

Government of Montenegro Statistical Office of Montenegro

RELEASE

Balance of electricity 2015

Primary production of electricity in Montenegro in 2015 was 1 462,0 GWh, transformation output was 1 411,6 GWh. Total import of electricity was 1 039,7 GWh and total export was 516,8 GWh. Consumption of the energy branch was 131,4 GWh and distribution losses 585,8 GWh.

Total final consumption of electricity in 2015 was 2 679,3 GWh. The highest ratio in total consumption of electricity was in households 46,4%, in industrial activities 28,6% and other sectors 25,0%.

Graph 1. Electricity - Montenegro

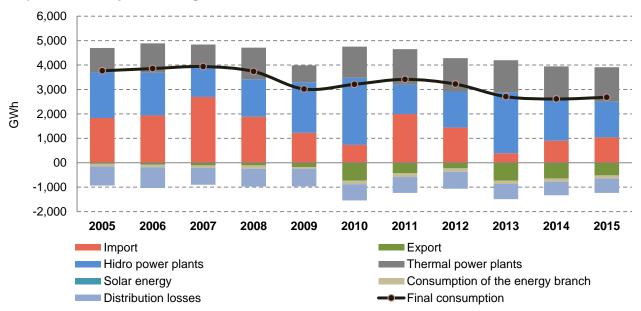


Table 1. Balance of electricity in Montenegro, 2015 **EUROSTAT** form Electricity -Solar Electricity -Solar Hydro energy Hydro energy total energy total energy GWh TJ 8 Primary production 1 459.9 2.1 5 256 **Imports** 1 039.7 3 742 Stock change **Exports** -516.8 -1 860 **Bunkers** Statistical differences **Gross inland consumption** 522.9 1 459.9 2.1 1 882 5 256 8 **Transformation - input** Thermal power plants (Main producers) Thermal power plants (Autoproducers) Cogeneration CHP (Main producers) Cogeneration CHP (Autoproducers) Heat-only plants (Main producers) Heat-only plants (Autoproducers) Patent fuel, briquetting and coke plants Oil refineries **Transformation - output** 1 411.6 5 082 5 082 Thermal power plants (Main producers) 1 411.6 Thermal power plants (Autoproducers) Cogeneration (CHP) (Main producers) Cogeneration (CHP) (Autoproducers) Heat-only plants (Main producers) Heat-only plants (Autoproducers) Patent fuel, briquetting and coke plants Oil refineries Exchanges and transfers, returns 1 462.0 1 459.9 2.1 5 264 5 256 8 1 462.0 1 459.9 2.1 5 264 5 256 Interproduct transfers 38 Products transferred Returns from petrochem. Industry Consumption of the energy branch 473 131.4 **Distribution losses** 585.8 2 109 2 679.3 9 646 **Final consumption** Final non-energy consumption Final energy consumption 2 679.3 9 646 Industry 767.3 2 762 Iron & steel industry 42.5 152 Non-ferrous metal industry 642.4 2 313 7.3 Chemical industry 26 Glass, pottery & building mat. Industry 4.6 17 Ore-extraction industry 2.1 8 Food, drink & tobacco industry 30.8 111 Textile, leather & clothing industry 8.0 3 Paper and printing 3.4 12 Engineering & other metal industry 6.6 24 Other industries 26.8 96 **Transport** 32.2 116 Railways 19.7 71 Road transport 5.0 18 Air transport Inland navigation 7.5 27 Other transport Households, commerce, pub. 1 879.8 6 768 auth.etc Households 1 242.9 4 475 13.5 Agriculture 49

2 244

623.4

Other sectors

Table 2. Balance of electricity in Montenegro, 2015

IEA form

						IEA forn
	Electricity - total	Hydro energy	Solar energy	Electricity - total	Hydro energy	Solar energy
		GWh	0,		TJ	- 0,
Production	-	1 459.9	2.1	-	5 256	8
Imports	1 039.7	-	-	3 742	-	-
Exports	-516.8	-	-	-1 860	-	_
Intl. marine bunkers	-	_	-	_	_	_
Stock change	-	_	_	-	_	_
Domestic supply	522.9	1 459.9	2.1	1 882	5 256	8
Transfers	1 462.0	1 459.9	2.1	5 264	5 256	8
Statistical difference	_	_	_	_	_	_
Transformations	1 411.6	_	_	5 082	_	_
Thermal power plants (Main producers)	1 411.6	_	_	5 082	_	_
Thermal power plants (Autoproducers)	_	_	_	-	_	_
Cogeneration CHP (Main producers)	_	_		_	_	_
Cogeneration CHP (Autoproducers)	_	_	_	_	_	_
Heat-only plants (Main producers)	_	_	_	_	_	_
Heat-only plants (Autoproducers)	_	_	_	_	_	_
Patent fuel, briquetting and coke plants	_	_	_	_	_	_
Oil refineries			_	_		
Other transformation sector			_	_		
Energy sector	131.4		_	473		
Coal mines	131.4			- 475		_
Thermal power plants and CHPs	130.0	_	_	468	_	_
Thermal power plants (Autoproducers)	130.0	_	_	400	_	_
Heat-only plants (Autoproducers)	_	_	_	_	_	_
	-	-	-	-	-	-
Patent fuel, briquetting and coke plants	1.4	-	•	-	-	-
Hydro power plants Distribution losses	1.4 585.8	-	•	5 2 109	-	-
	2 679.3	-	-	9 646	-	
Final consumption	767.3	_		2 762		_
Industry sector	42.5	-	-		-	-
Iron and steel Chemical and petrochemical		-	-	152	-	-
Non-ferrous metals	7.3	-	-	26	-	-
	642.4	-	-	2 313	-	-
Non-metallic minerals	4.6	-	-	17	-	-
Transport equipment	-	-	-	-	-	-
Machinery	6.6	-	-	24	-	-
Mining and Quarrying	2.1	-	-	8	-	-
Food and tobacco	30.8	-	-	111	-	-
Paper, pulp and print	3.4	-	-	12	-	-
Wood and wood products	11.2	-	-	40	-	-
Construction materials	-	-	-	-	-	-
Textile and Leather	0.8	-	-	3	-	-
Non-specified	15.6	-	-	56	-	-
Transport	32.2	-	-	116	-	-
International civil aviation	5.0	-	-	18	-	-
Domestic air	-	-	-	-	-	-
Road	-	-	-	-	-	-
Rail	19.7	-	-	71	-	-
Pipeline transport	-	-	-	-	-	-
Internal navigation	7.5	-	-	27	-	-
Non-specified	-	-	-	-	-	-
Other sectors	1 879.8	-	-	6 768	-	-
Agriculture	13.5	-	-	49	-	-
Commerce and public services	623.4	-	-	2 244	-	-
Residential	1 242.9	-	-	4 475	-	-
Non-specified	1 _	_	_	_	_	_

METHODOLOGICAL EXPLANATIONS

Bilance of electricity contains annual data on production, import, export, transformation, consumption and distribution of electricity in Montenegro in 2015. Data are presented in the natural units of measure and in TJ (terajoule).

The methodology for calculation of balance of electricity, definitions and statistical terminology are harmonized with the international IEA/OECD/EUROSTAT standards.

Every well-intentioned suggestion referred from a data users will be accepted with pleasure.

Data sources (coverage)

The reporting units for balance of electricity are companies engaging in the production and distribution of electricity. Balance of electricity also covers the data from statistical surveys in the area of energy, foreign trade, industry, transport and agriculture.

Method of data collection

The data are processed using the compilation method.

Definition

Primary production is a form of energy that has not been converted or transformed (coal, oil, natural gas, biomass, firewood, hydro power energy, geothermal energy, wind energy and solar energy).

Imports and exports cover quantities that crossed the national border.

Marine bunkers cover the quantities delivered for international navigation purposes.

Statistical differences are a category that includes the sum of unknown statistical differences between the production and consumption of selected fuels.

Gross inland energy consumption is calculated as follows:

Primary production

- + Imports
- Exports
- + Stock changes
- Marine bunkers

Transformation - input is the consumption of fuels as raw materials for energy production in thermal power plants, CHP, auto producers, district heating plants, refineries, blast furnace plants and coal transformation

Transformation - output covers the production of transformed energy forms (thermoelectricity, heat, petroleum products, blast furnace gas and oxygen steel furnace gas).

Exchange and transfers include inter product transferred (distillates), products transferred (hydro energy) and recycled products (naphtha, fuel oil and lubricants).

Own consumption in energy sector covers the energy used for energy sector running.

Distribution losses include losses incurred in transmission and distribution of energy.

Energy available for final consumption is the energy intended for final consumers.

Final consumption of energy covers final consumption of available energy for energy purposes in:

- industry (iron and steel, non-ferrous metal, chemical industry, non-metal minerals, mining and quarrying, food, drink and tobacco industry, textile, leather and clothing, paper and printing, engineering and other metal industry, other industries);
- transport (rail, road, air, inland, other);

- households, agriculture and other sectors (e.g. education, health, administration, etc.).

Conversion Equivalents between Units of Energy

Conversion factors for converting energy into various energy units are published in the Manual of Energy Statistics IEA / OECD / Eurostat.

Conversion refers to particular energy unit are shown in Table:

	TJ	Gcal	Mtoe	GWh
TJ	1	238,8	2,388 x 10 ⁻⁵	0.2778
Gcal	4,1868 x 10 ⁻³	1	10 ⁻⁷	1,163 x 10 ⁻³
Mtoe	4,1868 x 10 ⁻⁴	10 ⁷	1	11630
GWh	3,6	860	8,6 x 10 ⁻⁵	1

Unit of measure:

TJ = terajoule

Gcal = gigacalorie

Mtoe = milion tones of oil equivalent

GWh = gigawatt hour

t = tonne

Znaci:

- = no occurence of event

... = data not available

0 = value less than 0,5 of the unit of measure

1) = footnote

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