

Balance of wood fuels 2019

Primary production from firewood and wood residue and chips in Montenegro in 2019 was 770 877 m³, wood pellets was 89 069 tons.

Final consumption firewood in households was 525 157 m³, in industry 40 746 m³ and other sectors 26 947 m³.

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

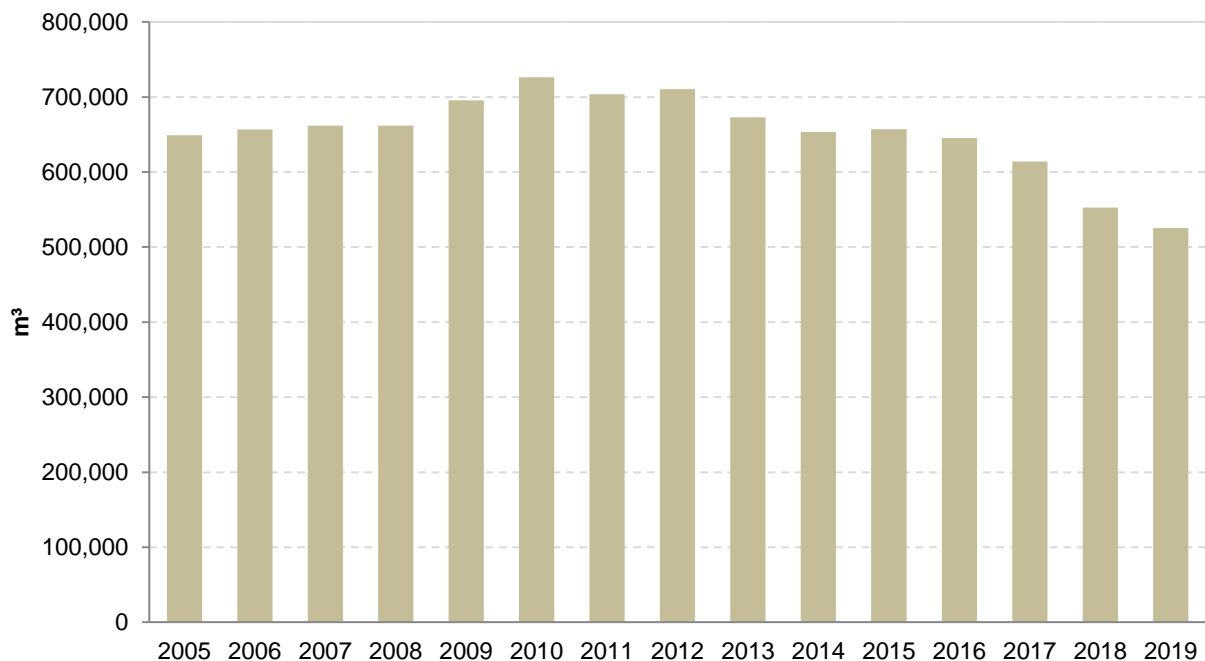


Table 1. Balance of wood fuels in Montenegro, 2019

	Firewood	Wood residue and chips	Wood pellets	Charcoal
	m ³	m ³	t	t
Production	732 010	38 867	89 069	-
Imports	-	63	1 862	404
Exports	534	-	-71 254	-9
Intl. marine bunkers	-	-	-	-
Stock change	-	-	-	-
Domestic supply	732 544	38 905	19 677	395
Transfers	-	-	-	-
Statistical difference	-	-	-	-
Transformations	-139 667	-	-	728
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	-139 667	-	-	728
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	592 877	38 905	19 677	1 123
Industry sector	40 746	-	422	(0)
Iron and steel	-	-	-	-
Chemical and petrochemical	5 395	-	-	-
Non-ferrous metals	-	-	-	-
Non-metallic minerals	-	-	(0)	-
Transport equipment	-	-	-	-
Machinery	1 930	-	-	-
Mining and Quarrying	-	-	-	-
Food and tobacco	32 340	-	(0)	(0)
Paper, pulp and print	-	-	-	-
Wood and wood products	1 081	-	-	-
Construction materials	-	-	-	-
Textile and Leather	(0)	-	(0)	-
Non-specified	(0)	-	422	-
Transport	-	-	-	-
International civil aviation	-	-	-	-
Domestic air	-	-	-	-
Road	-	-	-	-
Rail	-	-	-	-
Pipeline transport	-	-	-	-
Internal navigation	-	-	-	-
Non-specified	-	-	-	-
Agriculture, residential and other	552 131	38 905	19 255	1 123
Agriculture	2 597	-	-	-
Residential	525 157	37 685	15 117	648
Other	24 377	1 220	4 138	475

Table 2. Balance of wood fuels in Montenegro, 2019

	Firewood	Wood residue and chips	Wood pellets	Charcoal
	TJ			
Production	6 717	3 887	1 501	-
Imports	-	6	31	12
Exports	5	-	(1 200)	(0)
Intl. marine bunkers	-	-	-	-
Stock change	-	-	-	-
Domestic supply	6 722	3 891	332	12
Transfers	-	-	-	-
Statistical difference	-	-	-	-
Transformations	-1 282	-	-	22
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	-1 282	-	-	22
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	5 440	3 891	332	35
Industry sector	374	-	7	-
Iron and steel	-	-	-	-
Chemical and petrochemical	50	-	-	-
Non-ferrous metals	-	-	-	-
Non-metallic minerals	-	-	-	-
Transport equipment	-	-	-	-
Machinery	18	-	-	-
Mining and Quarrying	-	-	-	-
Food and tobacco	297	-	-	-
Paper, pulp and print	-	-	-	-
Wood and wood products	10	-	-	-
Construction materials	-	-	-	-
Textile and Leather	-	-	-	-
Non-specified	-	-	7	-
Transport	-	-	-	-
International civil aviation	-	-	-	-
Domestic air	-	-	-	-
Road	-	-	-	-
Rail	-	-	-	-
Pipeline transport	-	-	-	-
Internal navigation	-	-	-	-
Non-specified	-	-	-	-
Agriculture, residential and other	5 067	3 891	324	35
Agriculture	24	-	-	-
Residential	4 819	3 769	255	20
Other	224	122	70	15

METHODOLOGICAL EXPLANATIONS

Balance of wood fuels contains annual data on production, import, export, transformation, consumption and distribution of wood fuels in Montenegro in 2019. 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 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 occurrence of event
... = data not available
0 = value less than 0,5 of the unit of measure
1) = footnote

It may happen that the total sum does not match the number of individual data, and that the cumulative data is not always equal to the sum of individual quarterly results due to rounding of numbers.

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