

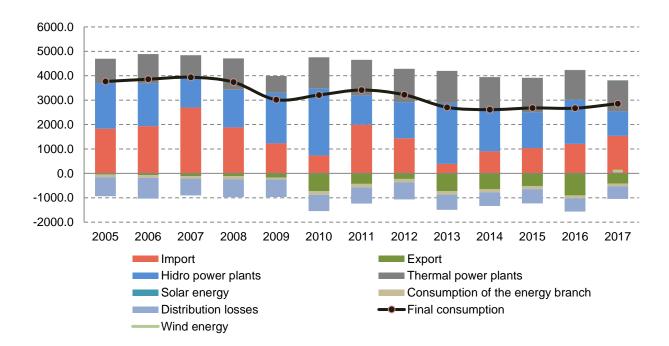
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# Balance of electricity 2017

Primary production of electricity in Montenegro in 2017 was 1 101.0 GWh, transformation output was 1 265.0 GWh. Total import of electricity was 1 536.9 GWh and total export was 416.7 GWh. Consumption of the energy branch was 119.0 GWh and distribution losses 512.2 GWh.

Total final consumption of electricity in 2017 was 2 855.0 GWh. The highest ratio in total consumption of electricity was in households 45.1%, in other sectors 29.3% and industrial activities 25.6%.



# Graph 1. Electricity – Montenegro, GWh

# Table 1. Balance of electricity in Montenegro, 2017

	Electricity	Hydro	Solar	Wnd	Electricity	Hydro	Solar	TAT form Wnd
	- total	energy	energy	energy	- total	energy	energy	energy
		GW	/h			TJ		
Primary production	-	1 003.8	2.2	95.0	-	3 614	8	95
Imports	1 536.9	-	-	-	5 533	-	-	-
Stock change	-	-	-	-	-	-	-	-
Exports	- 416.7	-	-	-	- 1 500	-	-	-
Bunkers	-	-	-	-	-	-	-	-
Statistical differences	_	_	_	_	_	_	_	_
Gross inland consumption	1 120.2	1 003.8	2.2	95.0	4 033	3 614	8	95
Transformation - input	1 120.2						-	
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	1 265.0	-	-		4 554	-		-
Thermal power plants (Main producers)	1 265.0	-	-	-	4 554	-	-	-
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	1 101.0	1 003.8	2.2	95.0	3 717	3 614	8	95
Interproduct transfers	1 101.0	1 003.8	2.2	95.0	3 717	3 614	8	95
Products transferred	-	- 1005.0		-	-		-	-
Returns from petrochem. Industry	_				_		_	_
Consumption of the energy branch	119.0			-	428			
Distribution losses		-	-			-	-	-
	512.2			-	1 844	-	-	-
Available for final consumption	2 855.0	-	-	-	10 032	-	-	-
Final non-energy consumption	-	-	-	-	-	-	-	-
Final energy consumption	2 855.0	-	-	-	10 032	-	-	-
Industry	731.7	-	-	-	2 635	-	-	-
Iron & steel industry	40.4	-	-	-	145	-	-	-
Non-ferrous metal industry	589.9	-	-	-	2 124	-	-	-
Chemical industry	4.7	-	-	-	17	-	-	-
Glass, pottery & building mat. Industry	6.4	-	-	-	23	-	-	-
Ore-extraction industry	8.6	-	-	-	31	-	-	-
Food, drink & tobacco industry	30.3	-	-	-	109	-	-	-
Textile, leather & clothing industry	1.0	-	-	-	4	-	-	-
Paper and printing	6.0	-	-	-	22	-	-	-
Engineering & other metal industry	5.9	-	-	-	21	-	-	-
Other industries	38.5	_	-	_	139	_	-	-
Transport	20.3			-	73		-	
Railways	20.3	_	_	_	73	_	_	_
Road transport	20.0	-	-	-		-	-	-
		-	-	-	_	-	-	-
Air transport	-	-	-		-	-	-	-
Inland navigation	-	-	-	-	-	-	-	-
Other transport	-	-	-	-	-	-	-	-
Households, commerce, pub. auth.etc	2 103.0	-	-	-	7 324	-	-	-
Households	1 285.9	-	-	-	4 382	-	-	-
Agriculture	18.3	_	_	-	66	-	-	-
	10.0							

# Table 2. Balance of electricity in Montenegro, 2017

	Electricity	Hydro	Solar	Wnd	Electricity	Hydro	Solar	Wno
	- total	energy	energy	energy	- total	energy	energy	ener
		GW				TJ		
Production	-	1 003.8	2.2	95.0	-	3 614	8	
Imports	1 536.9	-	-	-	5 533	-	-	
Exports	- 416.7	-	-	-	- 1 500	-	-	
Intl. marine bunkers	-	-	-	-	-	-	-	
Stock change	-	-	-	-	-	-	-	
Domestic supply	1 120.2	1 003.8	2.2	95.0	4 033	3 614	8	
Transfers	1 101.0	1 003.8	2.2	95.0	3 717	3 614	8	
Statistical difference	-	-	-	-	-	-	-	
Transformations	1 265.0	-	-	-	4 554	-	-	
Thermal power plants (Main producers)	1 265.0	-	-	-	4 554	-	-	
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	119.0			-	428	-	-	
Coal mines	115.0	-	-	-	420	-	-	
	-	-	-	-	423	-	-	
Thermal power plants and CHPs	117.4	-	-		423	-	-	
Thermal power plants (Autoproducers)	-	-	-	-	-	-	-	
Heat-only plants (Autoproducers)	-	-	-	-	-	-	-	
Patent fuel, briquetting and coke plants	-	-	-	-	-	-	-	
Hydro power plants	1.6	-	-	-	6	-		
Distribution losses	512.2	-	-	-	1 844	-	-	
Final consumption Industry sector	2 855.0 731.7	-	-	-	10 032 2 635	-	-	
Iron and steel	40.4	-	-	-	<b>2 035</b> 145	-	-	
		-	-			-	-	
Chemical and petrochemical	4.7	-	-	-	17	-	-	
Non-ferrous metals	589.9	-	-	-	2 124	-	-	
Non-metallic minerals	6.4	-	-	-	23	-	-	
Transport equipment	-	-	-	-	-	-	-	
Machinery	5.9	-	-	-	21	-	-	
Mining and Quarrying	8.6	-	-	-	31	-	-	
Food and tobacco	30.3	-	-	-	109	-	-	
Paper, pulp and print	6.0	-	-	-	22	-	-	
Wood and wood products	12.7	-	-	-	46	-	-	
Construction materials	-	-	-	-	-	-	-	
Textile and Leather	1.0	-	-	-	4	-	-	
Non-specified	25.8	-	-	-	93	-	-	
Transport	20.3	-	-	-	73	-	-	
International civil aviation	-	-	-	-	-	-	-	
Domestic air	-	-	-	-	-	-	-	
Road	-	-	-	-	-	-	-	
Rail	20.3	-	-	-	73	-	-	
Pipeline transport	-	-	-	-	-	-	-	
Internal navigation	-	-	-	-	-	-	-	
Non-specified	-	-	-	-	-	-	-	
Other sectors	2 103.0	-		-	7 324		-	
Agriculture	18.3	-	-	-	66	-	-	
Commerce and public services	798.8	_	_	_	2 876	_	_	
Residential	1 285.9	-	-	-	4 382	-	-	
	1 200.9	-	-	-	I 4.30∠	-	-	

### **METHODOLOGICAL EXPLANATIONS**

Bilance of electricity contains annual data on production, import, export, transformation, consumption and distribution of electricity in Montenegro in 2017. 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
ТJ	1	238,8	2,388 x 10⁻⁵	0.2778
Gcal	4,1868 x 10 <sup>-3</sup>	1	10-7	1,163 x 10 <sup>-3</sup>
Mtoe	4,1868 x 10 <sup>-4</sup>	10 <sup>7</sup>	1	11630
GWh	3,6	860	8,6 x 10 <sup>-5</sup>	1

Unit of measure:	Znaci:
$\begin{array}{lll} TJ &= terajoule \\ Gcal &= gigacalorie \\ Mtoe &= milion  tones  of oil equivalent \\ GWh &= gigawatt  hour \\ t &= tonne \end{array}$	<ul> <li>= no occurence of event</li> <li>= data not available</li> <li>0 = value less than 0,5 of the unit of measure</li> <li>1) = footnote</li> </ul>

According to the Revision policy of the Statistical Office, the final data shall be published with the date defined by the Statistical Release Calendar.

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