

## Montenegro Statistical Office

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Preliminary data

# Balance of wood fuels

## 2023

Primary production from firewood and wood residue and chips in Montenegro in 2023 was 788 907 m3, wood pellets was 93 480 tonnes.

Final consumption firewood in households was 510 697 m3, in industry 50 956 m3 and other sectors 38 736 m3.

Graph 1. Balance of wood fuels in Montenegro, 2023

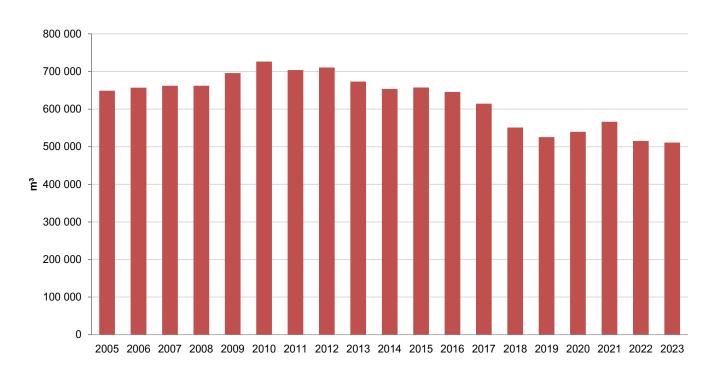


Table 1. Balance of wood fuels in Montenegro, 2023

	Firewood	Wood residue and chips	Wood pellets	Charcoal
	m³	m³	t	t
Production	750 689	38 218	93 480	_
Imports	(0)	-	135	326
Exports	(0)	-	-72 011	_
Intl. marine bunkers	-	-	-	_
Stock change	-	-	-	_
Domestic supply	750 689	38 218	21 604	326
Transfers	-	-	-	-
Statistical difference	-	-	-	-
Transformations	-150 300	-	-	1 078
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	-150 300	_	-	1 078
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	600 389	38 218	21 604	1 404
Industry sector	50 956	(0)	561	(0)
Iron and steel	-	-	-	(•)
Chemical and petrochemical	7 281	_	_	_
Non-ferrous metals		_	_	_
Non-metallic minerals	_	_	(0)	_
Transport equipment	_	_	(0)	_
Machinery	1 343	_	_	_
Mining and Quarrying	1 040	_	<u>-</u>	
Food and tobacco	41 299	(0)	(0)	(0)
Paper, pulp and print	41 233	(0)	(0)	(0)
Wood and wood products	1 033	-	(0)	-
Construction materials	1 033	-	-	-
Textile and Leather	- (0)	-	- (0)	-
	(0)	-	(0)	-
Non-specified	(0)	-	561	-
Transport	-	-	-	-
International civil aviation	-	-	-	-
Domestic air	-	-	-	-
Road	-	-	-	-
Rail	-	-	-	-
Pipeline transport	-	-	-	-
Internal navigation	-	-	-	-
Non-specified	-	-	-	-
Other sectors	549 433	38 218	21 043	1 404
Agriculture, forestry and fishing	2 639	(0)	-	
Commercial sector and public services	36 097	1 542	5 439	743
Residential	510 697	36 676	15 604	661

Table 2. Balance of wood fuels in Montenegro, 2023

	Firewood	Wood residue and chips	Wood pellets	Charcoal			
	TJ						
Production	6 888.6	283.3	1 575.0				
Imports	-	-	2.3	10.			
Exports	-	-	-1 213.2				
Intl. marine bunkers	-	-	-				
Stock change	-	-	-				
Domestic supply	6 888.6	283.3	364.0	10.			
Transfers	-	-	-				
Statistical difference	-	-	-				
Transformations	(1 379.2)	-	-	33			
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	(1 379.2)	-	-	33			
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	5 509.4	283.3	364.0	43			
Industry sector	467.6	-	9.5				
Iron and steel	-	-	_				
Chemical and petrochemical	66.8	-	_				
Non-ferrous metals	_	-	_				
Non-metallic minerals	_	-	_				
Transport equipment	_	-	_				
Machinery	12.3	_	_				
Mining and Quarrying	-	_	_				
Food and tobacco	379.0	_	_				
Paper, pulp and print	-	_	_				
Wood and wood products	9.5	_	_				
Construction materials	-	_	_				
Textile and Leather	_	_	_				
Non-specified	_	_	9.5				
Transport	_	_	-				
International civil aviation	_	_	_				
			_				
Domestic air	_	-	-				
Road	_	-	-				
Rail	_	-	-				
Pipeline transport	-	-	-				
Internal navigation	_	-	-				
Non-specified	5044.0	-	-	4.0			
	5 041.8	283.3	354.5	43			
Other sectors	212						
Other sectors Agriculture, forestry and fishing Commercial sector and public services	24.2 331.2	- 11.4	- 91.6	22			

#### **METHODOLOGICAL NOTES**

Bilance of wood fuels contains annual data on production, import, export, transformation, consumption and distribution of electricity in Montenegro in 2023. 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 production of wood fuels. 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 <sup>-5</sup>	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

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: <u>Balance of</u> 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