



Directorate of Forestry, Hunting and Wood industry

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Date:09/20/2024

To: UNECE/FAO Forestry and Timber Section Forests, Land and Housing Division
United Nations Economic Commission for Europe

Subject: Request for preparing a country market

1. General economic trends affecting forests and forest industries sector.

The Regular Economic Report of the World Bank for the Western Balkans countries, expects a moderate acceleration of the economic growth in the Western Balkans of 3.0 percent in 2023, after deceleration in 2023. The growth should be supported by the EU recovery, being the main trade partner of the Western Balkans, and reduced inflation, which will strengthen disposable income and sustain spending (table 1).

Real GDP growth rate, as %	World Bank		IMF		European Commission	
	2023	2024	2023	2024	2023	2024
Montenegro	4.8	3.2	4.5	3.7	4.9	2.7
Serbia	2.0	3.0	2.0	3.0	2.2	3.1
Bosnia and Herzegovina	2.2	2.8	2.0	3.0	1.5	2.0
Kosovo	3.2	3.9	3.8	4.0	n/p	n/p
Albania	3.6	3.2	3.6	3.3	3.5	3.1
North Macedonia	1.8	2.5	2.5	3.2	2.0	2.7

Sources: World Bank - Regular Economic Report for the Western Balkans Countries, autumn 2023; IMF – Global Economic Outlook, October 2023; European Commission – Economic Forecast, autumn 2023.

Table 1. GDP growth Forecast for Montenegro and the Western Balkans countries.

In 2023, Montenegro grew faster than the regional average, while according to estimates of international organisation, the growth of the Montenegrin economy will slow down in 2024, the forecast of the European Commission is 2.7 percent, while the IMF and the World Bank expect 3.7 and 3.2 percent respectively.

In 2022, the Montenegrin economy showed a high degree of resilience, along with the strong economic growth of 6.4 percent, where the fast recovery of tourism, dynamic private spending, and high inflow of foreign direct investments contributed. On the other hand,



record-high inflation limited to a great extent the purchasing power and led to stagnation of investment activity (Montenegro Economic Reform Programme 2024-2026, Government of Montenegro, January 2024).

The economic growth in the first half of 2023 intensified compared to the previous year and was 6.6 percent in real terms, with the largest contribution coming from export of goods and services (impact of 8.4 percentage points) and personal consumption of households (4.9 p.p.). The recovery of investment activity is particularly important, whereby the fixed capital formation added 0.9 percentage points to the economic growth for the first six months. The economic growth in 2023 is prominently driven by increase in revenues from tourism, which according to the preliminary data of the Central Bank of Montenegro for nine months of 2023 indicate that these revenues amounted to EUR 1.36 billion, which is an increase of 48.6 percent relative to the same period of the previous year, but they are also higher by 33.9 percent relative to the pre-crisis period (2019). According to the preliminary MONSTAT data, in the period January-July 2023, in total accommodation (collective and individual) 1,454,210 tourists visited Montenegro, with 9,244,842 overnight stays, which is higher by 27.9 and 50.6 percent, respectively, year-on-year. For the first nine months of 2023, electricity export was higher by 36.9 percent, while retail trade grew at a rate of 20 percent. In the same period, the carriage of passengers in airports recorded an increase of 34.4 percent compared to 2022. Favourable weather conditions resulted in increased electricity generation of 33.1 percent for nine months of 2023. The mining and quarrying sector grew at the rate of 2.4 percent, while the manufacturing industry recorded a decline of 9.7 percent. The construction activity in three quarters of 2023 recorded a reduced value of executed construction works by 9.6 percent year-on-year (Montenegro Economic Reform Programme 2024-2026, Government of Montenegro, January 2024).

The difference of projections in the last year's ERP and new ERP is presented in the following table 2:

Real growth in 2023, in %	ERP 2023-2025	ERP 2024-2026	Divergence (as p.p.)
Real GDP growth	4.4	5.8	1.4
Household consumption	2.4	8.2	5.8
Government consumption	2.5	3.0	0.5
Investments	4.6	1.4	-3.2
Export of goods and services	9.0	12.7	3.7
Import of goods and services	5.1	10.6	5.5

Source: Projections of the Ministry of Finance

Table 2. Divergence between the last year's ERP and ERP and most recent estimates for 2023 .



2. Policy measures taken in your country over the past 18 months, which might have a bearing on forest management or production and trade on forest product.

➤ **Raw material supply security;**

The Ministry of Agriculture, Forestry and Water Management is, in accordance with the Sustainable Development Strategy until 2030, the Revised Forestry Development Strategy (2018-2023), the 2020 Concessional Forest Use Reorganization Program, and the 2023-2024 Accession Program of Montenegro to the European Union and the Government's Medium-term Work Program 2023-2025 year, drafted the Proposal for the Law of Forest. The proposal essentially implies the abandonment of the concession model of forest use in Montenegro and the reorganization of the sector, the key component of which is the formation of a state-owned forest management company.

Due to its reform character, the Bill was formed on the basis of prepared basic documents (Economic analysis of the use of state-owned forests, Feasibility study of the establishment of a state enterprise for forest management in Montenegro, Balance sheets in the process of reorganization of the forestry sector in Montenegro), which done on the basis of consultations with institutions in the forestry sector, the professional public and interested business entities. After sectoral consultations, consultations with business entities in the forestry and wood industry sectors and public hearings, which are mandatory under the current Forest Law, the text was sent to the European Commission for its opinion.

Ministry of Agriculture, Forestry and Water Management received suggestions and comments from experts from the World Bank, which, together with the French development agency AFD, wants to support the reform process with the aim of reviving the economy in the forestry and wood industry sectors and achieving sustainability in the management of forests in Montenegro.

The reasons of the reform can be summarized as briefly as follows:

- 1) The application of the concession model of forest use has led to low state revenues in forestry and the enrichment of concessionaires in the wood trade business. The concession model caused the export of wood assortments from state forests by the concessionaires and the gray economy in the fields of forestry and wood industry. The concession model of forest use, therefore, did not achieve its goal, and the goal was the development of the wood industry in Montenegro on the basis of long-term supply of wood raw material through concession contracts.
- 2) The state's low revenues from concessions have led to a lack of investment in the cultivation and protection of forests, construction and maintenance of forest roads. Given that 70 percent of the state's income from concession fees from forest use is the income of local governments, less funds were poured into the state budget based on forest use than the funds needed for growing and protecting forests, which results in unsustainable financing of the forestry sector.



➤ **Wood in construction;**

In Montenegro, wood is recognised as a strategic sector by the government. As a renewable, bio-sourced material with carbon storage and capture capabilities, it is emerging as the cornerstone of the ecological transition. While the wood industry is expanding beyond the construction sector to include furniture, packaging and energy, legislation is emerging to support its development. Already in 2023, the Ministry Agriculture, Forestry and Water Management has been working on a new regulation, *Improved forest management and development of the wood industry based on the potential of our forest*, which will come into force until 2024 year. Timber quantities cannot increase significantly, but there is a potential for growth of GDP through increase in the degree of finalization of wood products. The state will motivate the development of the added value chain according to the principle »from the market to the forest«, that is, by generating the demand for biomass, fuelwood and installing wood products into the public buildings by green public procurement, and increased export of competitive final wood products by cluster of producers. Timber sales will be performed in a manner ensuring the stability of the market as much as possible and transparency of market prices.

➤ **Biotic and abiotic disturbances of forests, their impacts on forest products and trade and current and planned policy measures to mitigate economic and ecological impacts;**

Pests

Suppression of Pine processionary moth-PPM (*Thaumetopoea pityocampe*) in the spring of 2023 was carried out in the area of the Danilovgrad, Podgorica and Kotor regional units. Planned activities to destroy and prevent its development on a total area of 604 ha were implemented. These activities are mainly related to the mechanical destruction and burning of nests of Pine processionary moth-PPM (*Thaumetopoea pityocampe*). Forest protection from harmful insects is also carried out by taking measures against the spruce bark beetle (*Pityogenes chalcographus*), the large eight-toothed bark beetle (*Ips typographus*), fir engraver beetle (*Pityogenes curvidens*) and the sharp-dentated bark beetle (*Ips acuminatus*). Every year, pheromone traps and pheromone preparations are procured for all regional units, they provide results on their number, intensity of attacks, i.e. timely detection of the beginning of the gradation of bark beetles.



Wildland Fire in Montenegro

The factors that threaten forest ecosystems are mainly fires, abiotic factors (droughts, floods, frosts, snow, strong winds, etc.), pests and diseases. Forest fires show a worrying tendency, both in number and intensity, and as such, they pose the greatest danger to forest ecosystems in Montenegro (Srdjan Šašić, Country Project Staff in Podgorica, Landscape Fire Management in Western Balkans).

Furthermore, it has been observed that forests have become more susceptible to climate change, air pollution and fires, as well as parasitic fungi, insects. Threats to forest ecosystems in Montenegro include:

- weakening of the immunity of trees of certain tree species
- reduced productivity and bioecological stability
- intensive drying of forests, especially conifers: spruce and fir (larch on Lovćen), but also relatively weak defoliation
- the appearance of pathogenic fungal epiphytes and / or gradation of harmful insects.

All of this suggests a generally reduced resilience of forest ecosystems, which, along with inadequate management of forest ecosystems, results in an increased share of low-quality wood mass, which negatively affects the wood market (Srdjan Šašić, Country Project Staff in Podgorica, Landscape Fire Management in Western Balkans).

As part of increasing the resilience of forest ecosystems, Montenegro has joined the programme for Landscape Fire management in the Western Balkans. The program aims at regional landscape fire management, which involves intensifying activities at the national, regional and international levels (Srdjan Šašić, Country Project Staff in Podgorica, Landscape Fire Management in Western Balkans).

As part of the program, the following is done:

- a national LFM network was established by involving all participants in accordance with the Law on Protection and Rescue of Montenegro and with the LFM principle as a concept
- a national report on landscape fire management has been made
- LFM principles are incorporated into forestry strategy
- an analysis of the strengths and weaknesses of the existing system has been

The following is planned in the coming period:

- prevention as a basis for the fight against fire
- creating a threat map with LFM principles as a concept
- application of new technological solutions in the early announcement system
- planning at all levels in accordance with the Law on Protection and Rescue and with LFM principles as a concept
- intensification of education in accordance with LFM principles as a concept



➤ **Forest and the forest-based industries in the circular bioeconomy;**

By signing the Sofia Declaration, Montenegro undertook to share the climate ambition expressed in the European Green Agenda for the Western Balkans, to be climate neutral together with the EU by 2050. Previously, the National Determined Contribution, to which Montenegro committed to reduce the emission of greenhouse gases by 30 percent by 2030, was achieved in 2018. Through the revised contribution from 2021, a new target of 35 percent was set. With the next update of the National Determined Contribution in 2025, it is expected to go a step further, and to set a new goal of 45 percent reduction of gas emissions by 2030. One of the defined strategic goals in new regulation is to encourage the sustainability and competitiveness of the industry based on domestic forest, bioenergy and „green" industry and the circular economy.

➤ **Renewable energy policies and their impacts on forest products markets;**

Electricity has become Montenegro's most important strategic product as its exports are worth around 4 percent of the estimated gross domestic product (GDP) for this year, according to data from the Statistical Office of Montenegro – Monstat. In the same period last year, electricity exports were worth EUR 140 million, accounting for 24 percent of the total. This year's electricity surplus is expected to reach 818 GWh, while next year a surplus of 482 GWh is planned, according to the Energy Balance of Montenegro for 2024, which the government recently adopted. In comparison, the volume came in at 138 GWh in 2022. The results demonstrate fluctuations in hydropower production due to changes in hydrology, according to the document. Hydroelectric facilities Perućica and Piva, operated by Elektroprivreda Crne Gore (EPCG), account for half of the state-owned power utility's annual output. Hydrological conditions in 2022 were unfavorable. This year they were better than average, and in 2024 they are expected to be close to average. It was reflected in hydropower output – 1,454 GWh in 2022 and 2,150 GWh this year. The expected result in 2024 is 1,853 GWh.

Interestingly, solar power production increased fivefold this year. However, the result was 50% below the plan. The authors of the Energy Balance attributed the jump to newly installed photovoltaic units. The underperformance, on the other hand, was the result of delays in the *Solari 3000+* and *Solari 500+* schemes, implemented by EPCG. Montenegro's current photovoltaic capacity is 30 MW, and it is projected to reach 100 MW in 2024. A 5 MW solar power plant is expected to come online, while EPCG plans to inaugurate its Brana Slano and Brana Vrtac units, with 3.7 MW in total, and speed up the implementation of the programs *Solari 3000+*, *Solari 500+* and *Solari 5000+*.

Solar power production is planned at 104 GWh in 2024, or 3% of the total, but also five times more than estimated for 2023.

Power plants in Montenegro have a combined 1,080 MW in capacity.

The shutdown of the KAP aluminum smelter in Podgorica in 2021 contributed to the rise in surplus as well. The facility consumed 580 GWh per year until then. Only 18.8 GWh is planned for the firm in 2024. Over the period January-October 2023, BiH was the main export destination for



Montenegrin electricity (EUR 50 million), followed by Serbia and Slovenia (EUR 42 million each). Electricity was also sold to the Czech Republic, Switzerland, Hungary and Denmark (Balkan Green Energy News).

The Environmental Protection Fund continues to award subsidies for the implementation of the project of energy efficiency measures intended for economic society and entrepreneurs. The total amount for the distribution of funds for public tender is €300,000.00 and include the following:

- Purchase and instalation of highly pumps for heating/cooling;
- Instalation of thermal insulation on the facade;
- Purchase and instalation of contruction joinery, in particular windows and doors;

On the basis of the Agreement signed between the Municipality of Pljevlja and UNDP Montenegro (United Nations Development Programme) on the implementation of the Subsidy Model for measures to increase energy efficiency and reduce pollution in the housing sector of Pljevlja, the Municipality of Pljevlja and UNDP announce public call for subsidizing measures to increase energy efficiency in the housing sector and reduce air pollution in the municipality of Pljevlja. This public call include following:

1) Family houses (residential of individual housing):

- 1.1) Purchase and installation of heating systems based on modern forms of biomass (pellets, briquettes);
- 1.2) Purchase and installation of highly efficient heat pumps for heating the building;
- 1.3) Purchase and installation of split and multisplit systems for heating/cooling the building
- 1.4) Installation of thermal insulation on the facade of the residential building;

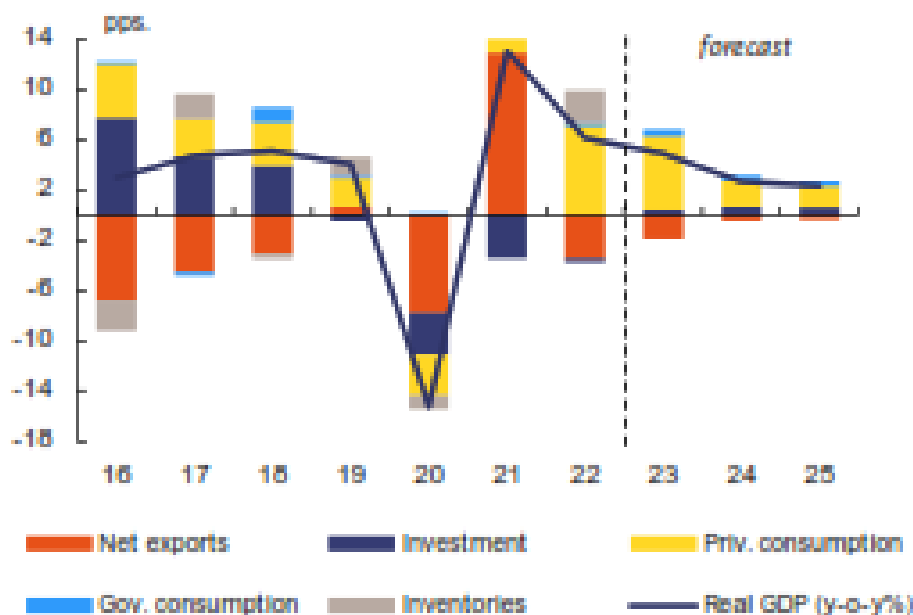
2) Flats (housing facilities of collective housing):

- 2.1) Purchase and installation of heating systems based on modern forms of biomass (pellets, briquettes);
- 2.2) Purchase and installation of highly efficient heat pumps for heating the flat;
- 2.3) Purchase and instalation of contruction joinery, in particular windows and doors;



3. Market drivers- and how they effect the market for forest products in your country, whether passively and negatively. This may include but is not limited to contruction trends, currency exchange rate fluctuations, export and import restrictions for wood products, extra-regional consumption of forest products, targeted incentivies for green building, renewable energy etc.

Real GDP expanded by 6.6 percent by year-on-year in the the first half of 2023, as a result of increasing real wages, employment and household borrowing, and the a very successful tourism season. The rise in export of good and services outpaced the growth in imports and added to real GDP growth. Gross fixed capital formation and government consumption expanded moderalety (Graph 1).



Graph 1. Montenegro-Real GDP growth and contributions .

Economic growth is remained strong in 2023, underpinned by private consumption and export of service. In 2024-2025 GDP is set to moderate amid headwinds from still elevated inflation, tighter financing conditions and weak external demand. These factors are expected to weigh on real disposable income, private consumption, recovery of investement and tourism exports.

The inflation rate, although it is slowing down after record-high growth in 2022, is still at a high level due to external factors, strong domestic demand and a large influx of non-residents, thus it averaged 9.5 percent in the first ten months of 2023. The prices of food and non- alcoholic beverages (impact 4.5 percentage points, price growth 12.5 percent) and the category 'Housing, water, electricity, gas and other fuels' (impact 1.5 p.p., price growth 10.9 percent) made the biggest contribution to price increase in this period. A partial change in the composition of factors

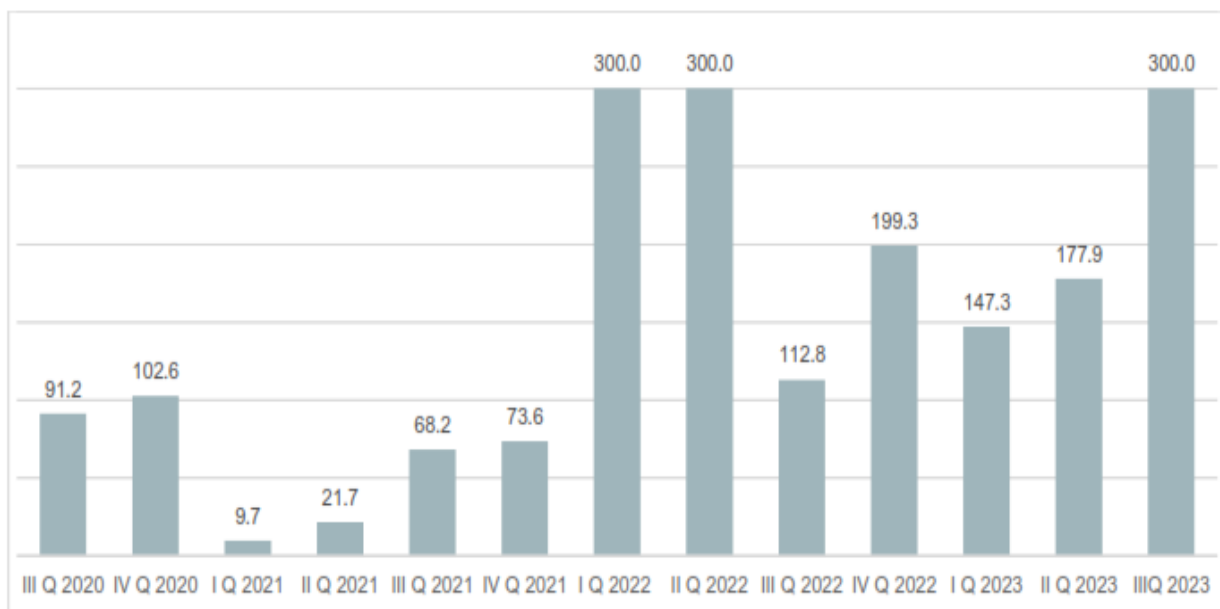


contributing to inflation, compared to the previous year, indicates that the so-called base inflation (inflation when the volatile growth of food and energy prices is excluded) may remain elevated, and entrenched even for a longer period. Even though deflation of the monthly consumer price index was recorded in October 2023 (-0.3 percent), the annual inflation is 6.1 percent in this month, which is significantly above the price increase in the Euro area (annual inflation 2.9 percent in October). In 2023, the prices of industrial products for export declined, recording a drop of 12.8 percent in Q3, due to a drop in prices in the metals processing sector, driven by development in the international commodity exchange prices. On the other hand, the growth of import prices slowed down to 2.8 percent in the third quarter of 2023, year-on-year (Montenegro Economic Reform Programme 2024-2026, Government of Montenegro, January 2024).

4.Developments in forest and forest product market

➤ Wood raw materials (round wood, pulp wood, chips, residues and fuel wood);

Production of forest assortments from state forests in Montenegro in the third quarter of 2023, compared to same quarter previous year, recorder a significant growth (Table 3, see page 10 and Graph 3). Between third quarter of 2023, compared to the fourth quarter has also the increased parameters.



Graph 3. Indices of physical volume of publicly owned forest assortments production, III quarter 2023 (Data sources: Montenegro Statistical Office-MONSTAT)

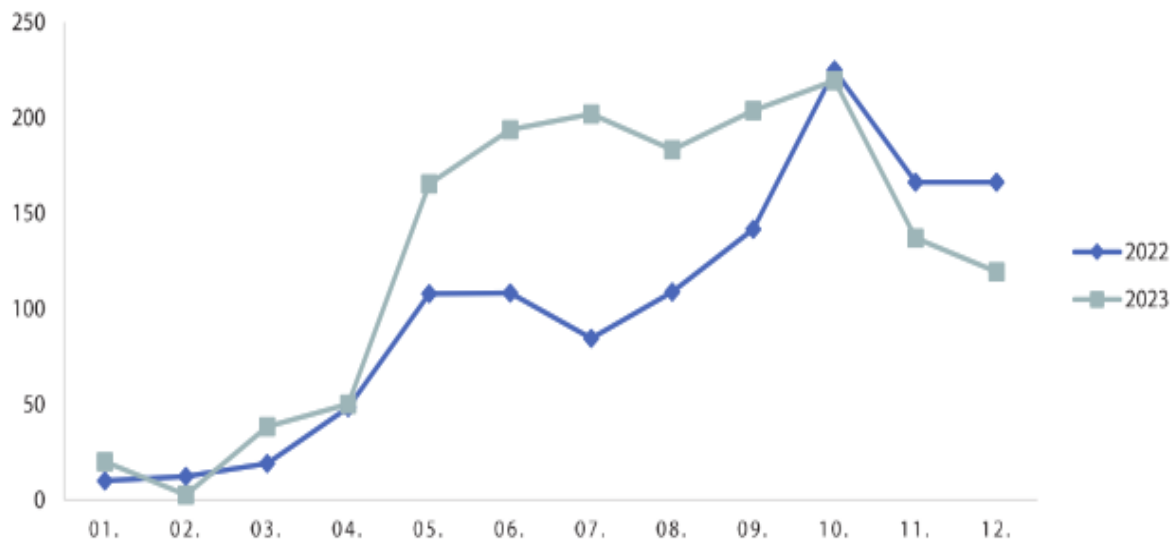


	<u>IIIQ 2023</u> <u>Ø 2022</u>	<u>IIIQ 2023</u> <u>IVQ 2022</u>	<u>IIIQ 2023</u> <u>IIIQ 2022</u>	<u>I-IIIQ 2023</u> <u>I-IIIQ 2022</u>
Total	300.0 ¹	225.1	300.0 ¹	165.3

¹Calculated index is higher than 300.0

Table 3. Indices of physical volume of publicly owned forest assortments production, III quarter 2023 (Data sources: Montenegro Statistical Office-MONSTAT)

The graph 4 show data for Indices of production of forest assortments, 2022- 2023 year. From Graph 4 it is clear that production of forest assortments climbing rapidly to a peak in October, before levelling off for the rest of the year. The most productive months during all year were in May, June, July, August, September and October due to open roads and access to forest site. By comparing 2023 and 2022 year, we find that indices of production of forest assortments rise 28.1 percent (Graph 4 and Table 4 see page 11).



Graph 4. Indices of production of forest assortments, 2022- 2023 (Data sources: Montenegro Statistical Office-MONSTAT)

The physical volume index of forest exploitation is calculated on basic data of data on the the production of forest assortments, according to te present nomenclature of product and weights coefficients. Quantities represent net wood mass of assortments expressed in cubic meter. In order to to calculate the index of forest assortments production, average purchase prices are used as weighting coefficients.



ŠUMARSTVO / FORESTRY

Ø 2022 = 100

	Indeks Index	Proizvedeni sortimenti, m ³ / Production of forests assortments						
		Četinara / Conifers				Lišćara / Deciduous trees		
		trupci Saw logs	tehničko drvo Lumber	prostorno drvo Space wood	ogrijevno drvo Firewood	trupci Saw logs	prostorno drvo Space wood	ogrijevno drvo Firewood
2020	108,8	147 878	7 814	17 405	5 642	30 955	26 295	44 186
2021	56,1	73 159	3 638	7 451	5 592	15 719	22 152	27 483
2022	100,0	141 458	7 949	18 891	17 248	18 759	33 118	33 665
Ø 01 – 12. 2022	100,0	11 788	662	1 574	1 437	1 563	2 760	2 805
Ø 01 – 12. 2023	128,1	15 382	818	2 317	1 576	1 706	4 014	2 855
2022								
12.	166,5	20 370	1 285	3 248	5 944	621	2 236	6 524
2023								
01.	20,1	2 920	257	550	14	30	260	25
02.	2,7	238*	11*	146*	0*	65*	49*	0*
03.	38,4	4 757	248	1 903	0	539	572	44
04.	50,3	5 788	497	1 805	85	380	3 148	206
05.	165,6	22 586	1 410	4 567	342	750	3 177	505
06.	194,0	25 236	1 099	3 645	426	2 567	5 386	1 097
07.	202,2	22 142	1 130	3 180	1 090	5 840	8 132	2 562
08.	183,4	22 655	1 306	2 932	1 800	2 543	5 505	2 534
09.	204,0	22 387	1 171	2 705	2 464	4 305	8 093	6 008
10.	219,6	25 802	1 409	3 276	2 752	2 392	7 942	7 762
11.	137,2	17 799	861	1 346	2 762	460	2 429	5 678
12.	119,4	12 272	422	1 750	7 178	596	3 479	7 837
01-12. 2023 / 01-12. 2022	128,1	130,5	123,6	147,2	109,7	109,2	145,5	101,8

¹⁾ Obračunati indeks veći je od 300,0

²⁾ Revidiran podatak

¹⁾ Calculated index is higher than 300.0

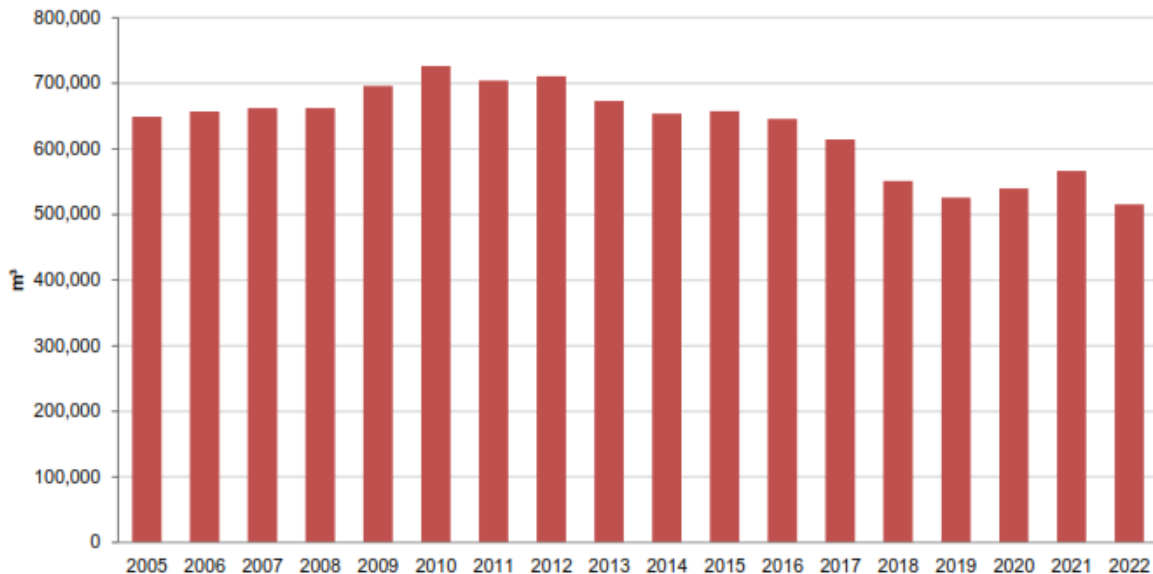
²⁾ Revised data

Table 4. Indices of production of forest assortments, 2022- 2023 (Data sources: Montenegro Statistical Office-MONSTAT)



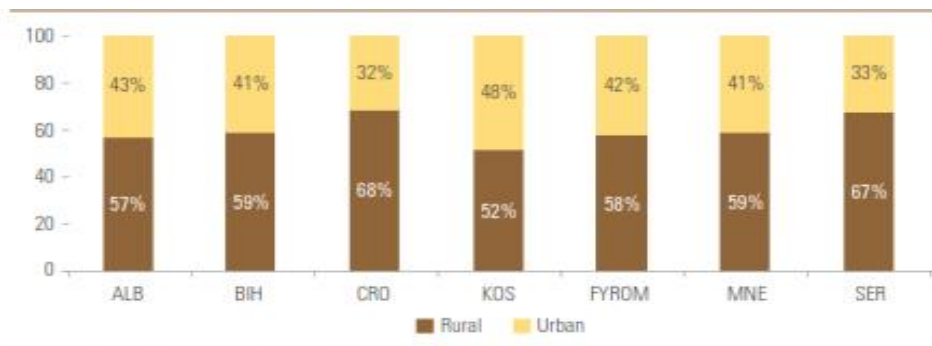
➤ **Wood energy, with a focus on government policies promoting wood energy;**

Primary production from firewood and wood risedeu and chips in Montenegro in 2022 was 740 014 m³, wood pellets was 85 894 tons. Final consumption firewood in households was 515 335 m³, in industry 52 314 m³ and other sectors 34 262 m³ (Graph 5 and Table 5, see page 13 and 14).



Graph 5. Balance of wood fuels in Montenegro, 2005- 2022 (Data sources: Montenegro Statistical Office- MONSTAT)

In rural areas, biomass is the primary source of heating for the majority of the population. Rural households account for 59 percent, and urban households for 41 percent of total biomass consumption (Graph 6).



Source: Biomass Consumption Survey, Energy Community Secretariat, 2012.

Graph 6. Rural vs. Urban Households: Share of Biomass Consumption in W-B (Western Balkan)



Wood consumption is the lowest in the households in the municipalities in the coastal zone, it is somewhat higher in central zone and the highest in the zone on the north of Montenegro. Average wood consumption in households in the coastal zone municipalities is 3.79 m³, in the central zone it is 5.02 m³ and on the north of Montenegro it is 6.74 m³ per household. Observed on the level of Montenegro, average firewood consumption per household was 5.49 m³ and as such it best represents relatively low consumption level in the coastal zone and high consumption level on the north of Montenegro. Compared to the neighboring countries, average firewood consumption per household in Montenegro in the amount of 5.49 m³ is significantly lower than the average consumption in Serbia which is 7.3 m³ per household as well as in Slovenia in the amount of 6.5 m³.

	Firewood	Wood residue and chips	Wood pellets	Charcoal
	m ³	m ³	t	t
Production	740 014	38 565	85 894	-
Imports	(0)	-	317	295
Exports	(0)	-	-65188	-
Intl. marine bunkers	-	-	-	-
Stock change	-	-	-	-
Domestic supply	740 014	38 565	21 023	295
Transfers	-	-	-	-
Statistical difference	-	-	-	-
Transformations	- 138 103	-	-	1,122
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	- 138 103	-	-	1,122
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	601 911	38 565	21 023	1 417
Industry sector	52 314	(0)	527	(0)
Iron and steel	-	-	-	-
Chemical and petrochemical	8 709	-	-	-
Non-ferrous metals	-	-	-	-
Non-metallic minerals	-	-	(0)	-
Transport equipment	-	-	-	-
Machinery	41 172	-	-	-
Mining and Quarrying	-	-	-	-
Food and tobacco	964	(0)	(0)	(0)
Paper, pulp and print	-	-	-	-
Wood and wood products	1 096	-	-	-
Construction materials	-	-	-	-
Textile and Leather	(0)	-	(0)	-
Non-specified	(0)	-	527	-
Transport	-	-	-	-
International civil aviation	-	-	-	-
Domestic air	-	-	-	-
Road	-	-	-	-
Rail	-	-	-	-
Pipeline transport	-	-	-	-
Internal navigation	-	-	-	-
Non-specified	-	-	-	-
Other sectors	549 597	38 565	20 496	1 417
Agriculture	2 570	-	-	-
Commerce and public services	31 692	1 586	5 380	771
Residential	515 335	36 979	15 116	646

Table 5. Balance of wood fuels in Montenegro, 2022 (Data sources: Montenegro Statistical Office-MONSTAT)



	Firewood	Wood residue and chips	Wood pellets	Charcoal
	TJ			
Production	6 791	286	1 447	-
Imports	-	-	5	9
Exports	-	-	(1 098)	-
Intl. marine bunkers	-	-	-	-
Stock change	-	-	-	-
Domestic supply	6 791	286	354	9
Transfers	-	-	-	-
Statistical difference	-	-	-	-
Transformations	(1 267)	-	-	35
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	(1 267)	-	-	35
Hydro power plants	-	-	-	-
Distribution losses	-	-	-	-
Final consumption	5 523	286	354	44
Industry sector	480	-	9	-
Iron and steel	-	-	-	-
Chemical and petrochemical	80	-	-	-
Non-ferrous metals	-	-	-	-
Non-metallic minerals	-	-	-	-
Transport equipment	-	-	-	-
Machinery	13	-	-	-
Mining and Quarrying	-	-	-	-
Food and tobacco	378	-	-	-
Paper, pulp and print	-	-	-	-
Wood and wood products	9	-	-	-
Construction materials	-	-	-	-
Textile and Leather	-	-	-	-
Non-specified	-	-	9	-
Transport	-	-	-	-
International civil aviation	-	-	-	-
Domestic air	-	-	-	-
Road	-	-	-	-
Rail	-	-	-	-
Pipeline transport	-	-	-	-
Internal navigation	-	-	-	-
Non-specified	-	-	-	-
Other sectors	5 043	286	345	44
Agriculture	24	-	-	-
Commerce and public services	291	12	91	24
Residential	4 729	274	255	20

Table 5. Balance of wood fuels in Montenegro, 2022 (Data sources: Montenegro Statistical Office-MONSTAT)



Production of firewood has decrease steadily since 2010 driven by government adopting and changing policies as Energy Efficient Home.

➤ **Certified forest products;**

EU decision-makers have reached an historic agreement by approving the landmark Regulation on deforestation-free products (EUDR). The EUDR will prohibit placing products linked to deforestation and forest degradation on the EU market. FSC has supported this initiative since the beginning, working together with EU policymakers, scientists, forest owners, Indigenous leaders, and progressive companies. Effective enforcement will be crucial, and FSC is ready to provide market-based tools to complement and enable regulatory approaches. Ministry of Agriculture, Forestry and Water Management is working with European Commission (Directorate-General for Environment) to implement the expectations of global regulators and customers while achieving sustainable forest management that builds resilient forests and supports sustainable communities. In order to FSC and new forest management are parallel to each other, It will be implemented together next two years.

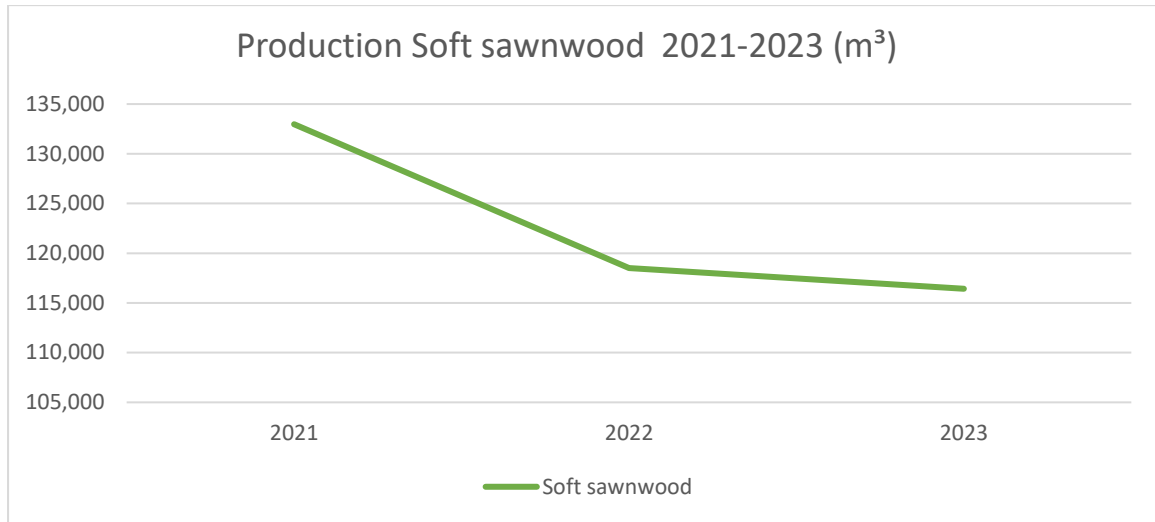
➤ **Sawn softwood and hardwood;**

Sawnwood represent the most significant forest product of the wood processing industry in Montenegro. Sawmills comprise 60.7 percent of total number of wood processing companies (394), and sawnwood accounts for 56.51 percent of all forest sector export. Regarding capacity, there are only two sawmills with installed capacity over 30 000 m³ logs per year. The majority of other mills have a capacity of 1000 to 5000 m³. Many mills are located in rural areas, operating only periodically, usually during the warm season, and produce 500 to 1500 m³.

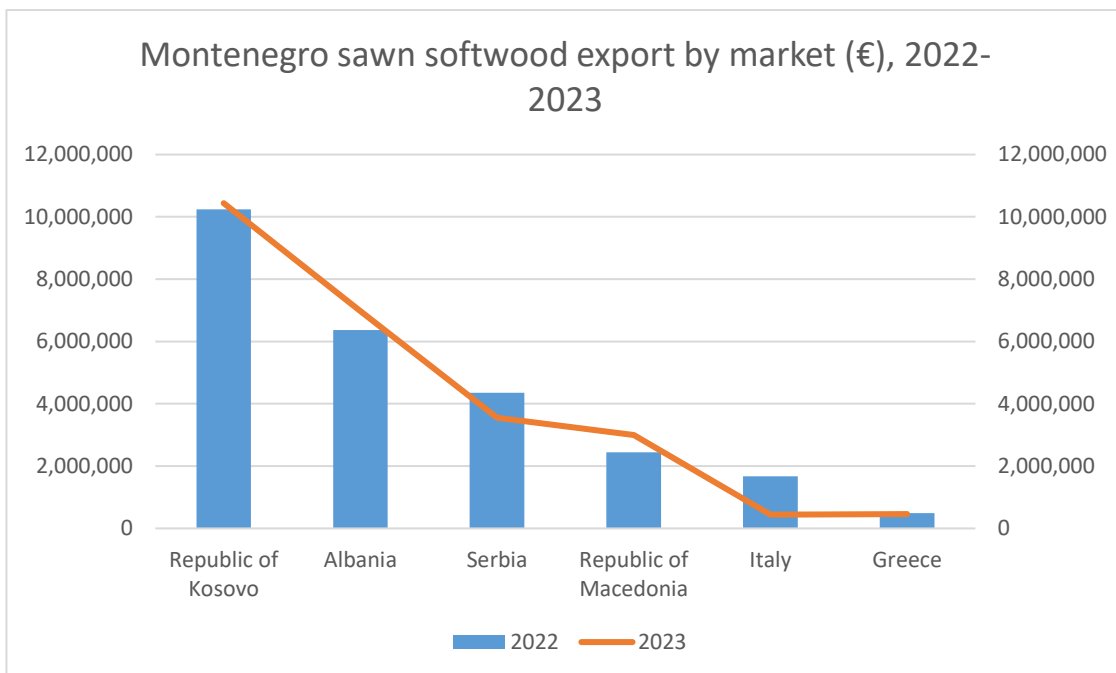
Softwood sawn timber is one of the rare wood product whose production can totally meet domestic needs. The production of sawn softwood in the Montenegro was 118 496 m³ in 2022, down by 10 percent from 2021. Data for four quarter 2023 and first quarter of 2024 indicate that Montenegro production of soft sawn timber are declining for the third year in row as struggled with declining domestic demand (Graph 7, see page 16).

Republic of Kosovo and Albania are remained Montenegro's largest export markets in 2023 (Graph 8, see page 15), but the rate of growth declined. Montenegro's sawn softwood export to Republic of Kosovo rose by 1.85 percent in 2023, to 10 438 556 €. Other key export market for Montenegro's sawn softwood included:

- Albania (up to 8.76 percent, to 6 973 784 €)
- Serbia (down by 18.66 percent, to 3 551 932 €)
- Republic of Macedonia (up to 18.39 percent, to 2 996 162 €)
- Italy (down to 73.70 percent, to 440 954 €)
- Greece (down to 4.96 percent , to 461 628 €)



Graph 7. Production soft sawnwood in Montenegro, 2021-2023(Data sources: Montenegro Statistical Office-MONSTAT)



Graph 8. Montenegro sawn softwood export by market, 2021-2023(Data sources: Montenegro Statistical Office-MONSTAT)



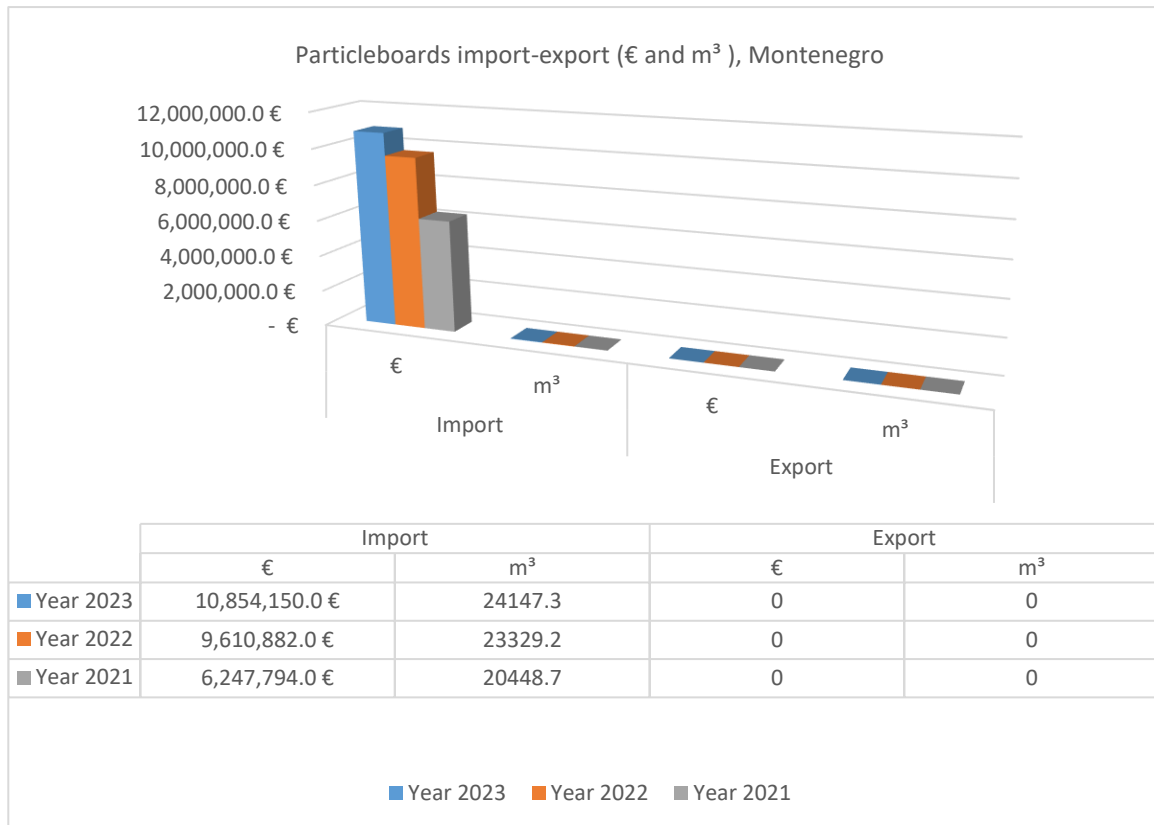
Beech sawnwood timber represent the most export wood species in sawn hardwood of Montenegro, accounting for 97 percent of total production. The share of oak sawn hardwood is about 2.5 percent and ash 0.5 percent. Montenegro production of beech sawnwood, which had been trending for years, reached an all-time in 2023, falling by 25.44 percent to 39 000 m³. Over half of total beech production is designated for the export and Montenegro's beech sawmills has weakening demand for beech in the domestic furniture industry and in furniture industry supply businesses, including glulam-board and cut size manufactures. Sawn beech export has decreased in all largest Montenegro's market (Albania, United Arab Emirates, Italy and Bosnia) in 2023, total export fell by 32.11 percent to 3 611 974 €, compared to 2022. The weakness in the domestic market in Montenegro with smaller export rate meant that the financial position of hardwood sawmills there remained difficult in 2024.

There is little change in Montenegro hardwood fashion trends in 2023 and 2024, which remain heavily oriented towards **oak**. **Production oak** sawnwood in Montenegro does not satisfy the domestic demand, considering that oak (*Quercus petraea* and *Quercus cerris*) only compose about 5.5 percent of forest inventory. Oak now accounts import value for 700 929 € in 2023 and show a strong upward trend of all wooden furniture industry.

➤ **Wood-based panels (particle boards, fibreboards and MDF, OSB, plywood);**

Particle board. Unsolved problems that concern the transformation of the plant, together with financial problems, culminated in 2002, and led to the shut down in 2004 only one company of production particle boards. Despite the fact that large number of different types of board has emerged during the last years, particle boards have still retained the leading position in Montenegro wood based panel consumption. Furniture making is the most significant particle board application area. Particle boards production in Montenegro has good prospects for two basic reasons: expressed domestic consumption that surpassed 24 147 m³, and the raw material for their production. Currently, much of this raw material (sawmill residuals, very low grade logs, etc) is left in the forests, unused, or is used for heating or pellet production.

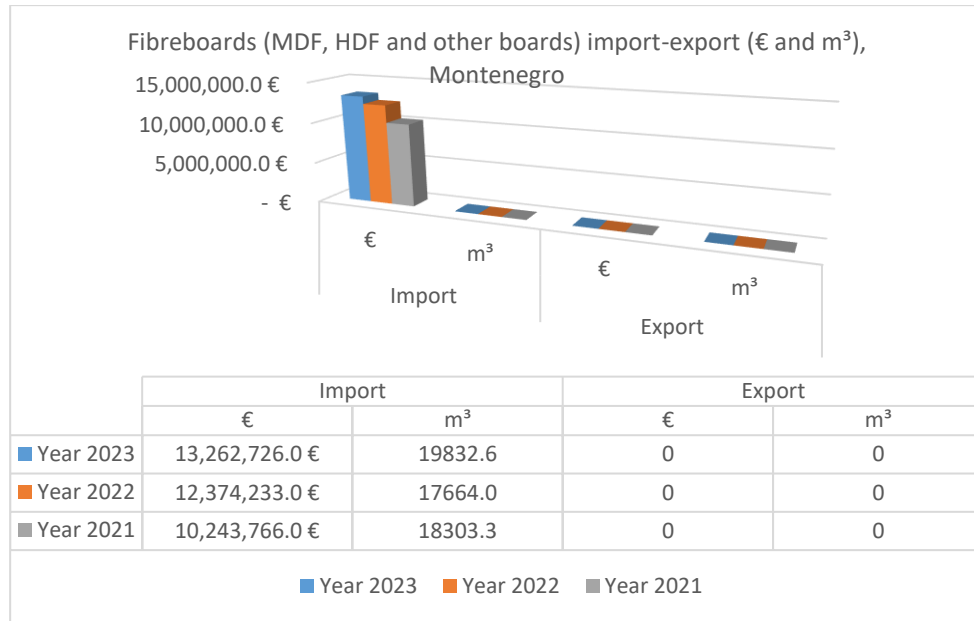
Import particle board increased by 3.38 percent in 2023, to 24 147 m³ (Graph 9, see page 18). Imports of particle board are expected to continue to grow (by 7 percent) in 2024. In order of importance, the biggest particle boards-exporting countries to Montenegro for 2023 were Austria, Hungary, Romania, Serbia and Turkey.



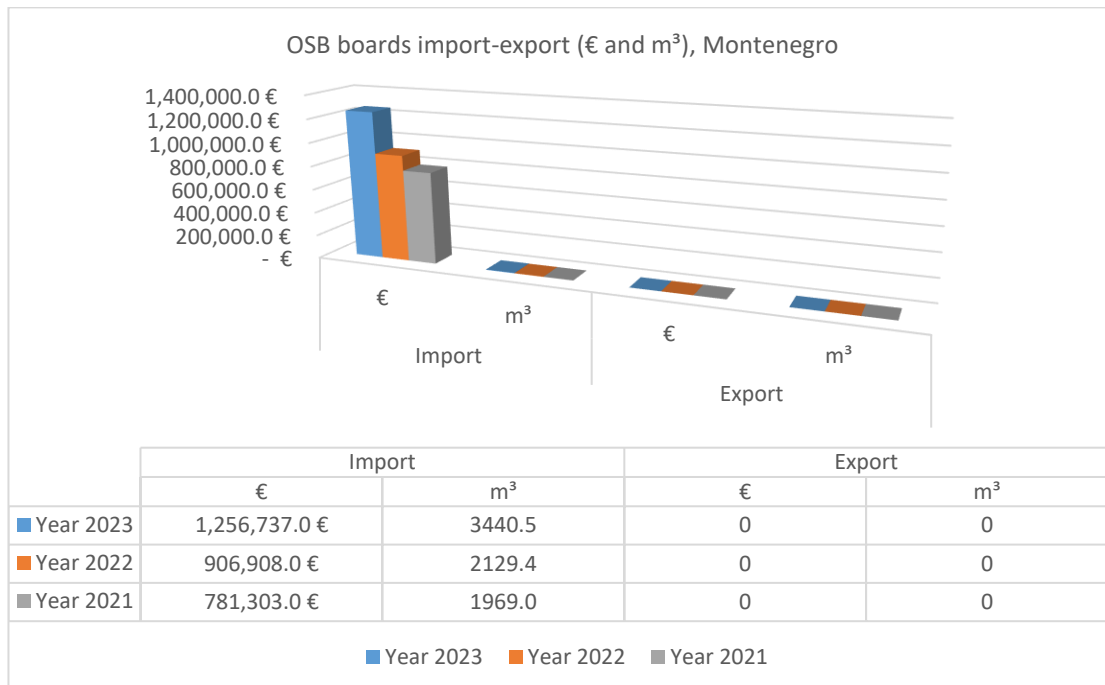
Graph 9. Particle board, import-export in Montenegro, 2021-2023(Data sources: Montenegro Statistical Office-MONSTAT)

Fibreboards (MDF, HDF and other boards). The economy of Montenegro fell into crisis as a result of UN sanctions towards Montenegro and had serious consequences for fibreboards industry. The only one producer of fibreboards in Mojkovac shut down after more than 30 years. Montenegro's import of fibreboards increased by 7.18 percent in 2023, to 13 262 726 € (Graph 10, see page 19). Price for fibreboards increased strongly in the 2022, before dropping sharply towards the end of 2023 year.

OSB boards. OSB have emerged as price competitive alternatives to the more traditional products such as plywood, particleboard and hardboard. With similar characteristics to plywood products, their greatest advantage is that low quality (including non-wood fibres) can be turned into high value and this fact contribute import value in 2023 at 1 256 737 €, representing year-over-year growth (Graph 11, see page 19). It is important to say that OSB boards have never produced in Montenegro.



Graph 10. Fibreboards (MDF, HDF and other boards), import-export in Montenegro, 2021-2023(Data sources: Montenegro Statistical Office-MONSTAT)



Graph 11. OSB boards, import-export in Montenegro, 2021-2023(Data sources: Montenegro Statistical Office-MONSTAT)

Plywood. Only one company in Montenegro produces plywood in Montenegro and this medium size company is privately owned. Montenegro's plywood output in 2023 was 976 m³, an increase of 20.79 percent over 2022. Montenegro's export volume shrank by 11.4 percent in 2023 compared



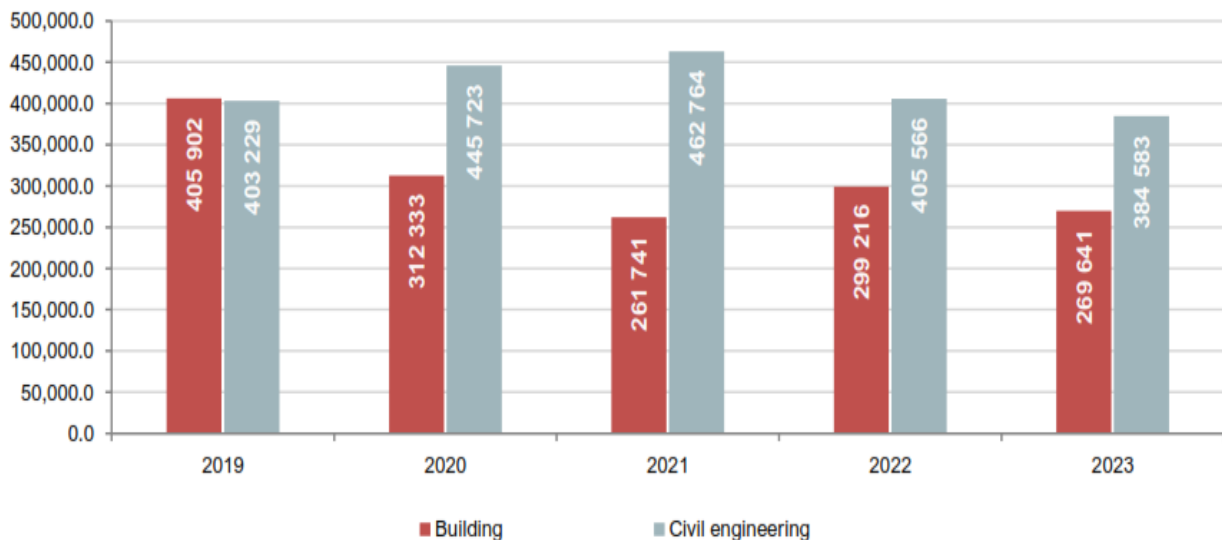
to 2022. The value of Montenegro import of plywood increased by 18.4 percent in 2023, to 3 879 272 €.

➤ **Pulp and paper;**

Pulp and paper factory in Berane was closed 2 decades ago, after shutting down factory in Berane, Montenegro produces toilet paper and carboards by purchased paper. The trade and production volume is not possible to show until December 2023.

➤ **Housing and construction with focus on wood construction;**

The total value of finalised construction works and consumption of construction materials realized by business companies in Montenegro in 2023 amounted to 654 million €, which is 7.2 percent less than in 2022. Value of finalised construction works on buildings amounted to 270 million €, while on other buildings it amounted to 385 million €. In 2023 are completed 1 557 dwellings with a useful floor area of 88 thous. m² (Graph 12, Table 6 ,7 and 8, see page 21 and 22).



Graph 12. Value of finished construction works in Montenegro in thousand €, 2019-2023. Note: The buildings are include residential and non-residential buildings, while civil engineering including transport infras (Data sources: Montenegro Statistical Office-MONSTAT)



	2022	2023
TOTAL	704 782	654 224
BUILDING	299 216	269 641
Residential buildings	171 171	161 116
Non-residential buildings	128 045	108 525
CIVIL ENGINEERING	405 566	384 583
Transport infrastructure	(311 727) ²	288 756
Pipelines, communication and electricity lines	(59 508)	(64 229)
Complex industrial constructions	(11 614)	11 679
Other civil engineering not classified elsewhere	(22 717)	19 919

Table 6. Value of finalized construction work in Montenegro, 2022-2023 (Data sources: Montenegro Statistical Office-MONSTAT)

	2022	2023
COMPLETED DWELLINGS		
Number of completed dwellings	(1 589)	1 557
The floor area of completed dwellings, in m2 thousand	(122)	88
UNCOMPLETED DWELLINGS		
Number of uncompleted dwellings	(2 503)	(2 561)
The floor area of uncompleted dwellings, in m2 thousand	(173)	193

Table 7. Number and floor area of uncompleted dwellings in Montenegro, 2022-2023 (Data sources: Montenegro Statistical Office-MONSTAT)



Type of material	Unit of measurement	2022		2023	
		Quantity of building material spent	Value of building material spent, in thousand €	Quantity of building material spent	Value of building material spent, in thousand €
Electricity	KWh	42 546	4 838	40 448	4 623
Motor petrol	tona	664	838	636	793
Diezel petrol	tona	26 791	31 559	25 873	28 187
Other petroleum products	tona	2	2	2	2
Blocks, all types	hilj. kom.	3 785	1 780	3 658	1 698
Plasterboards, all types	m ²	135 903	1 203	132 333	1 149
Other steel constructions, all types (roofs, columns, frames, scaffolding, etc.)	tona	4 268	1 602	3 996	1 432
Hydrated lime	tona	1 682	226	1 368	202
Portland cement	tona	21 170	2 371	19 646	2 213
Bitumen	tona	21 839	1 689	20 587	1 494
Aggregates for concrete	m ³	488 574	6 595	453 397	6 230
Fresh concrete	m ³	462 671	33 351	418 668	31 489
Asphalt	tona	178 396	15 957	167 878	15 221
Concrete steel	tona	22 386	13 716	21 491	12 599
Various elements for reinforced concrete (reinforcing nets, wall panels, wire lattice supports, etc.)	tona	9 440	4 117	9 180	3 863
Boards for panelling	m ³	9 449	229	9 325	215
Styrofoam	kg	91 985	672	88 362	636
Other insulating materials (glass, mineral wool)	tona	2 366	813	2 170	787
Ceramic tiles (wall, floor and facade)	m ²	83 198	1 217	75 495	1 198
Parquet (beech, oak, etc.)	m ²	22 021	501	20 434	426
Laminated parquet	m ²	23 499	577	21 991	541
Plastic pipes, all types	kg	86 420	317	82 198	298
Cables, all types	m	334 848	1 200	302 332	1 116
Installation material (switches, plugs, boxes, light sockets)	hilj. €	-	1 827	-	1 624
Doors and windows, all types	kom.	11 943	2 421	11 083	2 289

Table 8. The quantity and value of construction and operating materials used in Montenegro by companies, 2022-2023 (Data sources: Montenegro Statistical Office-MONSTAT)



6. Tables

	Units	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total area	km ²	13,812	13,812	13,812	13,812	13,812	13,812	13,812	13,812	13,812	13,812	13,812	13,812	13,812	13,812
Population	000	619	620	620	621	622	622	622	622	622	622	621.9	620.7	617.7	633.2
Population density	inhabitants/km ²	45	45	45	45	45	45	45	45	45	45	45	45	44.7	44.7
GDP (at current prices)	mill. EUR	3,125	3,265	3,181	3,362	3,458	3,625	3,954	4,299	4,663	4,951	4,185.6	4,955.1	5,924.0	6,964.0
Value added (at current prices)	mill. EUR	2,608	2,735	2,668	2,759	2,799	2,992	3,065	3,519	3,816	4,022	4192.9	4731.5	4769.9	5583.9
Economic growth (real change in GDP)	%	2.5	3.2	-2.7	3.5	1.8	3.4	2.9	4.7	5.1	4.1	-15.3	13.0	6.4	6.3
GDP per capita	EUR	5,045	5,265	5,126	5,412	5,561	5,826	6,354	6,908	7,495	7,959	6,737.0	8,002.0	9,598.0	10,998.0
GDP per capita in PPS	EUR	:	:	:	:	:	:	:	:	:	:	:	:	:	:
GDP per capita in PPS (EU-27_2020 =100)	%	41	41	39	41	41	42	45	46	48	50	45	47	50	:
Inflation	%	0.5	1.2	0.2	2.1	1.1	1.4	5.1	3.8	3.2	2.0	-0.2	4.7	12.4	8.6
Total employment	000	161.0	163.0	166.5	171.5	173.6	175.6	178.0	229.3	237.4	243.8	219.4	212.6	251.2	278.3
Unemployment rate	%	19.7	19.7	19.7	19.5	18.0	19.7	17.7	16.1	15.2	15.1	17.9	16.6	14.7	13.1
Total export of goods	mill. EUR	330	454	367	396	376	317	326	349	400	415	366	4,370	700	674
Total import of goods	mill. EUR	1,657	1,821	1,773	1,724	1,773	1,841	2,062	2,182	2,554	2,601	2,105	2,505	3,534	3,810
External trade balance	mill. EUR	-882	-808	-1,406	-1,329	-1,398	-1,523	-1,736	-1,833	-1,985	-2,185	-1,739	-2,068	-2,834	-3,136
Trade as a share of GDP		63.6	69.7	67.3	63.1	62.1	59.5	60.4	58.9	66.7	64.8	61.4	61.4	70.9	68.6
Share of food, beverages and tobacco in total household's expenditures	%	37.1	37.2	35.8	35.1	35.5	:	:	29.7	:	:	:	36.5	:	:
Exchange rate (1 EUR =)		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
National Budget	mill. EUR	:	1,401	1,237	1,257	1,338	1,565	1,614	1,752	1,900	1,977	2,104	2,056	2,384	2,639

Table 9. Macroeconomic data in Montenegro, 2010-2023 (Data sources: Montenegro Statistical Office-MONSTAT)



Year	Export	Import	Coverage of imports by exports
2014	23.850.554	24.477.539	97,4%
2015	30.022.502	22.793.804	131,7%
2016	29.045.345	25.918.435	89,23%
2017	30.604.466	29.284.370	104,51%
2019	29.078.511	32.382.274	89,80%
2019	34.997.435	39.349.908	88,94%
2020	31.420.490	31.328.523	100,29%
2021	37.540.453	33.228.539	113,0%
2022	48.134.930	41.876.944	114,9%
2023	45.956.123	54.763.929	83,9%

Table 10. Total value of import and export of wood and wood products in Montenegro, 2014-2023 (Data sources: Montenegro Statistical Office-MONSTAT)

The author would like to acknowledge the assistance of institutions, based locally and overseas, for the valuable information. Finally, the authors would like to kindly thank Mirsad Spahić (Head of Department for Economic Analyses and Market) and Vučeta Dukić (Advisor in Department for Economic Analyses and Market), for contribution to preparation country market.