

National Bureau of Statistics of the Republic of Moldova

THE ENERGY BALANCE OF THE REPUBLIC OF MOLDOVA

Edition 2023



National Bureau of Statistics of the Republic of Moldova

THE ENERGY BALANCE OF THE REPUBLIC OF MOLDOVA

STATISTICAL COMPILATION

Edition 2023

Chisinau, 2023

Editorial board:

President of the Editorial Board, General Director

Oleg CARA

Members:

Iurie Mocanu, Svetlana Bulgac, Galina Ermurachi, Natalia Gridneva

Editing:

Lilia Racu, Larisa Spanciuc

Layout, graphics and design:

Victor Cociug

The energy balance of the Republic of Moldova: Edition 2023: Statistical compilation / National Bureau of Statistics of the Republic of Moldova ; editorial board: Oleg Cara (president) [et al.]. – Chisinau : [S. n.], 2023 – . – (Statistica Moldovei / National Bureau of Statistics of the Republic of Moldova, ISBN 978-9975-53-418-5). – ISBN 978-9975-177-06-1. Cerinţe de sistem: PDF Reader. 2023. – 2023. – 66 p. : fig., tab. – ISBN 978-9975-177-07-8 (PDF). 620.9(478)(083.41)

T 49

 National Bureau of Statistics of the Republic of Moldova MD-2019, Chisinau, 106 Grenoble Str. Republic of Moldova Tel.: (373 22) 40 30 00 e-mail: <u>moldstat@statistica.gov.md</u> <u>http://www.statistica.gov.md</u>

Foreword

"The energy balance of the Republic of Moldova" is a large statistical collection, which presents the statistical indicators on the formation of primary and general resources of energy, distribution and final energy consumption on the main activities of the national economy during the period 2017-2022.

The collection is structured in 3 chapters which include 21 tables and 10 charts. Basic methodological notes are displayed for the basic indicators of the balance in the collection.

The collection is based on the annual statistical surveys carried out by the National Bureau of Statistics on enterprises, organizations, administrative authorities, other state and private institutions with legal personality.

Data on the consumption of Biofuels and Waste in the residential sector (population) for 2022 were estimated based on results obtained in the <u>"Research on Household Energy</u> <u>Consumption"</u>, conducted by the NBS for the 2021 reference year.

For the first time the publication "The energy balance of the Republic of Moldova", edition 2023 was supplimented with chapter 3 regarding *Sustainable Development Goal 7 (SDG 7): Ensure access to affordable, relaible, sustainable and modern energy for all.*

The publication does not include the data from the territory on the left side of the river Nistru and mun.Bender.

This collection is published only in electronic version on the official <u>Website</u> of the NBS.

Symbols:

- = not applicable
- 0 = negligible magnitude
- **Note:** In some cases, there may occur insignificant discrepancies between the totals and corresponding sums of the components, fact that could be explained by data approximations.

Content

	METHODOLOGICAL NOTES
1.	THE ENERGY BALANCE
1.1.	The energy balance for 2017 (oil equivalent)
1.2	The energy balance for 2017 (terajoule)
1.3	The energy balance for 2017 (coal equivalent)
1.4.	The energy balance for 2018 (oil equivalent)
1.5.	The energy balance for 2018 (terajoule)
1.6.	The energy balance for 2018 (coal equivalent)
1.7.	The energy balance for 2019 (oil equivalent)
1.8.	The energy balance for 2019 (terajoule)
1.9.	The energy balance for 2019 (coal equivalent)
1.10.	The energy balance for 2020 (oil equivalent)
1.11.	The energy balance for 2020 (terajoule)
1.12.	The energy balance for 2020 (coal equivalent)
1.13.	The energy balance for 2021 (oil equivalent)
1.14.	The energy balance for 2021 (terajoule)
1.15.	The energy balance for 2021 (coal equivalent)
1.16.	The energy balance for 2022 (oil equivalent)
1.17.	Energy resources used in 2022 (chart)
1.18.	Energy resource used for production of electricity and heat in 2022 (chart)
1.19.	The energy balance for 2022 (terajoule)
1.20.	The energy balance for 2022 (coal equivalent)
1.21.	Final energy consumption by types of products in 2022 (chart)
1.22.	Final energy consumption by sectors in 2022 (chart)
2.	THE ENERGY BALANCE, TOTAL PRODUCTS
2.1.	The energy balance for period 2017-2022 (oil equivalent)5
2.2.	The energy balance for period 2017-2022 (terajoule)
2.3.	The energy balance for period 2017-2022 (coal equivalent)
2.4.	National energy consumption for period 2017-2022 (chart)
2.5.	Final energy consumption by sectors for period 2017-2022 (chart)
3.	SUSTAINABLE DEVELOPMENT GOAL 7 (SDG 7): Ensure access to affordable, relaible, sustainable and modern energy for all
3.1.	sustainable and modern energy for all
3.2.	Consumption of primary energy (gross consumption) for period 2015-2022 – SDG 7.3.1.a (oil equivalent)
3.3.	Energy intensity for period 2015-2022 (MegaJoule/thou. \$ SUA)
3.4.	Energy producrivity for period 2015-2022 (Thou. \$ SUA/tonne of oil equivalent)

Methodological notes

I. 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.

At the national level, <u>The calculation methodology of the monthly and annual statistical</u> <u>indicators regarding the energy sector an energy prices</u> has been approved by the National Bureau of Statistics Board Decision No. 6/3 of December 23, 2014.

II. 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;
- specific surveys addressed to natural gas distributors;
- specific statistical surveys addressed to producers and traders of primary and transformed energy, distributors and final consumers;
- administrative sources.

Data collection is exhaustive for units producing electric and thermal energy also for the largest consumers of energy. In surveys, according to data for 2022 were included 22,0 thousands statistical units.

According to the <u>Classification of Activities from national economy-2</u> CAEM-2 consumptions reported are grouped in the following types of activity:

- energy sector;
- industry and construction;
- transport;
- agriculture;
- other economy branches.

<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.

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

III. Energy products

Energy product	Definition
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 should be reported on the Annual Oil Questionnaire.
Coke oven coke	The solid product obtained from carbonisation of coal, principally coking coal, at high temperature, it is low in moisture and volatile matter. Coke oven coke is used mainly in the iron and steel industry acting as energy source and chemical agent. Coke breeze and foundry coke are included in this category. Semi-coke (a solid product obtained from carbonisation of coal at low temperature) should be included in this category. Semi-coke is used as a domestic fuel or by the transformation plant itself. This heading also includes coke, coke breeze and semi-coke made from lignite/brown coal.
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.

Energy product	Definition
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 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	A combustible soft, porous or compressed, sedimentary deposit of plant origin with high water content (up to 90 % in the raw state), easily cut, of light to dark brown colour. Peat used for non-energy purposes is not included. This definition is without prejudice to the definition of renewable energy sources in Directive 2001/77/EC and to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories.
Natural gas	
Natural gas	This data collection applies to natural gas, which comprises gases occurring in underground deposits, whether liquefied or gaseous, consisting mainly of methane. It includes both 'non-associated' gas originating from fields producing hydrocarbons only in gaseous form, and 'associated' gas produced in association with crude oil as well as methane recovered from coal mines (colliery gas) or from coal seams (coal seam gas). It does not include gases created by anaerobic digestion of biomass (e.g. municipal or sewage gas) nor gasworks gas.
Oil and petroleum pro	
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.): oxygenates, such as alcohols (methanol, ethanol), ethers (such as MTBE (methyl tertiary butyl ether), ETBE (ethyl tertiary butyl ether), TAME (tertiary amyl methyl ether)), esters (e.g. rapeseed or dimethylester, etc.), chemical compounds (such as TML, TEL and detergents). Note: quantities of additives/oxygenates (alcohols, ethers, esters and other chemical compounds) reported in this category should relate to the quantities destined for blending with fuels or for fuel use.
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.

The energy balance of the Republic of Moldova, edition 2023

Energy product	Definition
Motor gasoline	Motor gasoline consists of a mixture of light hydrocarbons distilling between 35 °C and 215 °C. It is used as a fuel for land based spark ignition engines. Motor gasoline may include additives, oxygenates and octane enhancers, including lead compounds such as TEL and TML. Includes motor gasoline blending components (excluding additives/oxygenates), e.g. alkylates, isomerate, reformate, cracked gasoline
	destined for use as finished motor gasoline.
Aviation gasoline	Motor spirit prepared especially for aviation piston engines, with an octane number suited to the engine, a freezing point of - 60 °C and a distillation range usually within the limits of 30 °C and 180 °C.
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. propylene) produced within refineries.
Renewable energy and	
Solid biomass	Covers organic, non-fossil material of biological origin which may be used as fuel for heat production or electricity generation. It comprises:

Energy product	Definition
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 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, \geq 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.
Electricity and heat	
Electricity	It means electricity from all sources of production by type of producers, installations, fuels.
Heat	Heat destined for sale to third parties by type of producers, installations, fuels.

IV. List of aggregated indicators

Name of aggregated indicator	Definition
Primary energy production / national production	This category includes production from the exploitation of existing energy sources in nature (in subsoil assets, forests, water courses, etc.) that can be used as such or after a preliminary processing (sorting, washing, cleaning, etc.) that does not change 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 within national boundaries, including 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 produced in coal mines or extracted from coal layers, brought to the surface and consumed of collieries or transmitted by pipeline to consumers; Crude oil production: hydroelectric and wind energy production; is reported gross output (production measured at generator terminals), solar photovoltaic energy; Heat production: heat production obtained from nuclear reactors, geothermal energy, solar thermal energy; Biomass products from the argot products derived from activities other than energy production, such as wood processing cellulose and paper production, agriculture, etc;
Import/export	Production of other fuels: biogas, non-renewable industrial waste, renewable municipal waste and biofuels. Unless provisions contrary, "imports" refers to the country of initial origin (the country in which the energy product was produced) for
	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 electricity are considered as imported or exported quantities of electricity, that have passed or not customs, which has passed the political boundaries of a country. If the amount of electricity is transited through a country, it should be 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

Name of aggregated indicator	Definition
	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 matter fuels existing at producers distributors and
	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 1st January and those of 31st 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	Quantities of fuels used for primary or secondary energy transformation, for example: - coal in electric energy, coke oven gas in electric energy or used for the transformation in derived energy products (eg coking coal in coke); - natural gas in electric energy or used for the transformation in derived energy products (eg natural gas in methanol); Quantities of renewable energy and wastes used for the conversion of primary forms of energy to secondary forms (eg landfill gases to electric energy or used for the transformation to derived energy products (eg hierded patural gas); Quantities of electric
	products (eg biogas used for blended natural gas); Quantities of oil entered in the refineries.
- 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.

Name of aggregated indicator	Definition
	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.
	Are excluded 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 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.
- in other domains	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 heat	The indicator contains production of heat achieved in stations whose main activity is producing heat as well as heat produced and sold by the self-producers. This includes heat used by the auxiliary's installation of station which

Name of aggregated indicator	Definition
	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 heat (hot steam) used for producing heat. Not included heat used for producing electricity.
- 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 and vice versa, the total net effect should be zero.
Consumption in the energy sector (for the functioning of generating installations and ensuring basic activity)	This indicator includes quantities of energy carriers consumed by primary 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 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-2 code 05 - Extraction of superior and inferior coal CAEM-2 code 0892 - Extraction and agglomeration of peat.

Name of aggregated indicator	Definition
Extraction of crude petroleum, natural gas and services related to extraction	CAEM-2 code 06 - Extraction of crude petroleum, natural gas (excluding prospections); CAEM-2 code 0910 – Activities of related services of oil and natural gas extraction
Extraction of uranium and thorium ores	CAEM-2 code 0721 - Extraction of uranium and thorium ores
Manufacture of coke products and of products from crude oil processing	CAEM-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-2 code 35 - Production and supply of electric, thermic energy, gases, hot water and air conditioning
Losses	 Are comprised: at electricity: technological consumption in transport installations, transformation and distribution to the point of separation between suppliers and consumers. Technological consumption from the point of separation between suppliers and consumers and and to the receivers is comprised in technological consumption in analyzed branch (industry, construction, etc.). at heat: the amount of heat from the spent steam and the condensate returned in steam boilers; heat 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 heat lost through the insulation of systems. 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.
Available for final consumption (calculated) Nonenergetic	Available for final consumption = domestic consumption - inputs in transformation + outputs from transformation ± transfer - (energy sector consumption + losses) + final non-energy consumption. Comprise quantities of energy carriers used for purposes other than
Final energy consumption (gross consumption observed), total	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. 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- 2. as follows:

Name of aggregated indicator	Definition
In industry and construction, total	It refers to all activities classified industrial and inclusive construction, exclusively the energy sector consumption.
from which: - mining industry	CAEM-2 code 081 - Extraction of stone, sand and clay; CAEM-2 code 089 - Other mining activities (excluding code 0892); CAEM-2 code 09 - Mining support service activities.
 metallurgical industry 	CAEM-2 code 24 - Metallurgical industry
- chemical and petrochemical industry	CAEM-2 code 20 - Manufacture of chemicals and chemical products; CAEM-2 code 21 - Manufacture of basic pharmaceutical products and pharmaceutical preparations.
- nonmetallic minerals	CAEM-2 code 23 - Manufacture of other products from non-metallic mineral
- transport equipment	CAEM-2 code 29 - Manufacture of motor vehicles, trailers and semi- trailers; CAEM-2 code 30 - Manufacture of other transport means.
- Machine building industry	CAEM-2 code 25 - The industry of metallic constructions and of metal products, except machinery and equipment; CAEM-2 code 26 - Manufacture of computer, of electronic products and optimal; CAEM-2 code 27 - Manufacture of electrical equipment; CAEM-2 code 28 - Manufacture of machinery and instruments equipment n.c.a.; CAEM-2 code 33- Preparation, maintenance and installation of machinery and equipment.
 food, beverages, tobacco industry 	CAEM-2 code 10 - Food industry; CAEM-2 code 11 - Manufacture of beverages; CAEM-2 code 12 - Manufacture of tobacco products.
- Pulp, Paper and printing activities	CAEM-2 code 17 - Manufacture of paper and paper products; CAEM-2 code 18 - Printing and reproduction on recorded media
 wood processing and furniture production 	CAEM-2 code 16 - Wood processing, manufacture of wood and cork products, except furniture; manufacture of articles of straw and other plaiting materials
 Industry of textile and leather products 	CAEM-2 code 13 - Manufacture of textile products; CAEM-2 code 14 – Manufacture of Clothing articles; CAEM-2 code 15 - Tanning and dressing of leather; manufacture of luggage, handbags, saddlery, harness and footwear
- constructions	CAEM-2 code 41 - Construction of buildings; CAEM-2 code 42 - Civil constructions works; CAEM-2 code 43 - Special construction works
- Other industrial activities	CAEM-2 code 22 - Manufacture of rubber and plastic products; CAEM-2 code 31 - Manufacture of furniture; CAEM-2 code 32 - Other industrial activities n.c.a.
- transports	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. Not included consumption of marine vessels which sailing in international waters, this is included in "marine bunkers". Consumption of fishing vessels is included in "Fishing and aquaculture". CAEM-2 code 49 - Land transport and transport via pipelines; CAEM-2 code 50 - Water transport; CAEM-2 code 51 - Air transport;

Name of aggregated indicator	Definition
- residential sector (population)	 Comprises : to electricity: quantity consumed for lighting and other household uses, inclusive for living spaces from the ownership and management of economic agents. to heat: quantity of heat delivered to the population for heating and domestic hot water, both by the public sector as well as by self-producers. 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.
- agriculture	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. CAEM-2 code 01- Agriculture, hunting and related services; CAEM-2 code 02 - Silviculture forest harvesting; CAEM-2 code 03 - Fishing and aquaculture.
- other sectors of the economy	It comprises energy consumption reported by economic agents as consumed in other activities than those mentioned above, namely: CAEM-2 Section E - Water supply; sewerage, waste management and remediation activities CAEM-2 Section G - Wholesale and retail trade; repair of motor vehicles and motorcycles, CAEM-2 code 52 - Storage and support activities for transportation CAEM-2 code 53 - Postal and courier activities, CAEM-2 Section I - Accommodation and public alimentation activities, CAEM-2 Section J - Information and communication, CAEM-2 Section J - Information and communication, CAEM-2 Section L - Real estate transactions, CAEM-2 Section N - Professional, scientific and technical activities, CAEM-2 Section N - Professional, scientific and technical activities of support services. CAEM-2 Section O - Public administrative services and activities of support services. CAEM-2 Section P - Education , CAEM-2 Section R - Art, recreational and leisure activities, CAEM-2 Section R - Activities of private households as an employer of domestic personnel; activities of private households for producing goods and services for personal consumption, CAEM-2 Section U-Activities of Extra-territorial 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". 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.

1.1. The energy balance for 2017, thousands of tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	770	-	0	5	760	5	-
From other sources	195	-	-	-	-	195	-
Imports	2012	120	835	958	2	97	-
Exports	34	0	-	34	0	0	-
International bunkers	-	-	-	-	-	-	-
Stock changes	4	15	-1	-8	-2	-	-
GROSS CONSUMPTION	2939	105	836	937	764	297	-
TRANSFORMATION, INPUT	411	2	360	24	20	5	-
Electricity plants	7	-	-	-	2	5	-
Main activity producer combined heat							
and power (CHP) plants	260	-	260	-	-	-	-
Autoproducer combined heat and			45	0	F		
power (CHP) plants	29	-	15	9	5	-	-
Main activity producer heat plants	50	0	49	-	1	-	-
Autoproducer heat plants Oil refineries	49	2	36	1	10	-	-
	-	-	-	-	-	-	-
Petrochemical plants	14	-	-	14	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	2	-	-	-	2	-	-
Not elsewhere specified - transformation		_	_	_	_	_	_
TRANSFORMATION, OUTPUT	336	_	_	14	0	77	245
Electricity plants	5	_	_	-	-	5	245
Main activity producer combined heat		-	_	_	_	0	-
and power (CHP) plants	213	-	-	-	-	68	145
Autoproducer combined heat and							
power (CHP) plants	24	-	-	-	-	4	20
Main activity producer heat plants	42	-	-	-	-	-	42
Autoproducer heat plants	38	-	-	-	-	-	38
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	14	-	-	14	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	0	-	-	-	0	-	-
Not elsewhere specified -							
transformation	-	-	-	-	-	-	-
Energy sector	17	-	-	-	-	15	2
LOSSES	128	0	49	2	0	37	40

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	2719	103	427	925	744	317	203
FINAL ENERGY CONSUMPTION	2671	102	427	889	733	317	203
INDUSTRY AND CONSTRUCTION	218	30	59	18	0	65	46
Iron and steel	0	-	0	-	-	0	-
Chemical and petrochemical	6	-	1	-	-	4	1
Non-metallic minerals	83	29	31	12	0	11	0
Machinery	4	-	-	-	-	4	-
Transport equipment		-	-	-	-	-	-
Mining and quarrying	2	-	-	1	-	1	-
Food and tobacco	103	1	24	1	-	34	43
Paper, pulp and print	2	-	1	-	-	1	-
Wood and wood products	1	-	0	-	0	1	-
Construction	6	-	1	4	0	1	0
Textile and leather	7	-	0	-	-	5	2
Not elsewhere specified	4	-	1	-	-	3	-
TRANSPORT	734	-	24	703	-	7	-
Domestic aviation	47	-	-	47	-	-	-
Road	665	-	17	644	-	4	-
Rail	10	-	-	10	-	-	-
Pipeline transport	10	-	7	-	-	3	-
Domestic navigation	1	-	-	1	-	-	-
Non-specified	1	-	-	1	-	-	-
OTHER	1719	72	344	168	733	245	157
Residential	1346	54	250	66	720	141	115
Communal and public services	266	17	92	3	12	100	42
Agriculture	107	1	2	99	1	4	0
NON-ENERGY USE	48	1	-	36	11	-	-
Statistical differences		-	-	-	-	-	-

1.2. The energy balance for 2017, TeraJoule

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	32315	-	4	222	31885	204	-
From other sources	8208	-	-	-	-	8208	-
Imports	84351	5017	35006	40157	85	4086	-
Exports	1403	1	-	1401	1	0	-
International bunkers	-	-	-	-	-	-	-
Stock changes	236	625	-52	-315	-22	-	-
GROSS CONSUMPTION	123235	4391	35062	39293	31991	12498	-
TRANSFORMATION, INPUT	17165	74	15039	1117	731	204	-
Electricity plants	299	-	-	11	84	204	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and	10883	-	10883	-	-	-	-
power (CHP) plants	1238	-	628	412	198	-	-
Main activity producer heat plants	2042	5	2014	-	23	-	-
Autoproducer heat plants	1975	69	1514	27	365	-	-
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	667	-	-	667	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants Not elsewhere specified -	61	-	-	-	61	-	-
transformation	-	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	14130	-	-	635	14	3230	10251
Electricity plants	229	-	-	-	-	229	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and	8904	-	-	-	-	2831	6073
power (CHP) plants	990	-	-	-	-	170	820
Main activity producer heat plants	1750	-	-	-	-	-	1750
Autoproducer heat plants	1608	-	-	-	-	-	1608
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	635	-	-	635	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants Not elsewhere specified -	14	-	-	-	14	-	-
transformation	-	-	-	-	-	-	-
Energy sector	709	-	6	-	-	634	69
LOSSES	5403	12	2058	126	2	1546	1659

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	114088	4305	17959	38685	31272	13344	8523
FINAL ENERGY CONSUMPTION	111962	4287	17959	37097	30752	13344	8523
INDUSTRY AND CONSTRUCTION	9243	1212	2513	768	43	2749	1958
Iron and steel	6	-	0	-	-	6	-
Chemical and petrochemical	247	-	29	-	2	161	55
Non-metallic minerals	3446	1161	1318	488	1	478	0
Machinery	187	2	10	3	-	168	4
Transport equipment	13	-	2	-	1	10	-
Mining and quarrying	91	-	-	39	-	52	-
Food and tobacco	4385	49	1021	49	33	1437	1796
Paper, pulp and print	99	-	41	-	-	35	23
Wood and wood products	44	-	0	5	3	36	-
Construction	231	-	24	174	-	32	1
Textile and leather	305	-	40	3	1	187	74
Not elsewhere specified	189	-	28	7	2	147	5
TRANSPORT	30779	-	1052	29430	0	297	-
Domestic aviation	1999	-	-	1999	-	-	-
Road	27830	-	738	26936	-	156	-
Rail	437	-	-	437	-	-	-
Pipeline transport	455	-	314	-	-	141	-
Domestic navigation	20	-	-	20	-	-	-
Non-specified	38	-	-	38	0	-	-
OTHER	71940	3075	14394	6899	30709	10298	6565
Residential	56254	2254	10476	2642	30165	5895	4822
Communal and public services	11165	773	3830	98	495	4227	1742
Agriculture	4521	48	88	4159	49	176	1
NON-ENERGY USE	2126	18	-	1588	520	-	-
Statistical differences	-	-	-	-	-	-	-

1.3. The energy balance for 2017, thousands of tonnes of coal equivalent

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	1100	-		7	1086	7	-
From other sources	279	-	-	-	-	279	-
Imports	2874	171	1193	1368	3	139	-
Exports	48	0	-	48	0	0	-
International bunkers	-	-	-	-	-	-	-
Stock changes	10	22	-2	-9	-1	-	-
GROSS CONSUMPTION	4195	149	1195	1336	1090	425	-
TRANSFORMATION, INPUT	584	2	513	36	26	7	-
Electricity plants	10	-	-	-	3	7	-
Main activity producer combined heat							
and power (CHP) plants	371	-	371	-	-	-	-
Autoproducer combined heat and							
power (CHP) plants	42	-	21	14	7	-	-
Main activity producer heat plants	70	0	69	-	1	-	-
Autoproducer heat plants	68	2	52	1	13	-	-
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	21	-	-	21	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	2	-	-	-	2	-	-
Not elsewhere specified -							
transformation	-	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	481	-	-	21	-	110	350
Electricity plants	8	-	-	-	-	8	-
Main activity producer combined heat							
and power (CHP) plants	303	-	-	-	-	96	207
Autoproducer combined heat and							
power (CHP) plants	34	-	-	-	-	6	28
Main activity producer heat plants	60	-	-	-	-	-	60
Autoproducer heat plants	55	-	-	-	-	-	55
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	21	-	-	21	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	-	-	-	-	-	-	-
Not elsewhere specified -							
transformation	-	-	-	-	-	-	-
Energy sector	25	-	0	-	-	22	3
LOSSES	185	0	70	5	0	53	57

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	3882	147	612	1316	1064	453	290
FINAL ENERGY CONSUMPTION	3812	146	612	1263	1048	453	290
INDUSTRY AND CONSTRUCTION	308	42	85	22	1	92	66
Iron and steel	0	-	0	-	-	0	-
Chemical and petrochemical	8	-	1	-	0	5	2
Non-metallic minerals	117	40	45	16	0	16	0
Machinery	5	0	0	0	-	5	0
Transport equipment	0	-	0	-	0	0	-
Mining and quarrying	3	-	-	1	-	2	-
Food and tobacco	149	2	35	1	1	49	61
Paper, pulp and print	3	-	1	-	-	1	1
Wood and wood products	1	-	0	0	0	1	-
Construction	6	-	1	4	-	1	0
Textile and leather	10	-	1	0	0	7	2
Not elsewhere specified	6	-	1	0	0	5	0
TRANSPORT	1050	-	36	1004	0	10	-
Domestic aviation	67	-	-	67	-	-	-
Road	950	-	25	920	-	5	-
Rail	15	-	-	15	-	-	-
Pipeline transport	16	-	11	-	-	5	-
Domestic navigation	1	-	-	1	-	-	-
Non-specified	1	-	-	1	0	-	-
OTHER	2454	104	491	237	1047	351	224
Residential	1916	75	357	91	1028	201	164
Communal and public services	384	27	131	4	18	144	60
Agriculture	154	2	3	142	1	6	0
NON-ENERGY USE	70	1	-	53	16	-	-
Statistical differences	<u> </u>	-	-	-	-	-	-
Statistical differences	-	-	-	-	-	-	-

1.4. The energy balance for 2018, thousands of tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	798	-		5	787	6	-
From other sources	219	-	-	-	-	219	-
Imports	2109	85	913	1026	3	82	-
Exports	27	-	-	27	-	0	-
International bunkers	-	-	-	-	-	-	-
Stock changes	33	5	2	2	24	-	-
GROSS CONSUMPTION	3066	80	911	1002	766	307	-
TRANSFORMATION, INPUT	430	1	381	19	23	6	-
Electricity plants	10	-	-	0	4	6	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and	285	-	285	-	-	-	-
power (CHP) plants	28	-	18	6	4	-	-
Main activity producer heat plants	41	0	40	-	1	-	-
Autoproducer heat plants	53	1	38	1	13	-	-
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	12	-	-	12	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants Not elsewhere specified -	1	-	-	-	1	-	-
transformation	-	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	345	-	-	8	0	82	255
Electricity plants	7	-	-	-	-	7	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and	224	-	-	-	-	71	153
power (CHP) plants	21	-	-	-	-	4	17
Main activity producer heat plants	43	-	-	-	-	-	43
Autoproducer heat plants	42	-	-	-	-	-	42
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	8	-	-	8	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants Not elsewhere specified -	0	-	-	-	0	-	-
transformation		-	-	-	-	-	-
Energy sector	16	-	0	0	-	14	2
LOSSES	124	0	44	3	0	38	39

	2765	79	486	925	730	331	
INDUSTRY AND CONSTRUCTION	251	24	76	37	1	67	
Iron and steel	0	0	0	0	-	0	
Chemical and petrochemical	6	-	1	0	0	4	
Non-metallic minerals	102	23	42	25	0	12	
Machinery	5	0	1	0	-	4	
Transport equipment	1	-	0	-	0	1	
Mining and quarrying	5	-	-	4	-	1	
Food and tobacco	107	1	28	1	1	33	
Paper, pulp and print	2	-	1	-	0	1	
Wood and wood products	1	-	0	0	0	1	
Construction	9	-	1	7	0	1	
Textile and leather	8	-	1	0	0	5	
Not elsewhere specified	5	-	1	0	0	4	
TRANSPORT	758	-	25	727	-	6	
Domestic aviation	55	-	-	55	-	-	
Road	688	-	19	665	-	4	
Rail	6	-	-	6	-	-	
Pipeline transport	8	-	6	-	-	2	
Domestic navigation	0	-	-	0	-	-	
Non-specified	1	-	-	1	-	-	
OTHER	1756	55	385	161	729	258	
Residential	1364	36	286	62	716	142	
Communal and public services	283	18	96	1	12	110	
Agriculture	109	1	3	98	1	6	
NON-ENERGY USE	76	0	-	63	13	-	
Statistical differences	-	-	-	-	-	-	

79

Coal

Natural

gas

486

Oil

products

988

Biofuels

and waste

743

Electricity

331

Heat

214

214 46 _ 1 0 0 --43 -0 -2 _ _ -_ -_ --168 122 46 0 --

Total

products

2841

SUPPLY AND CONSUMPTION

FINAL CONSUMPTION

1.5. The energy balance for 2018, TeraJoule

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	33409	-	4	218	32934	253	-
From other sources	9166	-	-	-	-	9166	-
Imports	88433	3579	38250	43074	86	3444	-
Exports	1161	-	-	1161	-	0	-
International bunkers	-	-	-	-	-	-	-
Stock changes	1208	242	97	7	862	-	-
GROSS CONSUMPTION	128639	3337	38157	42124	32158	12863	-
TRANSFORMATION, INPUT	18009	72	15930	836	918	253	-
Electricity plants	411	-	-	8	150	253	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and	11949	-	11949	-	-	-	-
power (CHP) plants	1179	-	743	273	163	-	-
Main activity producer heat plants	1709	3	1674	-	32	-	-
Autoproducer heat plants	2187	69	1564	32	522	-	-
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	523	-	-	523	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants Not elsewhere specified -	51	-	-	-	51	-	-
	-	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	14464	-	-	354	12	3440	10658
Electricity plants	293	-	-	-	-	293	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and	9384	-	-	-	-	2980	6404
power (CHP) plants	869	-	-	-	-	167	702
Main activity producer heat plants	1808	-	-	-	-	-	1808
Autoproducer heat plants	1744	-	-	-	-	-	1744
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	354	-	-	354	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants Not elsewhere specified -	12	-	-	-	12	-	-
transformation	-	-	-	-	-	-	-
Energy sector	691	-	2	1	-	618	70
LOSSES	5214	6	1861	131	1	1590	1625

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	119189	3259	20364	41510	31251	13842	8963
FINAL ENERGY CONSUMPTION	115908	3257	20364	38782	30700	13842	8963
INDUSTRY AND CONSTRUCTION	10576	990	3199	1568	66	2780	1973
Iron and steel	8	0	0	0	-	8	-
Chemical and petrochemical	237	-	30	1	3	150	53
Non-metallic minerals	4292	929	1777	1077	1	508	0
Machinery	216	1	25	3	-	176	11
Transport equipment	36	-	7	-	1	28	-
Mining and quarrying	211	-	-	156	-	55	-
Food and tobacco	4520	60	1186	44	49	1371	1810
Paper, pulp and print	124	-	51	-	4	48	21
Wood and wood products	41	-	0	5	5	31	0
Construction	355	-	38	276	-	41	-
Textile and leather	306	-	50	-	1	182	73
Not elsewhere specified	230	-	35	6	2	182	5
TRANSPORT	31722	-	1038	30427	-	257	-
Domestic aviation	2324	-	-	2324	-	-	-
Road	28733	-	762	27806	-	165	-
Rail	236	-	-	236	-	-	-
Pipeline transport	368	-	276	-	-	92	-
Domestic navigation	18	-	-	18	-	-	-
Non-specified	43	-	-	43	-	-	-
OTHER	73610	2267	16127	6787	30634	10805	6990
Residential	57198	1474	12004	2610	30072	5916	5122
Communal and public services	11833	753	4001	48	510	4654	1867
Agriculture	4579	40	122	4129	52	235	1
NON-ENERGY USE	3281	2	-	2728	551	-	-
Statistical differences	-	-	-	-	-	-	-

1.6. The energy balance for 2018, thousands of tonnes of coal equivalent

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	1137	-	0	7	1122	8	-
From other sources	312	-	-	-	-	312	-
Imports	3013	121	1303	1469	3	117	-
Exports	40	-	-	40	-	0	-
International bunkers	-	-	-	-	-	-	-
Stock changes	41	6	3	-1	33	-	-
GROSS CONSUMPTION	4381	115	1300	1437	1092	437	-
TRANSFORMATION, INPUT	613	2	543	28	32	8	-
Electricity plants	13	-	-	0	5	8	-
Main activity producer combined heat							
and power (CHP) plants	407	-	407	-	-	-	-
Autoproducer combined heat and							
power (CHP) plants	40	-	25	9	6	-	-
Main activity producer heat plants	58	0	57	-	1	-	-
Autoproducer heat plants	75	2	54	1	18	-	-
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	18	-	-	18	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	2	-	-	-	2	-	-
Not elsewhere specified -							
transformation	-	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	493	-	-	12	-	118	363
Electricity plants	10	-	-	-	-	10	-
Main activity producer combined heat							
and power (CHP) plants	320	-	-	-	-	102	218
Autoproducer combined heat and							
power (CHP) plants	30	-	-	-	-	6	24
Main activity producer heat plants	62	-	-	-	-	-	62
Autoproducer heat plants	59	-	-	-	-	-	59
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	12	-	-	12	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	-	-	-	-	-	-	-
Not elsewhere specified -							
transformation	-	-	-	-	-	-	-
Energy sector	23	-	0	-	-	21	2
LOSSES	177	-	63	5	-	54	55

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	4061	113	694	1416	1060	472	306
FINAL ENERGY CONSUMPTION	3952	113	694	1325	1042	472	306
INDUSTRY AND CONSTRUCTION	357	33	109	53	1	96	65
Iron and steel	0	-	0	0	0	0	-
Chemical and petrochemical	8	-	1	-	-	6	1
Non-metallic minerals	146	31	61	37	0	17	0
Machinery	7	-	1	0	-	6	-
Transport equipment	1	-	-	-	-	1	-
Mining and quarrying	7	-	-	5	-	2	-
Food and tobacco	153	2	40	2	1	47	61
Paper, pulp and print	5	-	2	-	-	2	1
Wood and wood products	1	-	0	0	0	1	0
Construction	11	-	1	9	0	1	-
Textile and leather	11	-	2	-	-	7	2
Not elsewhere specified	7	-	1	-	-	6	-
TRANSPORT	1083	-	35	1039	-	9	-
Domestic aviation	80	-	-	80	-	-	-
Road	981	-	26	949	-	6	-
Rail	8	-	-	8	-	-	-
Pipeline transport	12	-	9	-	-	3	-
Domestic navigation	1	-	-	1	-	-	-
Non-specified	1	-	-	1	-	-	-
OTHER	2512	80	550	233	1041	367	241
Residential	1950	53	409	89	1022	202	175
Communal and public services	406	26	137	2	18	157	66
Agriculture	156	1	4	142	1	8	0
NON-ENERGY USE	109	0	-	91	18	-	-
Statistical differences	-	-	-	-	-	-	-

1.7. The energy balance for 2019, thousands of tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	668	-	0	5	653	10	-
From other sources	246	-	-	-	-	246	-
Imports	2031	92	854	1029	1	55	-
Exports	9	-	-	9	0	0	-
International bunkers	-	-	-	-	-	-	-
Stock changes	0	-10	-1	7	2	-	-
GROSS CONSUMPTION	2938	102	855	1018	652	311	-
TRANSFORMATION, INPUT	389	-	349	8	22	10	-
Electricity plants	13	-	-	-	3	10	-
Main activity producer combined heat							
and power (CHP) plants	257	-	257	-	-	-	-
Autoproducer combined heat and			10	0	4		
power (CHP) plants	22	-	16	2	4	-	-
Main activity producer heat plants	35	-	35	-	0	-	-
Autoproducer heat plants	55	-	41	1	13	-	-
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	5	-	-	5	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants Not elsewhere specified -	2	-	-	-	2	-	-
transformation	-	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	315	-	-	4	0	81	230
Electricity plants	11	-	-	-	-	11	-
Main activity producer combined heat and power (CHP) plants	204	-	-	-	-	67	137
Autoproducer combined heat and power (CHP) plants	16	_	_	_	_	3	13
Main activity producer heat plants	36	_	_	_	_	-	36
Autoproducer heat plants	44		_	_	_	_	44
Oil refineries	-	_	_		_		
Petrochemical plants	4	-	-	-	-	-	-
Liquefaction plants	-	-	-	4	-	-	-
Charcoal production plants	0	-	-	-	-	-	-
Not elsewhere specified -		-	-	-	0	-	-
transformation	-	-	-	-	-	-	-
Energy sector	19	-	0	0	-	18	1
LOSSES	104	-	30	3	-	37	34

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	2739	102	476	1011	628	327	195
FINAL ENERGY CONSUMPTION	2672	102	476	953	619	327	195
INDUSTRY AND CONSTRUCTION	234	23	64	37	0	62	48
Iron and steel	0	-	0	0	-	0	-
Chemical and petrochemical	8	-	1	-	-	3	4
Non-metallic minerals	99	22	37	27	0	13	0
Machinery	3	-	-	-	-	3	-
Transport equipment	1	-	-	-	-	1	-
Mining and quarrying	4	-	-	3	-	1	-
Food and tobacco	97	1	23	1	-	30	42
Paper, pulp and print	2	-	1	-	-	1	-
Wood and wood products	1	-	0	0	0	1	0
Construction	8	-	1	6	0	1	-
Textile and leather	7	-	1	-	-	4	2
Not elsewhere specified	4	-	-	-	-	4	-
TRANSPORT	769	-	20	745	-	4	-
Domestic aviation	49	-	-	49	-	-	-
Road	705	-	14	687	-	4	-
Rail	7	-	-	7	-	-	-
Pipeline transport	6	-	6	-	-	0	-
Domestic navigation	1	-	-	1	-	-	-
Non-specified	1	-	-	1	-	-	-
OTHER	1671	79	392	171	621	261	147
Residential	1274	62	293	58	610	144	109
Communal and public services	272	16	96	1	10	111	38
Agriculture	123	1	3	112	1	6	0
NON-ENERGY USE	67	-	-	58	9	-	-
Statistical differences	-	-	-	-	-	-	-

1.8. The energy balance for 2019, TeraJoule

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	27954	-	3	203	27346	402	-
From other sources	10293	-	-	-	-	10293	-
Imports	85164	3850	35812	43124	57	2321	-
Exports	413	-	-	412	1	0	-
International bunkers	-	-	-	-	-	-	-
Stock changes	44	-449	-53	283	263	-	-
GROSS CONSUMPTION	122954	4299	35868	42632	27139	13016	-
TRANSFORMATION, INPUT	16269	5	14627	360	875	402	-
Electricity plants	536	-	-	8	126	402	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and	10462	-	10462	-	-	-	-
power (CHP) plants	926	-	663	97	166	-	-
Main activity producer heat plants	1794	-	1784	-	10	-	-
Autoproducer heat plants	2251	5	1718	28	500	-	-
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	227	-	-	227	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants Not elsewhere specified -	73	-	-	-	73	-	-
transformation	-	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	13281	-	-	205	15	3391	9670
Electricity plants Main activity producer combined heat	442	-	-	-	-	442	-
and power (CHP) plants Autoproducer combined heat and	8562	-	-	-	-	2801	5761
power (CHP) plants	705	-	-	-	-	148	557
Main activity producer heat plants	1522	-	-	-	-	-	1522
Autoproducer heat plants	1830	-	-	-	-	-	1830
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	205	-	-	205	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants Not elsewhere specified -	15	-	-	-	15	-	-
transformation	-	-	-	-	-	-	-
Energy sector	781	-	2	0	-	734	45
LOSSES	4345	4	1227	131	1	1533	1449

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	114840	4290	20012	42346	26278	13738	8176
FINAL ENERGY CONSUMPTION	112112	4290	20012	39960	25936	13738	8176
INDUSTRY AND CONSTRUCTION	10011	932	2759	1599	23	2666	2032
Iron and steel	12	-	2	0	-	10	-
Chemical and petrochemical	354	-	42	-	2	127	183
Non-metallic minerals	4126	893	1528	1150	1	554	0
Machinery	158	-	18	8	-	121	11
Transport equipment	51	-	14	-	2	35	-
Mining and quarrying	213	-	5	154	-	54	-
Food and tobacco	4083	38	974	31	15	1270	1755
Paper, pulp and print	116	1	47	-	-	47	21
Wood and wood products	28	-	0	4	1	23	0
Construction	346	-	38	250	0	58	-
Textile and leather	294	-	55	-	-	181	58
Not elsewhere specified	230	-	36	2	2	186	4
TRANSPORT	32192	-	830	31199	-	163	-
Domestic aviation	2067	-	-	2067	-	-	-
Road	29510	-	569	28785	-	156	-
Rail	282	-	-	282	-	-	-
Pipeline transport	268	-	261	-	-	7	-
Domestic navigation	21	-	-	21	-	-	-
Non-specified	44	-	-	44	-	-	-
OTHER	69909	3358	16423	7162	25913	10909	6144
Residential	53303	2635	12276	2410	25411	6019	4552
Communal and public services	11429	678	4019	51	458	4632	1591
Agriculture	5177	45	128	4701	44	258	1
NON-ENERGY USE	2728	-	-	2386	342	-	-
Statistical differences	-	-	-	-	-	-	-

1.9. The energy balance for 2019, thousands of tonnes of coal equivalent

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	953	-		7	932	14	-
From other sources	351	-	-	-	-	351	-
Imports	2903	132	1221	1469	2	79	-
Exports	13	-	-	13	0	0	-
International bunkers	-	-	-	-	-	-	-
Stock changes	1	-13	-1	8	6	-	-
GROSS CONSUMPTION	4194	145	1222	1455	928	444	-
TRANSFORMATION, INPUT	556	-	499	13	30	14	-
Electricity plants	18	-	-	-	4	14	-
Main activity producer combined heat							
and power (CHP) plants	367	-	367	-	-	-	-
Autoproducer combined heat and power (CHP) plants	32	_	23	3	6	_	_
Main activity producer heat plants	50	_	50	- 5	0	_	_
Autoproducer heat plants	77	_	59	1	17	_	_
Oil refineries		_	-	- '		_	_
Petrochemical plants	9	_	_	9	_	_	_
Liquefaction plants		_	_	-	_	_	_
Charcoal production plants	3	_	_	_	3	_	_
Not elsewhere specified -					Ū		
transformation	-	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	451	-	-	6	1	115	329
Electricity plants	15	-	-	-	-	15	-
Main activity producer combined heat							
and power (CHP) plants	291	-	-	-	-	95	196
Autoproducer combined heat and power (CHP) plants	24	_	_	_	_	5	19
Main activity producer heat plants	52	_	_	_	_	-	52
Autoproducer heat plants	62	_	_	_	_	_	62
Oil refineries		_	-	-	_	-	- 02
Petrochemical plants	6	_	_	6	_	_	_
Liquefaction plants	`	_	_	-	_	_	_
Charcoal production plants	1	_	-	-	1	-	_
Not elsewhere specified -	· ·						
transformation		-	-	-	-	-	-
Energy sector	26	-	0	0	-	25	1
LOSSES	148	-	43	4	-	52	49

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	3915	145	680	1444	899	468	279
FINAL ENERGY CONSUMPTION	3822	145	680	1363	887	468	279
INDUSTRY AND CONSTRUCTION	338	32	92	54	0	91	69
Iron and steel	0	-	0	0	-	0	-
Chemical and petrochemical	12	-	1	-	-	5	6
Non-metallic minerals	140	30	52	39	0	19	0
Machinery	4	-	-	-	-	4	-
Transport equipment	1	-	-	-	-	1	-
Mining and quarrying	7	-	-	5	-	2	-
Food and tobacco	139	2	33	1	-	43	60
Paper, pulp and print	5	-	2	-	-	2	1
Wood and wood products	1	-	0	0	0	1	0
Construction	12	-	1	9	0	2	-
Textile and leather	10	-	2	-	-	6	2
Not elsewhere specified	7	-	1	-	-	6	-
TRANSPORT	1099	-	29	1065	-	5	-
Domestic aviation	71	-	-	71	-	-	-
Road	1007	-	20	982	-	5	-
Rail	10	-	-	10	-	-	-
Pipeline transport	9	-	9	-	-	0	-
Domestic navigation	1	-	-	1	-	-	-
Non-specified	1	-	-	1	-	-	-
OTHER	2385	113	559	244	887	372	210
Residential	1818	87	418	82	871	205	155
Communal and public services	391	24	137	2	15	158	55
Agriculture	176	2	4	160	1	9	0
NON-ENERGY USE	93	-	-	81	12	-	-
Statistical differences	-	-	-	-	-	-	-

1.10. The energy balance for 2020, thousands of tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	682	-		6	668	8	-
From other sources	279	-	-	-	-	279	-
Imports	1935	80	868	971	2	14	-
Exports	21	-	-	20	1	0	-
International bunkers	-	-	-	-	-	-	-
Stock changes	-68	-1	4	-11	-60	-	-
GROSS CONSUMPTION	2807	79	872	946	609	301	-
TRANSFORMATION, INPUT	388	0	352	7	21	8	-
Electricity plants	12	-	-	0	4	8	-
Main activity producer combined heat							
and power (CHP) plants Autoproducer combined heat and	256	-	256	-	-	-	-
power (CHP) plants	17	-	14	-	3	-	-
Main activity producer heat plants	40	-	40	-	0	-	-
Autoproducer heat plants	54	0	42	0	12	-	-
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	7	-	-	7	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants Not elsewhere specified -	2	-	-	-	2	-	-
transformation	-	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	315	-	-	7	0	85	223
Electricity plants Main activity producer combined heat	10	-	-	-	-	10	-
and power (CHP) plants Autoproducer combined heat and	208	-	-	-	-	72	136
power (CHP) plants	13	-	-	-	-	3	10
Main activity producer heat plants	34	-	-	-	-	-	34
Autoproducer heat plants	43	-	-	-	-	-	43
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	7	-	-	7	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants Not elsewhere specified -	0	-	-	-	0	-	-
transformation	-	-	-	-	-	-	-
Energy sector	18	0	0	-	-	17	1
LOSSES	96	0	24	3	0	35	34

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	2620	79	496	943	588	326	188
FINAL ENERGY CONSUMPTION	2531	79	496	871	571	326	188
INDUSTRY AND CONSTRUCTION	226	19	69	36	1	58	43
Iron and steel	0	-	0	-	-	0	-
Chemical and petrochemical	10	-	2	-	0	3	5
Non-metallic minerals	96	18	43	22	0	13	0
Machinery	2	0	0	0	-	2	0
Transport equipment	1	-	0	-	0	1	-
Mining and quarrying	5	-	0	4	-	1	-
Food and tobacco	88	1	21	0	1	28	37
Paper, pulp and print	2	0	1	-	-	1	0
Wood and wood products	1	-	0	0	0	1	-
Construction	11	-	0	10	-	1	-
Textile and leather	6	0	2	0	0	3	1
Not elsewhere specified	4	-	0	0	0	4	0
TRANSPORT	681	-	11	667	-	3	-
Domestic aviation	12	-	-	12	-	-	-
Road	658	-	7	648	-	3	-
Rail	5	-	-	5	-	-	-
Pipeline transport	4	-	4	-	-	0	-
Domestic navigation	0	-	-	0	-	-	-
Non-specified	2	-	-	2	-	-	-
OTHER	1624	60	416	168	570	265	145
Residential	1245	44	327	56	559	150	109
Communal and public services	255	15	86	0	10	108	36
Agriculture	124	1	3	112	1	7	0
NON-ENERGY USE	89	-	-	72	17	-	-
Statistical differences	-	-	-	-	-	-	-

1.11. The energy balance for 2020, TeraJoule

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	28541	-	0	227	27946	368	-
From other sources	11714	-	-	-	-	11714	-
Imports	81093	3356	36385	40685	65	602	-
Exports	880	-	-	826	54	0	-
International bunkers	-	-	-	-	-	-	-
Stock changes	-2885	-98	163	-452	-2498	-	-
GROSS CONSUMPTION	117583	3258	36548	39634	25459	12684	-
TRANSFORMATION, INPUT	16272	4	14737	318	845	368	-
Electricity plants Main activity producer combined heat	529	-	-	8	153	368	-
and power (CHP) plants Autoproducer combined heat and	10716	-	10716	-	-	-	-
power (CHP) plants	727	-	587	-	140	-	-
Main activity producer heat plants	1673	-	1660	-	13	-	-
Autoproducer heat plants	2282	4	1774	28	476	-	-
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	282	-	-	282	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants Not elsewhere specified -	63	-	-	-	63	-	-
transformation	-	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	13193	-	-	273	15	3540	9365
Electricity plants Main activity producer combined heat	414	-	-	-	-	414	-
and power (CHP) plants Autoproducer combined heat and	8704	-	-	-	-	3008	5696
power (CHP) plants	534	-	-	-	-	118	416
Main activity producer heat plants	1440	-	-	-	-	-	1440
Autoproducer heat plants	1813	-	-	-	-	-	1813
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	273	-	-	273	-	-	-
Liquefaction plants		-	-	-	-	-	-
Charcoal production plants Not elsewhere specified -	15	-	-	-	15	-	-
transformation	-	-	-	-	-	-	-
Energy sector	743	0	6	-	-	687	50
LOSSES	3964	6	999	109	5	1456	1389

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	109797	3248	20806	39480	24624	13713	7926
FINAL ENERGY CONSUMPTION	106061	3248	20806	36428	23940	13713	7926
INDUSTRY AND CONSTRUCTION	9729	790	2961	1537	58	2538	1845
Iron and steel	12	-	2	-	-	10	-
Chemical and petrochemical	445	-	95	-	1	121	228
Non-metallic minerals	4031	760	1790	914	1	566	0
Machinery	119	1	14	6	-	93	5
Transport equipment	46	-	14	-	1	31	-
Mining and quarrying	231	-	4	167	-	60	-
Food and tobacco	3728	28	894	27	44	1192	1543
Paper, pulp and print	112	1	48	-	-	46	17
Wood and wood products	36	-	0	5	8	23	-
Construction	485	-	15	410	-	60	-
Textile and leather	258	0	57	0	1	151	49
Not elsewhere specified	226	-	28	8	2	185	3
TRANSPORT	28512	-	468	27894	-	150	-
Domestic aviation	494	-	-	494	-	-	-
Road	27498	-	293	27060	-	145	-
Rail	227	-	-	227	-	-	-
Pipeline transport	180	-	175	-	-	5	-
Domestic navigation	7	-	-	7	-	-	-
Non-specified	106	-	-	106	-	-	-
OTHER	67820	2458	17377	6997	23882	11025	6081
Residential	51974	1788	13645	2296	23441	6233	4571
Communal and public services	10663	618	3599	42	381	4513	1510
Agriculture	5183	52	133	4659	60	279	0
NON-ENERGY USE	3736	-	-	3052	684	-	-
Statistical differences	-	-	-	-	-	-	-

1.12. The energy balance for 2020, thousands of tonnes of coal equivalent

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	973	-		8	953	12	-
From other sources	399	-	-	-	-	399	-
Imports	2763	114	1240	1386	2	21	-
Exports	30	-	-	28	2	0	-
International bunkers	-	-	-	-	-	-	-
Stock changes	-100	-4	6	-17	-85	-	-
GROSS CONSUMPTION	4005	110	1246	1349	868	432	-
TRANSFORMATION, INPUT	552	0	502	10	28	12	-
Electricity plants	17	-	-	0	5	12	-
Main activity producer combined heat							
and power (CHP) plants	365	-	365	-	-	-	-
Autoproducer combined heat and power (CHP) plants	25	_	20	_	5	_	_
Main activity producer heat plants	57	_	57	_	0		_
Autoproducer heat plants	77	0	60	1	16	_	_
Oil refineries		-	-	-	-	_	_
Petrochemical plants	9	_	_	9	_	_	_
Liquefaction plants		_	_	-	_	_	_
Charcoal production plants	2	_	_	_	2	_	_
Not elsewhere specified -	-				2		
transformation	-	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	450	-	-	9	1	121	319
Electricity plants	14	-	-	-	-	14	-
Main activity producer combined heat							
and power (CHP) plants	297	-	-	-	-	103	194
Autoproducer combined heat and power (CHP) plants	18	_	_	_	_	4	14
Main activity producer heat plants	49	_	_	_	_	-	49
Autoproducer heat plants	62	_	_	_	_	_	62
Oil refineries		_	_	_	_	_	- 02
Petrochemical plants	9	_	_	9	_	_	_
Liquefaction plants		_	_	-	_	_	_
Charcoal production plants	1	_	_	-	- 1	-	_
Not elsewhere specified -	'				I		
transformation	-	-	-	-	-	-	-
Energy sector	25	0	0	-	-	23	2
LOSSES	135	0	34	4	0	50	47

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	3743	110	710	1344	841	468	270
FINAL ENERGY CONSUMPTION	3615	110	710	1240	817	468	270
INDUSTRY AND CONSTRUCTION	328	27	101	51	1	86	62
Iron and steel	0	-	0	-	-	0	-
Chemical and petrochemical	14	-	3	-	0	4	7
Non-metallic minerals	137	26	61	31	0	19	0
Machinery	3	0	0	0	-	3	0
Transport equipment	2	-	1	-	0	1	-
Mining and quarrying	8	-	0	6	-	2	-
Food and tobacco	128	1	30	1	1	42	53
Paper, pulp and print	3	0	2	-	-	1	0
Wood and wood products	1	-	0	0	0	1	-
Construction	16	-	1	13	-	2	-
Textile and leather	10	0	2	0	0	6	2
Not elsewhere specified	6	-	1	0	0	5	0
TRANSPORT	971	-	16	950	-	5	-
Domestic aviation	17	-	-	17	-	-	-
Road	938	-	10	923	-	5	-
Rail	7	-	-	7	-	-	-
Pipeline transport	6	-	6	-	-	0	-
Domestic navigation	0	-	-	0	-	-	-
Non-specified	3	-	-	3	-	-	-
OTHER	2316	83	593	239	816	377	208
Residential	1775	61	466	78	800	213	157
Communal and public services	362	20	122	1	14	154	51
Agriculture	179	2	5	160	2	10	0
NON-ENERGY USE	128	-	-	104	24	-	-
Statistical differences	-	-	-	-	-	-	-

1.13. The energy balance for 2021, thousands of tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	761	-	0	5	742	14	-
From other sources	296	-	-	-	-	296	-
Imports	2126	74	999	1037	2	14	-
Exports	8	-	-	7	1	-	-
International bunkers	-	-	-	-	-	-	-
Stock changes	-60	16	-2	29	-103	-	-
GROSS CONSUMPTION	3115	90	997	1064	640	324	-
TRANSFORMATION, INPUT	427	0	372	21	20	14	-
Electricity plants	18	-	-	0	4	14	-
Main activity producer combined heat							
and power (CHP) plants	284	-	272	12	-	-	-
Autoproducer combined heat and			4.4	0	0		
power (CHP) plants	23	-	14	6	3	-	-
Main activity producer heat plants	41	-	41	-	0	-	-
Autoproducer heat plants	56	0	45	0	11	-	-
Oil refineries		-	-	-	-	-	-
Petrochemical plants	3	-	-	3	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants Not elsewhere specified -	2	-	-	-	2	-	-
transformation	-	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	350	-	-	2	0	97	251
Electricity plants	15	-	-	-	-	15	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and	233	-	-	-	-	79	154
power (CHP) plants	18	-	_	-	-	3	15
Main activity producer heat plants	37	-	-	_	-	_	37
Autoproducer heat plants	45	-	-	-	-	_	45
Oil refineries	-	_	_	-	_	_	-
Petrochemical plants	2	_	_	2	_	_	-
Liquefaction plants	- I	_	_	-	_	_	-
Charcoal production plants	0	_	_	_	0	_	-
Not elsewhere specified -					Ū		
transformation	-	-	-	-	-	-	-
Energy sector	17	-	0	0	-	15	2
LOSSES	97	0	23	3	0	37	34

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	2924	90	602	1042	620	355	215
FINAL ENERGY CONSUMPTION	2853	90	602	982	609	355	215
INDUSTRY AND CONSTRUCTION	245	28	76	27	2	64	48
Iron and steel	0	-	-	-	-	0	-
Chemical and petrochemical	10	-	2	-	0	3	5
Non-metallic minerals	103	27	46	15	-	15	-
Machinery	2	0	0	0	0	2	0
Transport equipment	1	-	0	-	0	1	0
Mining and quarrying	6	-	0	4	-	2	-
Food and tobacco	98	1	23	0	2	30	42
Paper, pulp and print	2	0	1	-	-	1	0
Wood and wood products	1	-	-	0	0	1	-
Construction	11	-	1	8	-	2	-
Textile and leather	6	-	2	-	-	3	1
Not elsewhere specified	5	-	1	0	0	4	0
TRANSPORT	789	-	31	754	0	4	-
Domestic aviation	41	-	-	41	-	-	-
Road	741	-	30	707	0	4	-
Rail	4	-	-	4	-	-	-
Pipeline transport	1	-	1	0	-	0	-
Domestic navigation	0	-	-	0	-	-	-
Non-specified	2	-	-	2	-	-	-
OTHER	1819	62	495	201	607	287	167
Residential	1368	45	389	56	596	158	124
Communal and public services	290	15	101	0	10	121	43
Agriculture	161	2	5	145	1	8	0
NON-ENERGY USE	71	-	0	60	11	-	-
Statistical differences	-	-	-	-	-	-	-

1.14. The energy balance for 2021, TeraJoule

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	31888	-	2	208	31120	558	-
From other sources	12414	-	-	-	-	12414	-
Imports	89178	3125	41859	43512	100	582	-
Exports	350	-	-	291	59	-	-
International bunkers	-	-	-	-	-	-	-
Stock changes	-2472	712	-79	1219	-4324	-	-
GROSS CONSUMPTION	130658	3837	41782	44648	26837	13554	-
TRANSFORMATION, INPUT	17872	5	15588	860	861	558	-
Electricity plants	702	-	-	7	137	558	-
Main activity producer combined heat							
and power (CHP) plants	11860	-	11393	467	-	-	-
Autoproducer combined heat and power (CHP) plants	961	_	594	225	142	_	_
Main activity producer heat plants	1749	_	1736	-	13	_	_
Autoproducer heat plants	2386	5	1865	13	503	_	_
Oil refineries	2300		1000	- 10			
Petrochemical plants	148	_	_	148	_	_	_
Liquefaction plants	_	_	_	-	_	_	_
Charcoal production plants	66	_	-	-	66	_	_
Not elsewhere specified -					00		
transformation	-	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	14704	-	-	96	16	4074	10518
Electricity plants	620	-	-	-	-	620	-
Main activity producer combined heat							
and power (CHP) plants	9762	-	-	-	-	3310	6452
Autoproducer combined heat and power (CHP) plants	762	_	_	_	_	144	618
Main activity producer heat plants	1542	_	_			-	1542
Autoproducer heat plants	1906	_	_				1906
Oil refineries	-	_	_	_	_	_	-
Petrochemical plants	96	_	_	- 96	_	_	_
Liquefaction plants		_	_	-	_	_	_
Charcoal production plants	16	_	_	_	- 16	_	_
Not elsewhere specified -		_			10		_
transformation	-	-	-	-	-	-	-
Energy sector	699	-	16	1	-	630	52
LOSSES	4074	4	964	115	2	1565	1424

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	122717	3828	25214	43768	25990	14875	9042
FINAL ENERGY CONSUMPTION	119692	3827	25214	41201	25533	14875	9042
INDUSTRY AND CONSTRUCTION	10619	1197	3214	1260	127	2708	2113
Iron and steel	11	-	-	-	-	11	-
Chemical and petrochemical	455	-	93	-	2	123	237
Non-metallic minerals	4357	1154	1910	666	-	627	-
Machinery	131	1	16	4	1	103	6
Transport equipment	37	-	8	-	3	22	4
Mining and quarrying	253	-	6	184	-	63	-
Food and tobacco	4181	41	987	17	111	1240	1785
Paper, pulp and print	122	1	47	-	-	55	19
Wood and wood products	35	-	-	6	4	25	-
Construction	490	-	39	374	-	77	-
Textile and leather	282	-	67	-	-	158	57
Not elsewhere specified	265	-	41	9	6	204	5
TRANSPORT	32979	-	1281	31532	1	165	-
Domestic aviation	1741	-	-	1741	-	-	-
Road	30925	-	1255	29509	1	160	-
Rail	188	-	-	188	-	-	-
Pipeline transport	31	-	26	-	-	5	-
Domestic navigation	4	-	-	4	-	-	-
Non-specified	90	-	-	90	-	-	-
OTHER	76094	2630	20719	8409	25405	12002	6929
Residential	57075	1882	16273	2300	24932	6576	5112
Communal and public services	12223	668	4219	32	418	5081	1805
Agriculture	6796	80	227	6077	55	345	12
NON-ENERGY USE	3025	1	-	2567	457	-	-
Statistical differences	-	-	-	-	-	-	-

1.15. The energy balance for 2021, thousands of tonnes of coal equivalent

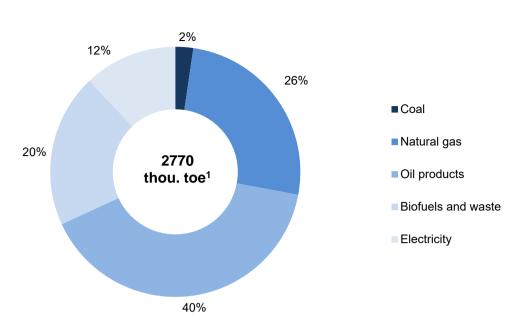
SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	1086	-	0	7	1061	18	-
From other sources	423	-	-	-	-	423	-
Imports	3038	106	1427	1482	3	20	-
Exports	12	-	-	10	2	-	-
International bunkers	-	-	-	-	-	-	-
Stock changes	-86	25	-3	40	-148	-	-
GROSS CONSUMPTION	4449	131	1424	1519	914	461	-
TRANSFORMATION, INPUT	607	-	532	29	28	18	-
Electricity plants	23	-	-	0	5	18	-
Main activity producer combined heat							
and power (CHP) plants	405	-	389	16	-	-	-
Autoproducer combined heat and power (CHP) plants	33	_	20	8	5	_	_
Main activity producer heat plants	59	_	59	-	0		_
Autoproducer heat plants	80	- 0	64	- 0	16		_
Oil refineries		- 0		-	-		_
Petrochemical plants	5	_	_	- 5			_
Liquefaction plants	J	_		5			_
Charcoal production plants	2	-			- 2	_	-
Not elsewhere specified -	-				2		
transformation	-	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	502	-	-	3	1	139	359
Electricity plants	21	-	-	-	-	21	-
Main activity producer combined heat							
and power (CHP) plants	333	-	-	-	-	113	220
Autoproducer combined heat and power (CHP) plants	26	_	_	_	_	5	21
Main activity producer heat plants	53	_	_	_	_	-	53
Autoproducer heat plants	65	_	_	_	_	_	65
Oil refineries		_	_	_	_	_	-
Petrochemical plants	3	_	_	3	_	_	_
Liquefaction plants		_	_	-	_	_	_
Charcoal production plants	1	_	-	_	- 1	-	_
Not elsewhere specified -	'				I		
transformation	-	-	-	-	-	-	-
Energy sector	23	-	0	0	-	21	2
LOSSES	138	0	33	3	0	53	49

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	4183	131	859	1490	887	508	308
FINAL ENERGY CONSUMPTION	4082	131	859	1405	871	508	308
INDUSTRY AND CONSTRUCTION	359	41	109	40	3	94	72
Iron and steel	0	-	-	-	-	0	-
Chemical and petrochemical	15	-	3	-	0	4	8
Non-metallic minerals	149	40	66	22	-	21	-
Machinery	5	0	0	0	0	5	0
Transport equipment	1	-	0	-	0	1	0
Mining and quarrying	8	-	0	6	-	2	-
Food and tobacco	141	1	34	0	3	42	61
Paper, pulp and print	5	0	2	-	-	2	1
Wood and wood products	1	-	-	0	0	1	-
Construction	16	-	1	12	-	3	-
Textile and leather	10	-	2	-	-	6	2
Not elsewhere specified	8	-	1	0	0	7	0
TRANSPORT	1127	-	43	1079	0	5	-
Domestic aviation	59	-	-	59	-	-	-
Road	1058	-	42	1011	0	5	-
Rail	6	-	-	6	-	-	-
Pipeline transport	1	-	1	-	-	0	-
Domestic navigation	0	-	-	0	-	-	-
Non-specified	3	-	-	3	-	-	-
OTHER	2596	90	707	286	868	409	236
Residential	1948	64	555	80	852	223	174
Communal and public services	419	23	144	1	15	174	62
Agriculture	229	3	8	205	1	12	0
NON-ENERGY USE	101	0	-	85	16	-	-
Statistical differences	-	-	-	-	-	-	-

1.16. The energy balance for 2022, thousands of tonnes of oil equivalent

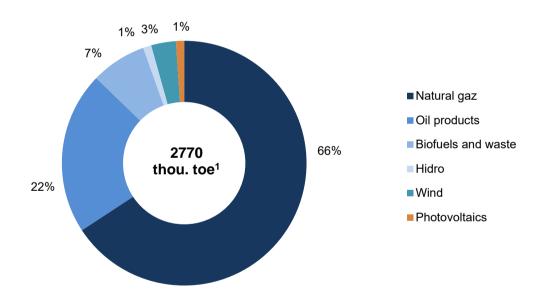
SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	524	-	0	5	499	20	-
From other sources	232	-	-	-	-	232	-
Imports	2231	77	779	1282	3	90	-
Exports	194	-	-	184	2	8	-
International bunkers	-	-	-	-	-	-	-
Stock changes	-23	-13	-69	10	49	-	-
GROSS CONSUMPTION	2770	64	710	1113	549	334	-
TRANSFORMATION, INPUT	373	0	242	83	28		-
Electricity plants	24	-	0	0	4	20	-
Main activity producer combined heat							
and power (CHP) plants	241	-	175	66	-	-	-
Autoproducer combined heat and							
power (CHP) plants	18	-	4	11	3	-	-
Main activity producer heat plants	27	-	27	-	0	-	-
Autoproducer heat plants	58	0	36	2	20	-	-
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	4	-	-	4	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	1	-	-	-	1	-	-
Not elsewhere specified -							
transformation	-	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	301	-	-	4	1	85	211
Electricity plants	21	-	-	-	-	21	-
Main activity producer combined heat							
and power (CHP) plants	189	-	-	-	-	61	128
Autoproducer combined heat and							
power (CHP) plants	14	-	-	-	-	3	11
Main activity producer heat plants	31	-	-	-	-	-	31
Autoproducer heat plants	41	-	-	-	-	-	41
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	4	-	-	4	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants	1	-	-	-	1	-	-
Not elsewhere specified -							
transformation	-	-	-	-	-	-	-
Energy sector	13	-	0	-	-	12	1
LOSSES	93	0	20	3	-	40	30

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	2592	64	448	1031	522	347	180
FINAL ENERGY CONSUMPTION	2521	64	448	980	502	347	180
INDUSTRY AND CONSTRUCTION	216	10	63	32	2	62	47
Iron and steel	0	-	-	-	-	0	-
Chemical and petrochemical	14	-	1	-	2	3	8
Non-metallic minerals	87	9	42	23	0	13	-
Machinery	1	0	0	0	0	1	0
Transport equipment	1	-	0	-	0	1	0
Mining and quarrying	5	-	0	4	-	1	-
Food and tobacco	86	1	17	0	0	30	38
Paper, pulp and print	2	-	1	0	-	1	0
Wood and wood products	1	-	-	0	0	1	-
Construction	7	-	1	5	-	1	-
Textile and leather	6	-	1	0	-	4	1
Not elsewhere specified	6	-	0	0	0	6	0
TRANSPORT	793	-	15	774	-	4	-
Domestic aviation	47	-	-	47	-	-	-
Road	740	-	15	721	-	4	-
Rail	5	-	-	5	-	-	-
Pipeline transport	0	-	0	0	-	0	-
Domestic navigation	0	-	-	0	-	-	-
Non-specified	1	-	-	1	-	-	-
OTHER	1512	54	370	174	500	281	133
Residential	1110	38	280	52	489	150	101
Communal and public services	264	14	84	1	10	123	32
Agriculture	138	2	6	121	1	8	-
NON-ENERGY USE	71	-	-	51	20	-	-
Statistical differences	-	-	-	-	-	-	-



1.17. Energy resources used in 2022

1.18. Energy resource used for production of electricity and heat in 2022



¹ thousands of tonnes of oil equivalent

1.19. The energy balance for 2022, TeraJoule

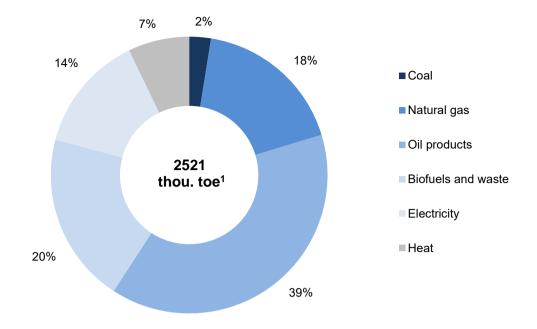
SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	21989	-	3	199	20943	844	-
From other sources	9738	-	-	-	-	9738	-
Imports	93505	3238	32647	53716	127	3777	-
Exports	8188	-	-	7747	101	340	-
International bunkers	-	-	-	-	-	-	-
Stock changes	-918	-531	-2876	419	2070	-	-
GROSS CONSUMPTION	116126	2707	29774	46597	23039	14019	-
TRANSFORMATION, INPUT	15625	7	10151	3437	1186	844	-
Electricity plants	1001	-	2	8	147	844	-
Main activity producer combined heat and power (CHP) plants Autoproducer combined heat and	10090	-	7342	2748	-	-	-
power (CHP) plants	779	-	162	470	147	-	-
Main activity producer heat plants	1136	-	1117	-	19	-	-
Autoproducer heat plants	2425	7	1528	66	824	-	-
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	145	-	-	145	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants Not elsewhere specified -	49	-	-	-	49	-	-
transformation	-	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	12595	-	-	140	22		8848
Electricity plants Main activity producer combined heat	895	-	-	-	-	895	-
and power (CHP) plants Autoproducer combined heat and	7935	-	-	-	-	2575	5360
power (CHP) plants	583	-	-	-	-	115	468
Main activity producer heat plants	1286	-	-	-	-	-	1286
Autoproducer heat plants	1734	-	-	-	-	-	1734
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	140	-	-	140	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants Not elsewhere specified -	22	-	-	-	22	-	-
transformation	-	-	-	-	-	-	-
Energy sector	566	-	5	•	-	528	33
LOSSES	3887	2	826	115	5	1667	1272

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	108653	2698	18792	43185	21870	14565	7543
FINAL ENERGY CONSUMPTION	105653	2698	18792	41039	21016	14565	7543
INDUSTRY AND CONSTRUCTION	9266	405	2730	1423	120	2598	1990
Iron and steel	2	-	-	-	-	2	-
Chemical and petrochemical	616	-	62	-	100	112	342
Non-metallic minerals	3630	364	1756	969	1	540	-
Machinery	94	1	10	3	2	70	8
Transport equipment	75	-	10	-	1	60	4
Mining and quarrying	213	-	5	150	-	58	-
Food and tobacco	3633	40	726	27	7	1251	1582
Paper, pulp and print	121	-	49	1	-	53	18
Wood and wood products	34	-	-	8	2	24	-
Construction	343	-	27	256	-	60	-
Textile and leather	249	-	54	7	-	156	32
Not elsewhere specified	256	-	31	2	7	212	4
TRANSPORT	33128	-	609	32348	-	171	-
Domestic aviation	1933	-	-	1933	-	-	-
Road	30918	-	603	30149	-	166	-
Rail	217	-	-	217	-	-	-
Pipeline transport	11	-	6	-	-	5	-
Domestic navigation	2	-	-	2	-	-	-
Non-specified	47	-	-	47	-	-	-
OTHER	63259	2293	15453	7268	20896	11796	5553
Residential	46334	1593	11680	2153	20414	6292	4202
Communal and public services	11138	606	3538	43	436	5164	1351
Agriculture	5787	94	235	5072	46	340	-
NON-ENERGY USE	3000	-	-	2146	854	-	-
Statistical differences	-	-	-	-	-	-	-

1.20. The energy balance for 2022, thousands of tonnes of coal equivalent

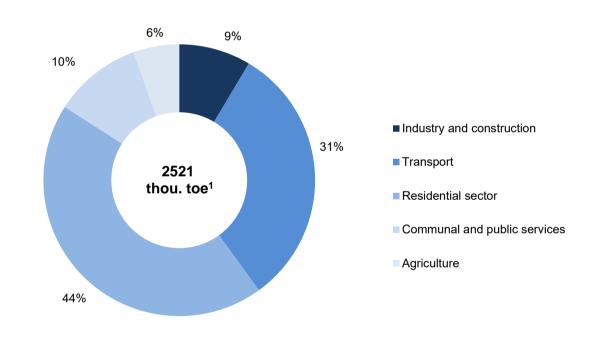
SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
Primary Production	748	-	0	7	713	28	-
From other sources	332	-	-	-	-	332	-
Imports	3186	110	1113	1829	5	129	-
Exports	280	-	-	265	3	12	-
International bunkers	-	-	-	-	-	-	-
Stock changes	-28	-18	-98	16	72	-	-
GROSS CONSUMPTION	3958	92	1015	1587	787	477	-
TRANSFORMATION, INPUT	531	0	345	116	42	28	-
Electricity plants	33	-	-	0	5	28	-
Main activity producer combined heat and power (CHP) plants	343	_	250	93	-	-	-
Autoproducer combined heat and							
power (CHP) plants	27	-	5	16	6	-	-
Main activity producer heat plants	39	-	38	-	1	-	-
Autoproducer heat plants	82	0	52	2	28	-	-
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	5	-	-	5	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants Not elsewhere specified -	2	-	-	-	2	-	-
transformation	-	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	429	-	-	4	1	122	302
Electricity plants Main activity producer combined heat	30	-	-	-	-	30	-
and power (CHP) plants Autoproducer combined heat and	271	-	-	-	-	88	183
power (CHP) plants	20	-	-	-	-	4	16
Main activity producer heat plants	44	-	-	-	-	-	44
Autoproducer heat plants	59	-	-	-	-	-	59
Oil refineries	-	-	-	-	-	-	-
Petrochemical plants	4	-	-	4	-	-	-
Liquefaction plants	-	-	-	-	-	-	-
Charcoal production plants Not elsewhere specified -	1	-	-	-	1	-	-
transformation	-	-	-	-	-	-	-
Energy sector	19	-	0	-	-	18	1
LOSSES	132	0	28	4	0	57	43

SUPPLY AND CONSUMPTION	Total products	Coal	Natural gas	Oil products	Biofuels and waste	Electricity	Heat
FINAL CONSUMPTION	3705	92	642	1471	746	496	258
FINAL ENERGY CONSUMPTION	3601	92	642	1398	715	496	258
INDUSTRY AND CONSTRUCTION	313	14	94	47	2	88	68
Iron and steel	0	-	-	-	-	0	-
Chemical and petrochemical	19	-	2	-	2	4	11
Non-metallic minerals	124	13	60	33	0	18	-
Machinery	2	0	0	0	0	2	0
Transport equipment	2	-	0	-	0	2	0
Mining and quarrying	7	-	0	5	-	2	0
Food and tobacco	123	1	26	0	0	42	54
Paper, pulp and print	5	-	2	0	-	2	1
Wood and wood products	1	-	-	0	0	1	-
Construction	12	-	1	9	-	2	-
Textile and leather	9	-	2	0	-	5	2
Not elsewhere specified	9	-	1	0	0	8	0
TRANSPORT	1131	-	21	1104	-	6	-
Domestic aviation	66	-	-	66	-	-	-
Road	1057	-	21	1030	-	6	-
Rail	7	-	-	7	-	-	-
Pipeline transport	0	-	0	0	-	0	-
Domestic navigation	0	-	-	0	-	-	-
Non-specified	1	-	-	1	-	-	-
OTHER	2157	78	527	247	713	402	190
Residential	1582	54	399	74	697	214	144
Communal and public services	379	21	120	1	15	176	46
Agriculture	196	3	8	172	1	12	-
NON-ENERGY USE	104	-	-	73	31	-	-
Statistical differences	-	-	-	-	-	-	-



1.21. Final energy consumption by types of products in 2022

1.22. Final energy consumption by sectors in 2022



¹ thousands of tonnes of oil equivalent

2. The energy balance, total products

2.1. The energy balance for period 2017-2022, thousands of tonnes of oil equivalent

SUPPLY AND CONSUMPTION	2017	2018	2019	2020	2021	2022
Primary Production	770	798	668	682	761	524
From other sources	195	219	246	279	296	232
Imports	2012	2109	2031	1935	2126	2231
Exports	34	27	9	21	8	194
International bunkers	-	-	-	-	-	-
Stock changes	4	33	-	-68	-60	-23
GROSS CONSUMPTION	2939	3066	2938	2807	3115	2770
TRANSFORMATION, INPUT	411	430	389	388	427	373
Electricity plants	7	10	13	12	18	24
Main activity producer combined heat and power		005	0.57	050	00.4	
(CHP) plants	260	285	257	256	284	241
Autoproducer combined heat and power (CHP)	00	00	00	47	00	40
plants Main activity producer best plants	29	28	22	17	23	18
Main activity producer heat plants	50	41 53	35 55	40	41 56	27
Autoproducer heat plants	49			54		58
Oil refineries	0	-			-	-
Petrochemical plants	14	12	5	7	3	4
Liquefaction plants	-	-	-	-	-	-
Charcoal production plants	2	1	2	2	2	1
Not elsewhere specified - transformation	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	336	345	315	315	350	301
Electricity plants	5	7	11	10	15	21
Main activity producer combined heat and power (CHP) plants	213	224	204	208	233	189
Autoproducer combined heat and power (CHP)	210		201	200	200	100
plants	24	21	16	13	18	14
Main activity producer heat plants	42	43	36	34	37	31
Autoproducer heat plants	38	42	44	43	45	41
Oil refineries	-	-	-	-	-	-
Petrochemical plants	14	8	4	7	2	4
Liquefaction plants	-	-	-	-	-	-
Charcoal production plants	0	0	0	0	0	1
Not elsewhere specified - transformation	-	-	-	-	-	-
Energy sector	17	16	19	18	17	13
LOSSES	128	124	104	96	97	93

2.	The	energy	balance,	total	products	
----	-----	--------	----------	-------	----------	--

SUPPLY AND CONSUMPTION	2017	2018	2019	2020	2021	2022
FINAL CONSUMPTION	2719	2841	2739	2620	2924	2592
FINAL ENERGY CONSUMPTION	2671	2765	2672	2531	2853	2521
INDUSTRY AND CONSTRUCTION	218	251	234	226	245	216
Iron and steel	0	0	0	0	0	0
Chemical and petrochemical	6	6	8	10	10	14
Non-metallic minerals	83	102	99	96	103	87
Machinery	4	5	3	2	2	1
Transport equipment	0	1	1	1	1	1
Mining and quarrying	2	5	4	5	6	5
Food and tobacco	103	107	97	88	98	86
Paper, pulp and print	2	2	2	2	2	2
Wood and wood products	1	1	1	1	1	1
Construction	6	9	8	11	11	7
Textile and leather	7	8	7	6	6	6
Not elsewhere specified	4	5	4	4	5	6
TRANSPORT	734	758	769	681	789	793
Domestic aviation	47	55	49	12	41	47
Road	665	688	705	658	741	740
Rail	10	6	7	5	4	5
Pipeline transport	10	8	6	4	1	0
Domestic navigation	1	-	1	0	0	0
Non-specified	1	1	1	2	2	1
OTHER	1719	1756	1671	1624	1819	1512
Residential	1346	1364	1276	1245	1368	1110
Communal and public services	266	283	272	255	290	264
Agriculture	107	109	123	124	161	138
NON-ENERGY USE	48	76	67	89	71	71
Statistical differences	-	-	-	-	-	-

2.2. The energy balance for period 2017-2022, TeraJoule

SUPPLY AND CONSUMPTION	2017	2018	2019	2020	2021	2022
Primary Production	32311	33409	27954	28541	31888	21989
From other sources	8208	9166	10293	11714	12414	9738
Imports	84351	88433	85164	81093	89178	93505
Exports	1403	1161	413	880	350	8188
International bunkers	-	-	-	-	-	-
Stock changes	236	1208	44	-2885	-2472	-918
GROSS CONSUMPTION	123231	128639	122954	117583	130658	116126
TRANSFORMATION, INPUT	17165	18009	16269	16272	17872	15625
Electricity plants	299	411	536	529	702	1001
Main activity producer combined heat and power (CHP) plants	10883	11949	10462	10716	11860	10090
Autoproducer combined heat and power (CHP)						
plants	1238	1179	926	727	961	779
Main activity producer heat plants	2042	1709	1794	1673	1749	1136
Autoproducer heat plants	1975	2187	2251	2282	2386	2425
Oil refineries	-	-	-	-	-	-
Petrochemical plants	667	523	227	282	148	145
Liquefaction plants	-	-	-	-	-	-
Charcoal production plants	61	51	73	63	66	49
Not elsewhere specified - transformation	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	14130	14464	13281	13193	14704	12595
Electricity plants	229	293	442	414	620	895
Main activity producer combined heat and power (CHP) plants	8904	9384	8562	8704	9762	7935
Autoproducer combined heat and power (CHP) plants	990	869	705	534	762	583
Main activity producer heat plants	1750	1808	1522	1440	1542	1286
Autoproducer heat plants	1730	1744	1830	1440	1906	1734
Oil refineries	1000	1744	1030	1015	1900	17.54
Petrochemical plants	- 635	- 354	- 205	- 273	- 96	- 140
Liquefaction plants		- 504	200	213	- 50	-
Charcoal production plants	- 14	- 12	- 15	- 15	- 16	- 22
Not elsewhere specified - transformation	-	-	-	-	-	-
Energy sector	709	- 691	- 781	743	699	566
LOSSES	5403	5214	4345	3964	4074	3887

2. The energy balance, total products

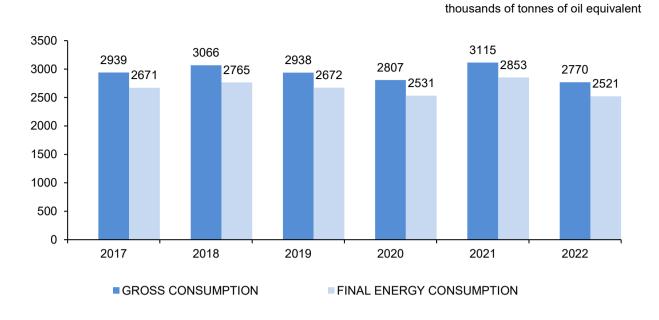
SUPPLY AND CONSUMPTION	2017	2018	2019	2020	2021	2022
FINAL CONSUMPTION	114084	119189	114840	109797	122717	108653
FINAL ENERGY CONSUMPTION	111958	115908	112112	106061	119692	105653
INDUSTRY AND CONSTRUCTION	9243	10576	10011	9729	10619	9266
Iron and steel	6	8	12	12	11	2
Chemical and petrochemical	247	237	354	445	455	616
Non-metallic minerals	3446	4292	4126	4031	4357	3630
Machinery	187	216	158	119	131	94
Transport equipment	13	36	51	46	37	75
Mining and quarrying	91	211	213	231	253	213
Food and tobacco	4385	4520	4083	3728	4181	3633
Paper, pulp and print	99	124	116	112	122	121
Wood and wood products	44	41	28	36	35	34
Construction	231	355	346	485	490	343
Textile and leather	305	306	294	258	282	249
Not elsewhere specified	189	230	230	226	265	256
TRANSPORT	30779	31722	32192	28512	32979	33128
Domestic aviation	1999	2324	2067	494	1741	1933
Road	27830	28733	29510	27498	30925	30918
Rail	437	236	282	227	188	217
Pipeline transport	455	368	268	180	31	11
Domestic navigation	20	18	21	7	4	2
Non-specified	38	43	44	106	90	47
OTHER	71940	73610	69909	67820	76094	63259
Residential	56254	57198	53303	51974	57075	46334
Communal and public services	11165	11833	11429	10663	12223	11138
Agriculture	4521	4579	5177	5183	6796	5787
NON-ENERGY USE	2126	3281	2728	3736	3025	3000
Statistical differences	-			-		-

2.3. The energy balance for period 2017-2022, thousands of tonnes of coal equivalent

SUPPLY AND CONSUMPTION	2017	2018	2019	2020	2021	2022
Primary Production	1100	1137	953	973	1086	748
From other sources	279	312	351	399	423	332
Imports	2874	3013	2903	2763	3038	3186
Exports	48	40	13	30	12	280
International bunkers	-	-	-	-	-	-
Stock changes	10	41	1	-100	-86	-28
GROSS CONSUMPTION	4195	4381	4194	4005	4449	3958
TRANSFORMATION, INPUT	584	613	556	552	607	531
Electricity plants	10	13	18	17	23	33
Main activity producer combined heat and power (CHP) plants	371	407	367	365	405	343
Autoproducer combined heat and power (CHP) plants	42	40	32	25	33	27
Main activity producer heat plants	70	58	50	57	59	39
Autoproducer heat plants	68	75	77	77	80	82
Oil refineries	-	-	-	-	-	-
Petrochemical plants	21	18	9	9	5	5
Liquefaction plants	-	-	-	-	-	-
Charcoal production plants	2	2	3	2	2	2
Not elsewhere specified - transformation	-	-	-	-	-	-
TRANSFORMATION, OUTPUT	481	493	451	450	502	429
Electricity plants	8	10	15	14	21	30
Main activity producer combined heat and power (CHP) plants	303	320	291	297	333	271
Autoproducer combined heat and power (CHP) plants	34	30	24	18	26	20
Main activity producer heat plants	54 60	30 62	24 52	49	20 53	20 44
	55	62 59	52 62	49 62	53 65	44 59
Autoproducer heat plants Oil refineries	55	59	02	02	60	59
	-	-	-	-	-	-
Petrochemical plants	21	12	6	9	3	4
Liquefaction plants	-	-	-	-	-	-
Charcoal production plants	-	-	1	1	1	1
Not elsewhere specified - transformation	- 25	- 23	- 26	- 25	- 23	- 19
Energy sector LOSSES	25 185	23 177	26 148	25 135	23 138	19 132

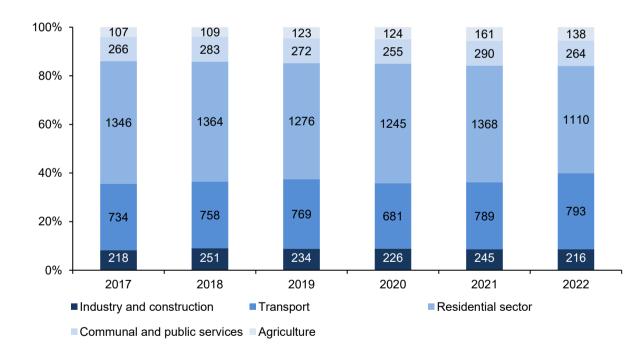
2. The energy balance, total products

SUPPLY AND CONSUMPTION	2017	2018	2019	2020	2021	2022
FINAL CONSUMPTION	3882	4061	3915	3743	4183	3705
FINAL ENERGY CONSUMPTION	3812	3952	3822	3615	4082	3601
INDUSTRY AND CONSTRUCTION	308	357	338	328	359	313
Iron and steel	0	0	0	0	0	0
Chemical and petrochemical	8	8	12	14	15	19
Non-metallic minerals	117	146	140	137	149	124
Machinery	5	7	4	3	5	2
Transport equipment	0	1	1	2	1	2
Mining and quarrying	3	7	7	8	8	7
Food and tobacco	149	153	139	128	141	123
Paper, pulp and print	3	5	5	3	5	5
Wood and wood products	1	1	1	1	1	1
Construction	6	11	12	16	16	12
Textile and leather	10	11	10	10	10	9
Not elsewhere specified	6	7	7	6	8	9
TRANSPORT	1050	1083	1099	971	1127	1131
Domestic aviation	67	80	71	17	59	66
Road	950	981	1007	938	1058	1057
Rail	15	8	10	7	6	7
Pipeline transport	16	12	9	6	1	0
Domestic navigation	1	1	1	-	0	0
Non-specified	1	1	1	3	3	1
OTHER	2454	2512	2385	2316	2596	2157
Residential	1916	1950	1818	1775	1948	1582
Communal and public services	384	406	391	362	419	379
Agriculture	154	156	176	179	229	196
NON-ENERGY USE	70	109	93	128	101	104
Statistical differences	-	-	-	-	-	-



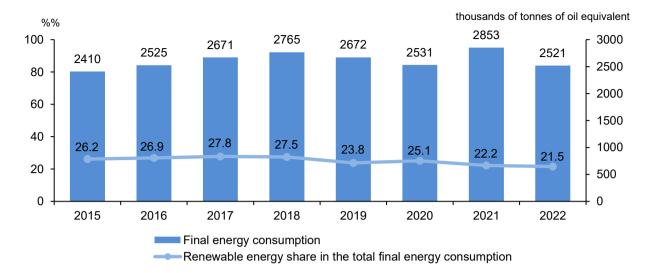
2.4. National energy consumption for period 2017-2022



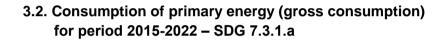


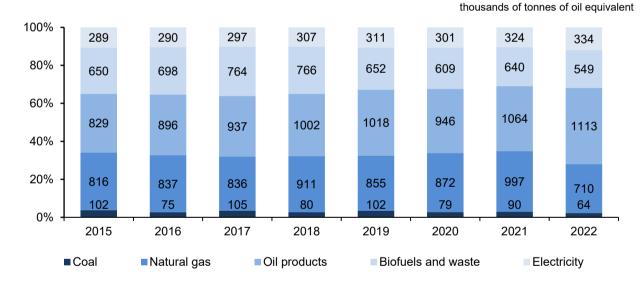
%

3. Sustainable development goal 7 (SDG 7): Ensure access to affordable, relaible, sustainable and modern energy for all

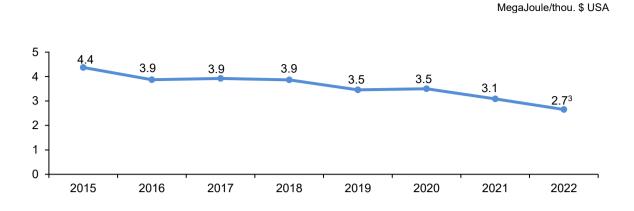


3.1 Renewable energy share in the total final energy consumption for period 2015-2022 – SDG 7.2.2



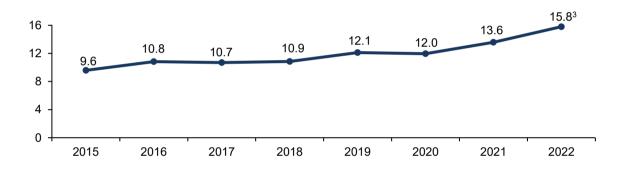


3.3. Energy intensity¹ for period 2015-2022



3.4. Energy producrivity² for period 2015-2022

Thou. \$ USA/tonne of oil equivalent



¹ Energy intensity is defined as the energy supplied to the economy per unit value of economic output.

Energy intensity = Gross energy consumption (MegaJoule) / Gross Domestic Product by purchasing power parity (thousand \$ USA). 2 Energy productivity is a measure of how efficiently a country uses its primary energy sources to generate economic output.

Energy productivity = Gross Domestic Product by purchasing power parity (thousand \$ USA) / Gross energy consumption (tonne of oil equivalent).

³ Data regarding Gross Domestic Product by purchasing power parity (thousand \$ USA) are semidefinitive and may be recalculated in later publications.

© Biroul Național de Statistică al Republicii Moldova Chișinău, str. Grenoble 106 MD-2019, Republica Moldova Tel.: (373 22) 40 30 00 e-mail: moldstat@statistica.gov.md http://www.statistica.gov.md

STATISTICA MOLDOVEI

NATIONAL BUREAU OF STATISTICS OF THE REPUBLIC OF MOLDOVA

MD-2019, mun. Chisinau 106 Grenoble Str. Tel.: +373 22 403 000 e-mail: moldstat@statistica.gov.md http://www.statistica.gov.md