MONTENEGRO
STATISTICAL OFFICE
R E L E A S E
No. 202
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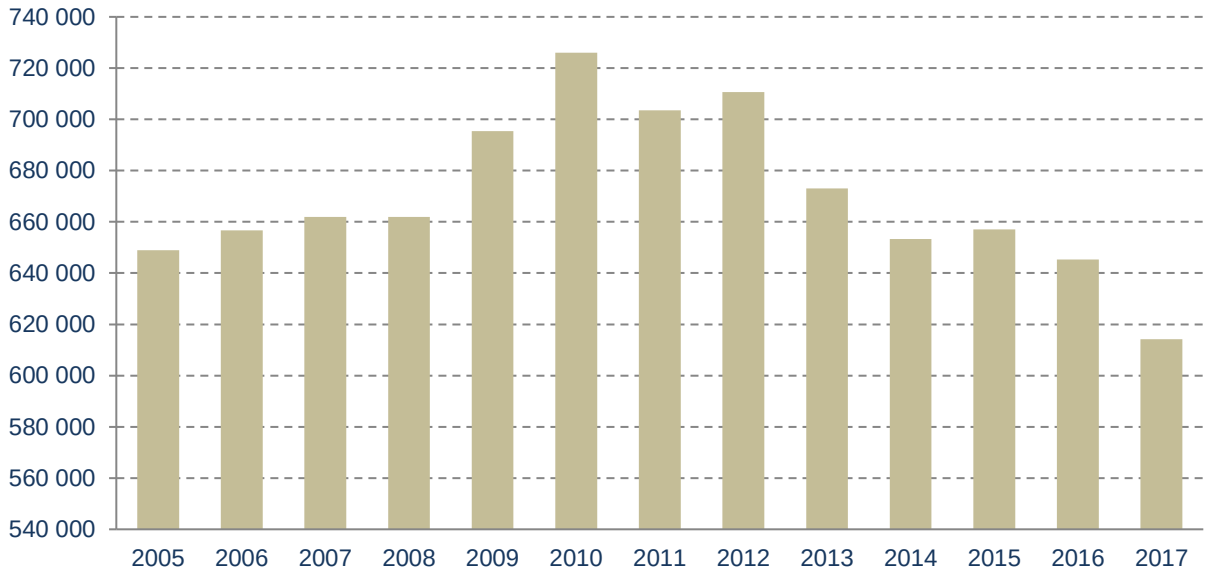
When using these data, please indicate the source

Balance of wood fuels
2017 (p)

Primary production from firewood and wood resideu in Montenegro in 2017 was 849 050 m3, wood chips 16 178 tons and wood briquettes and wood pellets was 54 758 tons.

Final consumption firewood in households was 614 219 m3, in industry 36 663 m3 and other sectors 21 153 m3.

Graph 1. Furewood consumption of firewood in household sector in Montenegro, in m³



(p) - preliminary data

Table 1. Balance of wood fuels in Montenegro, 2017

EUROSTAT form

	Firewood	Wood resideu	Wood chips	Wood briquettes	Wood pellets	Charcoal
	m³	m³	t	t	t	t
Primary production	766 594	82 456	16 178	350	54 408	-
Imports	3	60	26	-	1 328	280
Stock change	-	-	-	15	129	-
Exports	- 16 806	- 37 395	- 16 204	-	- 37 154	- 7
Bunkers	-	-	-	-	-	-
Statistical differences	-	-	-	-	-	-
Gross inland consumption	**749 791**	**45 121**	**0**	**365**	**18 711**	**273**
Transformation - input	**- 77 756**	-	-	-	-	-
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	- 77 756	-	-	-	-	-
Oil refineries	-	-	-	-	-	-
Transformation - output	-	-	-	-	-	**660**
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	-	-	-	-	-	660
Oil refineries	-	-	-	-	-	-
Exchanges and transfers, returns	-	-	-	-	-	-
Interproduct transfers	-	-	-	-	-	-
Products transferred	-	-	-	-	-	-
Returns from petrochem. Industry	-	-	-	-	-	-
Consumption of the energy branch	-	-	-	-	-	-
Distribution losses	-	-	-	-	-	-
Available for final consumption	**672 035**	**45 121**	-	**365**	**18 711**	**933**
Final non-energy consumption	-	-	-	-	-	-
Final energy consumption	**672 035**	**45 121**	-	**365**	**18 711**	**933**
Industry	**36 663**	-	-	**56**	**568**	**2**
Iron & steel industry	-	-	-	-	-	-
Non-ferrous metal industry	-	-	-	-	-	-
Chemical industry	7 256	-	-	-	-	-
Glass, pottery & building mat. Industry	-	-	-	-	59	-
Ore-extraction industry	-	-	-	-	-	-
Food, drink & tobacco industry	26 118	-	-	-	10	2
Textile, leather & clothing industry	447	-	-	-	24	-
Paper and printing	-	-	-	-	-	-
Engineering & other metal industry	2 042	-	-	-	-	-
Other industries	800	-	-	56	475	-
Transport	-	-	-	-	-	-
Railways	-	-	-	-	-	-
Road transport	-	-	-	-	-	-
Air transport	-	-	-	-	-	-
Inland navigation	-	-	-	-	-	-
Other transport	-	-	-	-	-	-
Households, commerce, pub. auth.etc	**635 372**	**45 121**	-	**309**	**18 143**	**931**
Households	614 219	44 076	-	167	14 467	596
Agriculture	-	-	-	-	-	-
Other sectors	21 153	1 045	-	142	3 676	335

Table 2. Balance of wood fuels in Montenegro, 2017

EUROSTAT form

	Firewood	Wood resideu	Wood chips	Wood briquettes	Wood pellets	Charcoal
	TJ					
Primary production	7 035	611	203	6	917	-
Imports	-	-	-	-	22	8
Stock change	-	-	-	-	2	-
Exports	- 154	- 277	- 203	-	- 626	-
Bunkers	-	-	-	-	-	-
Statistical differences	-	-	-	-	-	-
Gross inland consumption	**6 881**	**334**	**0**	**6**	**315**	**8**
Transformation - input	**- 714**	-	-	-	-	-
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	- 714	-	-	-	-	-
Oil refineries	-	-	-	-	-	-
Transformation - output	-	-	-	-	-	**19**
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	-	-	-	-	-	19
Oil refineries	-	-	-	-	-	-
Exchanges and transfers, returns	-	-	-	-	-	-
Interproduct transfers	-	-	-	-	-	-
Products transferred	-	-	-	-	-	-
Returns from petrochem. Industry	-	-	-	-	-	-
Consumption of the energy branch	-	-	-	-	-	-
Distribution losses	-	-	-	-	-	-
Available for final consumption	**6 167**	**334**	-	**6**	**315**	**27**
Final non-energy consumption	-	-	-	-	-	-
Final energy consumption	**6 167**	**334**	-	**6**	**315**	**27**
Industry	**337**	-	-	**1**	**9**	-
Iron & steel industry	-	-	-	-	-	-
Non-ferrous metal industry	-	-	-	-	-	-
Chemical industry	67	-	-	-	-	-
Glass, pottery & building mat. Industry	-	-	-	-	1	-
Ore-extraction industry	-	-	-	-	-	-
Food, drink & tobacco industry	240	-	-	-	-	-
Textile, leather & clothing industry	4	-	-	-	-	-
Paper and printing	-	-	-	-	-	-
Engineering & other metal industry	19	-	-	-	-	-
Other industries	7	-	-	1	8	-
Transport	-	-	-	-	-	-
Railways	-	-	-	-	-	-
Road transport	-	-	-	-	-	-
Air transport	-	-	-	-	-	-
Inland navigation	-	-	-	-	-	-
Other transport	-	-	-	-	-	-
Households, commerce, pub. auth.etc	**5 830**	**334**	-	**5**	**306**	**27**
Households	5 636	326	-	3	244	17
Agriculture	-	-	-	-	-	-
Other sectors	194	8	-	2	62	10

Table 3. Balance of wood fuels in Montenegro, 2017

IEA form

	Firewood	Wood residue	Wood chips	Wood briquettes	Wood pellets	Charcoal
	m³	m³	t	t	t	t
Production	766 594	82 456	16 178	350	54 408	-
Imports	3	60	26	-	1 328	280
Exports	- 16 806	- 37 395	- 16 204	-	- 37 154	- 7
Intl. marine bunkers	-	-	-	-	-	-
Stock change	-	-	-	15	129	-
Domestic supply	**749 791**	**45 121**	**0**	**365**	**18 711**	**273**
Transfers	-	-	-	-	-	-
Statistical difference	-	-	-	-	-	-
Transformations	**- 77 756**	-	-	-	-	**660**
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	- 77 756	-	-	-	-	660
Oil refineries	-	-	-	-	-	-
Other transformation sector	-	-	-	-	-	-
Energy sector	-	-	-	-	-	-
Coal mines	-	-	-	-	-	-
Thermal power plants and CHPs	-	-	-	-	-	-
Thermal power plants (Autoproducers)	-	-	-	-	-	-
Heat-only plants (Autoproducers)	-	-	-	-	-	-
Patent fuel, briquetting and coke plants	-	-	-	-	-	-
Hydro power plants	-	-	-	-	-	-
Distribution losses	-	-	-	-	-	-
Final consumption	**672 035**	**45 121**	-	**365**	**18 711**	**933**
Industry sector	**36 663**	-	-	**56**	**568**	**2**
Iron and steel	-	-	-	-	-	-
Chemical and petrochemical	7 256	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	59	-
Transport equipment	-	-	-	-	-	-
Machinery	2 042	-	-	-	-	-
Mining and Quarrying	-	-	-	-	-	-
Food and tobacco	26 118	-	-	-	10	2
Paper, pulp and print	-	-	-	-	-	-
Wood and wood products	800	-	-	-	-	-
Construction materials	-	-	-	-	-	-
Textile and Leather	447	-	-	-	24	-
Non-specified	-	-	-	56	475	-
Transport	-	-	-	-	-	-
International civil aviation	-	-	-	-	-	-
Domestic air	-	-	-	-	-	-
Road	-	-	-	-	-	-
Rail	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-
Internal navigation	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-
Other sectors	**635 372**	**45 121**	-	**309**	**18 143**	**931**
Agriculture	-	-	-	-	-	-
Commerce and public services	21 153	1 045	-	142	3 676	335
Residential	614 219	44 076	-	167	14 467	596
Non-specified	-	-	-	-	-	-

Table 4. Balance of wood fuels in Montenegro, 2017

IEA form

	Firewood	Wood residue	Wood chips	Wood briquettes	Wood pellets	Charcoal
	TJ					
Production	7 035	611	203	6	917	-
Imports	-	-	-	-	22	8
Exports	- 154	- 277	- 203	-	- 626	-
Intl. marine bunkers	-	-	-	-	-	-
Stock change	-	-	-	-	2	-
Domestic supply	**6 881**	**334**	**0**	**6**	**315**	**8**
Transfers	-	-	-	-	-	-
Statistical difference	-	-	-	-	-	-
Transformations	**- 714**	-	-	-	-	**19**
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	- 714	-	-	-	-	19
Oil refineries	-	-	-	-	-	-
Other transformation sector	-	-	-	-	-	-
Energy sector	-	-	-	-	-	-
Coal mines	-	-	-	-	-	-
Thermal power plants and CHPs	-	-	-	-	-	-
Thermal power plants (Autoproducers)	-	-	-	-	-	-
Heat-only plants (Autoproducers)	-	-	-	-	-	-
Patent fuel, briquetting and coke plants	-	-	-	-	-	-
Hydro power plants	-	-	-	-	-	-
Distribution losses	-	-	-	-	-	-
Final consumption	**6 167**	**334**	-	**6**	**315**	**27**
Industry sector	**337**	-	-	**1**	**9**	-
Iron and steel	-	-	-	-	-	-
Chemical and petrochemical	67	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	1	-
Transport equipment	-	-	-	-	-	-
Machinery	19	-	-	-	-	-
Mining and Quarrying	-	-	-	-	-	-
Food and tobacco	240	-	-	-	-	-
Paper, pulp and print	-	-	-	-	-	-
Wood and wood products	7	-	-	-	-	-
Construction materials	-	-	-	-	-	-
Textile and Leather	4	-	-	-	-	-
Non-specified	-	-	-	1	8	-
Transport	-	-	-	-	-	-
International civil aviation	-	-	-	-	-	-
Domestic air	-	-	-	-	-	-
Road	-	-	-	-	-	-
Rail	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-
Internal navigation	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-
Other sectors	**5 830**	**334**	-	**5**	**306**	**27**
Agriculture	-	-	-	-	-	-
Commerce and public services	194	8	-	2	62	10
Residential	5 636	326	-	3	244	17
Non-specified	-	-	-	-	-	-

METHODOLOGICAL EXPLANATIONS

Bilance of wood fuels contains annual data on production, import, export, transformation, consumption and distribution of wood fuels in Montenegro in 2017. Data are presented in the natural units of measure and in TJ (terajoule).

The methodology for calculation of balance of wood fuels, 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 wood fuels are companies engaging in the producing and selling/delivering of wood fuels and households. Balance of wood fuels 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

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.).

Fuel wood is wood used directly for heating or production of charcoal.

Wood pellet is fuel made from wood mass compressed and extruded through a die. The starting raw material often represents large or small (sawdust) residues from mechanical processing of wood.

Wood briquette is wood biofuel of prismatic or cylindrical form obtained from compressing extruded wood material in appropriate presses.

Charcoal is a wood residue from mechanical processing of wood products.

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	$2,388 \times 10^{-5}$	0.2778
Gcal	$4,1868 \times 10^{-3}$	1	10^{-7}	$1,163 \times 10^{-3}$
Mtoe	$4,1868 \times 10^{-4}$	10^{7}	1	11630
GWh	3,6	860	$8,6 \times 10^{-5}$	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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