	9	-
From other sources	304	-	-	-	-	304	-
Imports	2771	179	1330	1180	-	82	-
Exports	20	-	-	20	-	-	-
International bunkers	-8	-	-	-8	-	-	-
Stock changes	-20	-8	-1	-16	5	-	-
Gross consumption	3361	171	1329	1154	312	395	-
TRANSFORMATION, INPUT	668	2	590	53	14	9	-
Electricity plants	10	-	-	1	-	9	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and power	431	-	431	-	-	-	-
(CHP) plants	35	-	15	20	-	-	-
Main activity producer heat plants	79	-	79	-	-	-	-
Autoproducer heat plants	84	2	65	3	14	-	-
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	29	-	-	29	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	-	-	-	-	-	-	-
Not elsewhere specified - transformation	-	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	539	-	-	25	-	125	389
Electricity plants	10	-	-	-	-	10	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and power (CHP) plants	338 32	-	-	-	-	111	227 28
Main activity producer heat plants	_					·	
	69	-	-	-	-	-	69
Autoproducer heat plants	65	-	-	-	-	-	65
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	25	-	-	25	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	-	-	-	-	-	-	-
Not elsewhere specified — transformation		-	-	-	-	-	-
Energy sector	24	-	-	-	-	23	1
LOSSES	239	3	101	5	-	72	58

thousands of tonnes of coal equivalent

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	2969	166	638	1121	298	416	330
INDUSTRY	341	59	98	14	1	100	69
Iron and steel	-	-	-	-	-	-	-
Chemical and petrochem.	7	-	-	1	-	4	2
Non-metallic minerals	147	59	68	1	-	19	-
Machinery	8	-	2	-	-	6	-
Transport equipment	-	-	-	-	-	-	-
Mining and quarrying	5	-	-	3	-	2	-
Food and tobacco	123	-	22	2	-	37	62
Paper, pulp and print	5	-	3	-	-	1	1
Wood and wood products	10	-	-	-	1	9	-
Construction	10	-	1	7	-	2	-
Textile and leather	10	-	2	-	-	4	4
Not elsewhere specified	16	-	-	-	-	16	-
TRANSPORT	906	-	17	883	-	6	-
Domestic aviation	20	-	-	20	-	-	-
Road	857	-	3	849	-	5	-
Rail	13	-	-	13	-	-	-
Pipeline transport	15	-	14	-	-	1	-
Domestic navigation	-	-	-	-	-	-	-
Non-specified	1	-	-	1	-	-	-
OTHER	1681	107	523	183	297	310	261
Residential	1206	67	395	85	286	190	183
Comm. and public services	378	40	125	12	11	113	77
Agriculture/forestry	97	-	3	86	-	7	1
Not elsewhere specified	-	-	-	-	-	-	-
NON-ENERGY USE	41	-	-	41	-	-	-
Statistical differences	-	-	-	-	-	-	-

thousands of tonnes of coal equivalent

#### 1.7. The energy balance for 2012

			thousands of tonnes of oil equiva					
SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat	
Primary Production	245	-	-	11	231	3	-	
From other sources	209	-	-	-	-	209	-	
Imports	1832	113	885	761	-	73	-	
Exports	19	-	-	18	1	-	-	
International bunkers	-8	-	-	-8	-	-	-	
Stock changes	8	3	-	10	-5	-	-	
Gross consumption	2267	116	885	756	225	285	-	
TRANSFORMATION, INPUT	444	2	400	34	5	3	-	
Electricity plants	3	-	-	-	-	3	-	
Main activity producer combined heat and power (CHP) plants	292	-	292	-	-	-	-	
Autoproducer combined heat and power (CHP) plants	22	-	11	11	-	-	-	
Main activity producer heat plants	53	-	53	-	-	-	-	
Autoproducer heat plants	52	2	44	1	5	-	-	
Oil refineries	-	-	-	-	-	-	-	
Petrochemical plants	22	-	-	22	-	-	-	
Liquefaction plants	-	-	-	-	-	-	-	
Charcoal production plants	-	-	-	-	-	-	-	
Not elsewhere specified - transformation	-	-	-	-	-	-	-	
TRANSFORMATION, OUTPUT	357	-	-	18	-	80	259	
Electricity plants	3	-	-	-	-	3	-	
Main activity producer combined heat and power (CHP) plants	227	-	-	-	-	74	153	
Autoproducer combined heat and power (CHP) plants	19	-	-	-	-	3	16	
Main activity producer heat plants	46	-	-	-	-	-	46	
Autoproducer heat plants	44	-	-	-	-	-	44	
Oil refineries	-	-	-	-	-	-	-	
Petrochemical plants	18	-	-	18	-	-	-	
Liquefaction plants	-	-	-	-	-	-	-	
Charcoal production plants	-	-	-	-	-	-	-	
Not elsewhere specified — transformation	-	-	-	-	-	-	-	
Energy sector	14	-	-	-	-	14	-	
LOSSES	159	-	64	4		50	41	

thousands of tonnes of oil equivalent

			thousands of t	of tonnes of oil equivalent			
SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	2007	114	421	736	220	298	218
INDUSTRY	239	31	63	30	1	71	43
Iron and steel	-	-	-	-	-	-	-
Chemical and petrochem.	3	-	-	-	-	3	-
Non-metallic minerals	106	29	44	21	-	12	-
Machinery	4	-	-	-	-	4	-
Transport equipment	-	-	-	-	-	-	-
Mining and quarrying	2	-	-	1	-	1	-
Food and tobacco	50	2	17	2	-	29	-
Paper, pulp and print	43	-	1	-	1	1	40
Wood and wood products	7	-	-	-	-	6	1
Construction	8	-	1	6	-	1	-
Textile and leather	3	-	-	-	-	3	-
Not elsewhere specified	13	-	-	-	-	11	2
TRANSPORT	561	-	11	546	-	4	-
Domestic aviation	15	-	-	15	-	-	-
Road	521	-	2	516	-	3	-
Rail	14	-	-	14	-	-	-
Pipeline transport	10	-	9	-	-	1	-
Domestic navigation	-	-	-	-	-	-	-
Non-specified	1	-	-	1	-	-	-
OTHER	1164	83	347	117	219	223	175
Residential	834	59	250	62	210	135	118
Comm. and public services	270	24	94	4	8	84	56
Agriculture/forestry	60	-	3	51	1	4	1
Not elsewhere specified	-	-	-	-	-	-	-
NON-ENERGY USE	43	-	-	43	-	-	-
Statistical differences	-	-	-	-	-	-	-

thousands of tonnes of oil equivalent

#### **1.8.** The energy balance for 2012

							TeraJoule
SUPPLY AND CONSUMPTION	Total	Coal	Natural	Oil	Biofuels and	Electricity	Heat
SUPPLI AND CONSUMPTION	products	Coal	gas	products	waste	Electricity	пеа
Primary Production	10252	-	4	473	9653	122	
From other sources	8755	-	-	-	-	8755	-
Imports	76881	4745	37091	31984	14	3047	-
Exports	807	-	-	769	38	-	-
International bunkers	-342	-	-	-342	-	-	-
Stock changes	414	109	-1	460	-154	-	-
Gross consumption	95153	4854	37094	31806	9475	11924	-
TRANSFORMATION, INPUT	18672	74	16768	1452	256	122	-
Electricity plants	139	-	7	10	-	122	-
Main activity producer combined heat							
and power (CHP) plants	12243	-	12243	-	-	-	-
Autoproducer combined heat and power (CHP) plants	948	_	448	500	-	_	_
Main activity producer heat plants	2205	_	2205	-	_	_	_
Autoproducer heat plants	2203	74	1865	54	230	_	_
Oil refineries		-	-	-	-	_	_
Petrochemical plants	888	_	-	888	_	_	_
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	26	-	-	-	26	-	-
Not elsewhere specified - transformation	-	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	15026	-	-	779	13	3358	10876
Electricity plants	133	-	-	-	_	133	-
Main activity producer combined heat							
and power (CHP) plants	9546	-	-	-	-	3120	6426
Autoproducer combined heat and power	0.07					105	702
(CHP) plants	807	-	-	-	-	105	702
Main activity producer heat plants	1911	-	-	-	-	-	1911
Autoproducer heat plants	1837	-	-	-	-	-	1837
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	779	-	-	779	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	13	-	-	-	13	-	-
Not elsewhere specified — transformation		-	-	-	-	-	-
Energy sector	616 7212	-	-	-	-	598 2070	18
LOSSES	7213	11	3191	201	2	2070	1738

							TeraJoule
SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	83678	4769	17135	30932	9213	12492	9120
INDUSTRY	10169	1288	2687	1250	55	3044	1845
Iron and steel	7	2	-	-	-	5	-
Chemical and petrochem.	168	-	13	15	-	126	14
Non-metallic minerals	4399	1191	1832	868	-	505	3
Machinery	212	-	19	3	-	177	13
Transport equipment	0	-	-	-	-	0	-
Mining and quarrying	100	-	-	45	-	55	-
Food and tobacco	3780	94	710	88	8	1209	1671
Paper, pulp and print	131	-	49	-	-	44	38
Wood and wood products	318	-	9	2	45	257	5
Construction	311	-	30	225	-	56	-
Textile and leather	268	1	17	3	2	144	101
Not elsewhere specified	475	-	8	1	-	466	-
TRANSPORT	23552	8	441	22906	-	197	-
Domestic aviation	628	-	-	628	-	-	-
Road	21842	-	78	21626	-	138	-
Rail	607	8	-	599	-	-	-
Pipeline transport	422	-	363	-	-	59	-
Domestic navigation	3	-	-	3	-	-	-
Non-specified	50	-	-	50	-	-	-
OTHER	48094	3473	14007	4914	9174	9251	7275
Residential	35000	2463	10498	2592	8812	5679	4956
Comm. and public services	10573	1004	3377	200	329	3387	2276
Agriculture/forestry	2521	6	132	2122	33	185	43
Not elsewhere specified	0	-	-	0	-	-	-
NON-ENERGY USE	1863	-	-	1862	1	-	-
Statistical differences	-	-	-	-	-	-	-

#### **1.9.** The energy balance for 2012

				t	housands of to	nnes of coal e	equivalent
SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	350	-	-	16	330	4	-
From other sources	298	-	-	-	-	298	-
Imports	2620	162	1264	1090	-	104	-
Exports	27	-	-	26	1	-	-
International bunkers	-12	-	-	-12	-	-	-
Stock changes	12	3	-	16	-7	-	-
Gross consumption	3241	165	1264	1084	322	406	-
TRANSFORMATION, INPUT	636	3	571	50	8	4	-
Electricity plants	5	-	1	-	-	4	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and power	388	-	388	-	-	-	-
(CHP) plants	41	-	24	17	-	-	-
Main activity producer heat plants	71	-	71	-	-	-	-
Autoproducer heat plants	101	3	87	3	8	-	-
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	30	-	-	30	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	0	-	-	-	0	-	-
Not elsewhere specified - transformation	-	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	512	-	-	27	-	114	371
Electricity plants	4	-	-	-	-	4	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and power	325	-	-	-	-	106	219
(CHP) plants	27	-	-	-	-	4	23
Main activity producer heat plants	66	-	-	-	-	-	66
Autoproducer heat plants	63	-	-	-	-	-	63
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	27	-	-	27	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	0	-	-	-	0	-	-
Not elsewhere specified — transformation	-	-	-	-	-	-	-
Energy sector	21	-	-	-	-	20	1
LOSSES	229	-	93	6	-	70	60

thousands of tonnes of coal equivalent

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	2867	162	600	1055	314	426	310
INDUSTRY	343	44	91	42	1	104	61
Iron and steel	0	0	-	-	-	0	-
Chemical and petrochem.	4	-	-	-	-	4	-
Non-metallic minerals	150	41	62	30	-	17	-
Machinery	7	-	1	-	-	6	-
Transport equipment	0	-	-	-	-	0	-
Mining and quarrying	3	-	-	1	-	2	-
Food and tobacco	128	3	24	3	-	41	57
Paper, pulp and print	5	-	2	-	-	2	1
Wood and wood products	10	-	-	-	1	9	-
Construction	11	-	1	8	-	2	-
Textile and leather	9	-	1	-	-	5	3
Not elsewhere specified	16	-	-	-	-	16	-
TRANSPORT	805	-	16	782	-	7	-
Domestic aviation	21	-	-	21	-	-	-
Road	747	-	3	739	-	5	-
Rail	20	-	-	20	-	-	-
Pipeline transport	15	-	13	-	-	2	-
Domestic navigation	0	-	-	0	-	-	-
Non-specified	2	-	-	2	-	-	-
OTHER	1656	118	493	168	313	315	249
Residential	1192	84	358	88	299	194	169
Comm. and public services	380	34	131	8	13	115	79
Agriculture/forestry	84	-	4	72	1	6	1
Not elsewhere specified	0	-	-	0	-	-	-
NON-ENERGY USE	63	-	-	63	-	-	-
Statistical differences	-	-	-	-	-	-	-

thousands of tonnes of coal equivalent

#### 1.10. The energy balance for 2013

					thousands of t	onnes of oil e	equivalent
SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	283	-	-	10	269	4	-
From other sources	161	-	-	-	-	161	-
Imports	1924	156	833	810	-	125	-
Exports	34	-	-	34	-	-	-
International bunkers	-9	-	-	-9	-	-	-
Stock changes	-7	-6	1	-1	-1	-	-
Gross consumption	2318	150	834	776	268	290	-
TRANSFORMATION, INPUT	436	8	380	36	8	4	-
Electricity plants	6	-	1	-	1	4	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and power	270	-	270	-	-	-	-
(CHP) plants	31	-	17	14	-	-	-
Main activity producer heat plants	49	-	49	-	-	-	-
Autoproducer heat plants	58	8	43	1	6	-	-
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	21	-	-	21	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	1	-	-	-	1	-	-
Not elsewhere specified - transformation	-	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	350	-	-	18	-	78	254
Electricity plants	5	-	-	-	-	5	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and power	210	-	-	-	-	70	140
(CHP) plants	28	-	-	-	-	3	25
Main activity producer heat plants	41	-	-	-	-	-	41
Autoproducer heat plants	48	-	-	-	-	-	48
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	18	-	-	18	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	0	-	-	-	0	-	-
Not elsewhere specified — transformation	-	-	-	-	-	-	-
Energy sector	12	-	-	-	-	12	-
LOSSES	155	-	64	5	-	46	40

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	2065	142	390	753	260	306	214
INDUSTRY	257	55	58	16	1	75	52
Iron and steel	-	0	-	0	0	-	0
Chemical and petrochem.	5	-	-	1	-	3	1
Non-metallic minerals	114	53	38	8	-	15	-
Machinery	5	-	1	-	-	4	-
Transport equipment	-	-	-	-	-	-	-
Mining and quarrying	3	-	-	2	-	1	-
Food and tobacco	98	2	16	2	1	30	47
Paper, pulp and print	2	-	-	-	-	1	1
Wood and wood products	6	-	1	-	-	5	-
Construction	5	-	1	3	-	1	-
Textile and leather	6	-	1	-	-	3	2
Not elsewhere specified	13	-	-	-	-	12	1
TRANSPORT	586	-	6	575	-	5	-
Domestic aviation	13	-	-	13	-	-	-
Road	556	-	1	552	-	3	-
Rail	9	-	-	9	-	-	-
Pipeline transport	7	-	5	-	-	2	-
Domestic navigation	-	0	-	0	0	-	0
Non-specified	1	-	-	1	-	-	-
OTHER	1180	87	326	120	259	226	162
Residential	857	61	234	63	251	139	109
Comm. and public services	259	26	88	3	7	82	53
Agriculture/forestry	64	-	4	54	1	5	-
Not elsewhere specified	-	0	-	0	0	-	0
NON-ENERGY USE	42	-	-	42	-	-	-
Statistical differences	-	-	-	-	-	-	-

thousands of tonnes of oil equivalent

## 1.11. The energy balance for 2013

							TeraJoule
SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	11833	-	4	404	11257	168	
From other sources	6748	-	-	-	_	6748	-
Imports	80605	6486	34921	33938	15	5245	-
Exports	1410	-	-	1378	32	-	-
International bunkers	-373	-	-	-373	-	-	-
Stock changes	-175	-184	66	-23	-34	-	-
Gross consumption	97228	6302	34991	32568	11206	12161	-
TRANSFORMATION, INPUT	18289	348	15938	1499	336	168	-
Electricity plants	218	-	30	10	10	168	-
Main activity producer combined heat and power (CHP) plants	11318	-	11318	-	-	-	-
Autoproducer combined heat and power (CHP) plants	1304	_	713	565	26	_	_
Main activity producer heat plants	2082	_	2082	-	- 20	_	_
Autoproducer heat plants	2002	348	1795	54	269	-	_
Oil refineries		-	-	-	-	-	-
Petrochemical plants	870	-	-	870	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	31	-	-	-	31	-	-
Not elsewhere specified - transformation	-	_	-	-	_	-	-
TRANSFORMATION, OUTPUT	14692	-		775	16	3261	10640
Electricity plants	200	-	-	-	-	200	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and power	8805	-	-	-	-	2935	5870
(CHP) plants	1172	-	-	-	-	126	1046
Main activity producer heat plants	1700	-	-	-	-	-	1700
Autoproducer heat plants	2024	-	-	-	-	-	2024
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	775	-	-	775	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	16	-	-	-	16	-	-
Not elsewhere specified — transformation	-	-	-	-	-	-	-
Energy sector	515	-	-	-	-	492	23
LOSSES	6614	34	2707	244	11	1945	1673

							TeraJoule
SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	86502	5920	16346	31600	10875	12817	8944
INDUSTRY	10692	2253	2445	692	35	3146	2121
Iron and steel	14	2	1	-	-	11	-
Chemical and petrochem.	215	-	21	18	7	144	25
Non-metallic minerals	4711	2173	1589	339	-	606	4
Machinery	183	-	13	-	-	166	4
Transport equipment	4	-	-	-	-	4	-
Mining and quarrying	146	-	-	85	-	61	-
Food and tobacco	4068	78	676	90	15	1247	1962
Paper, pulp and print	139	-	74	-	-	40	25
Wood and wood products	212	-	4	-	13	191	4
Construction	242	-	45	160	-	37	-
Textile and leather	244	-	17	-	-	148	79
Not elsewhere specified	514	-	5	-	-	491	18
TRANSPORT	24526	-	290	24024	-	212	-
Domestic aviation	545	-	-	545	-	-	-
Road	23142	-	65	22940	-	137	-
Rail	383	-	-	383	-	-	-
Pipeline transport	300	-	225	-	-	75	-
Domestic navigation	3	-	-	3	-	-	-
Non-specified	153	-	-	153	-	-	-
OTHER	49475	3667	13611	5075	10840	9459	6823
Residential	35875	2548	9788	2661	10517	5805	4556
Comm. and public services	10900	1099	3675	141	291	3465	2229
Agriculture/forestry	2700	20	148	2273	32	189	38
Not elsewhere specified	0	-	-	0	-	-	-
NON-ENERGY USE	1809	-	-	1809	-	-	-
Statistical differences	-	-	-	-	-	-	-

## 1.12. The energy balance for 2013

				ť	housands of to	nnes of coal e	quivalent
SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	405	-	-	14	385	6	-
From other sources	230	-	-	-	-	230	-
Imports	2748	221	1190	1157	1	179	-
Exports	48	-	-	47	1	-	-
International bunkers	-12	-	-	-12	-	-	-
Stock changes	-4	-6	2	-	-	-	-
Gross consumption	3319	215	1192	1112	385	415	-
TRANSFORMATION, INPUT	623	12	543	51	11	6	-
Electricity plants	7	-	1	-	-	6	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and power	386	-	386	-	-	-	-
(CHP) plants	44	-	24	19	1	-	-
Main activity producer heat plants	71	-	71	-	-	-	-
Autoproducer heat plants	84	12	61	2	9	-	-
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	30	-	-	30	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	1	-	-	-	1	-	-
Not elsewhere specified - transformation	-	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	501	-	-	26	1	111	363
Electricity plants	7	-	-	-	-	7	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and power	300	-	-	-	-	100	200
(CHP) plants	40	-	-	-	-	4	36
Main activity producer heat plants	58	-	-	-	-	-	58
Autoproducer heat plants	69	-	-	-	-	-	69
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	26	-	-	26	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	1	-	-	-	1	-	-
Not elsewhere specified — transformation	-	-	-	-	-	-	-
Energy sector	17	-	-	-	-	17	-
LOSSES	221	1	91	6	-	66	57

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	2959	202	558	1081	375	437	306
INDUSTRY	369	78	83	24	2	108	74
Iron and steel	0	0	0	-	-	0	-
Chemical and petrochem.	8	-	-	1	1	5	1
Non-metallic minerals	163	76	54	12	-	21	-
Machinery	7	-	1	-	-	6	-
Transport equipment	-	-	-	-	-	0	-
Mining and quarrying	5	-	-	3	-	2	-
Food and tobacco	139	2	23	3	1	43	67
Paper, pulp and print	2	-	-	-	-	1	1
Wood and wood products	9	-	2	-	-	7	-
Construction	8	-	2	5	-	1	-
Textile and leather	9	-	1	-	-	5	3
Not elsewhere specified	19	-	-	-	-	17	2
TRANSPORT	839	-	10	822	-	7	-
Domestic aviation	19	-	-	19	-	-	-
Road	796	-	2	789	-	5	-
Rail	13	-	-	13	-	-	-
Pipeline transport	10	-	8	-	-	2	-
Domestic navigation	0	-	-	0	-	-	-
Non-specified	1	-	-	1	-	-	-
OTHER	1689	124	465	173	373	322	232
Residential	1227	87	334	91	362	198	155
Comm. and public services	372	37	126	5	10	118	76
Agriculture/forestry	90	-	5	77	1	6	1
Not elsewhere specified	0	-	-	0	-	-	-
NON-ENERGY USE	62	-	-	62	-	-	-
Statistical differences	-	-	-	-	-	-	-

thousands of tonnes of coal equivalent

## 1.13. The energy balance for 2014

					thousands of t	onnes of oil e	equivalent
SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	312	-	0	8	299	5	-
From other sources	224	-	-	-	-	224	-
Imports	1801	88	851	799	0	63	-
Exports	22	-	-	18	4	-	-
International bunkers	-8	-	-	-8	-	-	-
Stock changes	12	7	-1	14	-8	-	-
Gross consumption	2319	95	850	795	287	292	-
TRANSFORMATION, INPUT	443	2	396	28	12	5	-
Electricity plants	7	-	1	0	1	5	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and power	283	-	283	-	-	-	-
(CHP) plants	39	-	25	11	3	-	-
Main activity producer heat plants	46	-	46	-	-	-	-
Autoproducer heat plants	50	2	41	0	7	-	-
Oil refineries	0	-	-	0	-	-	-
Petrochemical plants	17	-	-	17	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	1	-	-	-	1	-	-
Not elsewhere specified - transformation	-	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	352	-	-	18	1	83	250
Electricity plants	6	-	-	-	-	6	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and power	208	-	-	-	-	71	137
(CHP) plants	35	-	-	-	-	6	29
Main activity producer heat plants	40	-	-	-	-	-	40
Autoproducer heat plants	44	-	-	-	-	-	44
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	18	-	-	18	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	1	-	-	-	1	-	-
Not elsewhere specified — transformation	-	-	-	-	-	-	-
Energy sector	17	-	-	-	-	17	0
LOSSES	152	0	68	4	0	40	40

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	2059	93	386	781	276	313	210
INDUSTRY	235	33	55	10	2	77	58
Iron and steel	1	-	-	-	-	1	-
Chemical and petrochem.	6	-	1	-	-	4	1
Non-metallic minerals	73	30	31	-	-	12	0
Machinery	4	-	1	-	-	3	0
Transport equipment	1	-	-	-	-	1	-
Mining and quarrying	3	-	-	2	-	1	-
Food and tobacco	112	3	17	4	1	34	53
Paper, pulp and print	4	-	2	-	-	1	1
Wood and wood products	7	-	1	-	1	5	0
Construction	6	-	1	4	-	1	-
Textile and leather	6	-	1	-	-	3	2
Not elsewhere specified	12	-	-	-	-	11	1
TRANSPORT	610	-	8	597	-	5	-
Domestic aviation	17	-	-	17	-	-	-
Road	581	-	1	576	-	4	-
Rail	1	-	-	1	-	-	-
Pipeline transport	8	-	7	-	-	1	-
Domestic navigation	1	-	-	1	-	-	-
Non-specified	2	-	-	2	-	-	-
OTHER	1162	60	323	125	271	231	152
Residential	853	42	239	64	258	143	107
Comm. and public services	245	18	82	5	12	84	44
Agriculture/forestry	64	0	2	56	1	4	1
Not elsewhere specified	0	-	-	0	-	-	-
NON-ENERGY USE	52	-	-	49	3	-	-
Statistical differences	-	-	-	-		-	-

## 1.14. The energy balance for 2014

							TeraJoule
SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	13017	-	3	341	12452	221	-
From other sources	9396	-	-	-	-	9396	-
Imports	75622	3714	35655	33571	49	2633	-
Exports	939	-	-	785	154	-	-
International bunkers	-339	-	-	-339	-	-	-
Stock changes	524	297	-44	617	-346	-	-
Gross consumption	97281	4011	35614	33405	12001	12250	-
TRANSFORMATION, INPUT	18765	80	16577	1320	567	221	-
Electricity plants	288	-	40	9	18	221	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and power	11839	-	11839	-	-	-	-
(CHP) plants	1684	_	1052	472	160	-	-
Main activity producer heat plants	1922	_	1922	-	-	-	-
Autoproducer heat plants	2196	80	1724	37	355	-	-
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	802	-	-	802	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	34	-	-	-	34	-	-
Not elsewhere specified - transformation	-	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	14655	-	-	710	8	3471	10466
Electricity plants	252	-	-	-	-	252	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and power	8748	-	-	-	-	2998	5750
(CHP) plants	1432	-	-	-	-	221	1211
Main activity producer heat plants	1675	-	-	-	-	-	1675
Autoproducer heat plants	1830	-	-	-	-	-	1830
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	710	-	-	710	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	8	-	-	-	8	-	-
Not elsewhere specified — transformation	-	-	-	-	-	-	-
Energy sector	693	-	-	-	-	674	19
LOSSES	6434	29	2866	160	18	1701	1660

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	86044	3902	16171	32635	11424	13125	8787
INDUSTRY	9697	1333	2275	424	29	3219	2417
Iron and steel	29	-	-	-	-	29	-
Chemical and petrochem.	234	-	29	-	-	176	29
Non-metallic minerals	3096	1216	1346	-	-	529	5
Machinery	140	-	20	-	-	117	3
Transport equipment	30	-	-	-	-	30	-
Mining and quarrying	147	-	-	88	-	59	-
Food and tobacco	4614	117	705	171	12	1383	2226
Paper, pulp and print	118	-	59	-	-	30	29
Wood and wood products	236	-	9	-	17	205	5
Construction	286	-	78	165	-	43	-
Textile and leather	264	-	29	-	-	147	88
Not elsewhere specified	503	-	-	-	-	471	32
TRANSPORT	25537	-	352	25009	-	176	-
Domestic aviation	732	-	-	732	-	-	-
Road	24366	-	59	24160	-	147	-
Rail	32	-	-	32	-	-	-
Pipeline transport	322	-	293	-	-	29	-
Domestic navigation	27	-	-	27	-	-	-
Non-specified	58	-	-	58	-	-	-
OTHER	48709	2569	13544	5231	11265	9730	6370
Residential	35631	1767	10012	2665	10740	5976	4471
Comm. and public services	10355	784	3462	197	481	3580	1851
Agriculture/forestry	2723	18	70	2369	44	174	48
Not elsewhere specified	-	-	-	-	-	-	-
NON-ENERGY USE	2101	-	-	1971	130	-	-
Statistical differences	-	-	-		-	-	-

# 1.15. The energy balance for 2014

				ť	housands of to	nnes of coal e	equivalent
SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	444	-	0	12	425	7	-
From other sources	320	-	-	-	-	320	-
Imports	2575	127	1215	1142	1	90	-
Exports	31	-	-	26	5	-	-
International bunkers	-12	-	-	-12	-	-	-
Stock changes	17	10	-1	21	-13	-	-
Gross consumption	3313	137	1214	1137	408	417	-
TRANSFORMATION, INPUT	638	3	565	44	19	7	-
Electricity plants	9	-	1	0	1	7	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and power	404	-	404	-	-	-	-
(CHP) plants	57	-	36	16	5	-	-
Main activity producer heat plants	66	-	66	-	-	-	-
Autoproducer heat plants	74	3	59	1	11	-	-
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	27	-	-	27	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	2	-	-	-	2	-	-
Not elsewhere specified - transformation	-	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	500	-	-	24	1	118	357
Electricity plants	9	-	-	-	-	9	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and power	297	-	-	-	-	101	196
(CHP) plants	49	-	-	-	-	8	41
Main activity producer heat plants	57	-	-	-	-	-	57
Autoproducer heat plants	62	-	-	-	-	-	62
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	24	-	-	24	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	1	-	-	-	1	-	-
Not elsewhere specified — transformation	-	-	-	-	-	-	-
Energy sector	23	-	-	-	-	23	0
LOSSES	218	1	98	4	0	58	57

thousands of tonnes of coal equivalent

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	2934	133	551	1117	386	447	300
INDUSTRY	330	45	78	14	1	109	83
Iron and steel	1	-	-	-	-	1	-
Chemical and petrochem.	8	-	1	-	-	6	1
Non-metallic minerals	105	41	46	-	-	18	-
Machinery	5	-	1	-	-	4	-
Transport equipment	1	-	-	-	-	1	-
Mining and quarrying	5	-	-	3	-	2	-
Food and tobacco	156	4	24	5	0	47	76
Paper, pulp and print	4	-	2	-	-	1	1
Wood and wood products	8	0	-	-	1	7	0
Construction	10	-	3	6	-	1	-
Textile and leather	9	-	1	-	-	5	3
Not elsewhere specified	18	-	-	-	-	16	2
TRANSPORT	872	-	12	854	-	6	-
Domestic aviation	25	-	-	25	-	-	-
Road	832	-	2	825	-	5	-
Rail	1	-	-	1	-	-	-
Pipeline transport	11	-	10	-	-	1	-
Domestic navigation	1	-	-	1	-	-	-
Non-specified	2	-	-	2	-	-	-
OTHER	1661	88	461	178	385	332	217
Residential	1215	60	341	91	367	204	152
Comm. and public services	354	27	118	7	17	122	63
Agriculture/forestry	92	1	2	80	1	6	2
Not elsewhere specified	0	-	-	0	-	-	-
NON-ENERGY USE	71	-	-	71	-	-	-
Statistical differences	-	-	-	-	-	-	-

## 1.16. The energy balance for 2015

				-	thousands of t	onnes of oil e	equivalent
SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	325	-	0	7	314	4	-
From other sources	283	-	-	-	-	283	-
Imports	1766	98	815	851	0	2	-
Exports	16	-	-	14	2	-	-
International bunkers	6	-	-	6	-	-	-
Stock changes	2	-4	-1	15	-8	-	-
Gross consumption	2350	102	816	823	320	289	-
TRANSFORMATION, INPUT	415	2	365	23	21	4	-
Electricity plants	4	-	-	0	-	4	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and power	279	-	279	-	-	-	-
(CHP) plants	31	-	14	7	10	-	-
Main activity producer heat plants	39	-	39	-	-	-	-
Autoproducer heat plants	44	2	33	0	9	-	-
Oil refineries	-	-	-	0	-	-	-
Petrochemical plants	16	-	-	16	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	2	-	-	-	2	-	-
Not elsewhere specified - transformation	-	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	331	-	-	11	-	81	239
Electricity plants	5	-	-	-	-	5	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and power	216	-	-	-	-	73	143
(CHP) plants	18	-	-	-	-	3	15
Main activity producer heat plants	43	-	-	-	-	-	43
Autoproducer heat plants	38	-	-	-	-	-	38
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	11	-	-	11	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	0	-	-	-	0	-	-
Not elsewhere specified — transformation	-	-	-	-	-	-	-
Energy sector	18	-	-	-	-	16	2
LOSSES	129	0	58	3	0	33	35

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	2119	100	393	808	299	317	202
INDUSTRY	209	40	60	4	1	65	39
Iron and steel	0	-	-	-	-	0	-
Chemical and petrochem.	5	-	1	-	-	4	-
Non-metallic minerals	88	39	35	-	-	14	0
Machinery	4	0	0	0	-	4	0
Transport equipment	0	-	-	-	0	0	-
Mining and quarrying	2	-	-	1	-	1	-
Food and tobacco	94	1	21	-	1	34	37
Paper, pulp and print	1	-	1	-	-	-	-
Wood and wood products	3	-	-	-	-	3	0
Construction	4	-	1	3	-	-	-
Textile and leather	6	-	1	-	-	3	2
Not elsewhere specified	2	-	-	-	-	2	-
TRANSPORT	646	-	10	631	-	5	-
Domestic aviation	19	-	-	19	-	-	-
Road	611	-	3	604	-	4	-
Rail	6	-	-	6	-	-	-
Pipeline transport	8	-	7	-	-	1	-
Domestic navigation	1	-	-	1	-	-	-
Non-specified	1	-	-	1	-	-	-
OTHER	1219	60	323	137	289	247	163
Residential	885	42	236	66	279	144	118
Comm. and public services	260	17	85	5	9	99	45
Agriculture/forestry	74	1	2	66	1	4	-
Not elsewhere specified	0	-	-	0	-	-	-
NON-ENERGY USE	45	-	-	36	9	-	-
Statistical differences	-	-	-	-	-	-	-

## 1.17. The energy balance for 2015

							TeraJoule
SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	13645	-	3	285	13164	193	-
From other sources	11879	-	-	-	-	11879	-
Imports	74076	4114	34146	35712	42	62	-
Exports	726	-	-	627	99	-	-
International bunkers	239	-	-	239	-	-	-
Stock changes	59	-174	-48	602	-321	-	-
Gross consumption	98576	4288	34197	34529	13428	12134	-
TRANSFORMATION, INPUT	17380	70	15309	946	862	193	-
Electricity plants	214	-	1	6	14	193	-
Main activity producer combined heat and power (CHP) plants	11686	-	11686	-	-	-	-
Autoproducer combined heat and power (CHP) plants	1236	-	587	262	387	-	-
Main activity producer heat plants	1640	-	1640		-	-	-
Autoproducer heat plants	1872	70	1395	18	389	-	-
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	660	-	-	660	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	72	-	-	-	72	-	-
Not elsewhere specified - transformation	-	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	14122	-	-	483	13	3584	10042
Electricity plants	199	-	-	-	-	199	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and power	9039	-	-	-	-	3046	5993
(CHP) plants	789	-	-	-	-	140	649
Main activity producer heat plants	1805	-	-	-	-	-	1805
Autoproducer heat plants	1595	-	-	-	-	-	1595
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	483	-	-	483	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	13	-	-	-	13	-	-
Not elsewhere specified — transformation	-	-	-	-	-	-	-
Energy sector	728	-	7	2	-	647	72
LOSSES	5531	2	2434	151	7	1437	1500

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	89059	4216	16447	33913	12572	13441	8470
INDUSTRY	9036	1705	2499	298	62	2782	1690
Iron and steel	8	-	-	-	-	8	-
Chemical and petrochem.	207	-	21	6	4	161	15
Non-metallic minerals	3715	1648	1469	29	-	568	1
Machinery	180	1	6	2	-	170	1
Transport equipment	3	-	-	-	1	2	-
Mining and quarrying	119	-	-	61	-	58	-
Food and tobacco	4014	56	869	41	43	1427	1578
Paper, pulp and print	108	-	55	-	-	32	21
Wood and wood products	163	-	-	5	13	145	-
Construction	201	-	37	143	-	20	1
Textile and leather	232	-	32	2	1	129	68
Not elsewhere specified	86	-	10	9	-	62	5
TRANSPORT	27032	-	421	26435	-	176	-
Domestic aviation	769	-	-	769	-	-	-
Road	25592	-	124	25314	-	154	-
Rail	258	-	-	258	-	-	-
Pipeline transport	319	-	297	-	-	22	-
Domestic navigation	28	-	-	28	-	-	-
Non-specified	66	-	-	66	-	-	-
OTHER	51080	2511	13527	5630	12149	10483	6780
Residential	37138	1733	9893	2722	11737	6118	4935
Comm. and public services	10951	749	3545	232	383	4198	1844
Agriculture/forestry	2989	29	89	2674	29	167	1
Not elsewhere specified	2	-	-	2	-	-	-
NON-ENERGY USE	1911	-	-	1550	361	-	-
Statistical differences	-	-	-	-	-	-	-

## 1.18. The energy balance for 2015

		thousands of tonnes of coal ec					
SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	462	-	0	10	446	6	-
From other sources	405	-	-	-	-	405	-
Imports	2522	140	1164	1216	-	2	-
Exports	24	-	-	21	3	-	-
International bunkers	8	-	-	8	-	-	-
Stock changes	5	-6	-1	23	-11	-	-
Gross consumption	3352	146	1165	1174	454	413	-
TRANSFORMATION, INPUT	590	2	522	31	29	6	-
Electricity plants	6	-	-	0	-	6	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and power	398	-	398	-	-	-	-
(CHP) plants	43	-	20	9	14	-	-
Main activity producer heat plants	56	-	56	-	-	-	-
Autoproducer heat plants	63	2	48	-	13	-	-
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	22	-	-	22	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	2	-	-	-	2	-	-
Not elsewhere specified - transformation	-	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	474	-	-	16	1	115	342
Electricity plants	6	-	-	-	-	6	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and power	308	-	-	-	-	104	204
(CHP) plants	27	-	-	-	-	5	22
Main activity producer heat plants	62	-	-	-	-	-	62
Autoproducer heat plants	54	-	-	-	-	-	54
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	16	-	-	16	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	1	-	-	-	1	-	-
Not elsewhere specified — transformation	-	-	-	-	-	-	-
Energy sector	24	-	-	-	-	22	2
LOSSES	188	-	83	5	0	49	51

thousands of tonnes of coal equivalent

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	3024	144	560	1154	426	451	289
INDUSTRY	305	57	85	9	2	94	58
Iron and steel	0	-	-	-	-	0	-
Chemical and petrochem.	7	-	1	-	-	5	1
Non-metallic minerals	124	55	50	-	-	19	-
Machinery	6	0	0	0	-	6	-
Transport equipment	0	-	-	-	0	-	-
Mining and quarrying	4	-	-	2	-	2	-
Food and tobacco	138	2	30	2	2	48	54
Paper, pulp and print	4	-	2	-	-	1	1
Wood and wood products	5	0	-	-	-	5	0
Construction	7	-	1	5	-	1	-
Textile and leather	8	-	1	-	-	5	2
Not elsewhere specified	2	-	-	-	-	2	-
TRANSPORT	921	-	14	901	-	6	-
Domestic aviation	26	-	-	26	-	-	-
Road	872	-	4	863	-	5	-
Rail	9	-	-	9	-	-	-
Pipeline transport	11	-	10	-	-	1	-
Domestic navigation	1	-	-	1	-	-	-
Non-specified	2	-	-	2	-	-	-
OTHER	1736	87	461	192	413	352	231
Residential	1264	60	337	94	399	205	169
Comm. and public services	369	26	121	7	12	141	62
Agriculture/forestry	103	1	3	91	2	6	-
Not elsewhere specified	0	-	-	0	-	-	-
NON-ENERGY USE	63	-	-	52	11	-	-
Statistical differences	-	-	-	-	-	-	-

## 2. THE ENERGY BALANCE, TOTAL PRODUCTS

## 2.1. The energy balance for 2010-2015

				thousands o	ands of tonnes of oil equivaler			
SUPPLY AND CONSUMPTION	2010	2011	2012	2013	2014	2015		
Primary Production	189	238	245	283	312	325		
From other sources	258	213	209	161	224	283		
Imports	1813	1937	1832	1924	1801	1766		
Exports	13	14	19	34	22	16		
International bunkers	-5	-6	-8	-9	-8	6		
Stock changes	52	-15	8	-7	12	2		
Gross consumption	2294	2353	2267	2318	2319	2350		
TRANSFORMATION, INPUT	493	466	444	436	443	415		
Electricity plants	8	7	3	6	7	4		
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and power	321	302	292	270	283	279		
(CHP) plants	27	24	22	31	39	31		
Main activity producer heat plants	60	55	53	49	46	39		
Autoproducer heat plants	60	59	52	58	50	44		
Oil refineries	-	-	-	-	-	-		
Petrochemical plants	17	19	22	21	17	16		
Liquefaction plants	-	-	-	-	-	-		
Charcoal production plants	-	-	-	1	1	2		
Not elsewhere specified - transformation	-	-	-	-	-	-		
TRANSFORMATION, OUTPUT	398	377	357	350	352	331		
Electricity plants	7	7	3	5	6	5		
Main activity producer combined heat and power (CHP) plants	248	237	227	210	208	216		
Autoproducer combined heat and power (CHP) plants	23	21	19	28	35	18		
Main activity producer heat plants	53	48	46	41	40	43		
Autoproducer heat plants	47	46	44	48	44	38		
Oil refineries	-	-	-	-	-	-		
Petrochemical plants	20	18	18	18	18	11		
Liquefaction plants	-	-	-	-	-	-		
Charcoal production plants	-	-	0	0	1	0		
Not elsewhere specified — transformation	-	-	-	-	-	-		
Energy sector	17	16	14	12	17	18		
LOSSES	176	165	159	155	152	129		

FINAL CONSUMPTION	2006	2083	2007	2065	2059	2119
INDUSTRY	227	235	239	257	235	209
Iron and steel	0	0	0	0	1	-
Chemical and petrochem.	3	4	3	5	6	5
Non-metallic minerals	94	102	106	114	73	88
Machinery	4	4	4	5	4	4
Transport equipment	-	1	-	-	1	-
Mining and quarrying	2	2	2	3	3	2
Food and tobacco	90	88	50	98	112	94
Paper, pulp and print	3	4	43	2	4	1
Wood and wood products	7	7	7	6	7	3
Construction	7	6	8	5	6	4
Textile and leather	6	6	3	6	6	6
Not elsewhere specified	11	11	13	13	12	2
TRANSPORT	592	624	561	586	610	646
Domestic aviation	14	14	15	13	17	19
Road	558	596	521	556	581	611
Rail	14	13	14	9	1	6
Pipeline transport	6	1	10	7	8	8
Domestic navigation	0	0	0	0	1	1
Non-specified	0	0	1	1	2	1
OTHER	1155	1194	1164	1180	1162	1219
Residential	808	848	834	857	853	885
Comm. and public services	276	277	270	259	245	260
Agriculture/forestry	71	69	60	64	64	74
Not elsewhere specified	0	0	0	0	0	0
NON-ENERGY USE	32	30	43	42	52	45
Statistical differences	-	-	-	-	-	-

## 2.2. The energy balance for 2010-2015

						TeraJoule
SUPPLY AND CONSUMPTION	2010	2011	2012	2013	2014	2015
Primary Production	7913	9800	10252	11833	13017	13645
From other sources	10827	8923	8755	6748	9396	11879
Imports	76062	81292	76881	80605	75622	74076
Exports	581	601	807	1410	939	726
International bunkers	-218	-258	-342	-373	-339	239
Stock changes	2117	-592	414	-175	524	59
Gross consumption	96120	98564	95153	97228	97281	98576
TRANSFORMATION, INPUT	20760	19579	18672	18289	18765	17380
Electricity plants	327	304	139	218	288	214
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and power	13460	12637	12243	11318	11839	11686
(CHP) plants	1133	1028	948	1304	1684	1236
Main activity producer heat plants	2527	2316	2205	2082	1922	1640
Autoproducer heat plants	2574	2451	2223	2466	2196	1872
Oil refineries	-	-	-	-	-	-
Petrochemical plants	739	843	888	870	802	660
Liquefaction plants	-	-	-	-	-	-
Charcoal production plants	-	-	26	31	34	72
Not elsewhere specified - transformation	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	16705	15831	15026	14692	14655	14122
Electricity plants	307	291	133	200	252	199
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and power	10399	9907	9546	8805	8748	9039
(CHP) plants	981	920	807	1172	1432	789
Main activity producer heat plants	2222	2021	1911	1700	1675	1805
Autoproducer heat plants	1965	1922	1837	2024	1830	1595
Oil refineries	-	-	-	-	-	-
Petrochemical plants	831	770	779	775	710	483
Liquefaction plants	-	-	-	-	-	-
Charcoal production plants	-	-	13	16	8	13
Not elsewhere specified — transformation	-	-	-	-	-	-
Energy sector	736	708	616	515	693	728
LOSSES	7532	7431	7213	6614	6434	5531

FINAL CONSUMPTION	83797	86677	83678	86502	86044	89059
INDUSTRY	9642	9955	10169	10692	9697	9036
Iron and steel	6	8	7	14	29	8
Chemical and petrochem.	142	188	168	215	234	207
Non-metallic minerals	3896	4256	4399	4711	3096	3715
Machinery	337	221	212	183	140	180
Transport equipment	-	-	-	4	30	3
Mining and quarrying	94	113	100	146	147	119
Food and tobacco	3718	3718	3780	4068	4614	4014
Paper, pulp and print	131	116	131	139	118	108
Wood and wood products	270	308	318	212	236	163
Construction	316	304	311	242	286	201
Textile and leather	259	261	268	244	264	232
Not elsewhere specified	473	462	475	514	503	86
TRANSPORT	24887	26564	23552	24526	25537	27032
Domestic aviation	564	578	628	545	732	769
Road	23396	24955	21842	23142	24366	25592
Rail	605	557	607	383	32	258
Pipeline transport	293	443	422	300	322	319
Domestic navigation	3	3	3	3	27	28
Non-specified	26	28	50	153	58	66
OTHER	47998	48943	48094	49475	48709	51080
Residential	33850	35429	35000	35875	35631	37138
Comm. and public services	11175	10609	10573	10900	10355	10951
Agriculture/forestry	2973	2905	2521	2700	2723	2989
Not elsewhere specified	0	0	0	0	0	2
NON-ENERGY USE	1270	1215	1863	1809	2101	1911
Statistical differences	-	-	-	-	-	-

# 2.3. The energy balance for 2010-2015

			thousands of tonnes of co					
SUPPLY AND CONSUMPTION	2010	2011	2012	2013	2014	2015		
Primary Production	272	334	350	405	444	462		
From other sources	369	304	298	230	320	405		
Imports	2590	2771	2620	2748	2575	2522		
Exports	18	20	27	48	31	24		
International bunkers	-9	-8	-12	-12	-12	8		
Stock changes	72	-20	12	-4	17	5		
Gross consumption	3276	3361	3241	3319	3313	3352		
TRANSFORMATION, INPUT	707	668	636	623	638	590		
Electricity plants	12	10	5	7	9	6		
Main activity producer combined heat								
and power (CHP) plants	459	431	388	386	404	398		
Autoproducer combined heat and power	20	25	41	4.4	<i>c</i> <b>7</b>	10		
(CHP) plants	39	35	41	44	57	43		
Main activity producer heat plants	86	79	71	71	66	56		
Autoproducer heat plants	87	84	101	84	74	63		
Oil refineries	-	-	-	-	-	-		
Petrochemical plants	24	29	30	30	27	22		
Liquefaction plants	-	-	-	-	-	-		
Charcoal production plants	-	-	-	1	2	2		
Not elsewhere specified - transformation	-	-	-	-	-	-		
TRANSFORMATION, OUTPUT	570	539	512	501	500	474		
Electricity plants	10	10	4	7	9	6		
Main activity producer combined heat								
and power (CHP) plants	355	338	325	300	297	308		
Autoproducer combined heat and power	33	32	27	40	49	27		
(CHP) plants Main activity producer heat plants	55 76	52 69	66	40 58	49 57	62		
Autoproducer heat plants		• /			62	54		
	67	65	63	69	02	54		
Oil refineries	-	-	-	-	-	-		
Petrochemical plants	29	25	27	26	24	16		
Liquefaction plants	-	-	-	-	-	-		
Charcoal production plants	-	-	-	1	1	1		
Not elsewhere specified — transformation	-	-	-	-	-	-		
Energy sector	25	24	21	17	23	24		
LOSSES	258	239	229	221	218	188		

thousands of tonnes of coal equivalent

FINAL CONSUMPTION	2856	2969	2867	2959	2934	3024
INDUSTRY	325	341	343	369	330	305
Iron and steel	-	-	-	-	1	-
Chemical and petrochem.	5	7	4	8	8	7
Non-metallic minerals	133	147	150	163	105	124
Machinery	7	8	7	7	5	6
Transport equipment	-	-			1	-
Mining and quarrying	3	5	3	5	5	4
Food and tobacco	128	123	128	139	156	138
Paper, pulp and print	4	5	5	2	4	4
Wood and wood products	8	10	10	9	8	5
Construction	12	10	11	8	10	7
Textile and leather	9	10	9	9	9	8
Not elsewhere specified	16	16	16	19	18	2
TRANSPORT	846	906	805	839	872	921
Domestic aviation	19	20	21	19	25	26
Road	797	857	747	796	832	872
Rail	21	13	20	13	1	9
Pipeline transport	8	15	15	10	11	11
Domestic navigation	0	0	0	0	1	1
Non-specified	1	1	2	1	2	2
OTHER	1641	1681	1656	1689	1661	1736
Residential	1155	1206	1192	1227	1215	1264
Comm. and public services	385	378	380	372	354	369
Agriculture/forestry	101	97	84	90	92	103
Not elsewhere specified	0	0	0	0	0	0
NON-ENERGY USE	44	41	63	62	71	63
Statistical differences	-	-	-	-	-	-