

RELEASE 150/2022

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Preliminary data

## Balance of wood fuels

**2021**

Primary production from firewood, wood residues, and chips in Montenegro in 2021 was 790 506 m<sup>3</sup>, wood pellets was 73 401 tonnes.

Final consumption of firewood in households was 566 303 m<sup>3</sup>, in industry 42 731 m<sup>3</sup>, and other sectors 27 923 m<sup>3</sup>.

**Graph 1.** Final consumption of firewood by households in Montenegro, in m<sup>3</sup>

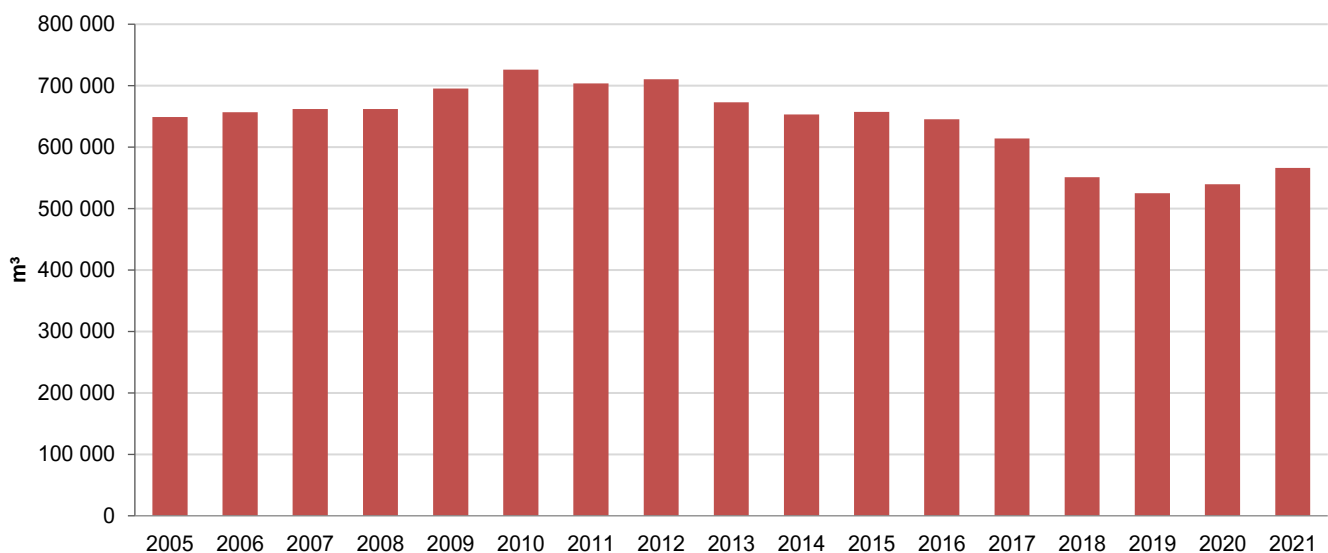


Table 1. Balance of wood fuels in Montenegro, 2021

	Firewood	Wood residues and chips	Wood pellets	Charcoal
	m <sup>3</sup>	m <sup>3</sup>	t	t
Production	748 601	41 905	73 401	-
Imports	(0)	-	1 680	299
Exports	(0)	-	-53 708	-
Intl. marine bunkers	-	-	-	-
Stock change	-	-	-	-
<b>Domestic supply</b>	<b>748 601</b>	<b>41 905</b>	<b>21 373</b>	<b>299</b>
Transfers	-	-	-	-
Statistical difference	-	-	-	-
<b>Transformations</b>	<b>- 111 644</b>	<b>-</b>	<b>-</b>	<b>-1028</b>
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	-	-	1 028
Oil refineries	-	-	-	-
Other transformation sector	-	-	-	-
<b>Energy sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Coal mines	-	-	-	-
Thermal power plants and CHPs	-	-	-	-
Thermal power plants (Autoproducers)	-	-	-	-
Heat-only plants (Autoproducers)	-	-	-	-
Patent fuel, briquetting and coke plants	-	-	-	-
Hydro power plants	-	-	-	-
<b>Distribution losses</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Final consumption</b>	<b>636 957</b>	<b>41 905</b>	<b>21 373</b>	<b>1 327</b>
<b>Industry sector</b>	<b>42 731</b>	<b>(0)</b>	<b>460</b>	<b>(0)</b>
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)	(0)
Paper, pulp and print	-	-	-	-
Wood and wood products	1 096	-	-	-
Construction materials	-	-	-	-
Textile and Leather	(0)	-	(0)	-
Non-specified	(0)	-	460	-
<b>Transport</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
International civil aviation	-	-	-	-
Domestic air	-	-	-	-
Road	-	-	-	-
Rail	-	-	-	-
Pipeline transport	-	-	-	-
Internal navigation	-	-	-	-
Non-specified	-	-	-	-
<b>Other sectors</b>	<b>594 226</b>	<b>41 905</b>	<b>20 913</b>	<b>1 327</b>
Agriculture	2 589	-	-	-
Commerce and public services	25 334	1 268	4 301	617
Residential	566 303	40 637	16 612	710

Table 2. Balance of wood fuels in Montenegro, 2021

	Firewood	Wood residues and chips	Wood pellets	Charcoal
	TJ			
Production	6 869	311	1 237	-
Imports	(0)	-	28	9
Exports	(0)	-	-905	-
Intl. marine bunkers	-	-	-	-
Stock change	-	-	-	-
<b>Domestic supply</b>	<b>6 869</b>	<b>311</b>	<b>360</b>	<b>9</b>
Transfers	-	-	-	-
Statistical difference	-	-	-	-
<b>Transformations</b>	<b>-1 024</b>	<b>-</b>	<b>-</b>	<b>32</b>
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	-	-	-	-
<b>Energy sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Coal mines	-	-	-	-
Thermal power plants and CHPs	-	-	-	-
Thermal power plants (Autoproducers)	-	-	-	-
Heat-only plants (Autoproducers)	-	-	-	-
Patent fuel, briquetting and coke plants	-1 024	-	-	32
Hydro power plants	-	-	-	-
<b>Distribution losses</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Final consumption</b>	<b>5 845</b>	<b>311</b>	<b>360</b>	<b>41</b>
<b>Industry sector</b>	<b>392</b>	<b>(0)</b>	<b>8</b>	<b>(0)</b>
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)	(0)
Paper, pulp and print	-	-	-	-
Wood and wood products	10	-	-	-
Construction materials	-	-	-	-
Textile and Leather	(0)	-	(0)	-
Non-specified	(0)	-	8	-
<b>Transport</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
International civil aviation	-	-	-	-
Domestic air	-	-	-	-
Road	-	-	-	-
Rail	-	-	-	-
Pipeline transport	-	-	-	-
Internal navigation	-	-	-	-
Non-specified	-	-	-	-
<b>Other sectors</b>	<b>5 453</b>	<b>311</b>	<b>352</b>	<b>41</b>
Agriculture	24	-	-	-
Commerce and public services	232	9	72	19
Residential	5 197	301	280	22

## METHODOLOGICAL NOTES

Balance 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).

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 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.

### Definitions

*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).

*Gross inland energy consumption is calculated as it follows:*

Primary production  
 + Import  
 - Export  
 + Stock changes  
 - Marine bunkers

*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.

*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 intermediate 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.).

Final consumption of energy is calculated as it follows:

- Gross domestic consumption of energy
- + Transformations
- + Changes and transfers, reverse flows
- - Own consumption in energy sector
- - Energy distribution and transmission losses

### 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.

The conversion referring to particular energy unit is shown in the 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 tonnes of oil equivalent  
 GWh = gigawatt hour  
 t = tonne

#### Symbol:

- = no occurrence of event  
 ... = data not available  
 (0) = statistics irrelevant data (small data value)  
 1) = footnote

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](#)*

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