

## Montenegro Statistical Office

IV Proleterske No 2, 81000 Podgorica

+382 20 230 811 (fax) +382 20 230 814

contact@monstat.org mediji@monstat.org

www.monstat.org

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# Balance of wood fuels

# 2021

Primary production from firewood and wood residue and chips in Montenegro in 2021 was 790 506 m3, wood pellets was 73 401 tons.

Final consumption firewood in households was 566 303 m3, in industry 42 731 m3 and other sectors 27 923 m3.

Graph 1. Balance of wood fuels in Montenegro, 2021

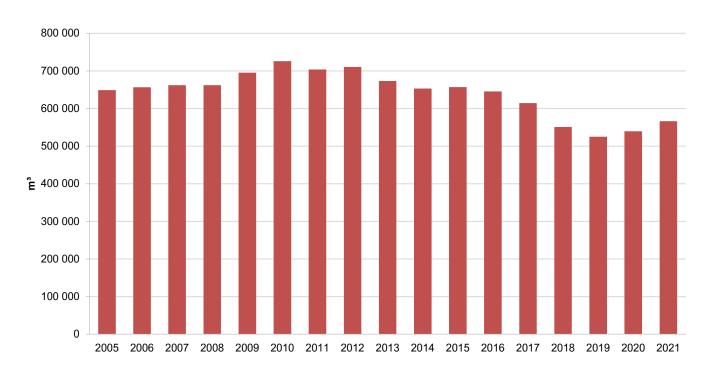


Table 1. Balance of wood fuels in Montenegro, 2021

	Firewood	Wood residue and chips	Wood pellets	Charcoal
	m³	m³	t	t
Production	748 601	41 905	73 401	
Imports	(0)	-	1 680	29
Exports	(0)	-	-53 708	
Intl. marine bunkers	-	-	-	
Stock change	-	-	-	
Domestic supply	748 601	41 905	21 373	29
Transfers	-	-	-	
Statistical difference	-	-	-	
Transformations	- 111 644	-	-	-1 02
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	-111 644	-	-	1 02
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	636 957	41 905	21 373	1 32
Industry sector	42 731	(0)	460	(
Iron and steel	-	-	-	`
Chemical and petrochemical	5 806	-	-	
Non-ferrous metals	-	-	-	
Non-metallic minerals	_	-	(0)	
Transport equipment	_	-	-	
Machinery	1 519	-	_	
Mining and Quarrying	_	_	_	
Food and tobacco	34 310	(0)	(0)	(
Paper, pulp and print	_	-	-	`
Wood and wood products	1 096	_	_	
Construction materials	_	_	_	
Textile and Leather	(0)	_	(0)	
Non-specified	(0)	_	460	
Transport	-	_	-	
International civil aviation	_	_	_	
Domestic air	_	_	_	
Road	_	_	_	
Rail	_	_	_	
	_	-	_	
Pipeline transport		-	_	
Internal navigation		_	_	
Non-specified Other sectors	594 226	41 905	20 913	1 3
	334 440	71 303	20 313	1 3/
	2 500			
Agriculture Commerce and public services	2 589 25 334	- 1 268	- 4 301	61

Table 2. Balance of wood fuels in Montenegro, 2021

	Firewood	Wood residue and chips	Wood pellets	Charcoal				
		TJ						
Production	6 869	311	1 237					
Imports	(0)	-	28					
Exports	(0)	-	-905					
Intl. marine bunkers	-	-	-					
Stock change	-	-	-					
Domestic supply	6 869	311	360					
Transfers	-	-	-					
Statistical difference	-	-	-					
Transformations	-1 024	-	-	3				
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	-	-	-					
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	-1 024	_	-	;				
Hydro power plants	_	_	_					
Distribution losses	_	_	-					
Final consumption	5 845	311	360	4				
Industry sector	392	(0)	8	(				
Iron and steel	-	-	-					
Chemical and petrochemical	53	-	-					
Non-ferrous metals	-	-	-					
Non-metallic minerals	-	-	(0)					
Transport equipment	-	-	-					
Machinery	14	-	-					
Mining and Quarrying	-	-	-					
Food and tobacco	315	(0)	(0)	(				
Paper, pulp and print	_	-	-					
Wood and wood products	10	_	-					
Construction materials	_	_	-					
Textile and Leather	(0)	_	(0)					
Non-specified	(0)	_	8					
Transport	_	_	_					
nternational civil aviation	_	_	_					
Domestic air	_	_	_					
Road	_	_	_					
Rail	_	_	-					
Pipeline transport	_	_	_					
Pipeline transport Internal navigation		_	_					
_		-	-					
Non-specified Other sectors	5 453	- 311	352					
Agriculture	24	311	332	•				
	232	9	- 72					
Commerce and public services	5 197	9	280					

#### **METHODOLOGICAL NOTES**

Bilance of wood fuels contains annual data on production, import, export, transformation, consumption and distribution of wood fuels in Montenegro in 2021. 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.

#### Data sources (coverage)

The reporting units for balance of wood fuels are companies engaged in the producing and selling/delivering of wood fuels. 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**

*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 <sup>-5</sup>	0.2778
Gcal	4.1868 x 10 <sup>-3</sup>	1	10 <sup>-7</sup>	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

It may happen that the total sum does not match the number of individual data due to rounding of numbers.

When using the data, state: "Data source: Statistical Office of Montenegro - MONSTAT"

More information, as well as detailed methodological explanations can be found in the section: Balance of wood fuels

### Unit of measure:

TJ = terajoule
Gcal = gigacalorie

Mtoe = milion tones of oil equivalent

GWh = gigawatt hour

t = tonne

# Symbol:

- = no occurence of event

... = data not available

(0) = statistics irelevant data (small data value)

1) = footnote