FOREST TRACKS

2025/2026

NATIONAL REPORTS COMPILATION

FOREST TRACKS: COUNTRY-LEVEL MARKET INSIGHTS 2025/2026

LKW beim Beladen von Baumstämmen im Harz. Eberhard Spaeth / stock.adobe.com

UNECE

Copyright and Disclaimer

Abstract

"Forest Tracks: Country-Level Market Insights 2025/2026" is a compilation of national reports submitted by countries to the eighty-third session of the UNECE Committee on Forests and the Forest Industry.

The document provides a comprehensive overview of forest and forest product-related policies and market trends in Armenia, Austria, Cyprus, Czech Republic, Estonia, Finland, German, Ireland, Kyrgyz Republic, Netherlands, Poland, Portugal, Slovenia, Sweden, Ukraine and the United Kingdom.

Each chapter offers an in-depth analysis of recent trends and an outlook for 2026, with a focus on wood and wood product markets. Each chapter includes information on general economic trends affecting the forest and forest industry sectors, policy measures taken in each country, key market drivers and their effects, recent developments, and a near-term outlook for forest and forest product markets.

The sectors analyzed include wood raw materials, wood energy, certified forest products, sawn softwood and hardwood (both temperate and tropical), structural and non-structural wood-based panels, pulp, paper and paperboard, as well as housing and construction, with a focus on wood construction.

ECE/TIM/TM/2026/1

Contents

Copyright and Disclaimer ii

Abstract ii

Contents iii

List of Tables iv

List of Graphs v

Explanatory Notes vi

Abbreviations, Acronyms and Symbols vi

1. Armenia 1
2. Austria 7
3. Cyprus 15
4. Czech Republic 23
5. Estonia 32
6. Finland 38
7. Germany 45
8. Ireland 54
9. Kyrgyz Republic 61
10. Netherlands 64
11. Poland 74
12. Portugal 83
13. Slovenia 96
14. Sweden 111
15. Ukraine 118
16. United Kingdom 128

References 137

List of Tables

Table 1.1 Austria: Economic indicators (2022-2026)[%] 7
Table 3.1 Cyprus: Main economic indicators (2023–2028) 15
Table 3.2 Cyprus: Imports of wood and wood-based products (2019-2023)[1,000 m^3 and 1,000 tonnes] 19
Table 6.1 Finland: Average nominal roundwood stumpage price (2024–2026f)[€/m^3 o.b. and % change] 40
Table 6.2 Finland: Pulp and paper industry production, export and export price forecasts (2024–2026f) 41
Table 7.1 Germany: Key figures of the 2025 autumn projection (2024-2027) [%] 45
Table 7.2 Germany: Comparison of felling statistics (2015-2024) [million m^3 u.b.] 50
Table 8.1 Ireland: Average Standing Timber Prices by tree size category (2013-2023) [€/m^3] 55
Table 8.2 Ireland: Roundwood Total Removals by Product (2015-2024) [1000 m^3] 57
Table 8.3 Ireland: Exports and imports of wood and paper products (2023) [tonnes, m^3, euro million] 57
Table 8.4 Ireland: Carbon stock changes and overall balance (1990-2022) [Gg C and Gg CO2-eq.] 59
Table 8.5 Ireland: Persons 15 years and over involved in forestry by principal economic status (2016-2022) 59
Table 9.1 Kyrgyz Republic: Main Products and Exports 61
Table 10.1 Netherlands: Key facts of sawn softwood market (2012-2024) [1,000 m^3] 68
Table 10. 2 Netherlands: Origin of Sawn softwood imports (2023-2024) [1,000 m^3] 69
Table 10.3 Netherlands: Key facts of sawn hardwood market (2012-2024) [1,000 m^3] 70
Table 10.4 Netherlands: Fibre origin of the paper and board industry (2012-2024) [1,000 metric tonnes] 70
Table 10.5 Netherlands: Recent developments of the paper and board industries (2014-2024) 71
Table 10.6 Netherlands: Average salary by gender in Agriculture, Forestry and Fisheries (2020-2024) [euro] 72
Table 10.7 Netherlands: Economic Indicators (2021-2026) [%] 72
Table 11.1 Poland: Economic indicators (2019-2024) 82
Table 12.12 Portugal: Forest sector commercial balance (2000-2024)[euro and %] 93
Table 12.23 Portugal: Forest production structure (2000-2022) 94
Table 12.45 Portugal: Forest sector employment (2017-2022) [1,000] 95
Table 12.6 Portugal: Occupational accidents in total economy and forest related activities (2023) 95
Table 12.78 Portugal: Average monthly wage by sex (2017-2024) [euro] 95
Table 13. 1 Slovenia: Economic indicators - GDP (2024-2027) 109
Table 14.1 Sweden: Wood raw materials production (2024-2026)[m^3] 114
Table 14.2 Sweden: Production and export of woodpulp and paper and paperboard (2024-2026) [tonnes] 115

List of Graphs

GRAPH 2.1 Austria: Regular fellings and fellings due to natural disasters (2020-2024)[million m³ u.b.]..... 9
GRAPH 2.2 Austria: Wood removals from forests (20154-2024) [1,000 m³ u.b.]..... 10
GRAPH 2.3 Austria: Paper production in Austria (2021-2024) [million tonnes]..... 11
GRAPH 4.1 Czech Republic: Real GDP growth (2019-2026) [%]..... 23
GRAPH 4.2 Czech Republic: Consumer price inflation (2019-2026) [%]..... 24
GRAPH 4.3 Czech Republic: 2025 average monthly temperatures [°C]..... 27
GRAPH 4.4 Czech Republic: Development of average monthly precipitation (2024) [mm]..... 27
GRAPH 4.5 Czech Republic: Average prices of spruce assortments (2005–2025) [CZK/m³]..... 28
GRAPH 4.6 Czech Republic: Industrial Production Index (2024-2025) [%]..... 29
GRAPH 5.1 Estonia: Employed persons in forest sector by sex (1989–2024) [1,000 persons]..... 36
GRAPH 5.2 Estonia: Gender pay gap (2011-2024) [%]..... 36
GRAPH 8.1 Ireland: Private forest area certified (2019-2024) [1000 ha]..... 56
GRAPH 8.2 Ireland: Roundwood harvest (1955-2024) [million m³]..... 56
GRAPH 10.1 Netherlands: Consumer confidence index (2009-2025)..... 64
GRAPH 10.2 Netherlands: Production, trade and consumption of sawn softwood (2008-2026) [million m³] 69
GRAPH 10.3 Netherlands: Wage difference between men and women (2014-2022) [%]..... 72
GRAPH 12.1 Portugal: National trade deficit (2000-2024) [billion euro]..... 84
GRAPH 12.2 Portugal: Burnt areas burnt in forest stands and scrublands (2000-2024) [1,000 ha]..... 92
GRAPH 12.3 Portugal: Share of forest products in national export and import values (2000- 2024) [%]..... 93
GRAPH 13.1 Slovenia: Consumption of different fuels in households by energy source (2004- 2023) [TJ].. 103
GRAPH 13.2 Slovenia: Semi-annual fuel prices (2011-2025) [€ per MWh incl. VAT]..... 104
GRAPH 13.3 Slovenia: Wood fuel prices beginning/end of heating seasons (2023-2024) [€/t incl. VAT]..... 104
GRAPH 13.4 Slovenia: Import of pellets by countries (2022-2024) [1,000 t]..... 105
GRAPH 14.1 Sweden: Quarterly prices sawlogs and pulpwood (2011-2025) [SEK per m³ u.b.]..... 114
GRAPH 14.2 Sweden: Stocks of pulpwood (2019-2025) [million m³]..... 115
GRAPH 14.3 Sweden: Quarterly wood fuel prices for district heating (2023-2025) [SEK/MWh*]..... 116
GRAPH 14.4 Sweden: New multi-dwelling buildings and the share built in wood frame (1995-2021)..... 116
GRAPH 16.1 United Kingdom: Exchange rate pound sterling to euro and US dollar (2016-2025)..... 128
GRAPH 16.2 United Kingdom: Households' Savings Ratio (2015-2025) [%]..... 128
GRAPH 16.3 United Kingdom: Consumer Prices Index (2011-2025) [%]..... 129
GRAPH 16.4 United Kingdom: Seasonally adjusted employment rate (2011-2025) [%]..... 129
GRAPH 16.5 United Kingdom: Exchange rate of Pound sterling to Swedish Krona (2016-2025) [SEK/£]..... 132
GRAPH 16.6 United Kingdom: Price indices for standing timber and logs (2015-2025)..... 132
GRAPH 16.7 United Kingdom: Construction industry output annual change (2024) [%]..... 133
GRAPH 16.8 United Kingdom: Monthly construction industry output index (2010-2025)..... 133
GRAPH 16.9 United Kingdom: Manufacturing output index monthly change (2019-2025) [%]..... 133
GRAPH 16.10 United Kingdom: Consumption of primary fuels (2014-2024) [%]..... 134
GRAPH 16.11 United Kingdom: Heat and power production from renewables (2014-2024) [Mtoe]..... 134
GRAPH 16.12 United Kingdom: Coniferous roundwood production (2004-2026) [million m³]..... 134
GRAPH 16.13 United Kingdom: Coniferous sawnwood production and imports (2000-2026) [million m³] . 135
GRAPH 16.14 United Kingdom: Consumption of wood-based panels (2000-2026) [million m³]..... 135
GRAPH 16.15 United Kingdom: consumption of paper and paperboard (2000-2026) [million tonnes]..... 135

Explanatory Notes

"Apparent consumption" is calculated by adding imports to a country's production and subtracting exports. Apparent consumption volumes are not adjusted for levels of stock. "Apparent consumption" is synonymous with "demand" and "use" and is often referred to as "consumption". Consumption is the sum of a country's (or subregion's) production, imports and exports.

For ease of reading, the publication mostly provides value data in United States dollars (indicated by "USD" or as "US dollars"). Exchange rates are based on the annual average rate provided by the UNECE (http://w3.unece.org/PXWeb/en).

The term industrial roundwood is used interchangeably with logs. The term softwood is used synonymously with coniferous. Hardwood is used synonymously with non-coniferous and broadleaved. Lumber is used synonymously with sawnwood.

A billion refers to a thousand million (109). One trillion refers to one million million, or 1012.

All data and statistics in this publication were provided by the countries individually. Data on forecast of production, trade and consumption of wood products in 2025 and 2027 are derived from the 2025 Forecast Questionnaire unless otherwise noted.

Forecast tables were published by the secretariat separately at: https://unece.org/info/Forests/pub/410547.

Abbreviations, Acronyms and symbols

(Infrequently used abbreviations spelled out in the text may not be listed here)

…	unavailable
€	euro(s)
£	Pound sterling
USD	United States dollar(s)
CLT	cross-laminated timber
COVID-19	coronavirus disease of 2019
CO_2-eq	Carbon dioxide equivalent
EU	European Union
EUDR	EU Deforestation Regulation
EUTR	EU Timber Regulation
FLEGT	EU Forest Law Enforcement, Governance and Trade Action Plan
FSC	Forest Stewardship Council
GDP	Gross domestic product
GHG	Greenhouse gases
GW	Gigawatt
Ha	Hectare(s)
HDF	High-density fibreboard
HWP	Harvested Wood Products
LULUCF	Land Use, Land-Use Change, and Forestry
LVL	Laminated veneer lumber
m^2	Square metre(s)
m^3	Cubic metre(s)
m^3 o.b.	m^3, overbark
m^3 u.b.	m^3, underbark
MDF	Medium-Density Fibreboard
$MtCO_2$-eq	Million tonnes of carbon dioxide equivalent
MENA	Middle East North Africa
Mtoe	Million tonnes of oil equivalent
MW	megawatt
NWFP	Non-wood forest products
OSB	Oriented Strand Board
PEFC	Programme for the Endorsement of Forest Certification
PJ	Petajoules
USDA	United States Department of Agriculture
TW	Terawatt
VAT	Value added tax
WTO	World Trade Organization

1. ARMENIA

Mountain landscape in Armenia. Top view. Shchipkova Elena/ stock.adobe.com

1. Armenia [1]

1.1. Market Drivers

1.1.1. Overall Market Situation

Forested areas in Armenia account for approximately 11.5 % of the nation's total land area, corresponding to about 328,470 ha. Despite this relatively modest coverage, Armenia's forests perform critical functions in climate regulation, soil protection, biodiversity conservation, and ensuring the socio-economic resilience of communities. The preservation and oversight of this system are the responsibility of the Ecopatrol Service of the Ministry of Environment of the Republic of Armenia. In recent years, Armenia's forest system has been significantly affected by global climate change, energy-related pressures, and socio-economic challenges in communities. A considerable portion of the rural population remains dependent on forest resources, particularly for firewood, which leads to illegal logging and diminished forest regeneration capacity. In addressing this issue, preventive, regulatory, monitoring, and law enforcement actions by the Ecopatrol Service are of key importance.

At the same time, there are important opportunities for growth in the forest sector. Under Armenia's commitments in the Paris Agreement, forest cover is planned to be raised to 12.9 % by 2030, through the planting of approximately 50,000 ha. The responsibility for implementing environmental protection and prevention measures in these programmes is assigned also to the Ecopatrol Service, in light of its sectoral and legislative mandates.

1.1.2. Policy and Legislative Framework

The legal regulation of Armenia's forest sector is established through a number of foundational documents. The principal among these are the Forest Code of the Republic of Armenia (2005), and the Law "On the Ecopatrol Service" (2023), which defines the structure, powers, and functions of the Service. The latter is a vital prerequisite for forest conservation, oversight, and for the prevention of environmental violations. Also significant in the legislative context is the document "Policy, Strategy, and Action Plan for Forest Development of the Republic of Armenia 2021–2030." Forest conservation and restoration are regarded as essential instruments for forming a low-carbon economy and ensuring climate resilience. These policy and legislative foundations are preconditions for the effective management of Armenia's forest resources, for enhancing international cooperation, and for implementing the "green recovery" agenda.

1.1.3. Biotic and Abiotic Pressures on Forests Ecosystems

In recent years Armenia's forest ecosystems have faced increasing biotic and abiotic pressures. Of particular concern are the spread of pests and diseases, as well as the growing number of forest fires. Monitoring, prevention, and rapid response to fires are functions legally prescribed to the Ecopatrol Service, which are critical not only for forest viability but also for national climate stability. Nonetheless, the situation poses serious threats to local biodiversity, undermines ecosystem resilience, and reduces the capacity of forests to sequester carbon-adversely affecting climate stability. The current situation demands coordinated policy, additional financing, and strengthened technical capacities to mitigate risks arising from both natural and human-induced factors.

1.1.4. Raw Material Supply in the Forest Sector

Domestic production of timber in Armenia is limited. The high level of firewood use by rural communities increases pressure on natural forests. In this context, the supervisory and law enforcement roles of the Ecopatrol Service aim to prevent illegal logging and ensure legal supply. Economically and environmentally, there is a clear need to review and modernize supply chains in the sector. This involves developing processing capacity, introducing energy-efficient technologies, fostering sustainable expansion of forested areas, and reducing firewood consumption through alternative solutions. Numerous international and state programmes are directed at

[1] Submitted by Eco-patrol Service of the Ministry of Environment of the Republic of Armenia to the 83rd Session of the ECE Committee on Forests and the Forest Industry (COFFI) Geneva, 2-4 November 2025.

mitigating these issues, ensuring not only environmental sustainability but also socio-economic improvements in rural populations.

1.1.5. Traceability and Supply Chains in the Forest Sector

For the sustainable use of forest resources and ensuring the legal circulation of products in the market, the development of a traceability system for raw materials is of great importance. Traceability makes it possible to monitor the entire wood supply chain-from verifying the legality of the source to reaching the final consumer. Clear and effective supply chains require legal, administrative, and technological mechanisms that guarantee transparency of origin. To this end, certification systems (for example, FSC or PEFC standards) are often employed, attesting that the wood has been sourced legally and in an environmentally responsible manner. To enhance controllability of supply chains, continuous monitoring, accountability, and control systems are also needed, documenting all stages of production, transportation, and sale. These systems aid not only in preventing illegal logging but also in building trust in domestic and international markets. Legally and operationally, supply chain transparency is viewed as a major prerequisite for the development of the forest sector and for deepening international cooperation toward both environmental and economic goals. The role of the Ecopatrol Service in this area is fundamental for forming international trust and expanding cooperation.

1.2. Market Developments

1.2.1. Wood Raw Materials

In Armenia the market for wood raw materials is primarily shaped by demand for firewood, which is particularly high in rural areas. Firewood continues to play a central role as an energy source, especially for seasonal heating needs. Since local production is of limited scale, a significant part of this demand is met through informal supply chains or imports. This leads to both legal and oversight challenges, as well as pressure on natural forests. In this context, policies for energy modernization are seen as important for reducing dependency on wood raw materials. Within its mandate, the Ecopatrol Service carries out supervisory, legal, and governance functions that directly affect the sustainable growth of the market.

1.2.2. Softwood and Hardwood Sawn Timber

Softwood and hardwood sawn timber, used in construction, furniture production, and repair works in Armenia, is largely imported. Local production volumes do not meet market demands due to limitations in raw material supply, technological infrastructure, and processing capacity. Most manufacturers prefer to import processed or semi-processed timber, particularly of species not native to local forests. This forms a dependence on external markets, which underlines the need to develop the domestic production base, including promotion of timber from certified, legal sources.

1.2.3. Wood-Based Panel Products

In Armenia, the production of wood-based panels—particularly MDF, OSB, and other composite materials—has not yet developed as a distinct industrial sector. Key barriers include small market size, lack of technological equipment, and intermittent supply of production raw materials. As a result, a lion's share of such products is imported, mainly from the Russian Federation, Iran, and certain EU countries. The development of this sector is seen as a promising direction to strengthen supply chains and promote localization in construction and furniture manufacturing.

1.2.4. Pulp and Paper

Pulp and paper production in Armenia is virtually non-existent. The entire domestic demand is met via imports. This applies both to consumer paper and to office and industrial paper. The absence of local production is due not only to insufficient raw materials but also to issues of economic efficiency linked with the high cost of equipment and the small scale of the market. Until the requisite infrastructure is established, reliance on external markets is likely to persist.

1.2.5. Wood Energy

Use of woody biomass, especially firewood, remains an important but unstable component of Armenia's energy system. In rural communities it continues to be

used as a primary means of heating, particularly where alternative energy carriers are unavailable. At the same time, steps are being taken to promote production and use of biomass in forms such as pellets and briquettes, as more energy-efficient and environmentally less damaging options. Expansion in this domain can be considered within the context of renewable energy, while simultaneously reducing pressure on natural forests and ensuring sustainable fulfillment of heating needs.

1.2.6. Construction and Housing Sector

The use of wood in Armenia's construction sector is limited, due to the prevalence of traditional materials such as metal, concrete, and brick in the market. However, in recent years interest has been noted in green and low-carbon construction, where wood is seen as a renewable and ecologically preferable material. Although the sector is still evolving, international experience demonstrates that wood's role in green architecture holds considerable potential in terms of both energy efficiency and carbon-footprint reduction. This development requires availability of wood of appropriate quality and provenance, as well as enhancement of technical skills.

1.2.7. Carbon Markets

Despite the limited area, Armenia's forests serve as significant natural carbon sinks. This attribute represents a valuable resource for future participation in carbon markets. In particular, the "Forest Landscape Restoration Program 2022–2032" envisions large-scale afforestation and restoration, which may form a basis for acquiring and trading carbon credits. International models show that such programmes can become sources of income for the state and for communities-provided that monitoring, accounting, and verification systems are operational in accordance with international standards (for example, VERRA or Gold Standard).

1.3. Gender Equality and Human Rights in the Forest Sector

The inclusion of human rights and gender equality principles in the forest sector is a key component of forming sustainable and inclusive governance systems. Involvement of women, youth, and local communities in forest restoration, planting, and conservation activities is not only a matter of social justice, but also enhances the effectiveness of these initiatives. Participatory governance by communities and securing access of local populations to resources contribute to local economic development and preservation of natural endowments for future generations. The incorporation of human rights principles in forest policies must be considered a precondition for governance integrity. The Ecopatrol Service attaches high importance to community engagement and gender equality in its programmes. Active participation of women, youth, and local populations in forest conservation programmes is coordinated by the Service itself.

1.4. Forecasts and Proposed Directions (through 2026 and beyond)

The development of Armenia's forest sector entails a medium- and a long-term strategic approach based on sustainable management, ecosystem restoration, and community participation. Taking into account current challenges and global trends, the following key forecasts and proposed directions are identified:

- Expand afforestation and restoration programmes in accordance with the provisions of the "Forest Development Strategy and Action Plan 2021–2030" and the initiative "Forest Landscape Restoration 2022–2032". This direction is one of the political priorities of the Government of Armenia and aims not only to increase forest cover but also to improve biodiversity and climate resilience.
- Mobilize international financing, particularly under the REDD+ mechanism, the Green Climate Fund, the Global Environment Facility (GEF), and EU-led green recovery programmes. The Government of Armenia is taking steps to promote financial cooperation toward resolving priority environmental issues. Financial engagement will support not only restoration efforts but also the development of infrastructure and institutional capacities.
- Develop new economic incentives to encourage the circulation of legal, certified timber and attract investment in processing and renewable energy sectors. Promoting green construction, in

which wood is considered a low-carbon, sustainable material, is also of importance.
- Ensure active involvement of local communities, especially women and youth, in forest governance, planting, and conservation processes. Their inclusion should become a stable source of social development and income for communities.
- Strengthen monitoring and data collection systems, including digitized forest mapping, accounting for carbon flows, monitoring pests and fires. These systems are necessary for policy formulation, risk management, and meeting international reporting requirements.
- Establish and implement traceability mechanisms that guarantee demonstrable legal origin of wood and enhance confidence in domestic and foreign markets.
- Carry out legislative reforms in alignment with international standards and prioritized environmental and economic goals, creating a more predictable and attractive environment for investment and international cooperation.
- Ensure coherence between climate and forest policies, grounded in the strategic vision adopted by the Government of Armenia. Such an integrated approach will enhance alignment of the sector with the country's overall development steering political and strategic documents.
- Successful implementation of future directions is directly linked with the strengthening of the institutional capacities of the Ecopatrol Service:
- Expansion of the Service's powers and nationwide implementation of the Law "On the Ecopatrol Service" will ensure integrity and effectiveness of the governance system.
- Development of the Service's capacities will enable provision of high-quality international reporting, monitoring, and control and the Ecopatrol Service will remain a key actor in ensuring sustainable development of Armenia's forest sector and in maintaining and advancing international cooperation.

Pursuing these directions will enable Armenia not only to preserve and restore its forest resources but also to leverage them as drivers of social, ecological, and economic sustainability.

2. AUSTRIA

Mountain Landscape Schiederweiher Alpine Lake Snowcapped Mountains Autumn Forest Tranquil Nature Scene in Upper Austria European Alps. Funk Design / stock.adobe.com

2. Austria [2]

2.1. Economic situation

1.1.6. Austria gradually emerges from recession

Austria's economy is recovering over the projection period from a recession. The rebound is driven by private consumption, while foreign trade in goods continues to contract for the time being. Residential construction is picking up earlier than equipment investment, thanks to falling interest rates. Moderate wage settlements are expected to curb real-wage growth in 2026 and improve corporate profitability. It is anticipated that inflation will decline during the forecasting period, and the unemployment rate will reach a plateau. Overall, real GDP is set to grow by a modest 0.3% in 2025, accelerating to 1.1% in 2026. Because of higher energy prices, elevated unit labour costs, and other structural challenges, Austria's economy is likely to expand somewhat more slowly than the euro area in the medium term, averaging 1.1% per year through 2030.

"The downturn in Austria was, according to the latest data, roughly as pronounced as in Germany and unusually protracted, lasting about three years", says Stefan Schiman-Vukan, one of the authors of the current Economic Outlook of the Austrian Institute of Economic Research (WIFO, 2025).

The Austrian economy is emerging from a recession that, according to new National Accounts data from Statistics Austria, was milder than previously assumed. Simultaneously, Germany's Federal Statistical Office (Destatis) revised its GDP figures downward. Taken together, the revisions yield a coherent picture: The losses in value added were similar in both countries. The recession, which affected Northern, Central, and Eastern Europe, was triggered by the 2022 energy-price shock. Western and Southern European economies were largely spared because they were less dependent on energy supplies from the Russian Federation.

As WIFO had projected, Austria's recovery is being led not – as usual – by exports of goods but by private consumption, which already expanded noticeably in 2024 (Table 2.1). During the forecast period, however, consumption will be restrained by the elevated unemployment risk and tight fiscal policy. Foreign trade in goods is not expected to revive until 2026. Weak global demand for capital goods is hitting Austrian exporters hard, and import tariffs by the United States are an additional strain, especially since their demand for Austrian goods had been strong in recent years. The recovery in residential construction, already underway, will continue into 2026 on the back of lower interest rates. In civil engineering, the underlying momentum will be dampened in 2026 by public-sector austerity. Equipment investment will recover only with a lag, as it generally trails the overall business cycle; moreover, weak corporate profits are curbing investment appetite (WIFO, 2025).

TABLE 1.1

Austria: Economic indicators (2022-2026)[%]

	2021	2022	2023	2024	2025	2026
	%					
GDP, volume	+ 4.9	+ 5.3	- 0.8	- 0.7	+ 0.3	+ 1.1
GDP, value	+ 6.8	+ 10.6	+ 6.3	+ 3.4	+ 3.5	+ 3.4
Export of goods, volume	+ 12.4	+ 5.6	- 0.9	- 4.5	- 1.1	+ 0.7
Export of goods, value	+ 19.9	+ 18.3	- 0.6	- 5.2	- 0.3	+ 1.5
Import of goods, volume	+ 14.8	+ 3.2	- 7.0	- 5.3	+ 1.0	+ 1.3
Import of goods, value	+ 24.1	+ 23.9	- 6.6	- 7.0	+ 1.4	+ 1.8
Consumer prices	+ 2.8	+ 8.6	+ 7.8	+ 2.9	+ 3.5	+2.4
Active dependent employment	+ 2.5	+ 3.0	+ 1.2	+ 0.2	+ 0.2	+ 0.8

Source: WIFO, 2025.

2.2. Key Policies

Since March 2025, a coalition government consisting of the Austrian People's Party (ÖVP), the Social Democratic Party of Austria (SPÖ), and the liberal NEOS party has been in office under Chancellor Christian Stocker. The 2025–2029 government programme includes a series of measures for active, sustainable forest management and targeted forest conversion to create climate-resilient

[2] Submitted by the Federal Ministry of Agriculture and Forestry, Climate and Environmental Protection, Regions and Water Management, Directorate-General III – Forestry and Regions to the 83rd Session of the UNECE Committee on Forests and the Forest Industry (COFFI) Geneva, 2-4 November 2025.

forests that are better protected against heat. The government is committed to continuing the National Forest Fund, the Protective Forest Action Programme and nature conservation, and it is working to achieve a balanced forest-game relationship to reduce browsing damage and to promote timber construction.

The national forest strategy adopted in 2016 serves as a guideline for forest policy in Austria. The implementation of its work programme is progressing well. The strategy was developed together with over 80 organizations and institutions within the Austrian Forest Dialogue.

2.2.1. Forest subsidies

Despite Austria's high budget deficit and the need to consolidate the budget, the national forest fund established in 2020 is secure for the coming years. The fund has been endowed with a total of €430 million, with over €70 million available for 2025/2026.

Up to the establishment of the Forest Fund, practically all forest-relevant subsidies in Austria were bundled in the national programme of the EU regulation for rural development. In the new funding period, this was replaced by the national CAP Strategic Plan. The CAP Strategic Plan for Austria for the funding period 2023 to 2027 was approved by the European Commission in September 2022. Around €139 million are available for forestry measures as part of this plan.

2.2.2. EU policies

As a member of the European Union, Austria is also affected by a number of EU policies with various strategies and legal regulations that have an impact on the forestry and timber sector.

Strategic frameworks:

- **EU Forest Strategy for 2030:** Provides the overarching framework for sustainable forest management and the multifunctional role of forests in achieving EU Green Deal objectives. It addresses biodiversity protection, climate change mitigation and the sustainable use of forest resources. A review is planned for 2025 to assess progress and decide whether further action is needed.
- **EU Biodiversity Strategy for 2030:** Sets targets to halt biodiversity loss and restore ecosystems by 2030. Key measures include forest protection, expansion of protected areas and promoting sustainable land use.
- **EU Bioeconomy Strategy:** Promotes the sustainable use of renewable biological resources to foster innovation and green growth. Forests and wood-based products are highlighted as key contributors to a circular and climate-neutral economy. The European Commission is currently working on a new strategy.
- **Nature Credits** are a proposed EU framework to incentivize investments in biodiversity and ecosystem restoration. They aim to create a market for verified benefits to nature, complementing carbon credits and supporting forest- and land-based projects.

Regulatory instruments affecting forest management and/or the forest-based industry:

- **Common Agricultural Policy:** The EU's main instrument to support farmers and rural areas, combining income support with environmental and climate measures. Includes incentives for sustainable forest and land management.
- **Land Use, Land-Use Change, and Forestry:** Establishes binding targets for carbon removals from forests and other land uses, ensuring the sector contributes to the EU's 2030 and 2050 climate goals.
- **Nature Restoration Law (NRL**): Introduces legally binding targets to restore degraded ecosystems, including forests, with the aim of enhancing biodiversity, climate resilience and ecosystem services.
- **EU Taxonomy:** A classification system defining environmentally sustainable economic activities, guiding investment flows, including in forestry and wood-based industries.
- **Carbon Removal Certification Framework**: Creates EU-wide rules for certifying carbon removal activities to boost transparency, credibility and investment, including in forestry.
- **EUDR:** Requires companies to ensure that commodities placed on the EU market (e.g. timber, soy, coffee, palm oil) are not associated with deforestation or forest degradation, with strict due diligence and traceability obligations. The EUDR would apply from December 30, 2025, following a one-year postponement. However, in October 2025, the European Commission presented a proposal for amendments to the regulation, which is still to be discussed by the Council and Parliament.
- **Renewable Energy Directive (RED II/III):** Sets binding targets for the share of renewable energy. Contains sustainability criteria for biomass, directly affecting the use of forest resources in energy generation.

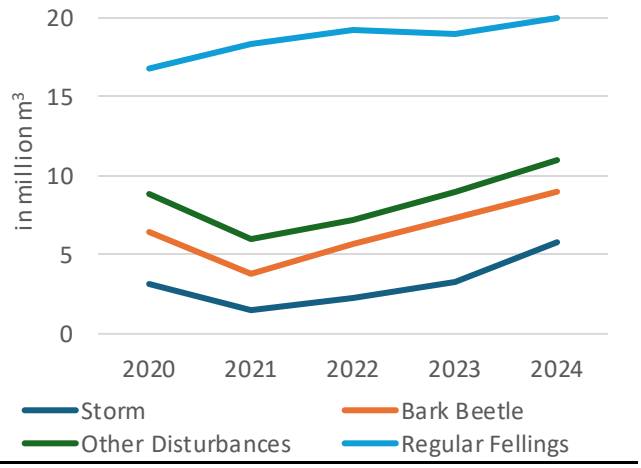
- **Packaging and Packaging Waste Regulation**: Aims to reduce packaging waste and promote reuse and recycling, directly affecting paper, cardboard and other wood-based materials.
- **Green Claims Directive:** Establishes rules to ensure environmental claims are reliable, verifiable and transparent, reducing greenwashing risks for forest-based products.
- **Ecodesign Directive:** Sets requirements for product design throughout the life cycle, promoting resource efficiency, durability and recyclability, with implications for forest-based materials.
- **Corporate Sustainability Reporting Directive**: Requires large companies to disclose detailed information on environmental, social and governance (ESG) impacts, including risks and opportunities linked to forestry and land use.
- **Corporate Sustainability Due Diligence Directive**: Obligates large companies to identify, prevent and mitigate adverse environmental and human rights impacts in their operations and supply chains.
- **Construction Products Regulation**: Establishes harmonised rules for the marketing of construction products in the EU, relevant for wood and wood-based construction materials.

2.2.3. Biotic and abiotic disturbances

In 2024, the share of damaged wood was 55.0%, more than half of the total harvest. In total, 11.01 million m³ of damaged wood were recorded. This indicates a clear increase in damaged wood of 22.2% compared with 2023.

GRAPH 2.1

Austria: Regular fellings and fellings due to natural disasters (2020-2024)[million m³ u.b.]



Source: BMLUK, 2025.

While bark beetle damage declined by nearly 20% to 3.24 million m³, windthrow damage increased by 76.2% to 5.78 million m³. At the beginning of 2025 a dry winter suggested a difficult year regarding bark beetle damage. After somewhat higher precipitation in late spring, media reports in the third quarter indicated clearly lower damaged wood amounts from bark beetles in the summer of 2025 than in the previous years (Holzkurier, 2025a).

2.2.4. Traceability and supply chains

PEFC Austria was founded in 1999. Since September 2000 the Austrian PEFC certification system has been applied. Both forest certification by means of the regional model and the "Chain of Custody" (CoC) certification have been developed so as to suit the specific requirements of small- and medium-sized enterprises in Austria. Currently, over 100,000 forest owners holding over 3.39 million ha effectively take advantage of the certification and 614 CoC certificates are valid.

FSC: In Austria, 587 ha of forest are currently certified according to FSC. There are 278 valid CoC certificates.

Since 2013, supply chains and traceability in Austria's timber trade have been subject to the EUTR and the FLEGT licensing system, which require market participants to prove that their timber comes from legal sources. EUDR, which came into force in 2023 and is expected to apply from 30 December 2025, will replace the EUTR. Due diligence and transparency requirements will be extended. In future, relevant products may only be placed or made available on the market or exported if they are deforestation-free, have been produced in accordance with the relevant legislation of the country of production and are covered by a due diligence statement. In October 2025, the European Commission presented a proposal to amend the EUDR in order to ensure implementation and facilitate compliance, particularly for small operators. The Council and the European Parliament have yet to give their approval.

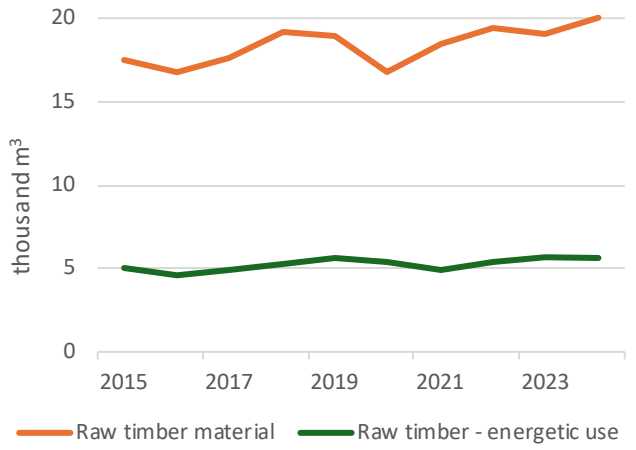
2.3. Market Developments

2.3.1. Wood raw materials

Altogether 20.03 million m³ under bark were harvested in 2024, 5.3% more than in 2023, 9.1% more than the ten-year average. Sawlogs accounted for 55.9%, pulpwood and other industrial roundwood for 16.2%, fuelwood and chippings from forests for 27.9% of the quantity felled.

14.45 million m³ were assigned to material use, 5.58 million m³ were used for energy generation. The share of coniferous wood in the total volume felled amounted to 84.9%. Small forest owners (forest area < 200 ha) harvested 11.72 million m³ in total in 2024 (+5.2%), the owners of forests from 200 ha 6.24 million m³ (+5.7%) and the Austrian Federal Forests 2.06 million m³ (+4.9%). The amount of wood harvested due to calamities increased by 22.2% to 11.01 million m³, which is 55.0% of the total removal and 32.4% above the ten-year average. The major causes of damage were bark beetles and weather extremes (mainly storm damage).

GRAPH 2.2
Austria: Wood removals from forests (20154-2024) [1,000 m³ u.b.]



Source: BMLUK, 2025.

On annual average, in 2024 sawmills paid €101.91 per m³ of sawlog spruce/fir, Cat. ABC, Media 2b, 0.7% less than in 2023; the annual maximum of €105.75 per m³ was paid in December, the annual minimum of €98.92 in July. The 2024 mixed pulpwood/mechanical pulpwood price for spruce/fir was with €41.38 per m³ 10.7% under the average for the preceding year – pulpwood €38.48 (- 12.9%), mechanical pulpwood €46.11 (-12.3%).

Roundwood imports remained on the same level as 2023, thus reaching just under 9.0 million m³. The import of industrial roundwood (sawlogs + pulpwood) slightly decreased to 8.4 million m³ (-3%). Roundwood exports decreased by 29% to 0.43 million m³.

Current situation: At the beginning of 2025, timber prices were already higher than in December 2024. While prices in the first quarter were relatively constant, they rose again in the second and third quarters. In August 2025, the price for sawlog spruce/fir, Cat. ABC, Media 2b, was at €114.61 and 14.9% above the previous year. In the first half of 2025, there was a clear decline in imports of roundwood, affecting almost all import markets. The import volume of coniferous sawlogs from January to July was 3.2 million m³, corresponding to an 11% decrease compared to 2024. Imports from Germany declined moderately by 2% to 1.6 million m³. Imports from the Czech Republic, Austria's second-largest trading partner in terms of coniferous sawlogs, fell by 12% to 1.1 million m³ and thus reached a level last seen in 2015 (Holzkurier, 2025a).

2.3.2. Sawn softwood and sawn hardwood

The past three years, the sawmill industry has navigated a difficult economic environment. While the construction sector remained weak, sale prices stagnated, costs for raw materials, energy and labour continued to rise. Nevertheless, sawn timber production was stabilised in 2024 with a recorded growth of around 6% compared to the previous year, following a decline of nearly 10% in 2023. The Austrian sawmill industry has traditionally been strongly export-oriented. After export volumes of coniferous sawn timber fell by around 6% in 2023, they were almost back to 2022 levels in 2024. The main export markets, Italy and Germany, recently recorded stable to increasing demand. Additionally, exports to Central and Eastern Europe, Japan and the MENA region increased. A major source of uncertainty for global markets are the import tariffs of the USA (Association of the Austrian Wood Industries, 2025).

The production of sawnwood amounted to 9.7 million m³ (2023: 9.4 million m³), of which 9.5 million m³ were sawn softwood. According to the industry report 2024/2025 of the Association of the Austrian Wood Industries, processed roundwood accounted for over 16 million solid m³ in 2024, 10.6 million m³ (64%) of which from domestic logging. The foreign trade statistics show around 6 million solid m³ of imported coniferous sawlogs. 5.7 million m³ of sawn softwood were exported in 2024 – an increase of 6.1% compared to the previous year (5.4 million m³). Exports to the main market, Italy, increased by 0.5% to 2.6 million m³. This means that 45% of the total sawn softwood exports were shipped to Italy. 14% of exports went to Germany (+7.8%), 16% to MENA countries (+11.6%), 7% to Asia

(+19.2%), 2% to North America (-35.3%). Imports of sawn softwood increased by 3% in 2024 compared to the previous year and totalled 1.4 million m³.

Current situation and outlook: Declines in windthrows and a weather-related reduction in bark beetle calamities led to a smaller supply of soft roundwood in autumn 2025 (Holzkurier, 2025b). Due to low stocks levels, sawnwood production had to be reduced in parts of southern Austria. However, the available autumn data indicate that sawn softwood production remains at a constant and high level. For exports, a further increase in export volumes is expected. For sawn hardwood, the figures suggest a slight increase in production (LKÖ, 2025).

2.3.3. Wood-based panels

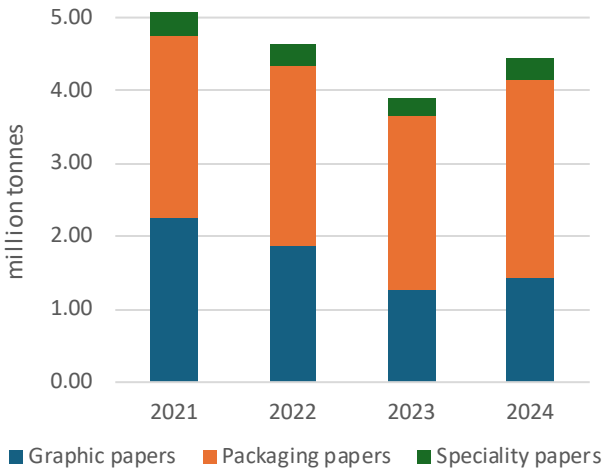
Due to steady demand in the furniture and construction sectors, the order situation in the panel industry has remained at a satisfactory level in 2025, although with regional differences. The Austrian panel industry can continue to position itself well in international markets, as exports in most segments increased in 2024 compared to the previous year. The most important market remains the European Union, especially Germany, France, and Italy. Total wood consumption in the panel industry amounted to 1.90 million m³, of which 1.02 million m³ were panel timber and 0.88 million m³ were sawmill by-products and sawdust. Overall, wood consumption decreased by 4% (2023: 1.98 million m³). The majority of the wood consumed originated from Austria, namely 1.34 million m³, corresponding to 70.5%. The share of imported wood was 0.56 million m³, i.e. 29.5% of the total wood consumption. The production value of solid wood boards in 2024 was €120 million. After two years of a decline, this represents a 10.2% increase compared with the previous year and is well above the 2020 level. The export value was €237.5 million, up 9.6% from the previous year. The most important export countries were the EU (71.0%) and the EFTA (24.7%). The weakness of the construction industry, especially in key markets like Germany, points to a possible decline in demand (Association of the Austrian Wood Industries, 2025).

2.3.4. Pulp and paper

After very low sales in 2023, the paper and pulp industry was able to recover some of the volumes in 2024. However, the demand for paper products remains weak at the beginning of 2025, at the start of the third year of recession, and high raw material and energy costs are jeopardizing competitiveness. Despite a recession and high costs, the Austrian paper industry, with its 23 pulp and paper production sites, is working to become an even stronger part of the bioeconomy. The number of employees fell only slightly in 2024, by 0.4% to 7,532. The total revenue of the sector increased by 7.2% to €4.63 billion. Despite the weaker cash flow situation, the sector continues to invest. After two strong years with around €300 million each, a further €291 million were invested in 2024.

Paper production amounted to 4.4 million tonnes in 2024. Although this was 13.6% more than in 2023, it was still 12.5% less than in 2021, which was a good year. Machine utilization rose from 77% to 86%. All three paper sectors grew strongly in 2024 (see figure). In total, the paper mills sold 4.4 million tonnes, significantly more than the domestic consumption of 1.8 million tonnes. For the small country of Austria, such production volumes are only possible thanks to a very high export quota, which stood at 87.5% in 2024.

GRAPH 2.3
Austria: Paper production in Austria (2021-2024) [million tonnes]



Source: Austropapier, 2025

The virgin fibre pulp statistics show production of around 1.8 million tonnes for 2024, an overall increase of 6.1%. The push does not quite correlate with the demand in the downstream paper sector, which is why paper pulp imports have risen to around half a million tonnes. Now that two mills have stopped mechanical pulping for virgin

fibres, the production mix is roughly as follows: 70% is produced using the sulphate process and 20% using the sulphite process. The remaining 10% is mechanical pulp, which was much more prevalent 30 years ago at 25%. A good example of bioeconomy outside the actual paper chain is dissolving pulp. These are chemically treated fibres as a precursor for viscose and later textiles, which are frequently exported to Asia and stagnated at around 430,000 tonnes in 2024. The amount of wood used by the Austrian pulp industry increased by 6.5% to 8.1 million solid m³ in 2024; 4.08 million m³ accounted for roundwood (+3.0%) and 4.00 million m³ for sawing by-products (+10.3%). Purchases of domestic roundwood increased by 11.5% to 2.57 million m³, imports by 6.8% to 1.76 million m³. For sawing by-products, domestic purchases amounted to 3.39 million m³ (+17.5%) and imports accounted for 0.66 million m³ (- 7.4%). The production of secondary pulp fell by 8.1% to 1.67 million tonnes. 2.32 million tonnes of recovered paper were used (+5.8%). Recycling works well in Austria, with a recycling rate of 86.9% in 2023. (Austropapier, 2025)

According to the UNECE Joint Forest Sector Questionnaire paper and paperboard exports increased by 12.4% to 3.55 million tonnes in 2024. The largest supply markets, alongside the 552,000 tonnes domestic market (+12.9%), remain Germany (764,000 t, +7.3%) and Italy (539,000 t, +15.0%). In 2024, a total amount of 1.13 million tonnes of paper and paperboard were imported into Austria (+1.9%).

Current situation and outlook: The data currently available for 2025 suggest a slight decline in paper production. The external trade situation is similar to the previous year, although with a slight increase expected in imports. Wood pulp production is expected to rise in 2025, a trend that could continue into 2026. In external trade, imports are expected to continue growing, albeit at a slower pace, while exports will temporarily decline slightly in 2025.

2.3.5. Wood energy

According to the official removal statistics 5.58 million m³ of fuelwood and chippings from forests were harvested in 2024, which corresponds to a 27.9% share in the total removal and a decrease of 1.5% compared to 2023. Fuelwood accounted for 2.65 million m³ (1.61 million m³ of coniferous wood, 1,04 million m³ hardwood), wood chips from forests for 2.93 million (solid) m³. After a significant price increase for fuelwood had taken place in the course of 2022, prices stabilized at this high level, although there where slight decreases in 2024. The average price for non-coniferous fuelwood in 2024 was €104.88 per m³ of stacked wood (with bark, without turnover tax), which is 3.1% lower than in 2023. The 2024 price for coniferous fuelwood, at €76.23 per m³, was 0.1% lower compared to the previous year. In 2025, prices remain at roughly the same level as in 2024.

2.3.6. Wood pellets

In 2024, 1.80 million tonnes of pellets were produced at the 53 Austrian production sites (2023 1.73 million t). The pellets production has increased by about 1 million tonnes over the past 15 years. The consumption of pellets in Austria was 1.43 million tonnes in 2024. In 2024 946,000 tonnes where exported, with 85% exported to Italy as the main export market. The export quantity is significantly higher than the import quantity, which was 220,900 tonnes in 2024. As of October 2025, the price pellets is €333.61 per tonne, which is 15.3% more than in 2024 (October 2024 €289.43 per tonne (ProPellets, 2025).

2.3.7. Housing and construction

Using wood as a building material has a long tradition in Austria. In recent decades, the development of engineered wood products has increased the share of timber used. One of the many highlights of wooden construction in Austria is the 24-storey, 84 metres high timber building "HoHo Wien" in Vienna.

Progress has been made in aligning the building regulations of the Federal Provinces with the guidelines of the Austrian Institute for Building Technology (OIB), which outline technical and safety-related requirements for buildings. However, greater harmonization of the regulations concerning medium and high-rise wooden buildings is still needed. Additionally, OIB guideline 7, which focuses on the sustainable use of natural resources in the building sector, is planned for 2027.

2.3.8. Austrian Wood Initiative

The Forest Fund is one of the largest packages of measures for Austrian forests in recent years. Its aim is to develop climate-smart forests, promote biodiversity and increase the efficient use of wood, thereby actively contributing to climate protection. Specific activities focusing on increasing

and sustainably using wood are summarised under the "Austrian Wood Initiative". The initiative comprises a wide range of specific measures and activities. One special measure to increase the proportion of timber construction in Austria is the 'CO_2 bonus'. The CO_2 bonus subsidises large-volume residential buildings and public buildings with a high proportion of renewable raw materials from sustainable management (new buildings, extensions and additions in timber construction). The subsidy is granted at a rate of €1 per kilogramme of sustainably sourced wood, plus an additional €0.10 per kilogramme if insulation materials made from renewable raw materials are used. The subsidy is limited to a maximum of 50% of the total construction costs. As of October 2025, six funding rounds had supported 194 timber construction projects across Austria. These buildings are expected to store around 70,000 tonnes of CO_2 equivalent over their lifetimes. An expert jury also selects lighthouse projects, which are presented on the Forest Fund website.

Further activities and measures of the Wood Initiative include an Austria-wide wood construction advisory network, a standardization secretariat for wood utilization and timber construction, and the promotion of various research projects to increase the efficient use of wood. As part of the initiative, four professorships in sustainable building and timber architecture are also being established at Austrian universities. To encourage wood-related exchange at a European level, Austria and Finland have launched the European Wood Policy Platform, "woodPoP". This platform aims to improve the framework conditions for the wood-based value chain and highlights its political relevance.

2.3.9. Carbon markets

There are several providers of voluntary carbon credits for forestry projects in Austria. Regional credits are sold, and there are various approaches, e.g. afforestation, growing stocks, and preserving stocks. Carbon credits can be a source of income for forest owners. Currently, the market is not yet developing very dynamically. There is a wait-and-see attitude due to uncertainties regarding the EU Carbon Removals and Carbon Farming (CRCF) Regulation.

2.4. Gender and Human Rights Issues

In Austria, the overall human rights situation can be described as excellent. The Austrian constitution and laws guarantee this. In the forestry and wood industry, women are generally underrepresented. In particular in the public sector and in the outsourced agencies and companies of the federal government, there are targets to adjust the gender balance.

The Federal Ministry of Agriculture, Forestry, Climate and Environmental Protection, Regions and Water Management funds the mentoring project for women in forestry and in the wood industry, which is conducted and scientifically supervised by the University of Natural Resources and Life Sciences Vienna. Women are given the opportunity to learn from the experiences of their mentors. The programme includes further education offers, career workshops, and networking opportunities.

In 2003, three women from the forestry sector founded the association "Forstfrauen" (Women in Forestry), which has grown to more than 200 members since. The goal of the association is to make the achievements and commitment of women in forestry and the timber industry visible, both within the sector and to a broad public. Forstfrauen is a founding member of Women in Forestry International (WOFO), which serves as a network linking of existing national networks and aims to anchor them at national and international levels. For this purpose, joint activities such as study trips, excursions, and events are organized, and joint projects are initiated and carried out (Forstfrauen, 2025).
The Federal Ministry of Agriculture and Forestry, Climate and Environmental Protection, Regions and Water Management supports we4DRR – women exchange for Disaster Risk Reduction a European network of female professionals in research, policy, and practice in the fields of natural hazard management and disaster risk reduction. It was launched in 2016 by Maria Patek, the former head of the Austrian Forestry Ministry, to provide a platform by and for women interested in professional and personal exchange. The network is coordinated by the Austrian Research Centre for Forest (BFW) in cooperation with BOKU and the Federal Ministry. The network wants to increase the visibility and strengthen female professionals by enabling the transnational exchange of knowledge and experiences. (Naturgefahren, 2025).

3. CYPRUS

Pano Platres landscape in Troodos mountains, Cyprus, Kristof/ stock.adobe.com

3. Cyprus [3]

3.1. Market Drivers

3.1.1. Market Situation

Cyprus experienced strong economic growth in 2024, with real GDP increasing by 3.4%. This growth was primarily fueled by strong private consumption, a booming tourism season, the expanding Information and Communication Technology (ICT) sector, and a rebound in net exports. Robust public finances also characterized 2024, with increasing tax revenues and a rising fiscal surplus. Strong economic growth is expected to continue over the next three years, despite risks arising from global trade tensions and geopolitical uncertainties that could limit growth prospects. The Ministry of Finance estimates that GDP growth will stand at 3.1% in 2025 and 2026, before slowing slightly to 3% in 2027 and 2.9% in 2028. Inflation is expected to be 1.9% in 2025, stabilizing at 2.1% through to 2028. Unemployment is projected to decline to 4.7% in 2025 and 2026, dropping further to 4.5% in 2027 and 2028. Public debt is forecast to fall below 60% of GDP by the end of 2025, reaching 54.7%. It is expected to continue decreasing reaching 43.3% by 2028. Cyprus anticipates consistent fiscal surpluses reaching 3.5% of GDP in 2025, and 3.7% through 2028.

TABLE 3.1
Cyprus: Main economic indicators (2023–2028)

Indicators	*2023*	*2024*	*2025 proj.*	*2026 proj.*	*2027 proj.*	*2028 proj.*
GDP at constant market prices 2010 [% change]	2.6	3.4	3.1	3.1	3.0	2.9
Unemployment Rate LFS [%]	5.8	4.9	4.7	4.7	4.6	4.5
Harmonized Index of Consumer Prices [% change]	3.9	2.3	1.9	2.1	2.1	2.1
Budget Balance [% of GDP]	1.7	4.3	3.5	3.7	3.7	3.7
Public Debt [% of GDP]	73.6	65.3	57.4	52.6	48.4	43.3

Note: LFS: labour force survey ; proj.: projection.
Source: MOF, 2025.

Despite the good performance of the Cypriot economy, as highlighted in the Strategic Fiscal Policy Framework (SFPF) 2026 - 2028, several risks could negatively affect Cypriot economic growth. These risks concern geopolitical instability in Ukraine and the Middle East, United States and United Kingdom sanctions on Cypriot entities, the stalled LNG terminal at Vasilikos, which poses financial risks related to EU guarantees and subsidies, as well as Cyprus' participation in the Great Sea Interconnector, which may also pose financial risks.

Undoubtedly, developments in international issues, as well as developments within Cyprus, have an impact on the forestry sector in Cyprus. The Cypriot government, which manages the country's state forests, the main and most extensive forests in Cyprus, aims to achieve multiple uses of forest resources, protect the environment and biodiversity, and provide opportunities for recreation and environmental awareness, reflecting a shift from timber production to broader social and environmental benefits. However, the management of Cyprus' forests, mainly for environmental and social purposes, has gradually led to the limitation of domestic timber production. This has resulted in Cyprus relying heavily on imports of timber and timber products from European and third countries to meet its needs, which exposes the country to changing conditions in the European and international timber market.

3.1.2. Key Policies

Climate policy

Cyprus has not developed a standalone climate law, nor does it have quantified carbon dioxide removal (CDR). It is therefore subject to the climate neutrality objective set in the EU Climate Law, within the framework of which it has developed specific policies and strategies to achieve its climate objectives. Cyprus's National Energy and Climate Plan (NECP) 2021-2030 is a comprehensive strategy to achieve decarbonization goals, focusing on reducing GHG emissions, increasing renewable energy (especially solar and wind), and improving energy efficiency. Key targets include a 32% reduction in non-ETS (Emissions

[3] Submitted by the Ministry of Agriculture, Rural Development and Environment of the Republic of Cyprus to the 82nd Session of the ECE Committee on Forests and the Forest Industry (COFFI) Geneva, 13-15 November 2024.

Trading System) emissions by 2030 and raising the share of renewables to at least 33% of final energy consumption. The plan promotes solar energy, a cross-border electricity interconnection with Greece (the Great Sea Interconnector), sustainable transport, and a circular economy to reduce fossil fuel reliance and move towards carbon neutrality by 2050. Alongside the NECP, Cyprus' Long-term Low GHG Emission Development Strategy is the country's second key climate policy document. It presents a roadmap for climate neutrality by 2050 and sets out four scenarios with different levels of ambition. In addition, Cyprus' Common Agricultural Policy Strategic Plan includes multiple measures for agriculture and forestry, such as the protection of soil, wetlands and peatlands and carbon sequestration in new forests. However, despite the various policies and actions it implements to achieve net zero GHG emissions by 2050, Cyprus's level of progress towards achieving the EU's climate neutrality objective appears to be insufficient, as gas emissions continue to trend upwards due to the high consumption of fossil fuels and the lack of a specific overall goal for reducing GHG emissions by 2050.

In this context, the contribution of Cyprus' forests to achieving the national carbon neutrality targets is extremely important. According to the available data from the Department of Forests of the Ministry of Agriculture, Rural Development and Environment of Cyprus, in 2024, the forests (living biomass) of Cyprus are estimated to have stored 4.54 million metric tonnes of carbon. Given the gross growth, in 2024 the forests of Cyprus had the potential to sequester 69.9 thousand tonnes of carbon. The potential of Cyprus' forests to act as a carbon sink is strengthened year by year, as the harvest rate is significantly lower than the maximum sustainable yield.

Low carbon construction

Low-carbon construction in Cyprus is a growing focus driven by EU and national climate goals, involving mandates for energy-efficient buildings from 2030, the adoption of green building standards like LEED [4] and BREEAM [5], and the increased use of renewable energy sources such as solar panels and innovative eco-materials. Key strategies include improved building insulation, natural ventilation systems, rainwater harvesting, and the incorporation of renewable energy to significantly reduce the carbon footprint of new and existing structures. Towards this direction, in March 2024, the Cypriot Parliament approved a bill mandating that all new buildings constructed from 2030 onwards must be energy-efficient and utilize renewable resources. The Cypriot government is ensuring that the island takes "steps" towards "green" trends. For example, a directive was issued in 2024 that all new homes must be zero carbon by 2030, and all buildings in Cyprus must be zero carbon by 2050. The government will also ensure that solar panels are installed wherever possible to harness solar energy.

Circular economy

Cyprus is actively developing its circular economy, guided by the national "Cyprus Action Plan for the Transition to a Circular Economy 2021-2027". Key initiatives include the creation of the Cyprus Circular Economy Network (CCEN) to facilitate cooperation and information exchange between stakeholders, and the launch of the Cyprus Circular Economy Platform to showcase good practices and events. Projects such as "Zero Waste Cyprus" promote waste reduction and reuse, while funding programmes, such as the one for circular economy projects for SMEs, offer financial incentives to support the transition from a linear to a circular model. However, despite the benefits of transitioning to a circular economy, there are significant challenges that need to be addressed such as the lack of a supportive framework and related technology, the lack of financing mechanisms and sustainable business models, as well as the lack of economies of scale.

Regarding the Cyprus forestry sector, the low productivity of the forests mainly due to the unfavorable soil and climatic conditions that prevail in Cyprus, makes

[4] LEED: Leadership in Energy and Environmental Design; globally recognized, point-based green building certification system managed by the U.S. Green Building Council.
[5] BREEAM (Building Research Establishment Environmental Assessment Method); science-based suite of validation and certification systems for sustainable built environments.

the exploitation of forest biomass difficult and uneconomical. Agriculture and the agro-food sectors dominate the bioeconomy, while forests and forest related value chains represent more over 50% of the non-food bioeconomy. As a consequence, there is higher diversity of biomass sources with a greater relevance of agricultural residues and dedicated agricultural crops. Nevertheless, lignocellulosic biomass and, specifically forest primary and secondary biomass (residues and side-streams), are the most significant sources of non-food biomass in Cyprus.

Trade policy

Cyprus' trade policy is largely defined by its European Union membership, which means its trade laws, regulations, and agreements are aligned with those of the EU and the WTO. Key aspects include harmonizing policies with EU standards, active participation in WTO negotiations through the European Commission, adherence to EU trade defense instruments, and managing EU customs duties, tariffs, and VAT, while navigating the unique situation of the divided island through the Green Line Regulation. The Republic of Cyprus also negotiates bilateral investment agreements with third countries, subject to EU's overarching investment policy. In this context, Cyprus' timber trade policy aims to align Cyprus with EU and international efforts to promote legal, sustainable timber trade and protect forests from illegal logging, through the implementation of the EU Timber Regulation (EUTR) and the FLEGT licensing scheme, as well as the enforcement of national legislation regulating domestic timber and firewood trade.

Energy policy

As it mentioned above, Cyprus's National Energy and Climate Plan (NECP) is a 2021-2030 strategy for achieving the country's energy and climate goals, and it was revised in 2024 to align with the EU's more ambitious "Fit for 55" package. The updated plan reflects increased targets for renewable energy, improved energy efficiency, and measures for green hydrogen, aiming for a 33% share of renewable Energy Sources (RES) in final energy consumption by 2030 and a 32% reduction in non-ETS GHG emissions compared to 2005.

In 2024, the share of renewable energy sources in Cyprus' gross final energy consumption reached 24.5%, far from achieving both the national target (33%) and the EU target (42.5%) for 2030. The low share is partly due to the failure to implement the necessary mechanisms for storing electricity generated by RES, resulting in load shedding during peak hours to protect the system from overload. According to Cyprus Transmission System Operator (TSOC) in 2024, approximately 835 MW of photovoltaic systems, 134 MW of wind systems and 12 MW of biomass systems were in operation, i.e., a total installed capacity of 981 MW with a total energy production of 1,351 GWh. At the same time, the total installed capacity of conventional power generation units amounts to 1.55 GW with a total energy production of 4,168 GWh.

National security

Through membership in international organizations that promote global security, the Republic of Cyprus participates in and supports international initiatives aimed at combating, inter alia, illegal trafficking of weapons, terrorism, and the proliferation and deployment of weapons of mass destruction. In addition, Cyprus supports and actively participates in efforts aimed at substantially deepening the EU Common Security and Defence Policy (CSDP), convinced that the Union's capability development is hugely significant, as in the case of the Permanent Structured Cooperation (PESCO) in Security and Defence and of the European Defence Fund (EDF). Cyprus also supports the ambitious goal for the EU to achieve strategic autonomy. At the bilateral level, Cyprus cooperates closely with all like-minded countries in the region to strengthen the security architecture in the Eastern Mediterranean and the Middle East, contributing in this manner in consolidating peace and stability.

Due to the ongoing Turkish occupation of its northern territory the Republic of Cyprus cannot exercise authority over forests in this area, which represent approximately 24% of the total forest area of the island.

3.1.3. Biotic and abiotic disturbances

Cyprus's forests face significant threats from both biotic and abiotic disturbances, with forest fires being a

primary concern alongside drought and extreme temperatures. Biotic factors include insect outbreaks and diseases, while abiotic elements like wind and drought contribute to increased tree mortality and vulnerability to pests and pathogens. Climate change is exacerbating these issues by fostering drier conditions and more extreme heat events, intensifying the impacts of both fire and insect pest outbreaks.

Abiotic disturbances to Cypriot forests are primarily caused by climate change impacts, especially increasing frequency and intensity of droughts, heatwaves, and forest fires. These phenomena significantly stress and degrade forest ecosystems, particularly coniferous species, by weakening stands and increasing their vulnerability to other pressures. Additionally, land-use change related to urban development, infrastructure, and intensive agriculture further contribute to habitat loss and forest degradation in Cyprus. Biotic disturbances in Cypriot forests are primarily caused by pest outbreaks and pathogenic fungi, which are increasingly prevalent due to drought and rising temperatures associated with climate change. These climate-related stresses weaken trees, making them more susceptible to insect infestations, particularly bark beetles, and disease. While wildlife damage is also a factor, it is generally less significant than insect and fungal impacts. To mitigate the impacts of drought on forests, the Government of Cyprus is implementing measures that include promoting forest thinning to reduce competition and improve drought resistance in stands, expanding of forests through afforestation and reforestation with drought-resistance species, as well as the effectively preventing and suppressing forest fires.

3.1.4. Raw material supplies

Cyprus is a net importer of timber. Total timber imports account for up to 98% of the total timber market, while timber exports are negligible. Consequently, the prices of timber and timber products in Cyprus are influenced by global and European economic conditions, with specific price ranges depending on the origin, type and application of the product. Local market offers a range of timber products, with prices being influenced by factors such as international supply chains, import costs and domestic demand for construction and other uses. Softwoods such as pine are generally cheaper, while hardwoods and specific products such as oak and beech boards are more expensive.

3.1.5. Traceability and supply chains

Cyprus's timber trade supply chains and traceability are governed by the EUTR and the FLEGT licensing scheme, requiring operators to demonstrate due diligence that their timber is legally sourced and not linked to illegal deforestation, as mandated by the new EUDR. The Department of Forests of the Ministry of Agriculture, Rural Development and Environment, acts as the Competent Authority, inspecting timber imports and working with Customs to verify FLEGT licenses and other compliance documents before customs clearance. At the same time, a national legal framework has been established to ensure compliance for limited domestic timber and firewood production and promote deforestation-free supply chains within Cyprus. Regarding certification, although Cyprus does not have a national certification system, the international certification provided by FSC, as well as PEFC, which share the common goal of sustainable forest management, are recognized by companies in Cyprus for timber supply chain traceability and responsible sourcing.

3.2. Market Developments

The level of investment in Cyprus forestry is very low in relation to the investments in other sectors and branches of the productive activities in Cyprus (the contribution of forestry to the Gross Domestic Production is far below 1%). This is mainly due to the low productivity of forests and the dependence of the market on the imports of finished or processed wood products. Additionally, rural depopulation alienates people from rural communities and pushes them to urban centers, where the service sector is growing. However, urbanization induces increasing demand for recreational services rather than for timber products. The offer of recreational opportunities combined with the protective services they provide highlight the enormous social and environmental role of Cyprus' forests.

3.2.1. Wood raw materials

Cyprus is a net wood importing country. The overall wood market imports account up to 98%, while exports are negligible. Imports include a wide variety of timber, such as hardwoods (e.g. ash, beech, cherry, teak) and softwoods, along with wood products such as MDF, plywood and OSB. These imports serve as raw materials for various industries, such as furniture manufacturing, flooring and general construction. Additionally, in order to meet the growing demand, quantities of firewood are imported, both from European and third countries.

Regarding the local production, Calabrian pine (Pinus brutia) is the main commercial value species of Cyprus forests, which constitutes about 80% of the area of forests and 80% of the growing stock. Although Pinus brutia can reach large sizes and produce good quality timber, the growth rate is low, accounting only to about 1.3 m³ per hectare per year. In addition, some areas are critically under stocked, and regeneration is inadequate. Consequently, large areas are excluded from felling to allow for the growing stock to recover and obtain the desired stocking. Local yield is mainly obtained from the productive state forests, and it is sold to sawmill owners or wood-cutter associations through open tenders for the production of tailor-made products for constructional purposes mainly for renovation of traditional buildings, light weight packaging for fruit and vegetables and pallets for the export trade. In addition, through local production, the Government makes available to the public quantities of firewood, in order to meet the growing demand for firewood.

3.2.2. Sawn wood (softwood and hardwood), wood based-panels, pulp and paper

Cyprus's needs for timber and wood products are almost entirely met through imports from European and third countries. However, a very small amount of timber is also harvested annually from Cypriot forests, which is channeled to the local market. In 2024, the amount of timber extracted from Cypriot forests amounted to 1,619 m³ (u.b.) and was 15% lower than the 1,862 m³ (u.b.) of timber extracted in 2023. The majority of the timber extracted was sold to private sawmills and other individuals for the production of pallets, lightweight packaging for fruits and vegetables and custom-made products. In addition, in 2024, 4,790 m³ (u.b.) of firewood were extracted from the Cyprus' forests, a quantity that represents a 30.4% decrease compared to the quantity of firewood extracted in 2023, which amounted to 6,247 m³ (u.b.).

Regarding timber imports in Cyprus, the most important products imported are sawn timber, veneer sheets and wood-based panels, as well as paper and paperboard. In 2024, sawn timber imports increased by 42.1%, reaching 49,487 m³ compared to 34,820 m³ in 2023, with the vast majority of them, i.e. 78.8%, being coniferous timber. An increase of 11.4% was also recorded in imports of veneer sheets and wood-based panels, as in 2024 imports reached 116,857 m³ compared to 104,899 m³ in 2023. A 15.1% was also recorded in paper and paperboard imports, which in 2024 reached 53,986 tonnes compared to 46,890 tonnes imported in 2023. For 2025, as for 2026, it is predicted that imports of timber and timber products mentioned above will decrease to return to 2023 levels (Table 3.2).

TABLE 3.2

Cyprus: Imports of wood and wood-based products (2019-2023)[1,000 m³ and 1,000 tonnes]

	2023	*2024*	*2025**	*2026**
Sawn wood [1,000 m³]	34.82	49.48	43.00	43.00
Wood based panels [1,000 m³]	104.9	116.86	104.00	104.00
Paper & paperboard [1,000 tonnes]	46.89	53.99	46.00	46.00

Note: **projection.*
Source: MOA, 2025.

3.2.3. Wood energy

Despite wood is a renewable source of energy and wood fuel has a key environmental benefit over fossil fuels in that wood is 'carbon neutral', the potential of fuel production from forests in Cyprus is limited, mainly due to adverse climatic conditions. However, a quantity of forest biomass, mainly firewood, is used for domestic heating in rural and mountainous areas, fueling traditional and energy-efficient fireplaces and stoves. As local production is not sufficient to meet the growing domestic demand for wood energy, driven by the rising cost of conventional fuels and the desire for more economical, environmentally friendly heating solutions, companies are importing wood fuels, such as solid

firewood, pellets and briquettes, from countries with abundant biomass resources, to meet the demand.

In an effort to contribute to meeting Cyprus' firewood needs, as well as to limiting illegal logging from forests, the Government of Cyprus makes available, on an annual basis, a quantity of firewood to citizens interested in acquiring firewood for their own use. The provision of firewood is typically occurring through the harvesting of designated state forests under the principle of sustainable and multi-purpose forestry. Access to firewood implies compliance with specific laws and regulations, which may include the obligation to obtain a permit for the transport of firewood, and the possession of documents proving its legality, as detailed in national legislation.

3.2.4. Housing and construction (with a focus on wood-based and wood-hybrid construction)

Although wooden houses have a lower environmental impact than other types of houses, due to the adverse weather conditions prevailing in Cyprus, the use of wood in the construction sector is not widespread enough. As a result, most buildings in Cyprus are constructed mainly from reinforced concrete, i.e. with the combined use of concrete and steel. However, the construction sector consumes a significant proportion of imported timber and wood-based products like OSB, MDF, and plywood for a variety of structural and non-structural applications, including timber frame constructions, flooring, interior partitions, doors, windows and furniture. Key benefits of timber construction in Cyprus are its ecological sustainability, high thermal insulation properties, and anti-seismic resilience. The government also supports this sector through initiatives like the National Action Plan for Green Public Procurements, which promotes sustainably sourced and certified timber.

In this context, during the period January - December 2024, 6,827 building permits were issued compared to 7,170 in the corresponding period of 2023, recording a decrease of 4.8%. The total value of these permits amounted to €2,907,321, approximately the same as in 2023, where the total value amounted to €2,906,219. At the same time, the total area of building permits for 2024 and 2023 fluctuated at approximately the same levels, namely 2,321,795 m^2 and 2,294,866 m^2, respectively. The number of residential units recorded an increase of 2.6%, reaching 11,329 for 2024 compared to 11,041 in 2023.

3.2.5. Carbon markets

Carbon markets in Cyprus are primarily integrated into the wider EU framework, driving emissions reductions through a combination of market mechanisms and a transition to renewable energy sources. However, despite the development of renewable energy sources, including wind and solar energy, which are important factors in reducing the carbon footprint of its energy sector, Cyprus is highly dependent on imported fossil fuels for energy production (88% of the country's energy mix). This results in GHG emissions remaining at high levels. According to the final Cyprus' Climate Action Progress, in 2023, GHG emissions in Cyprus were 8.8 $MtCO_2$-eq, 0.3% higher compared to 2022, while net GHG emissions (i.e. including LULUCF) in 2023 were 56.8% higher than 1990 levels. Regarding 2025, Eurostat data shows that, Cyprus' GHG emissions rose by 8.3% in the first quarter of 2025 compared to the first quarter of 2024, marking the third-largest increase in the EU after Bulgaria and the Czech Republic.

As regards emissions under the EU Emissions Trading System (ETS), in 2023, stationary installations (10 power generation and manufacturing industries) in Cyprus emitted 4.3 $MtCO_2$-eq (equal to 49% of total GHG emissions in Cyprus). This was 0.3% higher compared to 2022. Aviation emissions covered by the EU ETS were 88.2% higher compared to 2022. In parallel, Cyprus has raised over €0.40 billion in auction revenues since 2013 (€114 million in 2023), available for further climate action and energy transformation. Cyprus reported that an average of 118% of revenues was spent for climate and energy purposes over the same period.

Regarding the Effort Sharing Regulation (ESR), which excludes ETS and LULUCF emissions and removals, in 2023, estimated emissions were 4.4 $MtCO_2$-eq, 0.4% higher than in 2022. These emissions constituted 51% of Cyprus' total emissions, compared to 65% for the EU. In 2023, the largest contribution to the absolute change in ESR emissions came from transport, for which emissions increased by 0.4%, and small industry, with emissions increasing by 0.3% compared to 2022. In 2023, transport

accounted for 46% of total ESR emissions in Cyprus, and small industry accounted for 15%. The Effort Sharing Regulation sets the 2030 ESR emission reduction target for Cyprus to 32%, compared to 2005 levels. In 2024, Cyprus did not update GHG projections. However, latest GHG projections under the existing measures scenario (WEM) point to a 9% decrease in ESR emissions by 2030 compared to 2005 levels.

LULUCF absorptions expected to play a significant role through forest development and improved management to increase their resilience and carbon capture capabilities. According to the final inventory data, in 2022, Cyprus reported net removals of 0.30 $MtCO_2$-eq, while preliminary data indicate that net removals from the LULUCF sector remained at the same levels for 2023. Latest LULUCF projections for Cyprus show net removals in 2030 of 0.5 $MtCO_2$-eq with existing measures (WEM), a surplus of around 0.2 $MtCO_2$-eq to the estimated 2030 net removal target of 0.3 $MtCO_2$-eq.

3.3. Gender and Human Rights Issues in the Forest Products' Sector

The Republic of Cyprus takes all necessary measures to ensure respect for human rights, gender equality, and the protection of the rights of vulnerable groups of the population as well as persons with disabilities. A number of legislative measures concerning human rights and gender equality were passed in the context of the harmonization of Cyprus with the EU acquis. Sectoral laws on gender equality in areas like employment, equal work and pay, access to goods and services, gender-based violence, and domestic violence protect human rights and gender equality. In addition, action plans on specific aspects of gender equality, ensures that gender mainstreaming is incorporated into all stages of the utilization of the funds granted to Cyprus by the EU Structural Funds.

A decisive role in ensuring human rights and gender equality in Cyprus is played by the Commissioner for Administration and the Protection of Human Rights (Ombudsman), who is an independent Incumbent. The Ombudsman constitutes the most prevalent institution of extra judicial control of the administration and protection of human rights. The main pivots of the mission of the Commissioner for Administration and the Protection of Human Rights are to ensure legality, to promote good governance, to combat maladministration and to protect citizens' rights and human rights in general.

Based on the above, human rights and issues related to gender equality are considered by the competent services active in the forest sector. The Department of Forests, which reports to the Ministry of Agriculture, Rural Development and Environment, fully complies with the provisions of national legislation and the EU acquis in terms of human rights and gender equality. Furthermore, it takes all the necessary steps to ensure that people with disabilities have unhindered access to all forest recreation areas, while demonstrating particular concern and taking steps to support vulnerable groups of population.

4. CZECH REPUBLIC

Beautiful foggy forest in the heart of Czech Republic. Michal / stock.adobe.com

4. Czech Republic [6]

4.1. Market situation

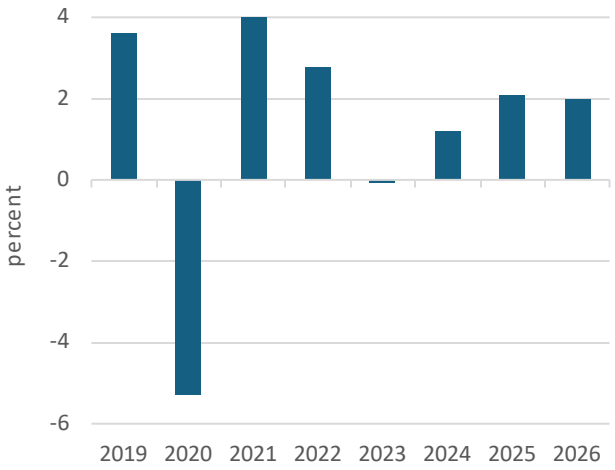
According to the macroeconomic forecast of the Ministry of Finance of the Czech Republic from August 2025 (MF, 2025), the global economic growth continues to benefit from weakening inflation, which stimulates the dynamics of household consumption expenditure. In contrast, investment activity in a number of countries has been constrained by restrictive monetary policies combined with heightened geopolitical instability.

Global economic activity is constrained by uncertainties related to trade policy and other measures taken by the administration of the United States of America, which have resulted in a decline in consumer and business confidence. The macroeconomic forecast assumes across-the-board tariffs of 15% on most commodities exported from EU countries to the US. The effects of the tariffs should slightly dampen economic activity in EU countries. On the other hand, the fiscal and tax package approved in Germany is expected to act as a positive stimulus, which should have a pro-growth effect in a number of other EU countries, including the Czech Republic.

According to the flash estimate of the Czech Statistical Office, real gross domestic product of the Czech Republic, adjusted for seasonal and calendar effects, increased by 0.2% quarter over quarter and by 2.4% year over year in the second quarter of 2025. In the first quarter 2025, for which detailed data on the growth structure are available, GDP grew by 2.4% year over year (unadjusted). According to the revised national accounts, the Czech economy stagnated in 2023 and GDP grew by 1.2% in 2024.

In 2025, GDP could grow by 2.1%, mainly thanks to an acceleration in household consumption expenditure, stimulated by a rise in real incomes and a lower savings rate. Inventory accumulation and government consumption should also support economic growth. In 2026, the Czech economy could grow by 2.0% thanks to renewed growth in investment activity and continued momentum in household consumption. At the same time, the increase in domestic demand will be supported by imports, while exports will be dampened by tariffs from the US, and the foreign trade balance is therefore expected to have a greater dampening effect on economic activity than in the current year (Graph 4.1).

GRAPH 4.1
Czech Republic: Real GDP growth (2019-2026) [%]



Source: Czech Statistical Office, 2025.

Annual inflation has so far been almost exclusively between 2.5% and 3%. Its volatility has been driven mainly by the base-year effect of the price level in 2024, but also by volatility in food and fuel prices. Monetary policy will continue to moderate inflationary pressures through interest rates over the forecast horizon, given the lag in transmission. The expected decline in the US dollar oil price, the appreciation of the Czech Koruna and lower energy prices in 2025 will have an anti-inflationary effect. On the other hand, continued dynamic wage growth, rising excise duties on tobacco products and alcohol, as well as persistently elevated price dynamics for services, mainly due to strong growth in imputed rents and housing rentals, will be inflationary factors. The average inflation rate could reach 2.4% in 2025 and fall slightly to 2.3% in 2026 (Graph 4.2).

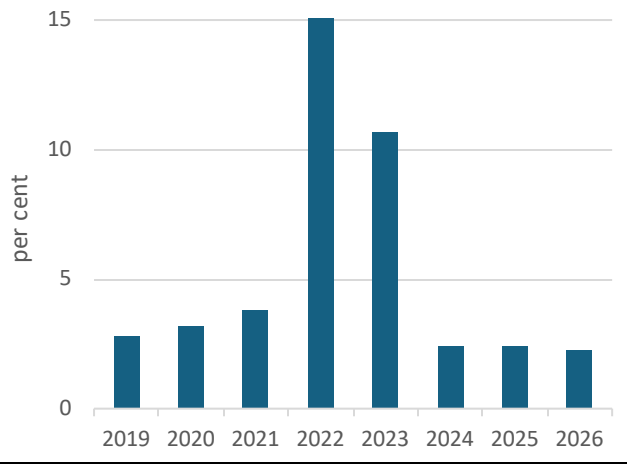
Labour market imbalances related to labour shortages continue to manifest themselves despite a partial

[6] Submitted by the Ministry of Agriculture of the Czech Republic, Forestry division, Department Forest Policy and Economy to the 83rd Session of the ECE Committee on Forests and the Forest Industry (COFFI) Geneva, 2-4 November 2025.

cooling. Demand for labour in services and construction remains strong, helping to mitigate the impact of problems in some industries. As a result, the unemployment rate could remain at 2.6% on average in 2025 and rise slightly to 2.7% in 2026. The persistent mismatch between supply and demand in the labour market does not allow for a significant slowdown in wage and salary growth. Real earnings are expected to rise in both years of the forecast.

GRAPH 4.2

Czech Republic: Consumer price inflation (2019-2026) [%]



Source: Czech Statistical Office, 2025.

4.2. Policy measures

4.2.1. The Concept of State Forestry Policy until 2035

At the level of forestry policy, the Concept of the State Forestry Policy of the Czech Republic to 2035 (CZMA, 2020a) is in force, which was approved by the Government in 2020. The aim of this policy is to achieve the following vision: 'Forests for Society' – sustainable multifunctional forests and forest management that reflects current and expected needs of society. Forests contribute to a higher quality of life, provide habitat, recreational opportunities and health benefits, while maintaining and improving environment quality and delivering ecological values. Sustainable forest management provides ecosystem services which are environmental, economic, social, and cultural benefits for society. They also provide renewable raw materials whose production and use are environmentally friendly and play an important role in economic development, employment and prosperity, especially in rural areas.

Long-term objectives of the concept, for the achievement of which measures and instruments are defined, are as follows:

- To ensure balanced and full performance of all forest functions for future generations.
- To increase biodiversity and ecological stability of forest ecosystems while maintaining production functions in the face of the ongoing climate change.
- To ensure competitiveness of forestry and forest-based industries and their importance for regional development.
- To strengthen importance of consultancy, education, research, and innovation in forestry.

The concept is accompanied by an application document which further specifies the individual measures as sub-tasks for which the responsible institutions, deadlines, and indicators for implementation, expected costs and economic instruments are defined.

4.2.2. The Policy of Wood Raw Material

At its meeting on 26 June 2024, the Government of the Czech Republic approved the Policy of Wood Raw Material (CZMA, 2024). The Policy represents a continuation of the Concept of the State Forestry Policy until 2035 in the area of processing and use of wood as a renewable raw material. The document identifies wood as a strategic commodity that is sustainably renewable and significantly contributes to mitigating the negative impacts of climate change through the long-term storage of atmospheric carbon. The priorities defined by the Policy of Wood Raw Material are as follows:"

- To ensure a long-term sustainable wood supply for the domestic wood processing industry.
- To promote the use of wood as a renewable raw material in economic sectors as well as in everyday life.
- To consistently increase the production of higher value-added wood-based products and their domestic consumption, with the aim of increasing the use of raw wood and primary processed wood.

Specific objectives of the Policy include the modification of standards in the construction sector, which will facilitate the construction of wooden buildings up to 22.5 metres in height, utilization of a minimum proportion of wood in the construction of buildings in appropriate public procurements, and provision of

subsidies and tax incentives for the construction of nearly zero-energy wooden buildings. In addition, the Policy seeks to expand the proportion of wooden buildings constructed in the Czech Republic for residential purposes, with the objective of increasing the current share of 14% to 25% by 2035. Furthermore, the Policy aims to promote wood as a suitable material, encourage research into new technologies, and promote the recycling of wood-containing waste.

Projections of removals possible up to 2050 were also prepared for this document. The wood supply outlook, derived from forest management plan data and reflecting the actual course of bark beetle outbreaks up to 2021, indicates that average annual removals could reach about 15 million m^3 by 2050. This volume corresponds to the volume of removals in the years of 2011-2014 (period before severe disturbances) and assumes that the current bark beetle outbreaks will cease. Coniferous wood removals are then expected to be around 14 million m^3 (2024-2033), 12 million m^3 (2034-2043) and 11 million m^3 (2044-2053).

4.2.3. Wood energy

No new policy or strategy has been adopted on wood energy use.

4.2.4. The Strategic Framework for Circular Economy of the Czech Republic 2040

The Strategic Framework for Circular Economy of the Czech Republic 2040 (CZME, 2021) was approved by the Government in December 2021. It reflects the necessity of promoting the principles of circular economy in the Czech Republic and includes circular economy among its priorities. It focuses on 10 areas: products and design; consumption and consumers; waste management; industry, raw materials, construction, energy; bioeconomy and food; circular cities and infrastructure; water; research, development and innovation; education and knowledge; and economic instruments. It then defines objectives, principles and actions in these areas. *"Circular Czechia"* aims to maintain the value of products, materials, and resources for as long as possible in the economic cycle and return them to the production cycle at the end of their use, while minimising waste. The strategy primarily intends to minimise the production of waste itself, to improve waste management by emphasis on recycling (by promoting recycling technologies) and reuse, particularly in the areas of bio-waste, textile, construction and food waste, packaging and e-waste.

Forests and wood products are listed under the Bioeconomy and Food area. The main points are:

- Wood is a natural, renewable, reusable, and recyclable raw material. Its role can be sustainable if it is harvested from sustainably managed forests, converted and used in a way that minimises negative impacts on the climate and the environment, while ensuring livelihoods.
- Forests, forestry, and forest-based sectors form the basis of Europe's bioeconomy. New opportunities are emerging for the forestry sector to replace unsustainable raw materials in the construction and packaging sectors with bio-based materials and to provide sustainable innovations in the sectors such as forest-based textiles, furniture, and chemicals, as well as new business models based on the valuation of forest ecosystem services.
- The 2018 revised legislative proposals on waste also include a mandatory EU-level recycling target for wood packaging waste.
- In order to develop the bioeconomy, it is important to promote the highest possible use of wood as a renewable raw material. There is a need to increase the primary processing capacity of wood, including other related industries in the Czech Republic, to include wood in the strategic commodities of the state and to develop strategic materials in the field of increased use of wood, wood research and bioeconomy.
- To increase the processing capacity of wood raw material in the Czech Republic and to process wood with a higher added value, the wood processing industry should be further developed, including a greater use of wood in construction. This should be ensured by methodologies or recommendations that directly promote the use of wood and wood-based materials in public construction procurements and identify appropriate types of buildings for their use.

4.2.5. Public Procurement

In 2020, an amendment to the Public Procurement Act was adopted, which introduces a requirement to give preference to environmental procurement. The Ministry of Agriculture prepared a methodology "Guide

to the Use of Wood in Public Procurements" (CZMA, 2020b), which contains 11 sheets and is designed as a brief introduction to possibilities and reasons for using wood in public procurements, including examples of good practice, a brief indication of the ways of application in the project documentation or in the tender documentation of public procurement. The examples are focused on the office and other buildings, infrastructure, and furnishings.

4.2.6. Nature Restoration Law

On 17 June 2024, the Council of the European Union formally adopted the Nature Restoration Law. EU member states will now be obliged to implement measures to restore at least 20% of the EU's terrestrial and marine areas by 2030 and all ecosystems in need of restoration by 2050. Of these ecosystems, within which forest ecosystems are also significantly represented, 30%, 60% and 90% are to be in good condition by 2030, 2040 and 2050 respectively. In the case of forest ecosystems, it is also mandatory to achieve an increasing trend for the common forest bird populations listed in Annex VI. In addition, EU member states are obliged to achieve a positive trend for six of the following seven indicators: standing deadwood; lying deadwood; share of forests with uneven-aged structure; forest connectivity; stock of organic carbon; share of forest dominated by native tree species; tree species diversity. Compliance with the above regulation may lead to a reduced size of forests available for wood supply, thereby reducing potential logging opportunities.

4.2.7. EU Biodiversity Strategy to 2030

In 2025, discussions began at the national level on how to implement the objectives of the Strategy. Under Objective 2.1 – 'Ensure a coherent network of protected areas' – the Strategy aims to protect at least 30% of the EU's terrestrial area and 30% of its marine areas, one third of which is to be under "strict protection", while all protected areas shall be effectively managed. Currently, 3.66% of the Czech Republic's territory meets the definition of strict protection. The commitment for 2030 is 6.02% of the Czech Republic's territory. Meeting this commitment will lead to a reduction in the forest area available for wood supply, thereby reducing potential harvesting capacity.

4.2.8. Amendment to technical standard ČSN 73 0802

As of August 2025, an amendment to the Czech technical standard ČSN 73 0802 (CZMIT, 2025) entered into force, allowing for the construction of multi-storey wooden buildings up to 22.5 metres in height. This amendment, designated Z1, is the result of cooperation among ministries, academic institutions, and professional organizations, and reflects the growing interest in the use of timber, including innovative construction systems such as CLT panels. Previously, it was only possible to build wooden structures exceeding 12 metres in height using an individual engineering approach, which posed limitations for investors and designers. The newly introduced Annex K to the ČSN 73 0802 standard now makes it possible to design wooden buildings of up to 22.5 metres in height through a standardized procedure, thereby simplifying the entire process and reducing costs. The standard also introduces specific technical requirements ensuring safe fire protection solutions in taller wooden buildings.

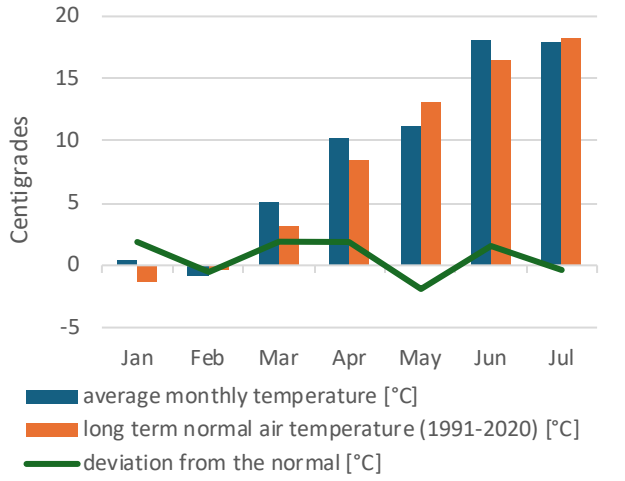
4.3. Weather developments and occurrence of harmful factors

According to the Forestry and Game Management Research Institute (FGMRI, 2025), 2024 can be considered unfavourable as to forest protection, although the volume of salvage felling due to bark-beetle infestations declined significantly, mainly as a result of weather conditions (cold and rainy spring months). With respect to weather, 2024 was the warmest year in the history of measurements (deviation +1.5 °C, in the Czech Republic +2.0 °C) and had above-average precipitation levels (113% of normal). The overpopulation of bark beetle affecting spruce and pine continued for another year. Regionally, the situation has been levelling out across the country, although substantial differences persist. The main damaging factors were similar to those of previous years. Abiotic factors included primarily the direct effects of wind and drought, while the main biotic factor represented damage caused by bark beetle infestation in spruce trees. The total amount of salvage felling in 2024 reached 8.0 million m^3, of which 3.9 million m^3 resulted from natural disturbances and 2.4 million m^3 from insect damage.

According to the Czech Hydrometeorological Institute, average monthly temperatures in January, March, April, and June 2025 were above the long-term average (Graph 4.3).

GRAPH 4.3

Czech Republic: 2025 average monthly temperatures [°C]

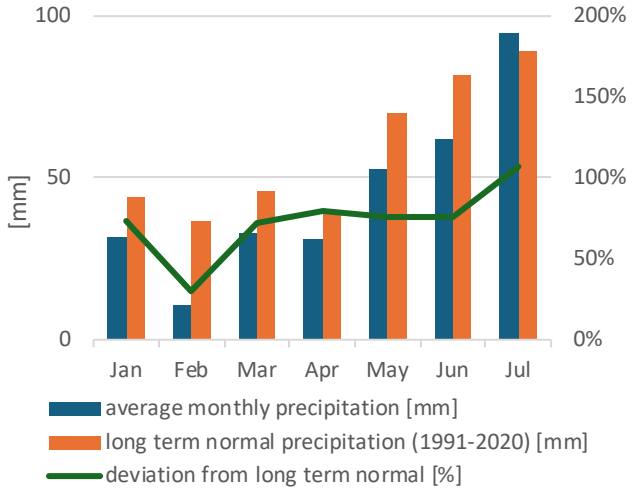


Source: MZE, 2024.

The highest difference of +1.9 °C was recorded in March. Monthly precipitation totals were below the long-term average, with the exception of July. They reached their lowest level in February, at only 30% of normal (Graph 4.4). These conditions may further weaken the health status of forest stands and increase the risk of subsequent bark-beetle outbreaks, particularly in spruce and pine forests.

GRAPH 4.4

Czech Republic: Development of average monthly precipitation (2024) [mm]



Source: MZE, 2024.

4.4. Wood removals development

The state enterprise Lesy České republiky, s.p. (Forests of the Czech Republic), which manages 45% of the national forest area, expects total roundwood removals for 2025 to reach 8.1 million m³, matching the level recorded in 2024. In the first half of the year, removals exceeded the previous year's volume by 200,000 m³. If the same volume of harvesting is achieved in the second half of the year, the total annual removals are expected to exceed the plan by 5%.

Compared to 2024, when total removals in the Czech Republic reached 17.8 million m³, stagnation or a slight decline can be expected in 2025. For coniferous sawlogs, supply levels are expected to remain unchanged, whereas coniferous pulpwood supply may increase by around 5%, as forest owners carry out previously deferred thinning operations after the bark-beetle outbreak. This will result in greater availability of smaller-diameter sawlogs and pulpwood on the market. The volume of removals from thinning in 2024 increased by 41% year-on-year and accounted for 23% of the total removals. A year-on-year increase of approximately 10% can be expected for non-coniferous sawlogs and stagnation for non-coniferous pulpwood. Fuelwood supplies could remain at the same level as in 2024.

The situation in 2026 will depend primarily on weather conditions and the timely processing of salvage felling. If conditions are favourable, a further slight decline or stagnation can be expected.

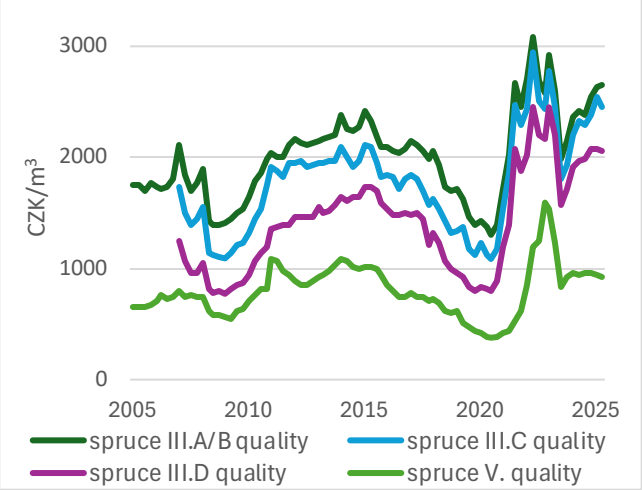
4.5. Roundwood prices development

According to statistics from the Czech Statistical Office, the average price of coniferous roundwood rose by 3.5% in 2024. The price of spruce sawlogs rose by an average of 5.3% and pine sawlogs by 2.9%. The price development for coniferous pulpwood was minimal, with the price of spruce pulpwood increasing by 0.9% and pine pulpwood decreasing by 0.2%. The prices of non-coniferous roundwood fell by an average of 2.2%.

In the first two quarters of 2025, the increase in the price of coniferous roundwood slowed down, with the average price rising by 1.6%. The price of spruce

sawlogs rose by an average of 1.2% and pine sawlogs by 1.3%. The price development of coniferous pulpwood was minimal, in spruce pulpwood decreasing by 0.2% and pine pulpwood increasing by 0.8%. Non-coniferous roundwood prices continued to decline, by an average of 3.6%. Price trends for spruce assortments are illustrated in Graph 4.5.

GRAPH 4.5
Czech Republic: Average prices of spruce assortments (2005–2025) [CZK/m³]



Note: Czk: Czech Koruna.
Source: MZE, 2025.

4.6. Market development

4.6.1. Construction sector

According to statistics from the Czech Statistical Office, 30,274 new dwellings in apartment buildings were completed in 2024, representing a year-on-year decline of 20.5%. In previous years, the category of completed dwellings in apartment buildings benefited from a high number of projects launched after the coronavirus pandemic. However, the past year supply of projects was exhausted. The decline in the number of completed dwellings in apartment buildings was also partly due to the high comparative base from previous years. The completion of dwellings was further constrained by insufficient construction and financial capacities. The number of completed houses also fell by 21% year-on-year, reaching 14,013 in 2024. This also had a negative impact on the share of completed houses with wooden structures, which fell by 1% year-on-year to 13.6% in 2024.

In the first half of 2025, 16,962 new dwellings were completed, representing a year-on-year decline of 3.3%. The construction of dwellings in single-family houses decreased by 23.5% year-on-year, and the construction of dwellings in apartment buildings decreased by 15.8%. However, there was a significant increase in the renovation of existing dwellings, with a 224% increase in dwellings in single-family houses and a 191.3% increase in dwellings in apartment buildings.

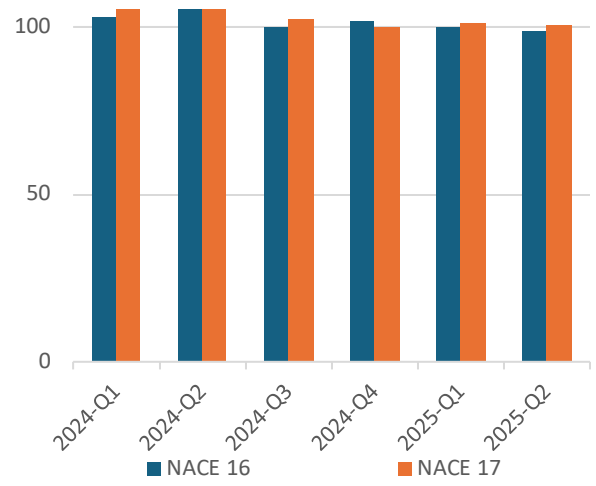
There is also a downward trend in the construction of new dwellings. During the first half of 2025, construction began on 16,295 dwellings, which represents a year-on-year decrease of 5.4%. The construction of apartments in single-family houses fell by 10.8% year-on-year, and the construction of dwellings in apartment buildings fell by 9.9%.

According to the construction production index, the construction sector in the area of residential and non-residential construction (NACE 41) declined year-on-year in the first three quarters of 2024 (-8.9%, -8.7%, -6.0%) and then grew by 7.0% in the final quarter. In the first two quarters of 2025, year-on-year growth continued at 12.7% and 12.1%, and the second half of 2025 is also expected to remain favourable for the construction sector. In 2026, growth of 2.4% can be expected, linked to government investment, cheaper loans, and economic recovery.

4.6.2. Wood-processing industry

According to the Czech Statistical Office, the quarterly year-on-year industrial production index for CZ NACE 16 (Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials) recorded growth in all four quarters of 2024. The largest year-on-year increase was achieved in the second quarter, at 6.1%. In the first quarter of 2025, there was initially a year-on-year increase of 0.3%, followed by a decline of 1.1% in the second quarter. Compared to 2024, a slight decline or stagnation in the wood processing sector can therefore be expected in 2025. If the anticipated growth in construction sector materializes in 2026, the production growth could revive (Graph 4.6).

GRAPH 4.6
Czech Republic: Industrial Production Index (2024-2025) [%]



Notes: NACE16: Manufacture of wood and products of wood and cork, except furniture; manufacture of straw and plaiting materials; NACE 17: Manufacture of paper and paper products
Source: MZE, 2025.

The development in the CZ NACE 17 sector (Manufacture of paper and paper products) was different. In 2024, the sector recorded its highest year-on-year growth in the first quarter, at 8.4%. In the following two quarters, the sector grew by 5.6% and 2.5% year-on-year. In the last quarter, a decline of 0.2% was recorded. In 2025, there has been an increase of 1.2% in the first quarter and 0.7% in the second quarter. Production in the paper manufacturing sector is expected to increase year-on-year in 2025, as a new paper machine for the production of unbleached kraft paper has been put into trial operation at the Mondi paper mill in Štětí. This paper is, for example, used in the production of bags for building materials, industry, and other sustainable packaging solutions that replace plastics. The machine will be fully operational in 2026, with an expected annual production capacity of 210,000 tonnes. Paper production in the Czech Republic will therefore increase significantly in 2026.

4.6.3. Foreign trade (January – June 2025)

In foreign trade, January – June 2025 saw a year-on-year decline in exports of coniferous sawlogs of 9% compared to the same period in 2024, as well as a 16% decline in imports. Spruce sawlogs accounted for 92% of imports. In the case of coniferous pulpwood, imports fell by 3% and exports by 13% over the same period. Spruce pulpwood dominated imports, accounting for 66% of the total.

Imports of non-coniferous sawlogs fell by 14%, but exports rose by 11% year-on-year. Imports of non-coniferous pulpwood were traditionally minimal, and exports fell by 14% overall. However, exports of beech pulpwood increased by 10%.

During the same period, there was also a year-on-year increase in exports of coniferous sawnwood by 2% and a decrease in imports by 15%. In the case of non-coniferous sawnwood, imports fell by 8% and exports grew by 14%.

A significant year-on-year increase of 49% was recorded in imports of wood chips, while exports fell by 11%. In the case of wood pellets, imports increased by 401% and exports by 2%. However, the volume of pellets imported accounted for only 12% of total exports.

The situation for wood-based panels was similar to that in the same period of 2024, with year-on-year differences ranging between 1% and 2% at most. Only MDF exports showed a more pronounced decline of 13%.

Wood pulp imports increased by 2% year-on-year, while exports fell significantly by 29%. This decline was mainly due to a decrease in exports of chemically bleached coniferous pulp, which fell by 71% year-on-year. This decline was probably caused by the launch of a new machine for the production of unbleached kraft paper at the Mondi paper mill in Štětí into trial operation.

In the paper and paperboard segment, imports did not increase year-on-year, while exports rose by 9%.

4.7. Issues of gender and human rights related to the forest market sector

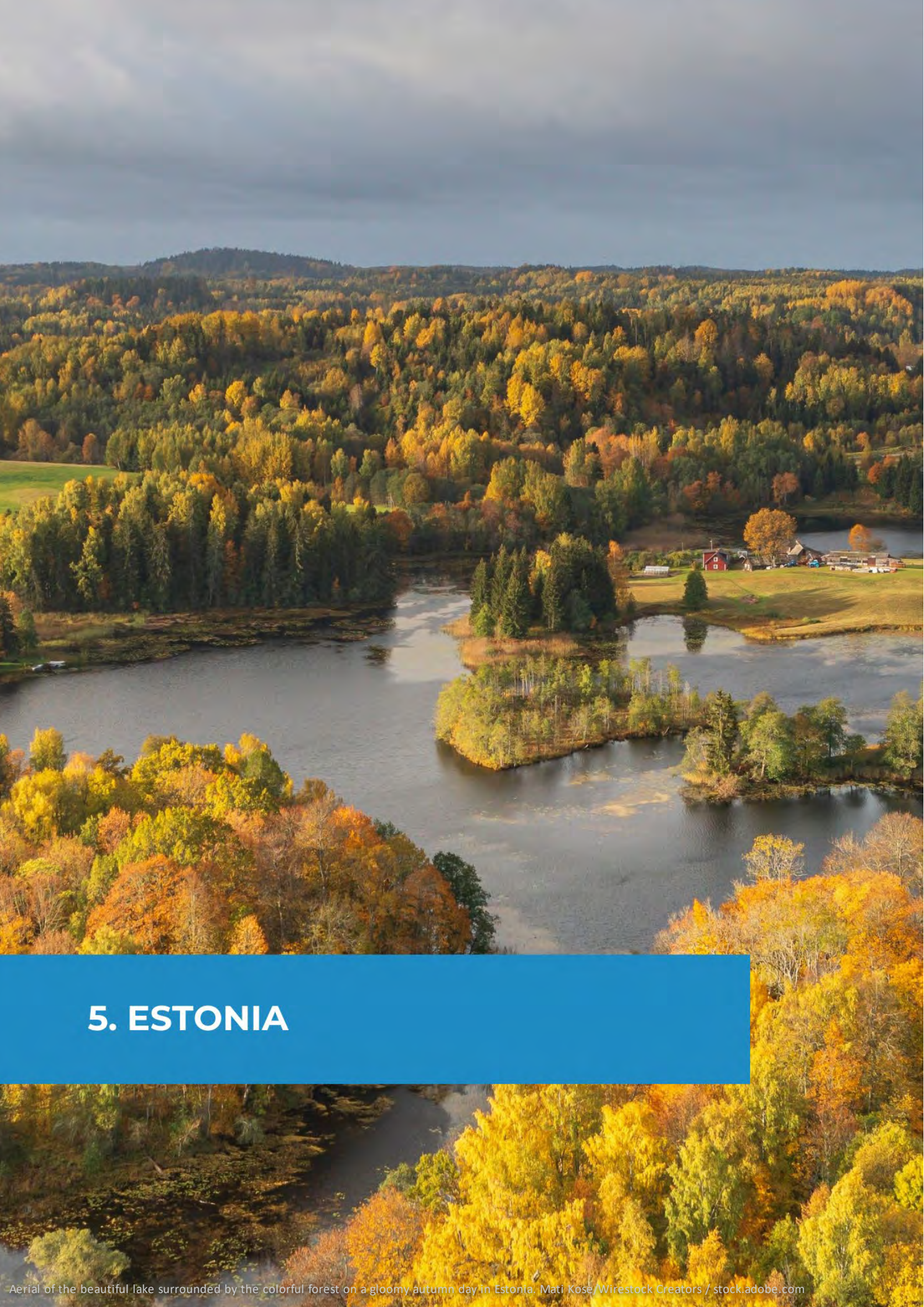
Promotion of gender equality remains one of long-term priorities of the Government of the Czech Republic. The first document at the level of the Government of the Czech Republic designed to coordinate activities in promoting gender equality was adopted as early as 1998 – Priorities and Government Procedures for Promoting Equal Opportunities for Women and Men. These priorities and procedures were then subsequently adopted annually by the Government of the Czech Republic and set a framework for the implementation of gender equality policy. Progress

towards gender equality has been monitored since 1998 through respective regular reports.

In 2001, the Government Council for Gender Equality (the Council) was established as an advisory body to the Government dedicated specifically to this field. Since 2001, the Council has adopted several recommendations and suggestions addressed to the Government of the Czech Republic. A key milestone for the effective promotion of gender equality was the adoption of the Government Strategy for Gender Equality in the Czech Republic for 2014–2020.

Strategy 2021+ (2021–2030) is the second framework government document for the implementation of gender equality policy in the Czech Republic. The aim of Strategy 2021+ is to formulate a framework for public administration measures that will contribute to achieving gender equality in the Czech Republic. The purpose of these measures is to build on positive changes that have been achieved in some areas of gender equality and to reverse negative trends where they persist or intensify. Most state institutions, not only in the forestry sector, build on this strategy and develop and promote their own gender equality strategies.

The number of female students at secondary and higher education institutions with a forestry focus continues to rise, and a gradual increase in the number of women working in the forestry sector in the Czech Republic can be expected.



5. ESTONIA

Aerial of the beautiful lake surrounded by the colorful forest on a gloomy autumn day in Estonia. Mati Kose/Wirestock Creators / stock.adobe.com

5. Estonia [7]

5.1. Market drivers

Starting with the energy crisis in 2021, the Estonian economy has faced difficulties due to its past dependence on raw materials from the Russian Federation – such as wood, metals, fertilisers and energy products. Costs rose as imports halted. The country's main trading partners also faced downturns, especially in construction, affecting Estonia's wood and furniture sectors (EEA, 2025). Estonia has entered the slow recovery phase. Exports are expected to recover in 2025, and, after a two-year GDP decline, growth is now forecast. The IT and renewable energy sectors are expanding, and falling interest rates are boosting the real estate sector. Yet, global trade policy uncertainty remains a risk. Domestic demand is still low and is expected to start recovering in 2026 (EEMF, 2025).

Estonian forest sector has faced significant challenges in recent years. The wood industry is largely dependent on foreign markets, where demand has decreased in recent years. The competitiveness of Estonian wood industry companies has decreased due to high input prices, where the prices of raw materials and energy are higher compared to the countries of the region. Several companies have reduced production volumes, laid off employees or closed their businesses. The production volumes peaked in 2021, fell sharply in 2022, and remained flat or slightly decreased in 2023 and 2024. Based on short-term statistics, the production volumes in 2025 will generally increase except pulp and paper production. Estonian biggest producer Estonian Cell will stop its production for two months from October 2025 due to weak global demand and Estonia's seasonally volatile energy prices (ERR News, 2025a).

The geopolitical situation and the geographical location of Estonia also have a major influence on the forest sector. The Russian Federation's invasion of Ukraine creates general uncertainty among both consumers and companies in the sector. Uncertainty inhibits investment decisions and geographical location repels foreign investment. After the invasion in 2022, trade restrictions were implemented on goods from the Russian Federation and Belarus. Companies that imported raw materials from these countries had to reorganize their supply chains, which also means that countries in the region compete for the same raw materials. The felling volume has slightly increased in recent years: from 10 million m^3 in 2021 to 12.1 million m^3 in 2022 and 11.7 million m^3 in 2023. In 2024, the total felling volume decreased to 10.9 million m^3. This has not compensated the loss in imports. Most of the wood processing sectors have suffered over the recent years except veneer and plywood industries which have increased the production volumes.

The long-lasting public forestry debate and unclear forest policy reduce the uncertainty of wood industry companies regarding the availability of raw materials and inhibits investment decisions. Companies expect a clear and long view in forestry from the state in order to ensure the sustainability and success of the forest sector (EEPFA, 2024). Forestry Development Plan until 2035 is planned to be adopted in Parliament by the end of 2025. Climate Act (in preparatory phase) recognises the role of forestry in LULUCF sector and defines long-term goals for the resource utilization. The Climate Act will have separate roadmap for forestry and harvested wood products highlighting the importance of forestry and forest sector achieving the climate neutrality by 2050.

Estonia's forest sector faces a number of challenges, but according to several forecasts, the situation should stabilize or improve in the coming years. Further progress is expected in chemical wood processing; VKG group has made major steps with biorefinery project during the previous years (VKG, 2025). At the same time the Fibenol company decided to build its industrial scale biorefinery in North-Latvia and not in Estonia (Fibenol, 2025).

[7] Submitted by the Estonian Environment Agency, Forest Department to the 83rd Session of the ECE Committee on Forests and the Forest Industry (COFFI) Geneva, 2-4 November 2025.

5.2. Market developments

5.2.1. General developments

According to the volume index of industrial production wood processing increased by 6.1%, production of furniture increased by 0.2% and production of paper and paper products decreased by 4.5% (August 2024 vs August 2025) (Statistics Estonia, 2025a). The wood industry is recovering and the sector plans to increase investments by 2025. According to the forecast, the volume of investments will grow by 13%, production volume by 7% and sales revenue by 8%. Companies in the sector see risks in the uncertain economic environment, the availability of raw materials, and geopolitical developments. Companies expect stable and transparent economic policies from the state that would encourage investment decisions. The aggregate turnover of the forest sector has increased over the past year. At the same time, the number of jobs in the sector has decreased and the situation of smaller companies remains difficult. In 2025, there have been several changes in the ownership of companies and forest land, as well as consolidation within the sector (EEPFA, 2025).

5.2.2. Wood raw materials

There is 2.4 million ha of forest land in Estonia which is 52% of the total land area. About half of the forest land belongs to the state and half to private owners. The total growing stock is 453 million m^3 and annual increment is 15 million m^3. 30% of the total forest area is protected. Distribution of forest land by tree species: pine (Pinus sylvestris) 30%, birch (Betula pendula) 30%, Norway spruce (Picea abies) 18%, black and grey alder (Alnus incana and A. glutinosa) 14%, aspen (Populus tremula) 7% and other species 2% (EEEA, 2025a).

In 2024, the felling volume was 10.9 million m^3 according to expert estimate based on remote sensing data and forest notifications. Timber harvesting conditions have been difficult over the past year. The winter of 2024/2025 was warmer than average and there was a lot of precipitation during the spring and summer of 2025, which made the ground soft and unsuitable for heavy forestry machinery. According to the Estonian wood balance, in 2023, the distribution of harvested wood from forest land is as follows (the distribution of assortments is done according to the actual use of the wood): logs 37% (of which coniferous 25%, and non-coniferous 12%), pulpwood 25% (conif. 11%, and non-coniferous 14%) and fuelwood and forest residues 38% (coniferous fuelwood 10%, non-coniferous fuelwood 20%, and forest residues 8%) (EEEA, 2025b).

In 2024 the import volume of industrial roundwood was 0.5 million m^3. About 70% of the import volume was sawlogs and veneer logs and 30% was pulpwood. The main import partners were Latvia, Finland, and Poland. In 2024, Estonia exported 2.2 million m^3 of industrial roundwood, mostly to Sweden and Finland. The majority of the exported roundwood was pulpwood (Statistics Estonia, 2025b).

Each year about 4 million m^3 of wood chips and particles is produced in Estonia. In 2024, the export volume of wood chips and particles was 1.1 million m^3. Majority of the chips and particles were exported to Finland (51% of total volume), Sweden (37%) and Denmark (11%) (Statistics Estonia, 2025b).

The prices of all roundwood assortments have increased moderately since the autumn of 2024. Birch sawlogs and veneer logs increased the most, reaching a peak in early 2025. Prices of all assortments remained stable in the spring of 2025. Since the summer, prices of sawlogs, veneer logs and fuelwood have been rising again, while pulpwood prices have fallen slightly. Since 2023, prices of all roundwood assortments have changed moderately, and the price anomalies seen in 2022 have not recurred (EEPFA, 2025).

5.2.3. Sawnwood

The global demand for sawnwood remains at a low level. The construction volumes in Estonia have not recovered therefore the domestic demand is weak. In 2023, the production volume of sawnwood was 1.5 million m^3. The production volume increased slightly in 2024, and according to short-term statistics increased by 17% in 2025. Over 90% of the produced sawnwood is coniferous. Two major sawmills announced their closure in 2023 due to low profitability, high production costs and general uncertainty surrounding forestry in Estonia (ERR News, 2023a & 2023b). Additionally, many sawmills have announced layoffs and reduction in production volumes

(ERR News, 2023c). Companies have the capacity to invest, but due to uncertainty, investments are directed more towards improving the quality of production.

In 2023, Estonia imported one million m^3 of sawnwood and in 2024, 1.1 million m^3. Before the trade restrictions implemented on goods from the Russian Federation and Belarus in 2022, majority of the sawnwood was imported from the Russian Federation. In 2023 and 2024, the main import partners were Finland, Latvia and Sweden. Estonian wood-processing companies importing sawnwood are adapting to the changed market conditions and rearranging their supply chains – in 2024, the import of sawnwood increased by 16%. The export volume of sawnwood decreased by 34% in 2022-2023. In 2024, the export volume increased by 3%, reaching 0.8 million m^3. Majority of the sawnwood was exported to Latvia. In 2025, the export volume of sawnwood is expected to increase slightly.

5.2.4. Wood-based panels

Estonia's only producer of particle boards closed its factory in 2022. Its production volume was around 200 thousand m^3 of particle boards per year. There is one soft fibreboard (insulating board) factory in Estonia. In 2024, the production volume of fibreboards was 38 thousand m^3. In 2025, based on short-term statistics the production volume has increased by 11%.

The veneer sheets and plywood industries have faced high raw material prices. The price of birch veneer logs rose rapidly to €175 per m^3 in early 2025, then decreased during the spring, and has been rising again since the summer (€153 per m^3 at the buyer's stock as of September 2025). However, according to one of the largest plywood manufacturers, despite the difficult circumstances, the company has managed to maintain its position thanks to the quality of its products and reliable deliveries. The decline in sales prices has been offset by lower raw material prices and increased productivity. The factory plans to slightly increase its production volumes in 2025. Overall, the veneer sheets and plywood industries have held up well in the past years. The production volume of plywood has increased every year since the global crisis in 2008-2009. In 2024, 210 thousand m^3 of plywood was produced in Estonia, and in 2025 the production volume is expected to increase by 7%. The production volume of veneer sheets has remained around 100 thousand m^3 since 2015, and in 2024 the production volume reached 151 thousand m^3. According to short-term statistics, the production of veneer sheets is expected to increase by 30% in 2025.

The Estonian wood-processing company *"Layerwood Production"* has announced plans to build a new factory for glulam products. The investment amounts to €29 million. The factory will produce veneered and laminated glulam products for furniture, construction, and playground equipment manufacturers. Production is scheduled to start in the second half of 2026. The annual production volume is approximately 54 thousand m^3, most of which will be exported to EU countries. The company also plans to build another factory in 2031-2032 (EEEIS. 2025).

5.2.5. Pulp and paper

There are 58 wood pulp, paper and paperboard manufacturing companies in Estonia. Two pulp mills account for half of the sector's turnover. Both companies have been strongly affected by the high input prices in recent years. Companies have a very high energy consumption, so the success of these companies largely depends on the energy prices. Energy prices in Estonia are at a higher level compared to neighbouring countries, which is why the competitiveness of Estonian pulp mills is unequal compared to other countries in the region. The situation has improved slightly in terms of the price of raw material. Pulpwood prices have fallen since autumn 2024. Recently, one pulp mill has announced it will halt production for two months in autumn 2025. Afterward, the mill plans to reduce its production volume, which will also result in layoffs. Another pulp and paper mill plans to invest €130 million in a new kraft paper production unit. The investment will create new jobs at the mill (ERR News, 2025b). The production of wood pulp decreased sharply in 2023 but recovered in 2024. In 2025, the short-term statistics show an 11% decrease in the wood pulp production. In 2024, the production of paper and paper products increased by 50% and in 2025 the production volume is expected to remain at the same level.

VKG Fiber, a new pulp mill, is currently in development and has plans to begin operating in 2028 with a production capacity of 500 thousand tonnes of various bioproducts. The pulp mill will use 2.2 million m^3 of raw material per year (VKG, 2025). The company has signed a long-term timber purchase and sale agreement with the State Forest Management Centre (SFMC). SFMC will supply the mill with 0.7 million m^3 of pulpwood per year (ERR News, 2025c).

5.2.6. Wood energy

Estonia's energy production has historically relied mainly on oil shale. Over the past few years, the proportion of solid biofuels used for heat and power generation has increased significantly. In 2023, 53.5 TWh of primary energy was produced in Estonia, of which 57% was produced from oil shale, 38% from solid biofuels (incl. firewood), 3% from wind and solar energy. The gross inland energy consumption was 49.5 TWh. The gross inland consumption of solid biofuels was 14.1 TWh, of which 65% was used for electricity and heat production and 35% was used in final consumption, most of which was consumed by households (mainly as firewood). 9.2 TWh of electricity and heat energy was produced from solid biofuels, 48% was produced in combined heat and power plants, 26% in heat plants and 22% in power plants (Statistics Estonia, 2025c).

The consumption volume of wood fuels in Estonia has been constantly increasing until 2022, when the consumption peaked (6.7 million m^3). In 2024, the consumption has decreased to 6.1 million m^3. The consumption volume was distributed by the type of wood fuel as follows: wood chips, particles and residues 76%, fuelwood 22% (the main consumers are private households), and wood briquettes and pellets 2%. In the last 10 years, the consumption volume of wood fuels has increased by 41% (Statistics Estonia, 2025d).

In the recent years the production volume of wood pellets has been around 1.5-1.7 million tonnes per year. The production volume peaked in 2021 and decreased in 2022, 2023, and 2024. According to short-term statistics the production volume of wood pellets has increased by 7% in 2025. The domestic consumption of wood pellets in Estonia is marginal, most of the wood pellets produced are exported, mostly to Denmark and United Kingdom.

5.2.7. Housing and construction

Decrease in demand in Estonia and globally has negatively affected the Estonian construction sector in recent years. Majority of prefabricated buildings of wood have been sold to the Scandinavian market, where the demand for the prefabricated buildings has been low. Several factories went bankrupt in recent years. Some manufacturers have been looking for new markets, for example Germany, where demand for wooden houses exists despite the economic recession. According to the construction volume index, construction activity has been declining since 2021. However, manufacturers report that the situation has improved toward the end of 2024 and beginning of 2025. The production and sales volumes of prefabricated buildings of wood have increased slightly.

Since 2009, the export of wooden houses has increased almost consistently. Exports increased to a record level in 2022 (€535 million), but in 2023 and 2024 the export of wooden houses dropped significantly, by a total of 43% to €329 million. Germany, Norway, Sweden and United Kingdom account for nearly three-quarters of exports.

5.2.8. Carbon markets

There are several service providers in the Estonian voluntary carbon credit market including "Abronias, Ecobase, and Single.Earth". The companies' carbon projects are essentially different: afforestation, impact forestry, and protection forestry. Some service providers issue Verra VCS (Verified Carbon Standard) certificates, which currently cover approximately one thousand ha (The Nature Fund, 2025). The voluntary carbon market is not regulated in Estonia.

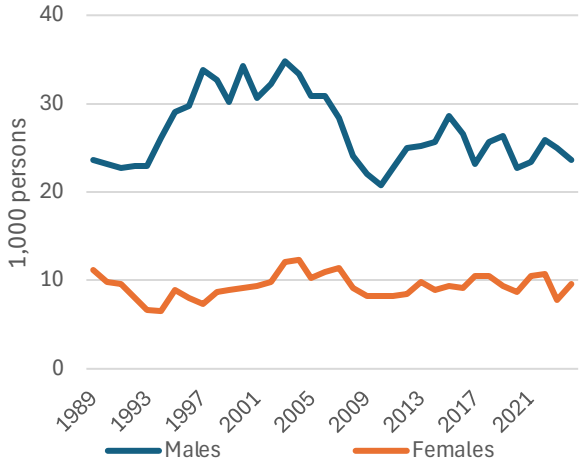
5.2.9. Gender and human rights issues in the forest products' sector

Statistics Estonia has conducted labour force surveys (Statistics Estonia, 2025e), one of the results of which is the distribution of employed persons in the forest sector by sex (Graph 5.1). The data is also presented in the Estonian statistical Yearbook of Forest (EEEA, 2023).

The gender distribution of forest sector workers has been fairly stable over the years. Male workers dominate the sector– their share has fluctuated between 68% and 82%. The share of female workers in the forest sector has ranged between 18% and 32%. In 2024, 23,600 men (71%) and 9,500 women (29%) worked in the forest sector. Statistics Estonia has published statistics on the gender pay gap. The gender pay gap in Estonia from 2011 to 2024 is shown in Graph 5.2.

GRAPH 5.1

Estonia: Employed persons in forest sector by sex (1989–2024) [1,000 persons]

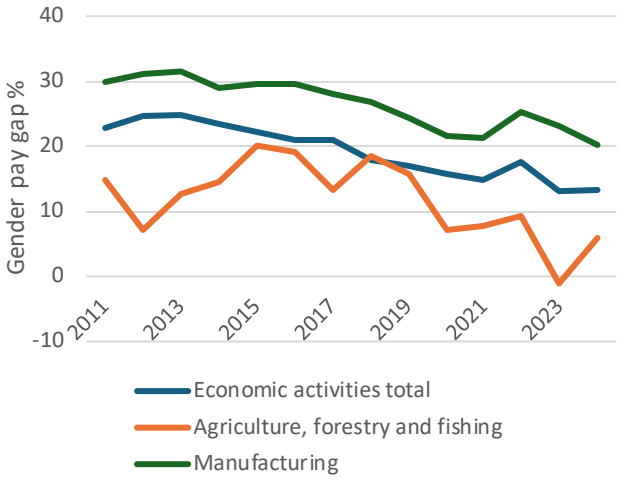


Notes: forest sector: forest management (forestry, logging and related activities) and wood industry (manufacture of wood and of products of wood, including manufacture of furniture; manufacture of pulp, paper and paper products).
Source: Statistics Estonia, 2025e.

In 2024, the gender pay gap was 13% across all economic activities. The pay gap in Estonia is on a downward trend. The gender pay gap in the forest sector is reflected under the "manufacturing" and "agriculture, forestry and fishing" activity fields in Graph 5.2. The gender pay gap in both fields of activity has generally been on a downward trend. The gender pay gap in agriculture, forestry and fishing was negative in 2023 but increased to 6% the following year. In manufacturing industry, the pay gap was larger, 20% in 2024.

GRAPH 5.2

Estonia: Gender pay gap (2011-2024) [%]



Notes: NACE rev 2, Statistical Classification of Economic Activities in the European Community.
Source: Statistics Estonia, 2025f.

6. FINLAND

Aerial view of blue lake with green tree woods on a sunny summer day in Finland. NBLX / stock.adobe.com

6. Finland [8]

6.1. Market Situation

The Finnish Forest sector operates in a turbulent global market featured by slow economic growth, geopolitical instability, and structural changes in consumption patterns. Globally, economic activity has weakened as the euro area maintains growth of roughly one per cent annually, while the United States and China both face deceleration. China's economy shows signs of prolonged weakness due to high debt levels, demographic decline, and weaker consumer confidence. These shifts have reduced demand for construction materials and paper-based products, directly impacting Finland's export-driven forest industry.

The euro's appreciation – by about 15 per cent against the US dollar during 2025 – has reduced the competitiveness of euro-area exports, including Finnish forest products, which are often traded in US dollars. As a result, Finnish producers face tighter margins despite moderate production growth. The inflation slowdown and lower interest rates in Europe have eased cost pressures somewhat, but consumer demand and construction activity remain subdued, particularly in Western Europe where residential construction has stagnated. Meanwhile, the United States' protectionist trade stance and tariffs on various industrial goods continue to shape market conditions, redirecting global trade flows and adding uncertainty to supply chains.

Finland's sawmilling industry temporarily benefited from strong export demand early in 2025, yet the momentum slowed as construction markets weakened across Europe. The overcapacity in global sawn wood and pulp markets, combined with sluggish demand for paper and packaging, continues to suppress prices. These developments highlight the sector's adaptation to evolving demand structures, particularly toward engineered wood products. Both in wood products and pulp and paper industries, several production plants have announced layoffs and production restrictions until the end of 2025.

6.1.1. Key Policies

European and national policies are increasingly defining the operational boundaries for the forest industry. The EU Deforestation-Free Supply Chains Regulation represents a watershed change in forest product governance. Its aim is to ensure that commodities placed on the EU market are not associated with deforestation or forest degradation. Finland, classified as a low-risk country, benefits from simplified due diligence, but companies must still establish traceability systems and reporting protocols to comply with the regulation. The postponed implementation date gives operators additional time to develop digital monitoring tools and integrate certification systems.

The EU Nature Restoration Regulation, adopted in 2024, will require EU member states to prepare national restoration plans by 2026. For Finland, this entails setting measurable targets for restoring forest biodiversity, wetlands, and peatlands. The regulation's implementation could limit intensive forestry practices in some regions while promoting multifunctional land use. The Finnish government's strategy emphasizes synergy between restoration, carbon sequestration, and sustainable roundwood production to prevent policy conflicts.

Taxation and ownership policies are also evolving. Starting from fiscal year 2025 leasing forest and agricultural land has been subject to capital income taxation, instead of earlier applied agricultural income taxation. The reduction of corporate tax from 20 to 18 per cent in 2027 will improve the financial position of forest-owning companies. Meanwhile, reform in forest deduction system from fiscal year 2026 aim to enhance forest property transfers against payments and active forest management.

Climate and energy policies increasingly shape the sector's future. Finland's national climate plan prioritizes low-carbon construction, renewable materials, and carbon capture and utilization (CCU). The forest industry is positioned as a supplier of biogenic carbon dioxide for

[8] Submitted by the Natural Resources Institute Finland to the 83rd Session of the ECE Committee on Forests and the Forest Industry (COFFI) Geneva, 2-4 November 2025. The Natural Resources Institute Finland (Luke) is a research organization operating under the Ministry of Agriculture and Forestry of Finland. Luke's task is to promote competitive business based on the sustainable use of renewable natural resources, as well as wellbeing and the vitality of the countryside.

synthetic fuels, offering emission reductions for hard-to-decarbonize sectors like aviation and shipping. However, the high cost of bio-based fuel production continues to require policy incentives and stable regulatory frameworks to achieve competitiveness.

Trade policy developments further complicate the picture. U.S. tariff measures and reciprocal EU actions have disrupted traditional trade flows. Tariffs on paper and packaging materials affect Finnish exports, while pulp remain exempt for now. A 10 per cent tariff is planned for sawn wood imports to the United States. Meanwhile, the Russian Federation's continued aggression in Ukraine and hybrid activities in Europe have heightened energy and security concerns, reinforcing Finland's strategic focus on domestic bioenergy and raw material self-sufficiency.

6.1.2. Biotic and Abiotic Disturbances

Forest ecosystems face growing risks from climate variability, pests, and extreme weather. Although no major pest outbreaks have been reported recently, Finland's forest growth is measured currently at 103 million m^3 (o.b.) annually. The National Forest Inventory (NFI13). The NFI13 recorded a reduction of almost five million m^3 (o.b.), that is, -4.5 per cent, in annual increment compared with the previous inventory (NFI12). The primary causes include age structure of forests, prolonged droughts, storm damages, and changes in soil moisture balance driven by climate change.

Abiotic factors, such as warmer winters, delayed ground freezing, and increased precipitation variability, are altering forest management cycles. Thinner snow cover impedes winter harvesting operations and increases soil damage risks, while intense summer droughts hinder regeneration. Biotic risks include expanding ranges of bark beetles and fungal diseases, particularly in southern Finland. Although bark beetle infestations have occurred locally, there have been no nationally significant epidemics so far. Climate adaptation strategies focus on mixed-species forests, promoting resilience and ecological diversity.

Peatland forests, comprising roughly one-third of Finland's forest and scrubland area, are gaining policy attention due to their dual role as both carbon sinks and potential emission sources. Drainage maintenance and restoration measures are increasingly integrated into sustainable forest management, balancing production with climate and biodiversity objectives.

6.1.3. Raw Material Supplies

Finland's forest resources remain extensive, providing a strong foundation for sustainable raw material supply. The country's total productive and poorly productive forest land area is 22.9 million ha, with 19.3 million ha designated for wood production. Forest lands hold 2.6 billion m^3 (o.b.) of growing stock – roughly half pine, 30 per cent spruce, and 17 per cent birch. The annual growth is 103 million m^3 (o.b.). While the total removal of trees (including the removal of trees felled during logging and forest management measures and naturally dead trees) was 89.6 million m^3 (o.b.) in 2024, the wood resource increased by 13.4 million m^3 (o.b.).

Industrial roundwood removals in Finland amounted to 54.6 million m^3 (u.b.) in 2024 – 25.7 million m^3 (u.b.) of saw logs and 28.9 million m^3 (u.b.) of pulpwood. Roundwood imports, mainly from the Baltic Sea region, remained stable at 4.3 million m^3 (u.b.). After the end of roundwood imports from the Russian Federation in spring 2022, wood procurement has increasingly focused domestically forests.

Regional disparities in harvest intensity remain evident. In southern Finland, removals locally are close or even exceed sustainable levels, while in Lapland and parts of eastern Finland harvests remain well below the sustainable potential. The national average utilization rate of 93 per cent indicates an overall sustainable trajectory, but regional imbalances challenge geographical location of wood consuming industries and especially their investments.

In addition to wood-based raw materials, the utilization of forest industry by-products such as bark, sawdust, and black liquor continues to increase. These residues supply bioenergy plants and contribute to Finland's renewable energy targets. The overall use of forest chips declined slightly in 2024 due to mild winter and increased electrification of heat production, but the role of side streams in energy and circular economy applications remains central.

6.1.4. Traceability and Supply Chains

Sustainable forest management depends increasingly on transparent, traceable supply chains. Under the EU Deforestation Regulation (EUDR), Finnish forest industries must ensure that all wood placed on the market can be verified to legal and sustainable origin. Nationally, Finland's "low risk" classification simplifies compliance, yet companies must maintain due diligence systems covering geolocation data, supplier records, and risk assessment documentation. Certification systems such as PEFC and FSC remain crucial for verifying sustainable origin and providing market access. Over 90 per cent of Finnish forests are PEFC certified and around 10 per cent are FSC certified. Some forests are certified with both forest certifications.

Technological innovation is transforming monitoring and reporting practices. The integration of blockchain-based traceability systems and satellite monitoring allows near-real-time verification of origin. These tools will be critical for exporters as consumer and regulatory expectations for sustainability disclosures rise. Finland's leading companies, such as Stora Enso and UPM, are developing digital product passports linking raw material data to lifecycle emissions and recycling potential. Overall, Finland's forest sector is transitioning toward a model that integrates environmental, social, and governance (ESG) criteria throughout the value chain, reinforcing its global reputation as a leader in sustainable forest management.

6.2. Market Developments

6.2.1. Wood raw materials.

Industrial roundwood harvests in Finland are forecast to reach approximately 54.5 million m^3 (u.b.) in 2025, which will mean no change from 2024, supported by moderate demand from sawmills and pulp producers. In 2025, sawlog harvests will grow to 25.9 million m^3 (u.b.), while pulpwood removals are expected to decrease to around 28.6 million m^3 (u.b.). Roundwood imports are projected to remain stable at about 4.4. million m^3 (u.b.).

The forecasted harvest levels are grounded in expectations of gradual improvement in global and European economic activity. As interest rates stabilize and inflation moderates, investment in housing and infrastructure is expected to slowly recover, supporting demand for sawn wood. Nonetheless, the market remains characterized by excess supply and cost pressures especially in pulp and paper markets, which have softened stumpage prices since mid-2025. For 2026, harvest volumes (u.b.) are anticipated to have modest growth, but stumpage prices, as depicted in Table 6.1, are expected to decline slightly – pine and spruce by about 2 per cent and pulpwood by 3–4 per cent – as industrial stocks remain high, and price competition intensifies in export markets.

TABLE 6.1

Finland: Average nominal roundwood stumpage price (2024–2026f)[€/m^3 o.b. and % change]

Assortment	2024 €/m^3	2025f €/m^3	2025f/ 2024 %	2026f €/m^3	2026f/ 2025f %
Pine logs	77.2	80.8	5	78.8	-2
Spruce logs	80.5	82.9	3	82.5	0
Birch logs	65.1	66.0	1	65.2	-1
Pine pulpwood	30.6	32.1	5	30.9	-4
Spruce pulpwood	32.7	33.9	4	32.5	-4
Birch pulpwood	31.2	32.4	4	31.3	-3

Note : f : forecast.
Source: Luke, 2025.

6.2.2. Sawn softwood and sawn hardwood

Sawn softwood production is projected to increase by 3 per cent in 2025 to 11.25 million m^3 and by one per cent in 2026, reaching approximately 11.4 million m^3. This modest growth reflects the gradual recovery of construction demand in Europe and North Africa, alongside constrained supply following the Russian Federation's exit from international markets. Export volumes of sawn softwood are expected to rise by 7 per cent (8.7 million m^3) in 2025 and one per cent (8.8 million m^3) in 2026, while export prices are forecast to increase by 7 per cent (€255 per m^3) and 2 per cent (€260 per m^3), respectively.

The market drivers behind this growth include strengthening demand from the Middle East and North Africa, where infrastructure investments remain robust, and limited availability of Central European softwood following bark beetle infestations and harvest

reductions. However, demand in Western Europe – particularly Germany and France – will remain subdued due to slow housing starts and tight credit conditions. In Finland, sawmills are optimizing output through flexible production schedules and selective market targeting, focusing on high-value grades for the Japanese and the United Kingdom markets.

Hardwood sawn wood, primarily birch, remains a niche product tied to furniture, flooring, and plywood industries. Currently, there is only one sawmill of industrial scale producing hardwood (birch) sawn wood. Hardwood sawn wood is also produced by small scale enterprises, such as field saws. The estimated production volume of hardwood sawn wood was 40,000 m^3 Finland in 2024.

6.2.3. Wood-based panels

The outlook for wood-based panels remains mixed, reflecting both structural change and cyclical weakness. Plywood production in Finland is projected to decline by 5 per cent (870,000 m^3) in 2025, largely due to prolonged strikes in early 2025, weak European demand, and mill closures. In 2026, the production of plywood is estimated to be 900,000 m^3. Exports are expected to fall by 4 per cent (730,000 m^3) in 2025 but rebound by 3 per cent (755,000 m^3) in 2026 as the European construction sector gradually recovers. Average export prices will decline slightly in 2025 (€755 per m^3) before stabilizing in 2026 (€765 per m^3).

The forecast is supported by clear market trends. Demand for traditional plywood products is constrained by subdued construction activity in Central Europe and the Nordic region. Conversely, demand for engineered wood products – particularly LVL – is increasing due to their structural efficiency and role in low-carbon building. Metsä Group's investment in a new LVL plant in Äänekoski, expected to start production in 2026, reflects this shift toward higher value-added segments. At the same time, Riga Wood Finland's capacity expansion in Sastamala demonstrates growing foreign investor confidence in Finland's wood panel industry.

6.2.4. Pulp and paper

The weak demand in export markets is reflected in the demand and exports of Finnish pulp. Although production is being restricted at several mills, pulp production and export volumes are higher in 2025 than in 2024 due to the weak comparison level (Table 6.2). In 2024, pulp production and export volumes were limited by strikes and the closure of the Kemi bioproduct mill for three months due to an explosion accident. In 2026, pulp production in Finland will remain stable, but pulp exports will increase slightly as demand recovers slightly. Finland's average export price will decrease by 3–4 per cent both in 2025 and 2026.

TABLE 6.2

Finland: Pulp and paper industry production, export and export price forecasts (2024–2026f)

Assortment	2024	2025f	2026f		2024	2025f	2026f
Pulp					annual change		
Production [million t]	6.97	7.14	7.11		0%	2%	0%
Exports [million t]	3.78	3.95	3.99		-10%	4%	1%
Export price (euro/t)	650	626	605		5%	-4%	-3%
Paper							
Production [million t]	3.01	2.93	2.70		4%	-3%	-8%
Exports [million t]	2.75	2.68	2.47		4%	-3%	-8%
Export price (euro/t)	943	918	887		-6%	-3%	-3%
Paperboard							
Production [million t]	3.72	3.81	3.88		10%	2%	2%
Exports [million t]	3.60	3.68	3.76		9%	2%	2%
Export price (euro/t)	918	877	845		-5%	-4%	-4%

Note: f : forecast.
Source: Finnish Forest Industries Federation, 2025; Finnish Customs, 2025; Forecasts: Luke, 2025.

Paper production will continue to contract, falling by 3 per cent in 2025 and 8 per cent in 2026, as declining European demand for printing and writing paper accelerates structural change. Mill closures and conversions to packaging production will continue. The market situation is continuing to tighten, as more paper from Asia and South America is likely to be diverted to the European market in the near future.

UPM has announced that it will close its Kaukas paper mill in Lappeenranta and Sappi will close one paper machine in Kirkniemi by the end of 2025. The machines announced to be closed produce coated magazine paper (MWC, LWC). Kaukas has a production capacity of 0.3 million tonnes and Kirkniemi has a production capacity of 0.175 million tonnes per year. The closures would reduce Finland's paper production capacity by approximately 11 per cent.

The paperboard market situation is also not expected to ease, as there is an oversupply of paperboard in the market and demand remains weak. Import duties are weakening the competitiveness of European products in the United States and affecting Finnish paperboard exports. Duties are also changing trade flows globally, as more paperboard imports are being directed to Europe, especially from Asia. Paperboard production and exports in Finland will grow by a couple of per cent both in 2025 and 2026, as Stora Enso's investment in Oulu increases folding boxboard production capacity. Due to the weak market situation, paperboard export prices will decrease by four per cent both in 2025 and 2026.

6.2.5. Wood energy

The demand for energy wood is projected to decline slightly in 2025 and 2026. The use of forest chips in combined heat and power plants fell in 2024 and is expected to decrease by 5 per cent in 2025 and marginally in 2026. The key market drivers are mild winter conditions, falling electricity prices, and increased electrification of district heating. Despite this, wood energy remains an important component of Finland’s renewable energy mix, providing supply security and flexibility.

Forest chip prices, which surged during the energy crisis, have since stabilized. In 2026, they are projected to decline by about 2–3 per cent, supported by greater availability of forest industry by-products, such as bark and sawdust. Pellet production, after a 9 per cent decline in 2024, is expected to remain flat. The medium-term outlook is shaped by the transition toward bio-based liquid fuels and heat electrification, reducing demand for solid biomass but increasing interest in value-added energy products.

6.2.6. Housing and construction (with a focus on wood-based and wood-hybrid construction)

Construction activity is expected to recover only modestly in 2025 and more clearly in 2026. Following a sharp downturn in 2023–2024, total construction volume in Finland will grow less than one per cent in 2025 and approximately 3.5 per cent in 2026. The recovery is driven by infrastructure and renovation projects rather than new housing starts. In Europe overall, Euroconstruct forecasts 0.3 per cent growth in 2025 and 2 per cent in 2026.

The main market factors influencing the forecast are declining interest rates, stabilizing building material prices, and targeted government incentives for green and wood-based construction. Demand for low-carbon and prefabricated wooden structures is expanding, particularly in public buildings, educational facilities, and urban infill projects. However, high financing costs, remaining uncertainty and reduced household purchasing power continue to limit new residential investment in 2025. By 2026, confidence is expected to strengthen as energy-efficient construction becomes a priority under EU climate targets.

6.2.7. Carbon markets

Carbon markets are emerging as a complementary mechanism supporting sustainable forest management and investment. In Finland, voluntary forest carbon projects and carbon farming schemes are developing, although the market remains in an early stage. Between 2025 and 2026, participation is expected to grow gradually, driven by corporate net-zero commitments and increasing investor demand for verified carbon credits.

Market fundamentals suggest rising interest in land-based carbon removal credits, but progress is constrained by verification challenges and uncertainty in EU regulation. The integration of forestry into the EU Emissions Trading System is not foreseen before 2030, but new standards for carbon accounting and monitoring are being tested.

6.3. Gender and Human Rights Issues in the Forest Products’s Sector

Historically, the forest sector has been a male-dominated work sector in Finland. Despite the use of advanced technology, digitalization, and automation,

the situation has not changed, as forest sector jobs are still dominated by male workers. In 2023, the share of male workers in the entire Finnish forest sector (including pulp and paper industries, wood-products industries, and forestry) was 81 per cent, and every fifth worker (19 per cent) was female. In the pulp and paper industries, the share of female workers was somewhat higher, at 35 per cent, while in wood-products industries, their share was only 15 per cent. In forestry, only every tenth worker (11 per cent) was female. The most common professional group for females in the Finnish forest sector is officers. During the 2020s, the trend of female workers has been slightly declining in forestry and wood-products industries but increasing in the pulp and paper industries. For comparison, nearly half (49 per cent) of all working population was female in all Finnish industries.

Gender is typically considered as an insignificant element in Finnish working life culture, while workers' competence and experience are assessed as more relevant issues. As a result, even talking about gender may be felt as an uncomfortable topic. On the other hand, it has been estimated that gender-based segregation of both work sectors and the choices of professional educational sectors is more clearly differentiated in Finland than in general in European countries. The general image of the forest professions is male dominated.

Currently, as in many other countries, the Finnish forest sector and rural areas are changing, and surrounded by new challenges and demands. In this situation, a new kind of thinking and different skills would be useful and needed. In addition, it has been estimated that the forest sector will face a lack of workforce in the future. To tackle these challenges, the forest sector also needs the work input of females, a widely untapped resource in this sector, and the forest sector should be attractive and competitive for female workers as well.

In 2020, the Metsämiesten Säätiö Foundation, the Ministry of Agriculture and Forestry (MMM) and the Natural Resources Institute Finland (Luke) conducted a survey (N=1282) covering professionals who harvest and transport various wood materials to processing plants or enable this work, for example through wood trade or advice. According to the results, female employees (n=53) reported a high workload, poor recovery from work and lack of social interaction in work communities. These measured themes of well-being at work were clearly lower in women than in men. A qualitative project will be implemented in 2025–2026 to investigate factors that undermine the well-being at work of female forest officials and ways to improve it.

From both domestic and international points of view, an important group of workers in the forest sector are seasonal workers. It is estimated that each year, 1,100 to 1,600 seasonal workers arrive in Finland from Baltic countries, Romania, Hungary, Nepal, and Thailand to carry out forestry work tasks like planting seedlings, nursery care, or lumberjack work. The exact number of seasonal workers is not known, as they may spend only some weeks or months in Finland. A recent project by Tapio assessed that seasonal workers in the forest sector should have special learning courses about occupational safety, forest, and nature care. In addition, they should learn the basic working life rules concerning their work period in Finland. Work authorities underline that work tasks in forests should not be delivered to subcontractor companies. Work in Finland (https://www.workinfinland.com/en) is a service for both job seekers and employers, established by several public sector organizations. The aim is to provide information for workers about work and life in Finland and to help employers in recruiting persons abroad.

Social and labour sustainability is another key component of responsible supply chains. In Finland, a few cases have come to light where foreign forest workers have been treated unfairly, such as non-payment of wages and compensation and inadequate occupational health care. As a result, the Finnish authorities strengthened supervision and updated contractor liability legislation. Fair working conditions, occupational safety, and transparent subcontracting chains are now integral to corporate responsibility frameworks. The forest sector's social license to operate increasingly depends on ethical labour practices and public accountability.

7. GERMANY

View from the Wallberg mountain in the German Alps Panorama. Nataliya Schmidt _/ stock.adobe.com

7. Germany [9]

7.1. General economic trends

7.1.1. The Federal Government's 2025 autumn projections

The German Government expects to see slight growth in GDP and increasing economic recovery over the next two years (BWE, 2025).

After two years of declining economic output as a result of energy price shocks and increased geopolitical uncertainties, the downward economic trend in recent years appears to be bottoming out in autumn 2025. This is indicated by steady – albeit still fragile – improvements across many sentiment indicators, not least among small and medium-sized enterprises, since the beginning of 2025. The current economic situation is still viewed with caution, and the assessment of the order situation reflects this as well. Against the backdrop of the adverse effects of higher tariffs by the United States of America, the subsequent slowdown in global economic momentum and relatively sombre consumer sentiment in private households, growth in the third quarter is still likely to be subdued overall.

Compared to the spring projection, the autumn projection shows that slightly higher real economic growth of 0.2% is expected for the current year. This is due to the currently somewhat more favourable statistical starting position ('carry-over') and a stronger-than-expected growth in GDP in the first quarter. At the turn of 2025/26, the domestic economic situation is likely to gain in momentum on the back of economic and fiscal policy measures by the federal government. In 2026, GDP growth of 1.3% is expected, followed by growth of 1.4% in 2027 (see Table 7.1). This assessment is in line with the autumn projections issued by various economic research institutes.

7.1.2. The economic situation in Germany as of October 2025

While the upturn in sentiment indicators in the corporate sector since the beginning of 2025 initially led to expectations of an economic recovery in the second half of 2025, the latest economic indicators for the third quarter point to continued weak growth.

The main factor behind this ongoing significant slowdown is the external economic environment: following the strong boost in exports at the beginning of 2025 in the run-up to the expected tariff increases by the United States of America, German exports have recently been on a downward trend against the backdrop of slowing global trade momentum.

The slowdown in global demand in recent months, partly as a result of higher import tariffs by the United States is also reflected in a significant decline in orders from abroad, and especially from outside the eurozone. This has had a particularly strong impact on Germany's export-oriented industry.

TABLE 7.1

Germany: Key figures of the 2025 autumn projection (2024-2027) [%]

Gross domestic product by expenditure (price adjusted) [Year-on-year change (in per cent)]	*2024*	*2025*	*2026*	*2027*
Gross domestic product	-0.5	0.2	1.3	1.4
Private consumption[1)]	0.5	0.9	0.8	1.1
Public sector consumption	2.6	2.5	2.5	0.6
Gross fixed capital formation	-3.3	-0.5	3.7	4.2
- in machinery	-5.4	0.0	6.5	5.5
- in buildings	-3.4	-2.3	2.0	3.7
- in other investments	0.2	3.6	3.6	3.5
Changes in inventories and net acquisition of valuables (contribution to GDP growth)	0.0	0.7	0.1	-0.1
Domestic demand	0.2	1.7	1.9	1.5
Exports	-2.1	-0.1	1.2	1.6
Imports	-0.6	3.6	2.6	2.1
Net foreign demand (contribution to GDP growth)[2)]	-0.7	-1.4	-0.5	-0.2
Price development of consumer spending by households[2)]	2.4	2.1	2.0	2.2
Growth in gainfully employed persons (domestic)	0.1	0.0	0.0	0.1
Unemployment ratio (Federal Employment Agency)	6.0	6.3	6.2	6.0
Gross domestic product	-0.5	0.2	1.3	1.4

Note: [1)] Including non-profit-making organizations; [2)] Absolute change in net foreign demand in per cent of pre-year GDP (= contribution to change in GDP).
Source: BWE, 2025.

[9] Submitted by the German Federal Ministry of Food and Agriculture to the 83rd Session of the ECE Committee on Forests and the Forest Industry (COFFI) Geneva, 2-4 November 2025.

Accordingly, production levels have stagnated since the spring. However, the sharp decline in industrial production observed in August compared with the previous month is likely attributable in part to car manufacturers having factory holidays later than usual, as well as to other production changes in 2025. The truck toll mileage index, which correlates closely with industrial production, indicates at least a slight increase again for September.

In the domestically oriented sectors of the economy, there are signs of stabilization in the third quarter so far. Construction output rose moderately in recent months, coming in slightly above the previous quarter on a seasonally adjusted basis. Although retail sales declined somewhat in August, the production index for consumer-related services showed a strong increase in July after a noticeable decline in June. Even though the business climate in the wholesale and retail sectors has been somewhat difficult as of late, the latest improvement in consumer sentiment indicates a certain stabilization in private consumption, albeit starting from a low level. In business-related services, there was an increase in production at the beginning of the quarter, which at least partially offset the earlier decline.

Overall, against the backdrop of continued weak external demand and ongoing sluggish domestic economic momentum, the current indicators do not point to a recovery in the third quarter. This is in line with the German government's autumn projection. Later in 2025, however, the German government's economic and fiscal policy measures are likely to have an increasing impact and provide impetus for a gradual economic recovery.

7.2. Selected policy measures affecting the forestry sector

7.2.1. Climate action targets, policies and measures in the forestry sector

The greatest challenge for strengthening the contribution of forests to climate action lies in the adaptation of forests to climate change. This is absolutely necessary to leverage synergies with sustainable, close-to-nature forest management and the promotion of forests' carbon sink capacities, both in standing stock and in deadwood and soil, and greater use of wood in the form of durable products.

However, first outcomes of the Fourth National Forest Inventory, implemented in 2022, showed that the important function of forests as natural carbon sinks has changed. Climate challenges have caused the forests to become a carbon source since 2017.

Since 2021, the Federal Climate Change Act postulates in para 3a that the contribution of the LULUCF sector to climate change mitigation is to be increased. More specifically, the annual emissions balances for land use, land-use change and forestry sector are to be improved as follows:

- to at least minus 25 $MtCO_2$-eq by 2030,
- to at least minus 35 $MtCO_2$-eq by 2040,
- to at least minus 40 $MtCO_2$-eq by 2045.

In order to ensure that these climate targets will be met, the German Government annually monitors progress with regard to targets and reviews as well as adapts its climate action programmes on a regular basis. The latest Climate Action Programme 2023 was agreed in October 2023 and included several measures related to the forestry sector, i.e. a new Action Plan on Nature-based Solutions for Climate and Biodiversity, a climate-adapted forest management scheme, improved GHG monitoring and reporting in the LULUCF sector, as well as the creation of sustainable and regional value chains for wood as a resource.

With its Action Plan on Nature-based Solutions for Climate and Biodiversity (BMKUN, 2023), the Federal Government aims to make a key contribution to significantly improving the general conditions of ecosystems in Germany, thus strengthening their resilience and climate mitigation performance. Forest ecosystems are one of the dedicated fields of action in the plan. This plan foresees to

- increase forest cover in order to promote biodiversity
- create species-rich, near-natural and climate-resilient mixed deciduous forests through forest restoration and conversion
- create financial incentives for additional climate and biodiversity services in forests
- protect old-growth, near-natural beech forests

A further element for achieving these targets is preserving and improving the sink capacity of forests, including increasing carbon storage in wood products. In addition, the CO_2 reduction potential of sustainable forest management, the adaptation of forest to climate change, the closely related use of wood and the climate potential of natural forest development must be tapped. Measures to this end are supported by the Joint Task for the Improvement of Agricultural Structures and Coastal Protection (GAK).

Since extreme weather events will become more frequent as climate change progresses and site conditions change due to climate change, there is high urgency to better adapt existing forests to climate change by accelerating the forest conversion that has already begun, and to restore the already damaged areas as close to nature and climate-resilient mixed broadleaved forests. As part of the German Government's climate action package to promote close to nature forest management and repair damage caused by extreme weather events, around €480 million have been available under the GAK to support private and municipal forest owners. The measure is co-financed by the federal states, therefore a total of around 800 million euros was available for the period up to 2023. Since 2024, the measures for forest conversion and reforestation have been funded via the Federal Action Plan on Nature-based Solutions for Climate and Biodiversity, which is part of the National Climate and Transformation Fund, receiving 125 million euros in 2024 and 90 million euros in 2025.

In autumn 2022, the Federal Government launched a new "climate-adapted forest management" support scheme. Under this scheme, forest owners are required to implement specific forest management practices addressing forest biodiversity and adaptation to climate change with a view to improving the provision of all forest ecosystem services. Thus far, it has been possible to issue more than 8,800. These have been committed to meeting the criteria of the support scheme for 10 years or 20 years. Since January 2024, the Programme has been financed through the National Action Plan on Nature-based Solutions for Climate and Biodiversity.

7.2.2. National Forest Strategy

Germany is one of the most densely forested countries in Europe, with around one third of its territory covered by forests. It is primarily mixed forests, characterising German forests with an area share of 76%. The extreme weather of the past six years represents a turning point. Since 2018, storms, drought and the bark beetle outbreak have caused massive damage: more than 500,000 ha need to be reforested with climate-adapted species in clearcut conditions.

It has now been over 10 years since the German Federal Government decided on a national forest strategy. In 2021, the Forest Strategy 2050 of the Federal Ministry of Food and Agriculture was presented as a departmental strategy. Currently, the Federal Government is developing a new national forest strategy (BMEL, 2021a).

7.2.3. German "Charter for Wood 2.0"

The Federal Government's "Climate Action Plan 2050" (BMUB, 2016) addresses the "Charter for Wood 2.0" as one particular milestone. The "Charter for Wood 2.0" (BMEL, 2021b) aims to promote the use of wood from sustainable forestry as a positive contribution to climate action, resource efficiency and value creation; and through its activities in seven fields of action, it also supports the key objectives of the coalition agreement.

Using wood in urban and rural construction, exploring new uses for wood in the circular bioeconomy, advancing material and energy efficiency and managing forests and timber as resources are among the central fields of action in the Charter for Wood 2.0. These areas are addressed in working groups, events and publications. The findings feed into research, development and knowledge transfer and contribute to redirecting the use of wood more strongly from energetic purposes towards higher-quality material applications in support of climate action and value creation. In this context, sustainable construction with wood, conflicting goals related to wood utilization and the transition towards a wood-based and circular wood-based bioeconomy are currently of particular relevance. In 2025, the Charter placed a strong focus on questions regarding future wood availability. This was addressed at

the "Charter for Wood 2.0 in Dialogue" (BMELH, 2025a) event, where the WEHAM study (Forest Development and Wood Supply Modelling) (BMELH, 2025b) was presented and discussed. WEHAM projected the wood supply in Germany over the next four decades. The findings highlight, among other impacts, shifts in tree species composition and long-term resource potentials, and provide an essential database for the forest and wood industry and interested stakeholders. These results also serve as a basis for discussions on the Charter and related strategic decision-making processes.

7.2.4. Climate change-induced calamities since 2018

Since 2018, 241 million solid m^3 have been cut for damage management in softwood alone.

Since the beginning of the drought in 2018, approximately 0.5 million ha have been reforested. Forest owners are making efforts to generate new forests as mixed forests to ensure that the diverse forest functions can be maintained for the longer term, even in the face of climate change.

7.2.5. Enhancing energy efficiency in buildings

In accordance with the Federal Climate Change Act Germany is to reach the goal of net GHG neutrality by 2045 and to cut just under two thirds of all emissions compared with 1990 levels by 2030 (BMWK, 2021; BMWK, 2024; BMWSB, 2022). The buildings sector emitted 100.5 million tonnes of CO_2-equivalent in 2024 (UBA 2025). This resulted in a decrease of GHG output of 2.4 million tonnes of CO_2-equivalent year-over-year, which corresponds to a per centage reduction of 2.3%. The buildings sector accounted for 10.4% of GHG reduction in Germany in 2024.

The cross-sectoral total emissions budget provided for in the Act was adhered to, and the national climate target for 2024 was thus achieved. At the European level, the buildings and transport sectors fall under a shared GHG reduction provision as per the Effort Sharing Regulation (ESR), making further efforts in the buildings sector necessary.

The Federal Government adopted its most recent climate action programme on 4 October 2023. The 2023 Climate Action Programme lays out a total of 13 measures for the buildings sector, including the following:

- Amendment of the Buildings Energy Act by 1 November 2024 (BMWE/BMWSB)
- Amendment of funding for retrofitting under the Federal Funding for Efficient Buildings by 1 November 2024 (BMWE)
- Restructuring of new build funding, e.g. introduction of a QNG quality seal for sustainable buildings (BMWSB)
- Timber construction initiative (BMWSB)
- Serial retrofitting – Federal funding (BMWSB)
- Initiative for public buildings to implement Article 6 of the Energy Efficiency Directive (BMWSB)
- Retrofitting of sport, youth and cultural institutions at municipal level
- Future of construction - Model projects for innovation in the buildings sector
- Energetic retrofitting (BMSWB)
- Heat Planning and Decarbonization of Heat Networks Act (BMWE)
- Federal funding for efficient heat networks (BMWE)
- Heat pump initiative (BMWE)
- Optimising existing heating systems
- Implementing buildings directive EPBD (BMWE/BMWSB)

As per section 9 of the Federal Climate Change Act, the Federal Government will adopt a (new) climate action programme no later than 12 calendar months after the start of a new legislative period. For each climate action programme, the Federal Government will use the relevant current projection data to determine which measures it will implement in the individual sectors and across sectors to meet national climate targets.

In general, the medium and long-term climate goals in the building sector can only be achieved if a rapid and significant increase in renovation dynamics is achieved, which includes both an increase in the renovation rate and depth, and the heat supply is decarbonised at the same time. The aim must therefore be to effectively reduce the heating and energy requirements of buildings (increase in energy efficiency), and to promote the use of renewable energy sources.

7.2.6. Timber construction initiative

The Federal Government's timber construction initiative (Holzbauinitative) was adopted by the

Federal Cabinet in June 2023. In presenting its initiative to promote timber construction as a key contributor to climate-appropriate and resource-efficient construction, the Federal Government is implementing a coalition agreement objective.

Buildings account for a significant share of carbon emissions. In order to achieve the much-needed transformation towards making Germany's building stock climate-neutral, the advantages offered by technologies already available to achieve GHG reductions, and also long-term carbon capture, must be exploited.

The initiative will be used to implement measures surrounding promotion and funding, research and development, and specialist and consumer information. It will also involve a review of the current legal provisions which unjustifiably hinder the use of available technology in timber construction, thereby creating a level playing field. Another key component of the initiative involves dialogues and exchanges with the Länder (federal states), some of which have already implemented their own programmes and initiatives to promote timber construction or are planning corresponding activities. The annually convened round table for the timber construction initiative brings representatives from the federal and state level together with municipal umbrella associations for a mutual regular exchange of experiences, with the aim of uncovering potential synergies between the federal timber construction initiative and corresponding activities in the states and municipalities.

The timber construction initiative runs until 2030 and interfaces with a wide range of other policy strategies and programmes at various different levels (at EU level, notably the EU Green Deal and the New European Bauhaus (NEB) initiative).

7.3. Market drivers – the current market situation as of September 2024

Ongoing discussions on import tariffs by the United States of America, a struggling domestic economy and issues in the construction sector continue to cause uncertainty about the current market situation and future prognoses. On the other hand, domestic supply of industrial roundwood seems to be a challenge. On average, prices for roundwood have generally increased since summer 2024. However, different developments in various roundwood species can be observed.

Softwood: the price of spruce sawlogs showed a steady increase through May 2025, but then dropped to a slightly lower level in June and July 2025. The prices of pine increased significantly in the autumn of in 2024. Since then, prices have been mostly stable, according to producer price indices of the Federal Statistical Office . Demand for softwood largely seems be met, as stated above, mainly due to slow economic development in general and to a weak construction sector, though some difficulties in supply have also been noted (DESTATIS, 2025a).

Hardwood: the price of hardwood sawlogs showed a decline during 2025. Sales markets (domestic and abroad) for non-coniferous sawnwood did not show positive signs in recent weeks, which consequently did not induce a higher demand or higher prices for hardwood sawlogs. Beech sawlogs showed an increase from July to October 2024, but have been declining since then. Prices for oak sawlogs also climbed in late summer before levelling off in October 2024. Since then, prices consistently declined until May 2025. However, the price index for oak sawlogs was 4.2 % higher in July 2025 compared to July 2024.

Pulpwood and fuel wood: While pulpwood prices were relatively constant during 2024, a slight increase has been observed in 2025. Prices for fuel wood have decreased in last months, and the price index in July 2025 is 3.5 % lower than in July 2024. This development applies to both coniferous and non-coniferous fuel wood. However, price changes for non-coniferous fuel wood were significantly higher during the last twelve months, as mainly hardwood species such as beech are in demand as fuel wood.

7.4. Development in forests and forest products markets sectors

7.4.1. Wood raw materials

Felling of damaged wood has decreased at a constant rate in past years, affecting the German roundwood

supply. In 2024, official felling statistics report 27 million m³ in fellings of damaged wood in 2024, as opposed to 38 million m³ in 2023. The main cause for fellings remains insects, which accounted for more than 60 per cent of fellings of damaged wood. However, this is a decrease of 20 per centage points compared to 2023. Also, the spruce species group, which includes fir and douglas fir, remains primarily affected. The highest amounts of damaged wood fellings were recorded in 2020 and 2021 with 60.1 and 50.5 million m³ respectively (DESTATIS, 2025b).

According to the Thünen Institute's estimation of roundwood fellings [10] (Jochem et al, 2015), a constant decrease in damage-induced fellings can be observed since the aforementioned high point (TI-WF, 2025). Data on roundwood fellings and damaged wood fellings over the last ten years are provided in Table 7.2.

TABLE 7.2
Germany: Comparison of felling statistics (2015-2024) [million m³ u.b.]

Year	Thünen estimated roundwood fellings [million m³ u.b.]	Damaged wood fellings [million m³ u.b.]	Official felling statistics [million m³ u.b.]
2015	69.2	12.9	55.6
2016	67.0	7.8	52.2
2017	66.8	12.3	53.5
2018	75.0	31.9	64.6
2019	74.0	46.2	68.9
2020	79.1	60.1	80.4
2021	84.1	50.5	83.0
2022	86.3	44.7	78.7
2023	74.9	38.7	70.6
2024	73.0	27.3	61.2

Note: Comparison between official felling statistics, Thünen estimation of roundwood fellings and damaged wood fellings (in million m³ of solid wood under bark per year).
Sources: Destatis, 2025b ; Destatis, 2025c; TI-WF, 2025.

Roundwood exports have also decreased In parallel with the decreasing supply of domestic roundwood in recent years. In 2024, 7.5 million m³ of roundwood were exported, with Austria remaining the top export destination. China is now the second-largest destination. Compared to 2023, exports show a year-over-year decrease of 16.0 %, but remain one of the highest export volumes ever achieved. Imports of roundwood also showed a decrease of 12 % to 4.1 million m³. In balance, Germany is still a net exporter of roundwood, with an export surplus of 3.4 million m³ in 2024. However, net trade of roundwood decreased by 20 % compared to 2023.

Domestic roundwood is still dominated by softwood (roughly two thirds of used roundwood are from coniferous species). The German timber industry is still mainly based on softwood processing. Material utilization of roundwood reveals a usage ratio of more than 90 % of softwood and less than 10 % of hardwood species in recent years. Main domestic users of roundwood are sawmills (35.7 million m³ in 2024) and private households, which used 17.9 million m³ as fuel wood for energy generation in 2024.

7.4.2. Sawnwood (softwood/hardwood)

In 2024, 19,908 people were employed in the German sawmilling industry (-0.1 % compared with 2023). The total turnover showed a decrease to 7.5 billion euro (-4.9 % against the previous year) which is mainly due to reduced demand. The export quota increased by 0.6 per centage points to 33.7 %, with export turnover reaching 2.5 billion euro. Compared with 2023, total export turnover decreased by 3.0 % (companies with 20 and more employed persons) (DESTATIS, 2025e).

The market for sawn softwood is influenced by the weak economy, low demand especially from domestic construction sector as well as decreasing demand from export markets.

With a total about 22.4 million m³, domestic production of sawn (coniferous) softwood decreased by 2.1 % year over year in 2024. However, the apparent domestic consumption of coniferous sawnwood increased to 16.5 million m³ (+3.4 % compared with 2023). German exports of sawn softwood decreased to 8.8 million m³

[10] Previous market statements also note that official felling statistics in Germany have historically underestimated harvest volumes. In this regard, the Thünen estimation on roundwood fellings provides more realistic accounts of harvesting volumes and removals. The method is based on the recalculation of the used amount of roundwood, differentiated by the various users, and taking into account trade and changes in roundwood storage.

(- 9.7 %), while imports increased to 2.9 million m³ in 2024, a plus of 3.1% compared to 2023.

The annual apparent consumption of sawn hardwood is lagging greatly, amounting to just 0.5 million m³, which is a decrease of 21.4 % compared to 2023. Domestic production also showed a decrease of 8.5 % and is currently at a level of about 0.8 million m³ of sawn hardwood.

7.4.3. Wood-based panels

In 2024, the German panel industry employed 14,152 people (-1.5 % compared to 2023) and recorded a total turnover of 4.9 billion euro. Compared with 2023, total turnover decreased by 9.0 %, a change also mainly caused by lower demand. About 41.7 % of turnover depended on foreign trade (2.1 billion euro). Compared with 2023, the entire export turnover decreased by 6.9 % (companies with 20 and more employees) (DESTATIS, 2025f). The annual production of the German panel industry in 2024 amounted to 5.8 million m³ of particle boards (including OSB) (-0.4 % compared with 2023) and to 3.9 million m³ of fibreboard (-2.1 %). The apparent consumption of particle boards (including OSB) was estimated to be 5.8 million m³ (-0.8 % compared with 2023) and fibreboards to be 2.4 million m³ (-3.9 %).

7.4.4. Pulp and paper

In 2024, approximately 35,329 people were employed in the German pulp and paper industry (-5.1 % compared with 2023) on about 168 production sites (-2.3 % against 2023). The total turnover decreased to 17.2 billion euro (a -3.9% change from previous year). With an export quota of 58.1 %, export turnover amounted to 10.0 billion euro. Compared with 2023, total export turnover decreased by 3.1 % (companies with 20 and more employed persons) (DESTATIS, 2025f). The annual production of paper and paperboard amounted to 19.2 million tonnes (+3.0 % against 2023) (Die Papierindustrie, 2025).

The total apparent consumption of graphic papers, papers and boards for packaging, sanitary and household papers and other papers and board was calculated to be 15.9 million tonnes (+4.5 % compared with 2023 and according to current data from the German Paper Industry). Wood consumption by German pulp and paper mills was reported to be 7.8 million m³ in 2024, which is a decrease of 7.4 % compared with 2023 (Die Papierindustrie, 2025).

7.4.5. Pellet industry and producers of other agglomerates

German producers of wood pellets and other agglomerates experienced a slight decrease in annual production. In 2024, production was recorded to be 4.3 million tonnes (-1.8 % compared to 2023). About 842,000 tonnes of pellets and briquettes were exported in 2024 (-12.9 % compared with 2023). 2024 saw imports increase to 715,000 tonnes (-4.2 % compared to 2023). Domestic consumption remained fairly stable in 2024 (4.2 million tonnes, a small plus of 0.4 %) compared with 2023. The main raw material sources for pellet production are wood residues originating from softwood sawmills. Additional sources only play a minor role (e. g. residues from forests, fast-growing species and hardwood species).

7.4.6. Value-added wood products (including furniture)

The German woodworking and furniture industry (including manufacturers of assembled parquet floors, carpentry and joinery for other builders, wooden containers, other wood-based products, office and shop furniture, kitchen furniture and other furniture types [11] employed 139,202 people in 2024 (-4.2 % compared with 2023). 54,445 (-3.0 %) were employed within the woodworking industry, and another 84,757 (-5.0%) in the furniture industry.

The total turnover amounted to 29.2 billion euro, a decrease of 7.5 % compared with 2023. The decrease was a little higher in the woodworking industry (-8.2 %), while the furniture industry experienced a slightly lower decrease (-7.1 %). Turnover in the furniture industry is significantly higher (17.9 billion euro in 2024) than turnover in the woodworking industry (11.2 billion euro). With an export quota of 23.5 %, export turnover in the woodworking and

[11] In accordance with NACE Codes 16.22, 16.23, 16.24, 16.29, 31.01, 31.02, 31.09

furniture industries combined amounted to 6.9 billion euro in 2024. The export quota of the furniture industry is considerably higher than the export quota of the woodworking industry (31.2 % compared to 11.1 % in 2024). Export turnover in the woodworking industry increased by 3.8 % compared to 2023. Export turnover in the furniture industry decreased by 7.7 %.

7.4.7. Housing and construction

The housing and construction sector is one of the most important consumers of wood products. In Germany, roughly one-half to two-thirds of roundwood is transformed into products designed for building, construction and housing elements. In 2024, the carpentry and timber construction industry employed about 74,755 people (+0.7 %) in 12,134 companies (0.1%). Total turnover was estimated at about 9.9 billion euros (no change compared to 2023). Please note that part of this data was already reported in the woodworking sector in the previous section.

In 2024, 13,214 residential buildings using wood for construction were approved, which is a significant 11.6 % decrease over the previous year. Alongside several other reasons, the primary cause of the decrease is the general economic trend in Germany, which also negatively affects the construction sector and leads to reduced activity. However, the timber construction rate increased to 24.1 % in 2024 (+2.1 per centage points compared to 2023). The number of approved non-residential buildings using wood for construction also showed a slight increase of 0.3 %, growing to 5,533. Moreover, the share of all approved non-residential buildings increased to 25.4 % in 2024, gaining 2.0 per centage points compared to 2023 (Holzbau Deutschland, 2024).

8. IRELAND

Panoramic Picture of the South Somerset Countryside. Philip / stock.adobe.com

8. Ireland [12]

8.1. Market Drivers

8.1.1. Market situation

The primary forest product produced in Ireland is Sitka spruce roundwood, with the vast majority of this material processed by six sawmills and two panel board mills. A major market for Irish sawnwood timber is the construction sector. However, while the demand for housing in Ireland continues to rise, largely due to the population and economy growth, most domestic production is exported, primarily to the United Kingdom. In turn, Irish construction is heavily dependent on imports from continental Europe. Additional challenges adding to housing supply are labour shortages and critical infrastructure around the carbon transition, which also draw on resources and put pressure on labour in the construction sector.

In preparation of the Regulation on Deforestation-free Products (EUDR), the Department of Agriculture, Food and the Marine is regularly meeting sector specific stakeholders, answering questions from individual operators or traders and representing Ireland at EU fora such as the Multistakeholder Platform on Deforestation and at the European Council.

8.1.2. Key policies

At national level, the Climate Action and Low Carbon Development (Amendment) Act 2021 (Ireland, 2021) set out the objective to achieve a climate neutral economy within the State by the end of 2050. Since then, annual Climate Action Plans have updated the measures and actions required to deliver the carbon budgets and sectoral emissions ceilings.

Forests will be vital in Ireland's effort to achieve this objective. Ireland's Forest Strategy 2023-2030 (DAFM, 2023a) was published in September 2023, based on the Shared National Vision for Trees, Woods and Forests in Ireland until 2050 (DAFM, 2022). The subsequent Forestry Programme 2023-2027 (DAFM, 2023b) was also launched in September 2023, along with other non-Programme actions under the Forest Strategy Implementation Plan (DAFM, 2023b). It is a €1.3 billion Programme, nationally funded, aiming to boost afforestation and secure a long-term, sustainable supply of Irish-grown timber whilst also delivering ecosystem services with environmental and climate benefits.

In November 2023, the Timber in Construction Steering Group (DAFM, 2023c) was established to create the conditions to increase the use of timber in construction and to maximise the use of home-grown timber in construction in a drive attempt to decarbonise the built environment. The Steering Group of 16 members and the Independent Chair is supported by five thematic groups, namely: Market Opportunity; Regulation, Standards and Compliance; Public Procurement and Demonstration Projects; Research and Development; Communication, Education, Training and Public Awareness. Over 60 members across a wide range of stakeholders represent key industry bodies, as well as senior representatives of relevant government departments and agencies with responsibilities for policy and the development of sectors. In addition, the National Development Plan 2021–2030 (DPER, 2021) supports the promotion of MMC, sustainability, and innovation in the built environment, areas where timber plays a key role.

8.1.3. Biotic and abiotic disturbances

Ireland's forest health status is relatively good overall. In 2024 Ireland continued its participation in EU co-funded surveys for EU priority pests. No findings of EU Priority Pests were made in Ireland in 2024. However, Ireland has had a number of outbreaks of organisms harmful to trees and forests, which have had significant impact in recent years. These include the impact of Hymenoscyphus fraxineus (ash dieback disease) and Phytophthora ramorum disease outbreaks in Japanese larch. Both of these harmful organisms continued to have significant impact in 2024. In December 2023, the Department of Agriculture, Food and the Marine (DAFM) announced findings of the non-EU bark beetle, Pseudips mexicanus, commonly known as the Monterey Pine Engraver. No evidence was found in follow-up work of any breeding insects in trees or of any damage caused to trees.

[12] Submitted by Irish Department of Agriculture, Food and the Marine to the 83rd Session of the ECE Committee on Forests and the Forest Industry (COFFI) Geneva, 2-4 November 2025.

Bark beetles were the major focus of the 2024 surveillance programme. This was in response to developments both with European Protected Zone species including Ips typographus and Ips cembrae and non-European species (following the finding of Pseudips mexicanus in Ireland). In total, 2024 forest health surveys took in over 685 visual examinations at 385 survey sites with 230 traps and 349 samples taken for laboratory analysis.

In 2025, restrictions were placed on the exporting of spruce logs with bark to the island of Ireland from Scotland. This came after the beetle Dendroctonous micans and Ips cembrae was found close to the Pest Free Area from which Ireland was sourcing timber. As it was no longer possible to guarantee freedom from these beetles in all areas the trade in logs from Scotland was paused since that finding.

The impact climate change may have on the Irish weather in the coming decades is concerning, and more frequent, strong storms, dry and hotter summers may occur. Storm Darragh and Storm Éowyn, caused widespread damage to Ireland in December 2024 and January 25, respectively. The satellite imagery-based assessment of wind-damaged forest areas indicate that a total of 26,050 ha of forests were impacted, 14,500 ha and 11,550 ha in the Coillte and private forest areas respectively. A Windblow Taskforce was established following Storm Eowyn to coordinated response to the storms, with particular emphasis on dealing safely with areas of forest blown down. It comprises stakeholders representing forest owners, forestry companies, Teagasc, and Coillte.

Forest fires normally occur each year in Ireland and reach their peak in spring, particularly in forests established on formerly unenclosed land, with a preponderance of purple moor grass and heather vegetation. Forest fire damage affected 100 ha in 2023.

8.1.4. Raw material supplies

The total value of roundwood removals, which is wood in its natural state removed from Irish forests, was €236 million in 2024, a 10% increase on the €215 million figure in 2023 and a 7% decrease from €253 million in 2022 (CSO, 2025a). The state forestry company, Coillte, is currently the dominant supplier of logs to the processing sector in Ireland. The standing timber price is the price paid per cubic metre of timber by the purchaser, where the purchaser is responsible for harvesting. The figures quoted in Table 8.1 are for sales to the sawmill sector only, and include all species and harvest types

TABLE 8.1
Ireland: Average Standing Timber Prices by tree size category (2013-2023) [€/m³]

Mean Tree Size (m³)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
0.001 - 0.074	-	-	-	-	39.4	-	-		-	-	-
0.075 - 0.124	-	-	41.2	-	-	-	-		-	-	-
0.125 - 0.174	-	-	-	-	40.1	-	-		-	-	-
0.175 - 0.224	-	-	-	-	56.6	-	44		-	69.4	-
0.225 - 0.274	43.7	49.2	50.0	43.5	44.2	66.4	51.8	44.45	91.79	46.0	62.2
0.275 - 0.324	47.1	52.4	49.9	45.8	46.0	62.4	55.6	51.59	63.58	67.3	47.8
0.325 - 0.374	51.3	54.5	53.9	44.7	51.8	70.5	54.3	46.95	73.38	60.3	47.9
0.375 - 0.424	48.6	57.3	56.5	48.1	51.1	67.8	53.7	50.52	70.75	63.4	51.8
0.425 - 0.474	52.0	58.6	58.4	50.5	50.6	75.0	57.3	51.33	69.44	59.1	50.8
0.475 - 0.499	54.5	62.1	62.9	54.4	52.1	73.9	63.9	55.67	81.07	58.9	54.6
0.500 - 0.599	51.6	62.2	63.3	54.5	55.2	70.0	61.5	53.22	64.97	53.8	52.9
0.600 - 0.699	55.4	67.2	66.0	57.2	57.1	76.8	57.3	54.1	55.87	59.1	57.7
0.700 - 0.799	55.6	65.7	59.6	57.0	57.6	81.9	65.3	53.22	59.59	58.0	63.8
0.800 - 0.899	57.4	71.8	67.9	58.7	56.8	76.5	61.8	57.99	89.61	61.2	53.1
0.900 - 0.999	60.7	66.4	67.0	58.4	57.4	80.7	67.6	58	70.27	60.0	55.3
> 1.000	54.0	74.3	71.1	60.8	60.3	76.7	65.6	58	67.36	64.0	60.2
Average (€/m³)	**52.7**	**61.8**	**60.5**	**52.8**	**52.6**	**73.2**	**58.4**	**52.9**	**71.5**	**60.0**	**54.8**

Source: Coillte, 2025; ITGA, 2025.

The majority of prices quoted are for standing sales with retained pulpwood, i.e. there is no value for pulp included in these prices. Coillte retain the pulpwood to supply their boardmills, i.e. Smartply and Medite. There is no data available for 2024.

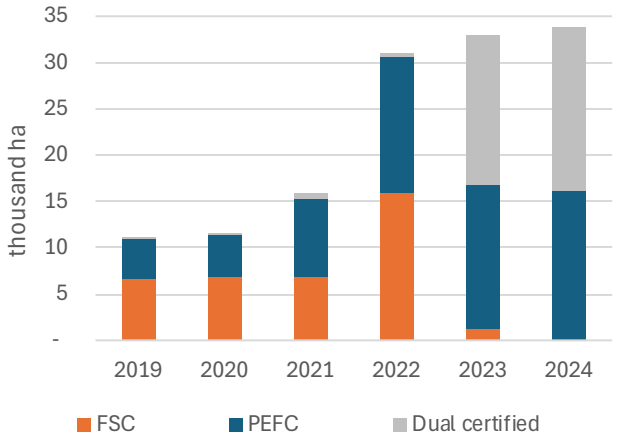
Irish forests continue to supply increasing amounts of wood fibre for sawmilling, panel board mills and the wood energy markets. The annual potential roundwood supply will increase from 4.7 million m^3 in 2021 to 7.9 million m^3 by 2035 (COFORD, 2021). This will be followed by a small decrease to remain constant at circa 7.6 million m^3 up to 2040. Realising this large increase in potential production will entail significant capital investment in roads, harvesting equipment and wood processing. The Irish sawmilling sector is well placed to process this increased production in supply, with the majority of products exported to markets in the United Kingdom and further afield.

8.1.5. Traceability and supply chains

Voluntary forest certification schemes are run by international non-governmental organizations to promote good forest practice. In Ireland, there are currently two certifying schemes: PEFC and FSC. Voluntary forest certification links the demand for forest products to environmental and social standards to producers who to show that wood or wood products come from certified forests. All major Irish sawmills are certified.

The management of the Coillte estate, which comprises 49% of the national forest estate, is certified by both the FSC and PEFC. Coillte first obtained certification in 2001 from FSC and became dual certified in 2014 when the company received PEFC certification. Although there has been progress in recent years in the certification of privately owned forests, this area will need to increase so that sufficient certified material will be available in the coming years. During 2023, work commenced on the preparation of a business plan for the establishment of an Irish Group Forest Certification Scheme. In 2024, an area of 33,947 ha for private forest is certified; all of which is certified by PEFC and 17,885 ha by FSC (Graph 8.1). There are 17,885 ha certified by both schemes.

GRAPH 8.1
Ireland: Private forest area certified (2019-2024) [1000 ha]



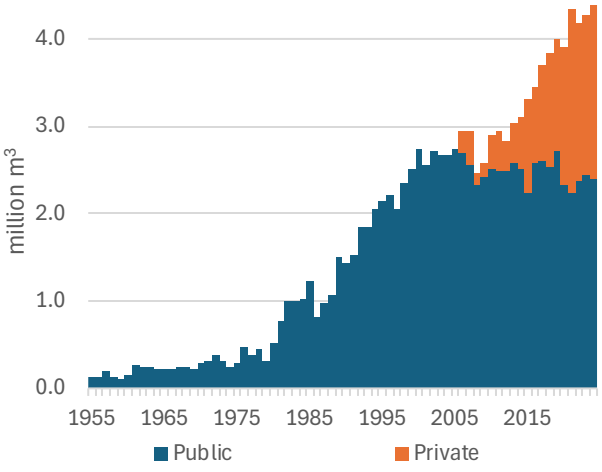
Source: PEFC, 2025; FSC, 2025; DAFM, 2025.

8.2. Market Development

8.2.1. Wood raw materials, Sawn softwood and sawn hardwood, Wood-based panels, Pulp and paper.

The national roundwood harvest (excluding firewood & hardwood) from Irish forests between 1955 and 2024 is shown in Graph 8.2. No data are available for the private roundwood harvest prior to 2006, as the forest cover was very low in the private sector at this time with an associated small contribution of roundwood.

GRAPH 8.2
Ireland: Roundwood harvest (1955-2024) [million m^3]



Source: DAFM, 2025.

TABLE 8.2
Ireland: Roundwood Total Removals by Product (2015-2024) [1000 m^3]

	Roundwood Total Removals			Roundwood Removals by Product					
	Public	*Private*	***Total***	*Large sawlo*	*Small sawlo*	*Stakewood*	*Pulpwood*	*Fuelwood*	*Roundwood for*
2015	2,235	1,077	**3,312**	1,016	1,000	119	1,015	103	58
2016	2,590	856	**3,445**	1,092	1,069	126	944	91	124
2017	2,592	1,106	**3,698**	1,210	1,163	136	1,018	100	70
2018	2,529	1,305	**3,834**	1,276	1,131	128	1,108	112	79
2019	2,720	1,288	**4,007**	1,249	1,128	146	1,200	112	172
2020	2,336	1,555	**3,914**	1,495	979	144	1,018	226	51
2021	2,235	2,098	**4,333**	1,749	1,120	129	1,094	209	33
2022	2,375	1,811	**4,186**	1,583	1,089	134	1,118	213	49
2023	2,447	1,822	**4,269**	1,633	1,059	153	1,154	207	63
2024	2,401	1,995	**4,396**	1,744	1,107	131	1,148	233	34

Source: DAFM, 2025.

The roundwood total removals by product between 2015 and 2024 is shown in Table 8.2. In 2024, 4.4 million m^3 of roundwood was removed from forests for processing (excluding firewood) in the Republic of Ireland. Much of this increase came from the private sector roundwood production with an 85% increase in 2024 production compared to 2015. This is reflective of the maturing private forest estate. Non-coniferous removals are still a minor element of the annual roundwood available for processing, and in 2024 amounted to 26,000 m^3. Between 2015 and 2024, non-coniferous removals averaged 18,400 m^3. Storms Darragh and Éowyn will likely increase the roundwood removals for 2025. Exports of wood and paper products were valued at €1.03 billion in 2023 while €2.5 billion was imported (Table 8.3). This is a slight decrease of 15.3% for exports and 7% for imports compared with 2022. The highest exports volume in 2023 was Veneer Sheets & Wood-Based Panels, followed by Coniferous Sawnwood and Coniferous Industrial Roundwood. Sales volumes of MDF and OSB products in 2024 were consistent with the previous year at circa 700,000 m^3 (Coillte, 2025). The United Kingdom is the largest destination for Irish exports by far, accounting for 79% of exports by value and 85% by volume for forestry and wood-based products. Other key destinations for Irish Forestry and wood-based products are the Netherlands, Belgium, France, Germany, Italy and the United States (DAFM, 2024).

TABLE 8.3
Ireland: Exports and imports of wood and paper products (2023) [tonnes, m^3, euro million]

Category	*Imports*			*Exports*		
	Tonnes	*m^3*	*M euro*	*Tonnes*	*m^3*	*M euro*
Coniferous Industrial	173,263	221,770	27.9	364,053	459,190	31.2
Non-Coniferous Industrial	4,345	6,526	7.1	6	7	0.1
Wood Fuel	41,715	50,058	15.3	8,659	10,391	1.4
Other Biomass	330,243	288,929	75.3	202,231	242,942	35.0
Coniferous Sawnwood	151,483	282,962	105.8	379,227	586,399	150.1
Non-Coniferous Sawnwood	24,935	34,978	43.7	710	1,061	1.0
Veneer Sheets and Wood-based	228,888	342,281	207.3	451,745	677,283	338.3
Pulp	39,651	-	46.2	341	-	0.2
Recovered Paper	1,703	-	2.4	434,631	-	56.9
Paper and Paperboard	326,770	-	393.3	15,720	-	38.5
Secondary Wood Products	272,044	-	715.4	51,213	-	149.5
Secondary Paper Products	370,031	-	878.4	59,860	-	223.4
Total	**1,965,072**	**1,227,504**	**2,518.1**	**1,968,397**	**1,977,272**	**1,025.6**

Note: M: million.
Source: DAFM, 2025.

In recent years, export volumes of Coniferous industrial roundwood, Coniferous sawnwood, Veneer sheets and Wood-based panels, and Recovered paper have exceeded imports of these products. This is indicative of the maturing forest estate and the development of markets from the wood processing industry. In contrast import volumes of Wood Fuel, Pulp, Paper & Paperboard, Secondary Wood Products and Secondary Paper Products have exceeded export volumes.

The most recent data available show that exports of coniferous sawnwood have increased from 212,000 m^3 in 1995 to 586,399 m^3 in 2023. Exports of coniferous industrial roundwood increased by 122% from 206,751 m^3 in 1995 to 459,190 m^3 in 2023. In 2023, imports of coniferous industrial roundwood totalled 221,770 m^3, an increase of 25% over 2022. Coniferous sawnwood imports decreased by 14% compared with 2022, totalling 282,962 m^3 for 2023.

Imports of Secondary Paper Products represented 35% of the total value of imports in 2023. Secondary Wood Products accounted for a further 28%. Exports of Veneer Sheets & Wood-Based Panels represented 33% of the total value of exports of wood and paper products. Exports of Secondary Paper Products accounted for a further 22% in 2023.

8.2.2. Wood energy

Since 1990, there has been a decrease in the use of firewood in open fires, in line with the general decline of solid-fuel open fires, with a concurrent rise in the use of oil, gas and electricity for residential energy consumption. As a result, the share of firewood used for domestic heating has decreased since 1990 (SEAI, 2016). However, due to the significant increase in the number of households and energy usage per household there has been a concurrent increase in firewood sales since the 1980's. The firewood market in Ireland has grown by 73%, from 147,000 m^3 in 2006 to 254,058 m^3 in 2023.

The introduction of grant aid in 2009 for first thinning of broadleaf forests has resulted in substantial mobilization of firewood from first thinning, principally for domestic use. In addition, firewood is also harvested by forest owners for their own use and this is not accounted for in current figures. Initiatives such as The Wood Fuel Quality Assurance (WFQA) scheme for Ireland administered by the Irish Bioenergy Association (IrBEA) increases consumer confidence in wood fuel products sold in Ireland. The WFQA independently certifies and verifies suppliers of firewood, wood pellets, woodchip and wood briquettes. All certification is carried out against EN ISO 17225 standards for biomass fuels. Since 1st January 2022, all wood burning stoves must comply with the Ecodesign European directive in a bid to tackle air pollution and particulate emissions.

8.2.3. Housing and construction

In the whole of 2024, there were 30,330 new dwelling completions, a decrease of 6.7% from 2023 (CSO, 2025b). The Government of Ireland has approved revised housing targets for the period 2025 to 2030, aiming to deliver a total of 303,000 new homes across Ireland. This ambitious plan sets an average of over 50,000 homes per year, with a pathway to achieve 60,000 homes annually in 2030 and thereafter (DHLGH, 2024).

Timber framed buildings are becoming increasingly common in Ireland, though they still account for less than 50% of all new buildings. The Irish timber construction market in 2025 is estimated at 668,000 m^3 (353,000 m^3 home-grown and 315,000 m^3 imported) timber volume. Over the coming years it is expected that residential construction will continue to dominate, accounting for 80% of the timber volume and 76% of the market value. Non-residential construction will also see growth, accounting for 20% of the timber volume and 24% of the market value in 2030 (ARUP, 2025).

The use of Mass Engineered Timber (MET) in buildings remains underutilised in Ireland, although interest is growing year on year. One of the main challenges to the adoption of MET is the difficulty in obtaining regulatory approval, uncertain costs and the lack of availability of skilled labour. The Timber in Construction Steering Group was established to create the conditions to increase the use of timber in construction whilst ensuring the highest degree of building safety and property protection; to examine regulatory and standardization challenges; and to maximise the use of home-grown timber in construction.

TABLE 8.4
Ireland: Carbon stock changes and overall balance (1990-2022) [Gg C and Gg CO2-eq.]

Year	*Carbon Stock Changes (Gg C)* (removal is a positive value & an emission a negative value)							*Overall Balance (Gg CO_2-eq.)* (removal is a negative value & an emission a positive value)		
	Living biomass	Litter & deadwood	Mineral soils	Organic soils	Fire	HWP	**Total**	CO_2	non-CO_2	**Total**
1990	1.204.7	85.8	-9.7	-461.8	-21.4	112.6	**910.3**	-3.337.9	201.7	**-3.136.3**
2000	839.0	-11.1	-11.6	-610.9	-17.6	306.3	**494.2**	-1.812.1	260.4	**-1.551.7**
2010	1.374.1	245.7	-2.0	-683.4	-83.8	223.3	**1.073.9**	-3.937.7	328.5	**-3.609.2**
2020	1.049.9	260.9	-5.6	-719.5	-17.7	220.6	**788.5**	-2.891.3	313.4	**-2.577.9**
2021	777.8	337.0	-4.5	-711.5	-6.0	262.6	**655.4**	-2.403.0	305.8	**-2.097.2**
2022	925.7	300.7	-5.3	-702.7	-6.0	240.9	**753.2**	-2.761.8	303.6	**-2.458.2**
2023	810.6	419.1	-6.4	-695.7	-9.0	241.9	**760.6**	-2.788.8	303.2	**-2.485.6**

Source: DAFM, 2025.

Currently, Ireland does not have MET manufacturing facilities (including CLT or Glue Laminated Timber). In addition, sawmill production typically produces the structural strength class C16, which very limited production of C24, which is the strength grade preferred for the production of MET.

8.2.4. Carbon markets

Greenhouse gas emissions and removals are estimated using the CBM-CFS model based on data from the NFI, FAO-EUROSTAT data on HWPs and other data sources. The data presented in Table 8.4 is taken from the National GHG inventory.

In relation to carbon farming, Ireland is engaged with the EU Commission on the establishment of tailored methodologies for carbon removal activities, including forestry, under the Carbon Removals and Carbon Farming (CRCF) Regulation. At national level, DAFM is leading the development of a Carbon Farming Framework to support putting farmers, landowners, and foresters at the centre of meeting our National Climate objectives. Work is ongoing in this area with a view to delivering a National Framework for Carbon Farming in Ireland, as outlined in the 2025 Programme for Government.

8.3. Gender & Human Rights

Human rights in Ireland are protected under the Irish Constitution and European provisions. Since 2014 the Irish Human Rights and Equality Commission has overseen human rights in the country.

Gender equality goals are set out in the whole of Government statements of priority on gender equality which include the National Strategy for Women and Girls 2017-2020, and its successor, currently being developed. Regarding gender equality in the forest sector, data is limited, however census records indicate that in agriculture 34.1% of the agriculture labour force are women.

The Irish Government has a number of initiatives tasked with promoting and improving gender balance in the agri-forest sector: the promotion of women-only knowledge transfer groups, improved recording of gender data, funding programmes to support rural female entrepreneurs, hosting a national dialogue on women, funding of research projects to identify barriers / enablers in participation levels of women in agriculture.

In the area of forest education and training, opportunities are open to all and career videos in forestry are produced with a balance of gender.

TABLE 8.5
Ireland: Persons 15 years and over involved in forestry by principal economic status (2016-2022)

			Census Year			
			2006	***2011***	***2016***	***2022***
NACE 02	Total in labour force		2,548	2,169	2,468	2,138
	At Work	m	2,142	1,676	1,978	1,737
		f	282	237	290	301
	Total		2,424	1,913	2,268	2,038
	Unemployed*		124	256	200	100
	Unemployment rate (%)		4.9	9.5	8.1	4.6
NACE 16	Total in labour force		6,188	5,530	4,000	4,274
	At Work	m	5,168	3,767	3,182	3,541
		f	752	647	429	459
	Total		5,920	4,414	3,611	4,000
	Unemployed*		268	1116	389	274
	Unemployment rate (%)		4.3	20.6	9.7	6.4

Notes: NACE 02 - Forestry and Logging; NACE 16 - Manufacture of wood and of products of wood and cork, except furniture; * (incl. looking for first regular job; m: male; f: female.
Sources: *2022 Census.*

9. KYRGYZ REPUBLIC

Naryn gorge, Naryn Region, Kyrgyzstan. Gabrielle / stock.adobe.com

9. Kyrgyz Republic [13]

9.1. Market Drivers

The forest sector of the Kyrgyz Republic is an essential part of the country's natural capital, providing ecosystem services, employment, and food security for mountain and rural areas. Kyrgyz forests perform protective, climate-regulating, water- and soil-conserving functions, while also serving as a source of timber and NWFPs that generate income for thousands of households.

According to the Ministry of Natural Resources, Ecology and Technical Supervision, the total area of state forests is about 1.17 million ha, equivalent to 5.6% of the country's territory. Of this, approximately 700–800 thousand ha are covered with forests, including unique walnut and pistachio ecosystems in the south.

FAO estimates the forested area at 700–800 thousand ha (about 4%), while UNECE (Forest and Landscape Restoration in the Caucasus and Central Asia, 2024) reports 1,116.6 thousand ha (5.61%). The forests of the Kyrgyz Republic are rich in biodiversity and are home to over 60 species of mammals, 300 bird species, and 30 rare plants listed in the national Red Book.

About 2 million people (almost 30% of the population) live in or near forest areas, and their livelihoods are closely linked to sustainable forest use.

Key functions of the forest sector

- Prevention of soil erosion and regulation of water flow in mountain basins;
- Climate regulation and carbon balance;
- Provision of fuelwood, construction materials, nuts, honey, and medicinal plants;
- Promotion of eco-tourism and the bio-economy.

Policy and Reforms

National forest policy is guided by the Forest Code of the Kyrgyz Republic, the Forest Sector Development Concept until 2040, and the National Climate Adaptation Strategy.

Reform is ongoing toward Joint Forest Management (JFM) to ensure the participation of local communities and increase their income.

At the national level, the KMS 1364:2022 standard "Wild Organic Forest Products" has been introduced, regulating the collection, processing, and labeling of forest products.

Main Challenges

- Degradation of forest lands due to overgrazing, fires, and illegal logging;
- Insufficient statistics and monitoring of NWFP use;
- Low investment in processing and logistics;
- Impacts of climate change (droughts, erosion, landslides).

9.2. Market Developments Production and Structure

The forest sector of the Kyrgyz Republic remains modest in production volume, contributing less than 0.1% of GDP, though its social value is significant. The main economic potential lies in NWFPs — walnuts, honey, herbs, mushrooms, berries, sea buckthorn, and wild apples.

TABLE 9.1
Kyrgyz Republic: Main Products and Exports

Product	*Main Regions*	*APP (KGS/kg)*	*RP (KGS/kg)*	*main markets*
Walnut	Jalal-Abad	80–100	400–600	Germany, Türkiye, Iran, United Arab Emirates
Pistachio	Batken, Jalal-Abad	80–100	600–800	Türkiye, Kazakhstan, United Arab Emirates
Mountain honey	Naryn, Osh, Talas	250–350	800–1200	Germany, Qatar, China
Sea buckthorn	Issyk-Kul	30–50	700–1000 (oil)	Kazakhstan, China
Medicinal herbs	Osh, Batken	80–200	400–800	European Union, India, Türkiye
Mushrooms and berries	Naryn, Talas	40–120	800–1000	Kazakhstan, Russian Federation
Wild apple	Issyk-Kul	5–10	400–600 (dried)	CIS countries

Note: APP: Average Purchase Price; RP: Retail Price; CIS: Commonwealth of Independent States.
Source: MESKG, 2025.

According to surveys conducted in eight regions (2024), about 47% of households in forest areas identified NWFPs as their main source of income, 35% rely on agriculture, and 17% on pensions and public service.

According to WITS (World Bank), exports of forest-based products from the Kyrgyz Republic reached approximately USD2.8 million in 2023, with major

[13] Submitted by the Ministry of Emergency Situations of the Kyrgyz Republic to the 83rd Session of the ECE Committee on Forests and the Forest Industry (COFFI) Geneva, 2-4 November 2025.

partners being the Russian Federation (43%), Türkiye (22%), China (14%), and United Arab Emirates (8%).

Processing and Added Value

Non-timber products pass through several stages: collection → drying → sorting → processing → packaging → marketing. Added value increases by 4–6 times compared to raw materials. Examples:

- Walnuts in shell: KGS [14]100 per kg, kernels up to KGS600 per kg;
- Honey (raw): KGS300 per kg, packaged up to KGS800 per kg;
- Dried berries and herbs: up to KGS1,000 per kg.

Development of processing and implementation of quality standards (ISO 9001, HACCP, Organic, Fair Trade) are key competitiveness factors. Currently, less than 5% of producers hold certification, but the share grows by 10–15% annually.

Key Problems

- Absence of a national brand and coordinated marketing;
- Weak transport and storage infrastructure;
- High certification cost (up to USD1,500/year);
- Shortage of laboratories and packaging facilities;
- Low awareness of EU and Gulf market requirements among farmers.

9.3. Gender and Social Aspects

Women and youth make up a significant share of those engaged in the collection and processing of forest products. Surveys indicate that 42% of NWFP-chain workers are women, particularly in packaging, drying, and marketing. Women are active in honey production, herbal teas, and fruit and nut processing.

The development of women's cooperatives helps reduce poverty and strengthen the role of women in decision-making. Youth play an increasingly important role in innovation – creating online stores, promoting wild brands, and engaging in eco-tourism and agro-initiatives. Joint Forest Management (JFM) programmes cover about 25,000 leaseholders, providing employment to more than 100,000 rural residents.

9.4. Environmental and Climate Challenges

Climate change exacerbates forest degradation, especially in walnut and pistachio stands.

According to Global Forest Watch (2024), the Kyrgyz Republic loses 150–200 ha of natural forest annually due to erosion, fires, and illegal logging. The situation is worsened by droughts, frosts, and floods.

Key Adaptation Measures

- Forest restoration and establishment of 50+ nurseries nationwide;
- Promotion of sustainable agroforestry practices;
- Development of eco-tourism and alternative livelihoods;
- Implementation of carbon sink and forest-carbon monitoring programmes.

9.5. Institutional Framework and Governance

The forest sector is managed by the Ministry of Natural Resources, Ecology andTechnical Supervision (MNRET). About 50 state forest enterprises (leskhozes) are responsible for protection, reproduction, and leasing of forest areas.

Decentralization continues, strengthening the role of communities and private leaseholders.

Since 2018, pilot programmes have been implemented for digital forest accounting, NWFP monitoring, and remote sensing, supported by FAO and GIZ.

9.6. Outlook 2026

- NWFP exports are expected to grow by 15–20% in 2026, mainly from walnuts, honey, and sea-buckthorn oil.
- Certification development – establishment of a national organic control authority.
- Creation of a national brand "Organic Kyrgyz Forest" for EU and Gulf markets.
- Formation of processing and packaging cooperatives in each region.
- Increased participation of women and youth in sustainable forest management programmes.
- Expansion of reforestation programmes – planting up to 5 million trees by 2030.
- Digital integration in forestaccounting, certification, and product traceability.

[14] KGS: Kyrgyz Som (KGS1,000 equal about USD11.4)

10. NETHERLANDS

Erasmus bridge in Rotterdam harbor the Netherlands on summer day. JackF / stock.adobe.com

10. Netherlands [15]

10.1. General economic trends affecting the forest industries sector

10.1.1. General outlook

The year 2024 has been significantly different from 2023 in economic terms. The Dutch economy regained momentum, resulting in GDP growth of 1.1%. This pick-up was driven by robust wage growth, catalysing a rebound in private consumption. Exports remained subdued as United States import tariffs and elevated global uncertainty weighed on external demand. The majority of growth in 2024 can thus be attributed to domestic private spending and a continued public investment push. In 2025, growth is forecast to increase slightly, underpinned by sustained wage growth and further expansion in private consumption and public investment, although exports will be dampened by tariffs by the United States and heightened global uncertainty.

In 2024, inflation went down slightly from 4.1% in 2023 to 3.2% and is expected to further decline in subsequent years. The price developments in housing and higher excise duties and VAT contributed the most to inflation. The decline in inflation can be attributed to the global economic slowdown, lower energy prices, and the appreciation of the euro, among other reasons. This development coexisted with a rise in purchasing power from -0.7% in 2023 to 2.9% in 2024.

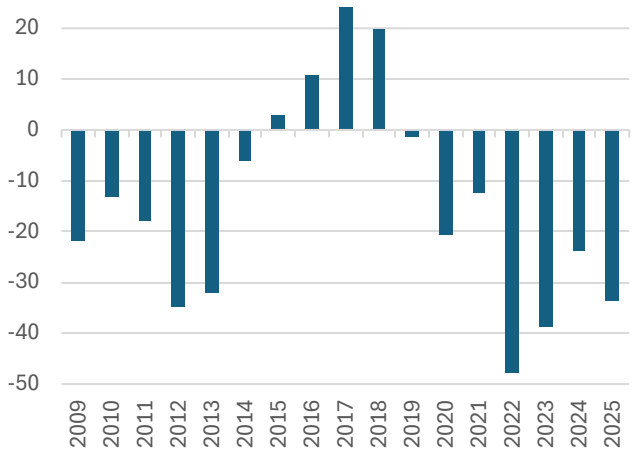
After the labour market became very tight shortly after the coronavirus recession, unemployment rate increased slightly from 3.6% in 2023 to 3.7% in 2024. A similar growth is expected to occur in 2025, ultimately reaching 3.8%. Wage growth showed a delayed increase as a result of increased inflation, which resulted in a historically low purchasing power in 2022. Wage growth accelerated significantly in the subsequent years, peaking at 6.6% in 2024—the highest level recorded in more than four decades. It is expected to remain elevated in the coming years.

10.1.2. Consumer confidence

Consumer confidence is an indicator of consumers' faith and expectations in the Dutch economy. It is however largely influenced by the general world economy. As is shown in Graph 10.1, consumer confidence in the Netherlands increased sharply since 2013, stabilised between 2017 and 2018 and then shows a large drop in 2019 as a consequence of the COVID-19 outbreak, stretching into 2020. However, over the first seven months of 2021 consumer confidence increased again by 9 points. To a great extend this recovery may be attributed to the high vaccination rate in the Netherlands and consequently the gradual ease of related limitations. Unfortunately, consumer confidence dropped in 2022. The all-time low (-59) was reached in September and October 2022. This is according to CBS 2022 the lowest level since measurement began in 1986. From November 2022 onwards, consumer confidence started to recover steeply, averaging at -24 in 2024. The reduced inflation rates, among others, probably plays a role in this. The first eight months of 2025 was marked by a decrease in consumer confidence, showing an average of-33.5.

GRAPH 10.1

Netherlands: Consumer confidence index (2009-2025)



Source: Statistics Netherlands (CBS) Statline, 2025; edited by Probos, 2025.

[15] Submitted by the Dutch Institute for Forestry, Forest Products and Services, Probos for the Ministry of Agriculture, Fisheries, Food Security and Nature Ministry of Infrastructure and Water Management of the Kingdom of the Netherlands to the 83rd Session of the ECE Committee on Forests and the Forest Industry (COFFI) Geneva, 2-4 November 2025.

10.1.3. Housing market

Traditionally, the housing industry is important for the softwood industry. The demand for housing remains high and house prices rose steeply until mid-2022. This was mainly driven by low interest rates combined with generous mortgage loan standards, which allowed people to borrow money cheaply. After mid-2022 housing prices started to decrease for some time, but this trend reversed from mid-2023 onwards. A similar but opposite trend was apparent in the mortgage rates, which have been decreasing since mid-2023. After years of growth, construction output declined by 3% in 2024, amounting to a €3 billion drop. This contraction was driven primarily by a sharp decrease in new residential and non-residential construction, with housing output falling by 5%. Sustainability investments also dipped following earlier surges. Short-term prospects remain subdued, particularly due to regulatory challenges such as the recent nitrogen ruling involving internal offsetting, which is expected to delay permit approvals and impact completions in 2026 and 2027. Nonetheless, the medium-term outlook is more optimistic: total construction output is projected to rise from €97 billion in 2024 to €107 billion by 2029, with moderate growth across various segments.

10.2. Policy measures influencing timber trade and marketing

10.2.1. Sustainable procurement policy

In the view of the Dutch government, public procurement of sustainably produced timber is very important to give timber producing countries a clear signal regarding consumers' willingness to purchase sustainably produced products at reasonable prices and thus increase such purchases. It also sets an example for semi-governmental organizations and the private sector to introduce sustainably produced timber in their procurement criteria and by doing so, contribute to sustainable forest management.

In June 2008 the Dutch national government established its sustainable procurement policy. By implementing this policy the government intended to increase the use of sustainably produced products. Therefore all governmental organizations must use sustainability as an important criterion when purchasing goods. This way the Dutch government intends to stimulate the market for sustainable products and promote innovation within companies. Clear goals were set. As of 2010 the Dutch government has the ambition that all timber procured by central government should come from a sustainable source.

Part of the sustainable procurement policy is a set of criteria for sustainably produced timber, the Dutch Procurement Criteria for Timber. Based on these criteria the government can assess whether the offered timber is produced sustainably. The Timber Procurement Assessment Committee (TPAC) is responsible for the assessment of certification systems for sustainable forest management according to the Timber Procurement Assessment System (TPAS). TPAC advises the Dutch Ministry of Infrastructure and Water Management. The minister decides on the final acceptance. Information on the TPAS criteria and the TPAC judgements can be found on the TPAC website (www.tpac.smk.nl).

The website www.inkoopduurzaamhout.nl has been set up to support procurers and suppliers in their efforts to procure or supply sustainably produced timber.

10.2.2. EU Regulation on deforestation free products (EUDR)

On 29 June 2023 the Regulation on deforestation free products was adopted in the EU. This regulation is to be applied from 30 December 2025 onwards and will replace the EU Timber Regulation. The Deforestation Regulation requires additional transparency and due diligence from timber traders and other operators in the timber value chain that bring timber and listed relevant products derived from timber on the EU market. The Dutch Competent Authority, the NVWA, is prepared for implementation and enforcement by 30 December 2025.

10.2.3. Climate agreement

In 2019 the National Climate Agreement was presented by the coalition and cabinet. The aim of this agreement is a reduction in GHG emissions of at least 49% by 2030 compared to 1990. The underlying aim is compliance with the Paris Climate Agreement, in other words a maximum 2-degree temperature increase compared to 1990, and preferably 1.5 degrees.

The Climate Agreement contains a package of measures which has broad societal support, with the active support of stakeholders. The agreement was established through meetings of authorities, companies and interest groups at five so-called climate tables. The five tables are: Electricity, Built Environment, Industry, Agriculture & Land Use, and Mobility. At each table a package of measures was formulated and agreements between parties were concluded which together comprise the contribution of each of the five sectors to achieve the climate objective.

The forestry- and timber sector is covered by the sector table Agriculture & Land Use. A specific sub-table titled 'trees, forests and nature' is dedicated to the optimization of the contribution of forest and nature (including the timber- and other related sectors) to reach the climate mitigation goals. The elements are afforestation, revitalization of existing forests, agroforestry and landscape restoration, and carbon storage in biomaterials, including wood. The main framework for the implementation of the Climate Agreement for forests and timber is the National Forest Strategy.

In 2021 the EU adopted a new binding goal of at least 55% reduction in GHG emission reduction by 2030, which is a 6% increase from the Dutch National Climate Agreement. In July 2021 the European Commission presented the Fit-for-55 package with proposals to deliver on this goal. The EU Forest Strategy is part of this package and aims to protect and restore EU forests and their vital role in tackling climate change and biodiversity loss. Part of the EU Forest Strategy is the pledge to plant 3 billion trees by 2030. This translates to approximately 11,000 ha of forest in the Netherlands, which is in line with the National Forest Strategy (which aims for 37,400 ha).

10.2.4. National Forest Strategy

In 2020, the Dutch Ministry of Agriculture, Nature and Food Quality (renamed the Ministry of Agriculture, Fisheries, Food Security and Nature in 2024) together with the provinces presented a National Forest Strategy. This strategy has been developed in close cooperation with stakeholders such as decentralized government and forest managers (public and private). The forest strategy is partly funded through various programmes; however, some financial resources still need to be secured. The national forest strategy covers four main topics/issues:

1. More forest

The aim is to increase the Dutch forest area by 10% by 2030, an increase of approximately 37,400 ha of forest.

2. Vital forests

To improve the quality of forests, it is important to improve environmental factors, to give a quality boost to forests and to adjust the management in certain areas in order to increase the resilience of forests against the backdrop of a changing climate. This requires action in various policy areas and programmes. For example, the reduction in nitrogen deposition, which is envisaged in the government's nitrogen approach, is crucial for the vitality of many forests. This is achieved through the nitrogen policy that will be further developed in the coming years. The implementation of the Nature Restoration Law for forest ecosystems (Article 12) will also be integrated into the policy for vital forests. Specific measures required to comply with the law will be further detailed in the Nature Restoration Plan.

3. Trees outside forests

By supporting the partners in the Delta Plan Biodiversity Recovery the aim is to increase the area of trees outside the forest to 10% in rural areas and to aim for 25,000 ha of agroforestry and 1,000 ha of food forests by 2030.

4. Sustainable use of trees and forest

The strategy aims to increase the sustainable use of the forests for recreational and educational purposes and to increase the per centage of Dutch timber used in long-lasting products.

10.2.5. Netherlands Circular in 2050

The outcome of latest Dutch government climate change and wider environmental policy decisions could provide an enhanced market opportunity for wood. The Netherland's aim is to create a truly 'circular economy' in 2050, with an emphasis on using products and materials

that can be re-used, recycled and ultimately disposed of in an environmentally sound way. To this end the government submitted the policy paper 'Netherlands Circular in 2050' to the House of Representatives in 2016. In the follow up of this policy ambition the National Agreement on the Circular Economy has been signed by more than 300 businesses and social partners like NGOs. At the beginning of 2019 the Dutch Cabinet presented the implementation programme for the circular economy. At the beginning of 2023 an update was sent to the House of Representatives: 'National Circular Economy Programme 2023-2030'. This implementation programme presents concrete measures, actions and projects for prioritised product chains: consumer goods, plastics, construction and manufacturing.

10.2.6. Sustainability framework for bio-based raw materials

Bio-based raw materials, including wood, play an increasingly important role in the transition towards a circular and climate-neutral economy. This is the case for bio-based raw materials for material applications such as the building industry as well as raw material in chemicals and the use of residual flows for energy applications.

The Dutch government has sent a Letter to Parliament in October 2020 with the Sustainability Framework. The government is convinced that the use of biomass is essential in the transition to a climate-neutral and circular economy by 2030 and 2050. However, only sustainable biomass can contribute to this transition, and sustainable raw materials must ultimately be used for the highest-value applications possible. These are applications with lower carbon emissions than processes using fossil fuels, which contribute to the transition to a circular economy and have a positive effect on employment and the economy. This gives rise to the following categories:

- Low-value applications are applications that do not comply with this desired end state. Alternatives are available, or will become available in the near future, and policy must be focused on phasing out.
- Bridging applications dovetail with the transition perspective, and policy on them should focus on conversion.
- High-value applications are the desired end state, and policy on them should focus on phasing in.
- Sustainable use of bio-based raw materials requires that the materials themselves are sustainably produced – in other words, without negative effects on the environment or the social circumstances of the local population, and with respect for the rights of workers (people, planet, profit). The government is currently developing sustainability criteria for all bio-based raw material flows and applications, insofar as they are subsidized or regulated by the Dutch government. These criteria are based on -and as similar as possible to criteria from- the European Renewable Energy Directive III (REDIII).

A key document on which this sustainability framework is based is the advisory report by the Social and Economic Council of the Netherlands (SER) entitled 'Biomass in the Balance'. The report draws on many sources, including analyses by the Netherlands Environmental Assessment Agency (PBL) of the availability and uses of biomass and an independent report on sustainability criteria.

The new criteria are scheduled to come into effect January 1st 2027 at the earliest and will apply to subsidized and regulated biomass used for energy, (chemical) feedstock and (building) materials. The new sustainability criteria will not yet apply to food, feed, paper and textile.

10.3. Developments in Dutch forest products markets sectors

10.3.1. Wood raw materials

Removals of roundwood, chips and shreds from the Dutch forests and other wooded areas in 2024 are estimated to be approximately 2,770,000 m^3 under bark in total and hence remained stable compared to 2023. Industrial roundwood has a share of app. 19% (app. 535,000 m^3 under bark) within the total removals. The rest of the removals mainly consist of wood fuel as logs or chips and shreds, including those from landscape care wood and municipal waste streams.

The share of export within the total removals of industrial roundwood in the Netherlands was 44% in 2023. The export of pulp- and fibrewood has a share of almost 80% in the total exports of industrial roundwood.

10.3.2. Wood energy

The share of renewable energy in the Netherlands in 2024 was approximately 19.8%. This is an increase compared to 2023 when the share of renewable energy was 17.4%, according to the statistics Netherlands (CBS). Approximately 34% of the renewable energy comes from use of biomass, 32% from wind energy and 22% from solar energy. Based on the current trend and the expected future developments the Dutch National Climate and Energy Outlook 2024 expects that the renewable energy share will be 30-37% by 2030 .

In 2024 60 billion kWh electricity is produced from wind-, water- and solar power and biomass, which represents around 50% of the total electricity use. In 2023 this per centage was 46%. Electricity production from biomass however showed a decrease of 12%.

In 2023 approximately 3.1 million tonnes dry matter of woody biomass is estimated to be used for the production of energy and heat in the Netherlands. The total in 2024 is at a similar level, but decreased slightly. Due to the increase in the use of energy pellets in the past years the share of imports substantially increased within the total consumption of wood for energy production. However, the importance of pellet imports decreased in 2024.

10.3.3. Certified forest products

The market share of certified primary timber products (sawn wood and wood-based panels) on the Dutch market in 2023 was 85.6%, which corresponds to a volume of 5.54 million m³ roundwood equivalents under bark. This concerns primary timber and timber products (sawnwood and wood-based panels) that meet the Dutch Procurement Criteria for Timber. Differences between the product groups are quite significant. While sawn softwood and wood-based panels have a market share of 84.8% and 90.7% respectively, sawn tropical hardwood (69.6%) and sawn temperate hardwood (66.1%) are lagging behind.

Results from an internal monitoring system of the Netherlands Timber Trade Association for 2023 indicates growth over the previous years. In 2022 and 2023 the growth is stabilizing at a very high level within the product group of sawn softwood and panels. Tropical sawnwood showed a minor increase in 2023 compared to 2022. Data for 2024 are expected to become available by the end of 2025.

10.3.4. Sawn softwood

After a period of decreasing imports and consumption since 2007 (see Graph 10.1), the sawn softwood market in the Netherlands recovered in 2015 and this recovery continued until 2019. After a small decrease in 2019, the recovery continued in 2020 and 2021. In 2022 and 2023 the imports of sawn softwood seemed to stabilize, while 2024 imports almost peaked at 2021 levels.

In 2024 imports of sawn softwood increased by 8.1% while exports decreased with 16% compared to 2023. This resulted in a moderate increase in apparent consumption. The share of planed sawnwood increased to 65% of the total sawn softwood import volume, whereas rough sawn softwood has a share of roughly 35% (Table 10.1). Stocks are expected to remain at a low level.

The top 10 countries for softwood imports in the Netherlands experienced little changes compared to 2023 (table 10.2).

TABLE 10.1
Netherlands: Key facts of sawn softwood market (2012-2024) [1,000 m³]

	2012	*2013*	*2014*	*2015*	*2016*	*2017*	*2018*	*2019*	*2020*	*2021*	*2022*	*2023*	*2024*
Domestic production	137	159	163	129	126	110	82	90	95	110	115	103	104
Imports	2,151	2,138	2,210	2,433	2,477	2,615	2,827	2,760	2,818	3,032	2,659	2,701	2,918
Export	327	359	411	456	393	428	512	602	509	391	515	660	551
Apparent consumption	1,961	1,938	1,962	2,106	2,210	2,297	2,397	2,248	2,404	2,751	2,259	2,144	2,471

Sources: Statistics Netherlands (CBS) trade statistics edited by Probos, Probos roundwood survey.

TABLE 10. 2
Netherlands: Origin of Sawn softwood imports (2023-2024) [1,000 m³]

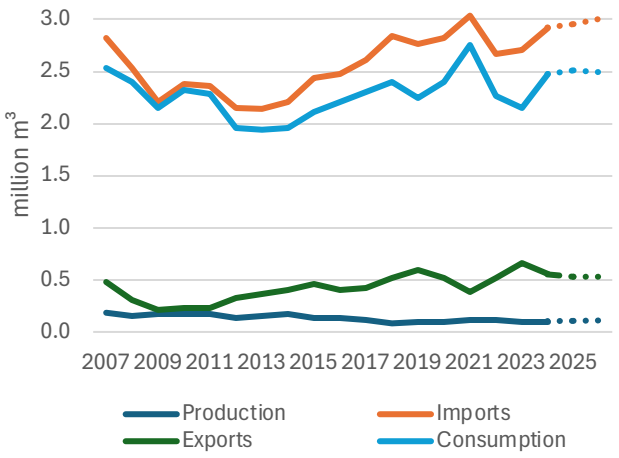
Key Exporting countries	2023				2024				annual change		
	Sawn	Planed	Total	Share of imports	Sawn	Planed	Total	Share of imports	Sawn	Planed	Total
	1,000 m³			%	1,000 m³			%	%		
Sweden	235.9	694.0	929.9	34%	199.5	792.6	992.0	34%	-15%	14%	7%
Germany	280.7	379.2	659.9	24%	272.8	415.5	688.3	24%	-3%	10%	4%
Finland	116.2	139.1	255.3	9%	117.4	141.3	258.7	9%	1%	2%	1%
Belgium	59.9	107.7	167.7	6%	58.1	154.6	212.7	7%	-3%	43%	27%
Latvia	46.6	56.8	103.4	4%	69.9	58.7	128.6	4%	50%	3%	24%
Poland	24.6	52.7	77.4	3%	24.3	76.0	100.3	3%	-1%	44%	30%
Estonia	20.8	50.3	71.1	3%	19.5	66.2	85.7	3%	-6%	32%	21%
Ukraine	57.3	649.0	57.9	2%	65.5	279.0	65.8	2%	14%	-57%	14%
United Kingdom	37.2	1.1	38.3	1%	52.1	2.2	54.4	2%	40%	102%	42%
France	10.5	31.0	41.5	2%	15.2	33.2	48.4	2%	44%	7%	17%
Other*	177.1	121.2	298.3	11%	133.4	149.9	283.8	10%	-25%	24%	-5%
Total	1,066.9	1,633.8	2,700.7		1,027.8	1,890.4	2,918.2		-4%	16%	8%

Note: This group consists of 39 countries with exports to the Netherlands of less than 48,000 m³.
Sources: Statistics Netherlands (CBS) trade statistics edited by Probos and international trade statistics of Sweden, Germany, Finland and Latvia for verification.

However, New-Zealand – which in 2023 represented the 5th largest supplier - did not make the current list. Also the United Kingdom made an entry at the 9th place.

Sweden and Germany remain by far the foremost suppliers of softwood timber to the Netherlands, with negligible changes in their represented volume. In general the imports increased slightly. This is reflected in the individual imports of almost all countries. The total import of sawn softwood in the Netherlands increased by 8.1% in 2024 compared to 2023 (Graph 10.2). This is caused by an increase of imports of planed sawnwood (16%).

GRAPH 10.2
Netherlands: Production, trade and consumption of sawn softwood (2008-2026) [million m³]



Note: 2025 and 2026 estimates and forecasts.
Source: Statistics Netherlands (CBS) trade statistics, 2025; edited by Probos, 2025; Probos roundwood survey and NTTA estimates and forecasts, 2025.

10.3.5. Sawn hardwood (temperate and tropical)

The packaging industry represents the largest market for temperate hardwood, with poplar being the primary species used. Other industries, including civil engineering and infrastructure, carpentry, and furniture and interior design, also play a significant role in the import and utilization of temperate hardwood .

The imports of temperate hardwoods increased significantly (+35%) in 2024 compared to 2023, representing the second significant increase in a row. With approx. 202,000 m³, the import reached a peak level since 2018.

The market for temperate hardwoods is expected to benefit from the recovery of the construction sector and the housing market on the medium-term (2024-2029). However, this is still surrounded by major uncertainties due to several factors, including regulatory challenges involving nitrogen deposition. As interior products and furniture are bought at the end of the construction cycle, there is a delay compared to tropical timber used in construction. European oak is by far the most popular species within the temperate hardwoods. There is a huge demand for European oak, with almost daily price increases. Due to constraints in the availability supply might limit market developments (Table 10.3).

TABLE 10.3
Netherlands: Key facts of sawn hardwood market (2012-2024) [1,000 m^3]

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Domestic production	53	59	66	56	58	60	58	51	54	38	34	32	33
of which tropical	7	5	11	7	6	6	7	6	6	8	7	7	6
Imports	276	231	201	224	230	273	385	305	268	271	314	322	357
of which tropical	194	172	148	156	136	125	218	152	141	136	142	172	155
Apparent consumption	329	290	267	280	288	333	443	356	322	309	266	261	310
of which tropical	201	177	159	163	142	131	225	158	141	143	176	136	128

Sources: Statistics Netherlands (CBS) statistics edited by Probos, Probos roundwood survey.

The primary markets for imported tropical hardwood have been civil engineering and infrastructure, the carpentry sector, and the construction industry. The DIY and garden sector represents the next largest market.

Imports of tropical hardwood decreased since 2018, however in 2022 an unexpected increase in imports was reported. This increase seems to be fully caused by one product: unassembled profiled board for hardwood floors. Since 2023 imports have been decreasing, reaching levels similar to 2021 and 2020. The DIY and gardening sector significantly benefitted from the fact that people - due to the COVID-19 measures - were limited in commuting and travelling and thus spent more time at home and in their gardens. The negative impact of COVID-19 regarding imports and delays in shipments and high freight costs seems to have alleviated and hence the Dutch market for (tropical) hardwoods is positive about the medium-term market development. The productivity within the construction sector is recovering and is predicted to show a growing trend on the medium-term (2024-2029). This will lead to more demand as well.

The share of further processed/optimized tropical sawnwood keeps increasing in the Dutch joinery industry resulting in more demand for timber from Asian producing countries, but the share of African timber species within these imports are increasing. Demand is shifting from Meranti, traditionally the species most used in the Dutch joinery industry, to Mahogany.

Timber might also benefit from the increased environmental awareness among consumers and architects. Although competition with other building materials is still heavy, timber seems to recover market share, e.g. in renovation, where now and then PVC plastic is replaced by timber. Increasingly new Life Cycle Analyses studies are published . Innovations like CLT help strengthen the position of timber as well.

Following a decline in the residential construction industry in 2020 due to the impact of the global pandemic, the consequences of nitrogen emissions and PFAS-contaminated soil, and the economic situation and conflict in Ukraine from 2021 onwards, the outlook for 2024 and beyond is for a further decrease. However, the medium-term outlook is for average growth of 2.5% per annum, spread across the residential construction industry, civil engineering and infrastructure. The call for sustainability in these sectors is also a key driver of growth.

TABLE 10.4
Netherlands: Fibre origin of the paper and board industry (2012-2024) [1,000 metric tonnes]

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Cellulose	2,496	2,611	2,275	2,377	2,181	2,083	2,024	1,867	2,024	1,862	941	1,176
Recovered paper	7,170	7,179	7,254	7,426	8,561	8,541	8,379	8,453	8,632	8,174	6,903	6,526
Total fibre input	9,666	9,790	9,529	9,803	10,741	10,624	10,402	10,320	10,656	10,036	7,844	7,702

Sources: Royal VNP annual report, edited by Probos.

10.3.6. Pulp and paper

The turnover within the Dutch paper and board industry increased slightly by less than 1% between 2023 and 2024 to €1,740 million. In the previous year there was a decrease of 35%. Thus, the market for paper and paperboard shows clear swings in turnover. The total paper production decreased slightly by 3% to 2.18 million tonnes in 2024 (Table 10.5).

The paper and board industry in the Netherlands is one of the leading sectors in recycling and energy reduction. This is due to the large collection of wastepaper by consumers and the biobased production process. Export accounted for 77% of the total production. Germany remains by far the most important export country (29%), followed by Belgium (11%), France (10%) and the United Kingdom (9%).

Paper and board producing factories in the Netherlands almost solely produce paper and board from recovered paper and/or imported pulp (table 10.4). From the total of 21 factories in the Netherlands one factory produced mechanical wood pulp for the production of board for folding boxes. However, since around 2021/2022 processing of roundwood in said factory has been discontinued. In 2023 84% of the produced pulp was certified sustainably (FSC or PEFC) sourced. A significant increase compared to 2017 when this per centage was 62.7%.

10.3.7. Wood pellets

The production of wood pellets was approximately 233,000 tonnes in 2024, compared to over 231,000 tonnes in 2023. Approximately half of this quantity is exported. The imports of wood pellets have increased substantially in 2021 due to the fact that the utilities further increased co-firing of wood pellets. In 2021 almost 2.7 million tonnes of wood pellets were imported by the Netherlands. In 2022 this amount stabilised. In 2023 this amount decreased to approximately 2.2 million tonnes. By 2024 the import of wood pellets decreased significantly to almost 1.4 million tonnes.

10.4. Gender and human rights issues related to the forest market sector

According to Statistics Netherlands, in 2024 approximately 3,000 and 17,000 individuals are employed in forestry and the timber industry, respectively. Out of these totals, 2,000 and 15,000 individuals are estimated to be men. At the State Forest Service, 1,396 individuals are employed, with a ratio of 64% men and 36% women.

In 2024, the average gross annual salary (including special bonuses) of female employees was 32 per cent lower than that of male employees (Graph 10.3). Two-thirds of this wage gap is due to women working fewer hours. Men are more likely to work full-time (63 per cent) than women (23 per cent).

TABLE 10.5

Netherlands: Recent developments of the paper and board industries (2014-2024)

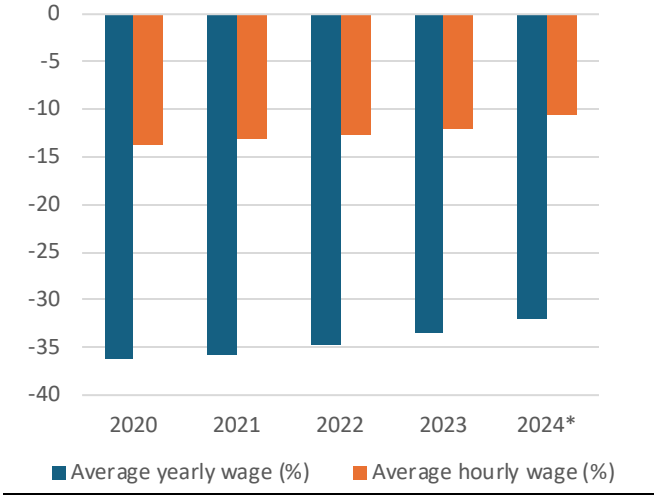
	2014	*2015*	*2016*	*2017*	*2018*	*2019*	*2020*	*2021*	*2022*	*2023*	*2024*
Change in production in	*[%]*										
Thermo-mechanical pulp (integrated)	8.0	0.0	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0,0
Graphic papers	0.0	4.0	-2.6	-3.3	-5.7	-8.3	-13.2	0.0	1.5	-37.0	18
Packaging papers	0.0	1.0	4.3	30.1	2.8	-0.6	2.5	3.9	0.5	-20.0	-7
Case materials	0.0	1.0	4.3	30.1	2.8	C	C	C	C	C	C
Other packaging paper and board	2.0	4.0	0.9	4.8	0.3	C	C	C	C	C	C
Sanitary & household	-6.0	-3.0	-0.9	0.0	-1.8	-14.5	0.0	-11.3	-0.5	-4.0	-4
Total paper & board	-1.0	-4.0	1.1	11.7	0.1	-2.9	-0.9	2.7	0.5	-23.0	-3
	[billion euro]										
Turnover	1.81	1.74	1.69	1.86	1.96	1.81	1.66	2.02	2.68	1.74	1.74
Price change of production of paper and board industries	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note: C = confidential.

Sources: Royal VNP.

GRAPH 10.3

Netherlands: Wage difference between men and women (2014-2022) [%]



Note: *data are provisional.
Source: CBS, 2025.

The difference in hourly wages is therefore much smaller: the average hourly wage of women was 10.5 per cent lower than that of men. Part of this difference in hourly wages is due to differences in the composition of working men and women in terms of age, education, type of work, and similar factors. It is important to note that the shown figures have not been adjusted for such differences. Corrected figures for 2024 are expected to become available by the end of 2025. Both the yearly as well as the hourly wage gap between men and women show a consistent shrinkage throughout 2020-2024.

Above mentioned differences do not specifically apply to the forest market sector, but are general data on the overall labour market.

Data specifically for the forestry market sector are not available. However table 10.6 shows the number of jobs, hourly rate, monthly salary and the average workweek for men and woman working in the sector of agriculture, forestry and fisheries combined. However, do note that these are general averages and hence represent uncorrected numbers. This means that for instance the level of education or function has not been incorporated in the comparison between men and women.

TABLE 10.6

Netherlands: Average salary by gender in Agriculture, Forestry and Fisheries (2020-2024) [euro]

	year	jobs	hourly wage	monthly wage*	Workweek*
		[1,000]	euro	euro	hours
Men	2020	73	18.7	2,293	32.0
	2021	74	18.8	2,311	31.8
	2022	72	19.7	2,453	32.2
	2023	70	21.2	2,644	32.5
	2024*	71	23.1	2,893	32.6
Women	2020	39	15.4	1,450	24.6
	2021	40	15.5	1,467	24.6
	2022	39	16.3	1,586	25.3
	2023	39	17.8	1,759	25.8
	2024*	39	19.7	1,966	26.0
Total	2020	112	17.7	2,000	29.5
	2021	114	17.8	2,015	29.3
	2022	111	18.7	2,147	29.8
	2023	109	20.1	2,330	30.1
	2024*	110	22.0	2,562	30.2

Note: * inclusive overtime.
Sources: CBS, 2025.

TABLE 10.7

Netherlands: Economic Indicators (2021-2026) [%]

Change in % year-over-year, unless otherwise specified	2021	2022	2023	2024	2025	2026
GDP	6.2	5	0.1	0.6	1.6	1.3
Private consumption	4.3	6.9	0.8	0.7	2.8	2.2
Exports of goods and services	8.8	19.1	-0.9	1.0	1.7	1.5
Imports of goods and services	10	22.1	-3.4	-0.7	1.4	2.6
Consumer Price Index (inflation)	2.8	11.6	4.1	3.5	2.8	2.6
Labour share in enterprise income (in level %)	72.9	67.8	67.6	68.6	68.9	69.6
Active labour force	0.9	2.4	2.0	1.0	0.6	
Unemployment level, % of labour force*	4.2	3.5	3.6	3.7	3.9	0.8
EMU-debt level (ultimo year, in % GDP)	51.7	48.3	45.1	45.3	46.9	4.0
EMU-balance level (in % GDP)	-2.3	-0.1	-0.4	-2.2	-2.6	

Notes: *According to the international definition; EMU: European Economic and Monetary Union.
Sources: CPB, 2025.

11. POLAND

Wild flowers at sunset in the mountains. Poland. Zakopane. standret / stock.adobe.com

11. Poland [16]

11.1. Market drivers

11.1.1. Market situation

The functioning of Polish forestry-wood sector is influenced primarily by the economic situation in the country and the prospects for its development. The condition of the EU and global economies, global geopolitical tensions and armed conflicts, and the challenges of operating in today's dynamically changing environment are also important.

In 2024, the Polish economy recorded an acceleration, with Gross Domestic Product growing 3% in real terms (compared to 0.2% in 2023), Gross Value Added 2.1 (in industry 0.9%), and domestic demand 4.5% (household consumption 2.9% and public consumption 8.7%). The contribution of domestic demand to GDP growth was 4.2 per centage points. The forestry-wood sector is estimated to have generated 2-2.5% of GDP value in recent years. However, gross outlay on fixed assets has declined (0.9%) in 2024. The dynamics of sold production of industry remained at the level of 2023 and was 0.3%, with a much higher figure in the wood industries: in the wood industry it was 5%, in the pulp and paper industry 7.6% and in the furniture industry 4.1% (the wood sector generated almost 8% of the value of total sold production of industry). The situation on the labour market was relatively good in 2024, average employment in the national economy was maintained at the level of 2023 (with an increase of 0.3%), the registered unemployment rate at the end of 2024 was the same as in 2023 (5.1%), and high real wage growth was recorded in the economy (9.5%). The forestry sector employed approximately 40 thousand people in 2024 (similar to 2023) and the wood sector 328 thousand (11% of the total industry workforce, but this was 3% less than in 2023). There was a marked decline in inflation in 2024 – to 3.6% (in 2023 it was 11.4%). In foreign trade, the dynamics of imports [17] (4.5%) was higher than that of exports [18] (2%, with the share of exports in GDP growth being negative at -1.1 per centage points). Foreign sales (PLN 1523.4 billion [19]; USD383.1 billion; €353 billion) were constrained primarily by a decline in demand from major partners (inter alia, problems in the industrial sector in Germany), while the growth in imports (PLN 1521 billion; USD382.4 billion; €352.5 billion) was related to an increase in domestic demand. Germany remained the main consumer and supplier of goods to Poland in 2024 (however, its share in the geographical structure of exports decreased to 27.2% (0.7 per centage points compared to 2023) and in imports to 19.2% (also down by 0.7 per centage points). In contrast, China's importance in imports increased significantly (from 13.9% to 14.5%). Nearly 7% of the export value (PLN104.6 billion; USD26.3 billion; € 24.2 billion) was generated by wood and wood products. Exports are dominated by furniture. On the other hand, imports of wood and wood products to the domestic market worth PLN50.8 billion (USD12.8 billion; €11.8 billion) and representing 3.3% of total imports were dominated by products of the pulp and paper and paper processing industries. In the coming years, the recovery of the Polish economy is expected to be maintained (real GDP growth in 2025-2026 is expected to be 3.4% and 3.5%, respectively), with public and private investment being the main growth factor (the use of EU funds from the 2021-2027 financial perspective, funds from the National Reconstruction Programme), including military investments, as well as investments in road and rail infrastructure, and energy and digital transition. Gross outlay on fixed assets is assumed to increase 7.2% in 2025 and 8% in 2026. The labour market is expected to stabilise (registered unemployment rate at 5% at the end of 2026), wages should continue to rise, consumer sentiment should improve, and inflation should stabilise (3% in 2026). However, the labour market, also in the wood industries, may be affected by demographic processes, i.e. an ageing population and a reduction in labour resources. With the weak economy in the

[16] Submitted by the Polish Ministry of Climate and Environment, Department of Forestry and Hunting to the 82nd Session of the UNECE Committee on Forests and the Forest Industry (COFFI) Geneva, 2-4 November 2025.
[17] Import and intra-Community acquisition.
[18] Exports and intra-Community deliveries.
[19] PLN: Polish złoty

European Union economies, the real dynamics of export may still be lower than that of import by 2026 (2.4% vs. 3.7%) (GOV PL, 2025).

The relatively good condition of the Polish economy should stimulate the development of the domestic forestry-wood sector. However, a major challenge is the uncertainty about the future of the global economy and the shape of future global relations resulting from the trade policy of the United States of America. This uncertainty also relates to the development of the European Union market, particularly the economic situation in the countries that are Poland's main trading partners: Germany, France and Italy (the EU economy may still feel the effects of the energy shock caused by the war in Ukraine, and the declining competitiveness of the EU economy compared to the USA and China should also draw attention, inter alia, in the context of the development of global companies operating in the area of new technologies, which translates into poorer growth prospects in the long term). Military conflicts (the Russian Federation's invasion of Ukraine, Palestinian Hamas' attack on Israel, China's increasing aggressiveness in the South China Sea) also affect the Polish economy and the domestic wood market. The Russian Federation's aggression against Ukraine and the successive packages of EU sanctions against the Russian Federation and Belarus have hampered trade with these countries, excluded the possibility of covering part of the domestic demand for wood raw material and wood materials with imports from these countries (hitherto their significant suppliers), caused a break in the existing supply chains, an increase in wood prices on European and world markets, and an increase in the cost of its transport.

Increasing global protectionism is also becoming an important challenge for the development of wood companies and the wood sector in Poland. A threat may be posed by a shortage of specialised assortments of deciduous species (felt throughout Europe) and a shortage of from disrupted supply chains as a result of the war in Ukraine and successive sanction packages on the Russian Federation and Belarus.

The forestry-wood sector in Poland also faces challenges such as increasing innovativeness, a transformation towards a closed-loop economy development of wood construction with the use of ecological wood materials, carrying out energy transformation and decarbonization, and transformation towards climate neutrality. The timber sector will increasingly face growing competitiveness, primarily from producers of cheaper products from Asia and China. Not only Polish furniture, but also producers and exporters of other wood products must seek non-price advantages, competing through improved quality and design, product personalization, and modern sales channels. With rapidly rising labor costs and a workforce shortage due to an aging population, increased investment in manufacturing process automation is essential, particularly in smaller timber companies.

11.1.2. Key policies

The Medium-term Budget and Structural Plan 2025-2028 (which in 2024 replaced the Multiannual State Financial Plans and National Reform Programmes) acts as a fiscal strategy in Poland, setting the direction for the reduction of the deficit and the debt of the government and self-government intuitions sector, while emphasising the maintenance of economic growth rate and the implementation of public investment, which indicates its influence also on the domestic forestry-wood sector. A key element of the Plan is the expenditure path set until 2028, ensuring that in the medium-term the deficit and public debt comply with EU regulations. The structural part of the document includes the reforms and investments foreseen to be implemented, which support the implementation of the annual recommendations of the Council of the European Union to Poland within the framework of the European Semester, and which are in line with the common economic priorities of the EU member states. These are activities in the area of:

- the economy (reform of industrial property law, facilitation of participation of small and medium-sized enterprises in public procurement),
- labour market (reform of labour market institutions),
- digitization (digitization of companies),
- green economy (investments in water and sanitation infrastructure in rural areas),

- energy security (development of energy infrastructure, wind energy and hydrogen technology).

Poland is obliged, like other EU countries, to submit annual reports on the implementation of the Plan. On the other hand, the basis for the work on the budget bill for the following years are the Multiannual macroeconomic assumptions (in a 5-year perspective).

The period of 2024-2025 is also a period of intensive work and discussions concerning further development of the forestry-wood sector in Poland. Public expectations and new conditions for forest management related to the effects of climate change were the impetus for holding the National Forestry Consultation. Additional protection is planned for naturally valuable forests (including so-called old-growth forests) and socially important forests. Work is underway to amend the Forest Act to, inter alia, make the process of drawing up forest management plans more transparent and increase public oversight of forests. Work has resumed on the National Forest Programme, which is to form the basis for a long-term strategy for forestry development in Poland. Effective protection by 2050 of one of Europe's last natural forest complexes, the Białowieża Forest, is to be ensured by the Białowieża Forest World Heritage Site Management Plan. Work has been undertaken on a National Natural Resource Restoration Plan which is to respond to the challenges connected with biodiversity loss and climate change. A draft of Wetlands Protection Strategy is being prepared to provide a framework for the protection, including restoration, of peatlands and wetlands and to ensure the protection of the country's water resources. The regulation of funding sources for conservation activities is being sought. In turn, the further development of wood-based industries is being discussed at various levels. The establishment of the Wood Industry and Furniture Council, commencement of work on the development of the Industry Contract and taking steps to recognise wood as a strategic raw material – these are the most important resolutions of the first Wood Industry Congress in Poland (March 2025).

Important documents adopted in 2025, especially in the context of changes in the geopolitical situation, include the National Security Strategy of the Republic of Poland which indicates four priorities: inviolability of the territory, security of citizens, sustainable development, and the shape of the international security system that is favourable from the point of view of Poland. Within the area of sustainable development, the strategy provides for the strengthening of the economic and technological potential, demographic security and environmental protection, including, inter alia, strengthening the competitiveness of the Polish economy through the development of science and increased expenditure on research and development, strengthening the energy security of the state, and ensuring ecological security of the state.

11.1.3. Biotic and abiotic disturbances

Poland's location on the border between continental and maritime climates increases the occurrence of threats to forest ecosystems, adversely affecting the health of forests. Of the abiotic factors in 2023 (which caused damage to 53.7 thousand ha of forests managed by the State Forests National Forest Holding), the key factors were drought (in the State Forests NFH 30.4 thousand ha of forests were damaged by it) and wind (18.8 thousand ha) (in stands over 20 years old) (Polish State Forests Directorate General, 2024). Trees which are damaged/dead or damaged by abiotic factors are removed (the volume of windbroken and windthrown trees amounted to 3.5 million m^3 in the State Forests NFH in 2023). On the other hand, the area of damage caused by insects considered harmful and by mammals amounted to 260.9 thousand ha in 2024 (80% of this area required chemical, biological, or mechanical protection treatments). The main pests (insects) plaguing Polish forests were foliophages of pine stands and imagines of beetles (Melolontha spp.). The phenomenon of deciduous stand dieback occurred on an area of 10.1 thousand ha, mainly affecting oak stands (an 86% increase compared to 2023; however, the area of beech, birch and ash stands dieback decreased in 2024). On the other hand, damage caused by game species, including red deer, fallow deer, roe deer, wild boar and hare,

covered an area of 39.9 thousand ha, and the area of fungal pathogens occurrence was over 157 thousand ha in 2024 (Polish Forest Research Institute, 2025). Poland's forests, dominated by pine monocultures, are particularly vulnerable to adverse factors (e.g. droughts), and the resulting damage favours pest gradations and increases the risk of fires. The effects of these threats translate indirectly into a decrease in the stability of the domestic wood market. The response to these challenges is the development of forest health monitoring and the progressive reconstruction of forest stands towards their greater resilience.

11.1.4. Raw material supplies

Poland has been largely self-sufficient in timber supplies until now. However, timber harvesting will tend to decline in the coming years. According to official announcements, by 2030 it could be down by approximately 5% compared to the period of 2023-2024 (SEJM, 2024). This gap should not be expected to be filled by imports – more and more countries have been signalling raw material shortages on their own markets as well, mainly hardwood, also on their own markets. The shortage of raw material on the market is to be counteracted by limiting its export outside the European Union (without legislative changes, however, a significant reduction in exports will not be possible) and limiting wood combustion in the commercial power sector (ceasing subsidies for combustion of certain types of wood biomass). In order to limit the export of unprocessed wood and to support local processing, in 2025 the State Forests National Forest Holding introduced modified rules for the sale of raw material, including a return to the geographical criterion and clarification of the criterion of wood processing depth (packing or sorting of wood is not considered wood processing). Despite concerns, in 2024 wood raw material prices decreased (the average wood sale price in State Forests NFH of PLN 276 per m^3 was 13.8% lower than in 2023). The highest average price was recorded in Q1 (PLN 284 per m^3), after which prices stabilised in subsequent quarters at PLN 273-274 per m^3. The price drop affected most assortments and species, with the exception of fuelwood, whose prices (for pine, spruce, beech, birch, oak, and alder) increased 7-12%. Despite the price pressure, purchasing procedures in the first period of 2025 indicated sustained demand – roundwood was sold on average more than 10% more expensive than the minimum prices in forest inspectorates. The average price obtained (PLN 283 per m^3) signifies growing market interest, especially in the large-size hardwood segment, where the supply gap has allowed price increases compared to base prices. On the other hand, in Q1 2025 the average total wood price of PLN 280 per m^3 was 2.2% higher than in the previous quarter (Biznes, 2025).

11.1.5. Traceability and supply chains

Wood and its derivatives have been covered by the deforestation and forest degradation regulations also in Poland (EUDR) (EU, 2025), even though Poland is considered a low-risk country in this area. Measures are therefore being taken for the effective implementation of the new regulations, a law is being prepared to implement the EUDR regulation in the country (concerning, inter alia, the responsible authorities and their powers, control procedures, mode of declaration, monitoring, and sanctions). All entities affected by the new regulations are preparing to apply a due diligence system (traceability of goods, risk assessment and countermeasures, documentation of compliance with country-of-origin regulations, updating of data) and to use the EUDR information system (posting of information on goods origin). For SME companies (which dominate the wood sector) this generates additional operational and administrative costs. The country's main wood supplier, i.e. State Forests National Forest Holding, also faces significant challenges as it is obliged to verify the wood it sells against the new regulations. Detailed geolocation data on wood sold is to be prepared by the forestry inspectorates. All actors are preparing their supply chains and management systems for the new requirements and are investing in raw material traceability technologies. Certification under two systems, i.e. FSC and PEFC , which have operated in Poland can support this process, but there must be a real ability to demonstrate that the product has not contributed to deforestation. In the FSC system, the FM (Forest Management) certificate, ensuring that the

forest is managed with respect for environmental protection and social values, is held by 10 State Forests Regional Directorates and 2 Forest Experimental Stations in Poland (as of 1.09.2025). This totals more than 4,945 thousand ha (3% of forests certified under this system worldwide and 7.7% in Europe). There are also 2,250 FSC CoC (Chain of Custody) certificates in Poland, which certify that a wood product or a wood-based product has been produced from raw material sourced from legal sources and responsibly managed forests and confirm that it is monitored throughout the entire supply chain (this is 3.3% of such certificates in the world and 9.4% in Europe) (FSC, 2025). It should be mentioned that on 1.10.2024 the new FSC standard came into force in Poland, which finally replaced the previous one from 2013 on September 30, 2025. On the other hand, in the PEFC system, the FM certificate is held (as of 1.09.2025) by all State Forests Regional Directorates and 4 other entities (this represents 7260 ha, which is 2.5% of forests certified in this system in the world and 9% in Europe). There are also 690 PEFC CoC certificates active (5.1% of global and 6.3% of European certificates)(PEFC, 2025).

11.2. Market developments

11.2.1. Wood raw materials

In 2024 42.5 million m³ of roundwood was harvested in Poland (0.5% less than in 2023), of which approximately 1 million m³ from trees and shrubs outside the forest. Harvesting of roundwood for industrial purposes (36.5 million m³) increased 2%, while harvesting of fuelwood decreased 13% (6.0 million m³). The majority of harvested roundwood (93%, 39.7 million m³) originated from the State Forests NFH, with only 4% from private forests (1.9 million m³, and this was an 8% drop compared to 2023). By type the harvested roundwood was dominated by coniferous species (79%), by assortment of industrial wood by pulpwood (almost 50%, 18.1 million m³), followed by saw logs (together with veneer logs and peeler logs) which accounted for 49% (17.8 million m³). In 2024 domestic demand for roundwood was also satisfied with imports (1.1 million m³, less than 3% of the harvested volume), while its volume was 38% lower than in 2023 (almost 97% of imported roundwood was intended for production purposes). On the other hand, 9% of harvested roundwood volume was exported (3.8 million m³, 19% more compared to 2023). As in the case of imports, it was mainly industrial roundwood (97%). In coming years, a slow decrease in harvesting of roundwood from the domestic base is assumed – to 40.7 million m³ in 2026, of which 34.9 million m³ should be allocated for material processing (in the case of merchantable timber it may be 39.1 million m³). Growing domestic demand is to be satisfied by increasing imports (1.5 million m³ in 2026), and increased rate of adaptation to climate change in pine and spruce monocultures, while, according to the expectations of wood companies, roundwood exports (especially outside the EU) are to decrease (to 3.2 million m³ in 2026). These forecast are based on current trends, assumptions resulting from available data and information concerning the expected timber harvest and foreign trade in timber (SEJM, 2024; Bankier, 2024; RynekPapierniczy.pl, 2025).

11.2.2. Sawn softwood and sawn hardwood

According to official reporting, 4.2 million m³ of sawn wood was produced in Poland in 2024, including railway and tramway sleepers (impregnated and non-impregnated). This represented a 2% decrease in production compared to 2023. Sawn softwood dominated, accounting for 91% of total sawn wood production (3.8 million m³). The production of sawn hardwood decreased almost 7% (0.4 million m³) compared to 2023. Of the volume of domestic production, 21% of sawn wood (0.9 million m³, 7% more than in 2023) was exported: 17% of sawn softwood and 56% of sawn hardwood. While sawn softwood exports increased 11% compared to the previous year, sawn hardwood exports recorded a decrease of more than 3%. In contrast, Poland imported 0.8 million m³ of sawn wood (95% of the 2023 level), 0.7 million m³ of sawn softwood and 0.1 million m³ of sawn hardwood (of which there was approximately 13 thousand m³ of tropical sawn wood). In relation to domestic production, this was respectively 19%, 17% and 39%. The performance of wood companies recorded in the successive months of 2025 indicates a possible, but

minor increase in sawn wood production in the following years – as assumed up to 4.4 million m^3 in 2026. Due to increasing domestic demand, however, it is anticipated that in the period 2025-2026 sawn wood exports will decline (to 0.8 million m^3) and imports will remain at a level similar to 2024 (0.8 million m^3), but with foreign sawn hardwood supplies increasing 17% in 2026 compared to 2024.

11.2.3. Wood-based panels

Poland's production of wood-based panels increased more than 5% in 2024 compared to 2023 (11.0 million m^3). In its structure, particleboards accounted for 55% (6.0 million m^3, a 6% increase in relation to 2023; of which 0.8 million m^3 were OSBs), fibreboards for 40% (4.4 million m^3, a 4% increase compared to 2023), and plywood for 5% (0.5 million m^3, a 10% increase). Fibreboards were dominated (with a 64% share) by dry-process fibreboards (2.8 million m^3, a 6% increase in production in relation to 2023), and the share of wet-process porous fibreboards was 34% (1.5 million m^3, production level similar to that of 2023). Foreign exchange is of immense importance for the domestic market in wood-based panels. In 2024 wood-based panel exports were 28% in relation to their production (3.1 million m^3), and imports 23% (2.5 million m^3), while the export volume was 13% higher than in 2023, and the import volume 7%. Exports were dominated (with a 52% share) by fibreboards (1.6 million m^3), primarily wet-process porous fibreboards (0.8 million m^3). Particleboards (1.1 million m^3, including 30% of OSBs) and plywood (0.4 million m^3) were also sold abroad. On the other hand, Poland imported primarily particleboards (66% of total imports, 1.7 million m^3, including 0.3 million m^3 of OSBs). Fibreboard imports amounted to 0.5 million m^3 and included mostly dry-process fibreboards (0.4 million m^3). Poland also imported 0.4 million m^3 of plywood. In the coming years further development of the wood-based panel market is assumed as well as increase in their production – 4% in 2026 compared to 2024 (up to 11.4 million m^3). The expected production growth relates to all types of wood-based panels: the envisaged production of plywood is to amount to 0.6 million m^3, of particleboards to 6.1 million m^3, and of fibreboards to 4.7 million m^3. An increase may also be expected regarding foreign trade – imports should grow to 2.7 million m^3 in 2026 (more than 5% in relation to 2024) and exports to 3.3 million m^3 (a 7% increase). In the following years, the assortment structure of foreign trade in wood-based panels – both in imports and exports – should not change significantly.

11.2.4. Pulp and paper

The wood pulp market in Poland is characterised by stable growth. Its production was 11% higher in 2024 than in 2023, amounting to 1.7 million tonnes. The primary product was cellulose (57%, 1 million tonnes), and mechanical wood pulp and semi-chemical wood pulp accounted for 40% (0.7 million tonnes). Additionally, 0.048 million tonnes of wood pulp for chemical processing were produced. Domestic wood pulp production is relatively largely supplemented by imports, which accounted for 69% of production volume (1.2 million tonnes) in 2024 and was 9% higher than in 2023. Exports, on the other hand, are relatively small. In 2024, 0.2 million tonnes of wood pulp were exported to foreign markets (11% more than in 2023, less than 13% of domestic production volume). Both imports and exports are dominated by cellulose (with a share of 94% and over 99%, respectively). In the period 2025-2026 production is expected to continue to increase slightly (to 1.8 million tonnes in 2026). As regards foreign trade, it is assumed that the trend of faster growth in imports (up to 1.3 million tonnes, 8% more than in 2024) than in exports (0.2 million tonnes, which would be a 5% increase) will continue.

The paper and paperboard market has also been growing steadily in Poland. In 2024 its production was 7% higher than in 2023, amounting to 4.9 million tonnes, of which 0.7 million tonnes was graphic paper, 0.7 million tonnes household and sanitary paper, and 2.4 million tonnes paper and paperboard used for production of corrugated board. As in the case of wood pulp, imports of paper and paperboard are remarkably high and in 2024 it exceeded production volume, amounting to more than 5 million tonnes (a 10% increase in relation to 2023). On the other hand, exports with its 2.4 million tonnes were 49% of domestic production volume (a 7% increase compared

to 2023). Foreign trade was dominated by paper and paperboard used for production of corrugated board and by graphic paper, and in the case of export one of the dominating goods was also wood-free uncoated paper. The forecasts for the period 2025-2026 assume increase in the production of paper and paperboard to 5.2 million tonnes in 2026 (4% compared to 2024) and regarding foreign trade – maintenance of imports at a level of 5.1 million tonnes, with simultaneous growth of exports to 2.6 million tonnes (a 5% increase).

11.2.5. Wood energy

Primary energy generation from renewable energy sources (RES) was 580.4 PJ in Poland in 2023, representing 24.5% of the total primary energy volume. This was 2.1 per centage points higher than in 2022, with a decrease in total primary energy generation. The structure of renewable energy carriers is dominated by solid biofuels (60.1%), although their importance has declined in recent years in favour of solar and wind energy (in 2019 the share of energy from solid biofuels was 73.4%). The achievable capacity of solid biofuel power plants decreased to 855 MW in 2023 (894 MW in 2022). The development of the potential and use of renewable energy sources is one of the primary objectives of the updated in 2025 National Energy and Climate Plan to 2030 with an outlook to 2040 (the Plan aims to ensure Poland's energy security while reducing the negative impact on the environment, electrification of the power and heating sector, thermo-modernization and covering the heat needs of the economy, decarbonization of industry, and reduction of the emissions of GHG and air pollutants). The Plan assumes a reduction in the direct combustion of solid biomass in the long term and a strengthening of the importance of other renewable sources. Also, the forthcoming Heating Sector Transformation Strategy until 2040, as envisaged, is expected to contribute to the sector's transition to zero-carbon technologies and electrification – based primarily on renewable energy sources. However, the transformation of the heating sector is not to be based on wood combustion (the support tools for the transformation will not include wood combustion). Of the important regulations directly related to bioenergy from wood, one should point out the new Regulation on the detailed qualitative and dimensional characteristics of energy wood, which optimises wood management and eliminates the possibility of combustion of full-grade wood, precisely indicating which raw material can go into commercial power generation. New, higher quality requirements for the production and sale of wood biomass in the form of briquettes and pellets have also been introduced in 2025 to ensure their high combustion efficiency and safety of use. According to official figures, 936.7 thousand tonnes of pellets and briquettes made of wood and plant waste were produced in Poland in 2024. There is also a steady increase in the number of manufacturers certified to guarantee the high and reproducible quality of these types of fuel (Polish Central Statistical Office, 2025a).

11.2.6. Housing and construction (with a focus on wood-based construction)

Due to the generation of high demand for wood and wood products, the condition of the construction industry is relatively important for the development of the forestry-wood sector in Poland. However, the situation of this sector deteriorated in 2024 compared to earlier periods. Gross value added was lower than in 2023 (6% in real terms), sales of construction and assembly production decreased approximately 0.7% (mainly in the civil engineering construction category), but employment remained at a level similar to 2023 (677 thousand people). According to official reporting, only 1.5% (in 2023 it was 1.3%) of the residential houses completed were wood-framed houses (1304 buildings with 1368 dwellings) (Polish Central Statistical Office, 2025b). In 2024, the number of dwellings completed also decreased (more than 9%, to 200.1 thousand) (Polish Central Statistical Office, 2025c). There are therefore challenges ahead for the construction sector, but the results of the first months of 2025 signal some improvement in the situation, even though the general economic climate in the sector is still assessed as unfavourable. In Q1 2025, the gross value added of construction increased approximately 1% compared to the corresponding period of the previous year, employment and sales of construction and assembly production have been slowly increasing, but mainly in the category of

specialised construction works (more than 7% in H1 2025 compared to the half of 2024). The number of dwellings completed in H1 2025 was still lower than in the corresponding period of 2024, but a positive sign is the increase in the number of dwellings under construction (by 3%). It is assumed that in 2025 and successive years investment in housing development will be supported and expenditure on housing policy increased (including social and municipal construction). The construction industry is to be dominated by trends related to technological innovations (intelligent building management systems and modular prefabrication technologies, use of renewable energy sources and recycled materials), which improve the comfort of exploitation of buildings and structures and reduce the negative impact on the environment. The implementation of the National Building Renewal Plan aims to transform the national building stock into a highly energy-efficient, zero-emission and decarbonised one by 2050. Improvement of the situation in the domestic construction sector is to be supported by the use of funds from the National Reconstruction Plan and the FEnIKS programme (European Funds for Infrastructure, Climate, Environment 2021-2027) and the funds for the construction of defence infrastructure (e.g. the East Shield).

11.2.7. Carbon markets

In 2024, Poland sold 59.306 million CO_2 emission allowances (EUA (European Union Allowance) and EUAA (European Union Aviation Allowance) at 25 auctions under the European Emissions Trading Scheme (EU ETS). This represents a decrease of 8.9% compared to 2023. The value of sales is € 3.843 billion (2023: € 5.419 billion), with an average allowance price of € 64.80 (2023: € 83.25). Revenues from the sale of emission allowances is earmarked domestically to support the energy transition and the achievement of climate goals. The reported demand for allowances reached a relatively high level, and the cover ratio was 1.77. Total CO_2 emissions covered by the EU ETS decreased in 2024 (with the aviation sector) to 149.9 million tonnes (down 2.64% compared to 2023). It should be emphasised that the wood-based panel industry's emissions of 196.9 tonnes of CO_2 were as much as 42.1% lower in 2024 compared to 2023 (Polish National Centre for Emissions Management, 2025).

11.3. Gender and human rights issues in the forest products sector

In accordance with the Constitution of the Republic of Poland, social and economic practice seeks to maintain gender equality, raise awareness of the principles of equality and non-discrimination, and support the balance between work and family life. This also applies to the forestry-wood sector. And although women are in the minority in this sector, their role has been steadily increasing. At the end of 2023, women accounted for more than 28% among those working in the entire forestry-wood sector, compared to less than 25% in 2010 (in forestry it is about 19%, in the wood industry 22%, in the pulp and paper and paper processing industry 35%, and in the furniture industry 32% (among those working in the entire economy, the share of women is 46%)). The proportion of women among students of forestry studies has also been increasing – to almost 37% in academic year 2022/2023 from less than 24% in academic year 2010/2011.

Women's voices have also been increasingly heard in the discussion on the future of the wood industries. Every year, as part of the "DREMA" International Trade Fair of Machines, Tools and Components for the Wood and Furniture Industries, meetings are held for women connected with the furniture, wood, and interior design industries. This year's meeting is held under the motto How to be successful in a world of new challenges. It has a conference-networking character and includes lectures on topics important for the industry, talks with business leaders, exchange of knowledge and up-to-date information, and also aims to establish new relationships. Since 2009 the Forest Women's Association has also been operating in Poland – a non-profit association which promotes, supports and integrates women working in forestry, exchanges experience with national and foreign organizations, aims to create an opinion-forming and consultative environment aimed at bridging the gender gap in the professional position of women and men in forestry and wood industries.

TABLE 11.1

Poland: Economic indicators (2019-2024)

Indicator	2019	2020	2021	2022	2023	2024
	change on previous year (in real terms) [%]					
Gross Domestic Product	104.7	98.0	106.9	105.3	100.2	103.0
Sold production of industry	105.1	98.1	114.7	109.1	100.3	100.3
Construction and assembly production	104.8	95.6	105.8	109.3	104.1	99.3
Dwellings completed	112.1	106.5	106.3	101.6	92.8	90.4
Dwellings under construction	103.8	100.4	105.2	95.6	96.1	104.2
Average paid employment						
- total	101.8	98.9	101.6	101.5	100.1	100.3
- in the enterprises sector	102.7	98.9	100.3	102.6	100.3	99.6
Registered unemployment rate (at the end of the year)[1]	5.2	6.8	5.8	5.2	5.1	5.1
Average monthly gross real wages and salaries	104.8	102.9	103.3	98.2	101.6	109.5
- total	104.1	101.5	103.4	99.0	100.5	107.0
- in the enterprises sector	102.3	103.4	105.1	114.4	111.4	103.6
Price indices of consumer goods and services (inflation)	103.1	95.0	106.3	105.5	108.1	93.2
Investment outlays	104.7	98.0	106.9	105.3	100.2	103.0
	Trade [billion, current prices]					
	Polish Zlotys					
Exports	1,023.6	1,062.5	1,316.0	1,618.6	1,613.4	1,523.4
Imports	1,018.5	1,015.4	1,323.0	1,711.8	1,568.3	1,521.0
Balance of trade	*+5.1%*	*+47.1%*	*-7.0%*	*93.2%*	*+45.1%*	*+2.3%*
	United States Dollar					
Exports	267.1	272.6	342.0	365.8	381.9	383.1
Imports	265.8	260.6	343.5	387.0	371.4	382.4
Balance of trade	*+1.3%*	*+12.0%*	*-1.5%*	*-21.2%*	*+10.5%*	*+0.7%*
	Euro					
Exports	238.2	239.9	288.1	346.2	353.1	353.0
Imports	237.0	229.4	289.6	366.2	343.3	352.5
Balance of trade	*+1.2%*	*+10.5%*	*-1.5%*	*-20.0%*	*+9.8%*	*+0.5%*

Note: [1]as a ratio of registered unemployed persons to the economically active civil population.
Source: Statistics Poland, 2025.

12. PORTUGAL

Odiáxere, Faro, Algarve, Portugal, Europe - Pine and Eucalyptus forests on hills around Bravura artificial lake built on Odiáxere river in the late 1958 to help relieve water shortages on the coast. Danuta Hynlewska / stock.adobe.com

12. Portugal [20]

12.1. Market drivers [21]

12.1.1. Market situation (National)

In 2024, the Portuguese Gross Domestic Product (GDP) increased by 6.4% in nominal terms, reaching around €285 billion. In volume, GDP grew by 1.9%, following the growth rate of 2.6%, in 2023 (Statistics Portugal, 2025a).

Investment increased in real terms (2.6%, in 2024; 2%, in 2023) and Gross Fixed Capital Formation showing a less intense increase compared to 2023 (from 3.6% to 3.1%).

Domestic demand (2.7 per centage points (pp), in 2024) accelerated, reflecting the final consumption growing rate, both public (1.1%, volume terms) and private (3.2%, real terms).

Net external demand registered a downward contribution to GDP (-0.8 pp in 2024) with: the exports of goods and services slowing down from 2023 (3.8%) to 2024 (3.3%); while the imports of goods and services accelerated from 2023 (1.8%) to 2024(5.1%).

In 2024, the Portuguese public debt attained 94.9% % of GDP (127.4%, in 2022). The lending of the General Government sector was 0.7% of GDP, reflecting the increase in expenditure (+7.6%) that more than offset the increase in revenue (+6.3%) (Statistics Portugal, 2025a).

Trade and prices

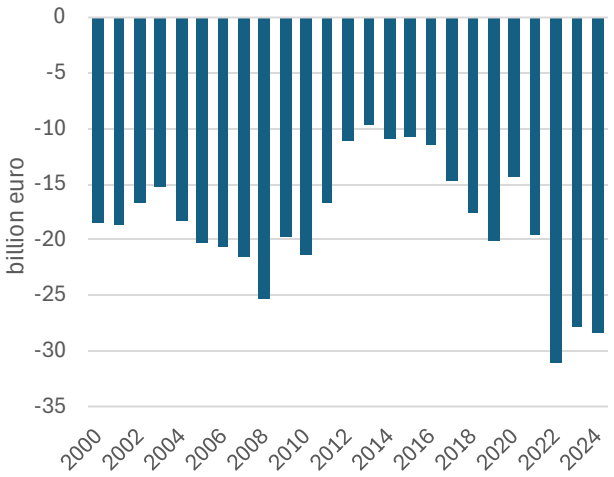
In 2024, exports of goods increased by 2% (+€1,555 million), compared to 2023, amounting to €78,895 million in nominal terms (Statistics Portugal, 2025b). The upward shift reflects primarily the increase of exports to Intra-European Union (EU) counties (+€1,759 million; +3.24%), whilst to Extra-EU countries was recorded a decrease in exports (-€204 million; -0.88%). Spain, Germany and France remained the main clients of exports, concentrating 50.4% of the total (+0.9 pp. compared to 2023).

Imports of goods raised by around 2% (+€2,095million compared with 2023), amounting to €107,244 million, reflecting both the increase in imports from Intra-EU countries (1.89%) and Extra-EU (2.3%). Spain, Germany, and France remained the main suppliers, accounting for 51.6% of imported goods (-0.5% pp compared with 2023).

The trade deficit in goods reached -€28,349 million, worsening €540 million (1.94%) compared with 2023 (Graph 12.1).

GRAPH 12.1

Portugal: National trade deficit (2000-2024) [billion euro]



Source: Statistics Portugal, 2025b.

In 2024, the average rate of change of the Portuguese Consumer Price Index (CPI) was 2.9%, 1.9 pp lower than in 2023 (2.4%) The producer price index of agricultural products recorded an annual rate of change of -2.6% (14.6% in 2023). The agricultural crop output prices -1.7% (14.5% in 2023) and the animal output prices -4.4% (14.7% in 2023) declined. The index of purchase prices of the means of agricultural production decreased by 0.02% (1.5% in 2023). The annual rate of change in goods and services currently consumed in agriculture (input I) stood at -0.4% (1.1% in 2023), while goods and services contributing to agricultural investment (input II) stood at 3.5% (4.7% in 2023) (Statistics Portugal, 2025a).

[20] Submitted by the Ministry of Environment and Climate Action Portugal, Division of Forest Management and Competitiveness, Institute for Nature Conservation and Forests to the 83rd Session of the UNECE Committee on Forests and the Forest Industry (COFFI) Geneva, 2-4 November 2025.

[21] The overview of recent developments in Portuguese Socio-economic situation was mostly based on the official statistical data (Publications & Database) of Statistics Portugal (www.ine.pt). The main references were the annual Statistical Yearbook of Portugal, the international trade and economic accounts, construction and housing publications and databases (Statistics Portugal, 2025a. 2025b, 2025c, 2025d, 2025e)

Environment and energy

Portugal is energetically dependent on the outside, importing a large share of its primary energy consumption (66.7%, in 2023; 71.2, in 2022). Renewable energy sources contributed 34.7% to the gross final energy consumption (Statistics Portugal, 2025a).

In 2023, 75.8% (61.3%, in 2022) of the total electricity production was generated from renewable sources, which attained a total installed capacity of 18,818 MW. The emphasis on solar photovoltaic, which increased by 45.1%, accounting 3,892 MW in 2023 (2,682 MW, in 2022).

In 2022, GHG emissions without LULUCF, including indirect CO_2 emissions, were estimated at 53.2 $MtCO_2$- eq., corresponding to an increase of 5.6% in total emissions between 2022 and 2023.

The efforts of industrial enterprises to promote environmental performance standards in their production processes resulted in an investment of €204 million (+4.5% than in 2022). Expenditure totalled €393 million and income stood at €247 million.

Housing and Construction

In 2024, a total of 25,470 buildings were licensed in Portugal, representing an increase by more than 7.2% than in 2023 a rebound from the previous years decrease by 6.9% from 2022. The buildings licensed for new construction continued to represent the majority of licensed buildings (74.9% of the total); whilst 4,965 buildings were licensed for renovation works, corresponding to an increase of 3.4% compared with the previous year (Statistics Portugal, 2025c).

The Portuguese Government has set specific actions to counter the crisis resulting from the present unbalanced context of high demand and scarce supply of housing. The investment to implement the measures under those actions is supported by public funds, under which the construct of new buildings or renovation of existing houses is envisaged. In the short term this frame prospects the rise of timber products to be used in construction activities.

12.1.2. Key policy measures impacting forests and forestry [22]

Climate change and energy

The Portuguese framework for climate and energy policy (APA, 2025a) is aligned with the European Commission strategic package to tackle in different areas the Paris Agreement.

The European Green Deal, launched in 2019, is the EU package of policy initiatives to trigger the green transition, envisaging to reach climate neutrality by 2050, as end goal. The aim is to transform Europe's economy, energy, transports, and industries for a more sustainable future, cutting emissions by at least 50% by 2030, rising towards 55%; while binding legally the neutrality goal under the European Climate Law 2050 (European Commission, 2025a).

The European Climate Law sets the legally binding target of net zero GHG emissions by 2050, committing to reduce those gases by at least 55% by 2030. The 'Fit for 55' package makes all sectors of the EU's economy fit to meet those targets, setting the EU on a path to reach them in a fair, cost-effective and competitive way.

The EU institutions and the EU member states are bound to take the necessary measures at EU and national level to meet the climate targets. The framework comprises the Regulation on the Governance of the Energy Union and Climate Action, which sets the common rules for planning, reporting and monitoring to ensure EU compliance with international commitments, as those under the Paris agreement.

These keystone instruments are being or have been transposed to the Portuguese legal system, underlining for the direct or indirect repercussion in forest sector:

- Climate Basis Law (Law 98/2021) setting out the basis and objectives for the national climate policy;
- The Roadmap for Carbon Neutrality 2050-RNC2050 (Government Order 107/2019),

[22] Based on references disseminated by the National Authorities empowered within the policies of forests, environment, economy and energy, mainly: the Portuguese Agency for Environment (https://apambiente.pt/clima/planeamento), endorsed on Climate Change themes; the Directorate-General of Economic Activities (https://www.dgae.gov.pt) with attributions on circular economy (https://eco.nomia.pt); the Directorate-General of Energy and Geology (http://www.dgeg.gov.pt), with competence on energy policies; the Institute for Nature Conservation and Forests (https://www.icnf.pt/), the National Authority for Nature Conservation and Biodiversity and the National Authority for Forests.

establishing the vision and pathways to achieve carbon neutrality by 2050;
- The National Integrated Energy and Climate Plan 2030 (Government Order n.º 53/2020, updated by Government order n.º 149/2024) with ambitious but achievable national targets for the 2030 horizon, in terms of reducing GHG emissions, incorporation of renewable energy, including biomass, for energy efficiency and interconnections, and the policies and measures to achieve them
- The National Roadmap for adaptation 2100, with the assessment of the Portuguese territory vulnerability to climate change, entailing guidelines for territorial and sectorial planning within that scope;
- The National Strategy for Climate Change Adaptation (approved by the Government Order 56/2015 and extended until 31 December 2025 by the Government Order n.º 53/2020) establishes objectives and the model to implement adaptation solutions to the effects of climate change in different sectors, comprising forestry, biodiversity and energy;
- The Action Program for Climate Change Adaptation (Government Order 130/2019,) complements and systematizes the work carried out in the context of the National Strategy for Climate Change Adaptation, entailing the implementation of adaptation measures (its second objective).

Climate basis law

The Portuguese Climate Basis Law sets as objectives of the climate policy:

- To promote the use of energy from renewable sources and their integration into the national energy framework system;
- To promote circular economy, improving energy and resource's efficiency;
- To develop and reinforce current sinks and other carbon sequestration services, strengthening the national resilience to climate change and the adaption capabilities;
- To foster prosperity, green growth and social justice, fighting inequalities and generate more wealth and employment;
- To protect and promote the regeneration of biodiversity, ecosystems and services;
- To stimulate sustainable financing and promote information on climate risks.

The sectoral climate policy encompasses the promotion of State policies envisaging the production of electricity from renewable sources.

The use of residual forest biomass for energy is to be articulated with the instruments of rural fires prevention and land management, namely with the system of Rural Fire Integrated Management and with the Regional Forest Management Plans. Moreover, the subordinating principles of the energetic national policy covers:

- The development of criteria to grant green certificates to attest the renewable electricity and gases sources;
- The certification of origin of residual forest biomass;
- The inspection on a regular basis of the biomass categories being used on electric production;
- The ban on the utilization of quality standard wood, biomass from dedicated energy crops and residual biomass from far away/distant origins on the production of energy from biomass;

Roadmap for carbon neutrality 2050

Portugal has committed internationally too reducing its GHG emissions so that the balance between emissions and removals from the atmosphere, namely through the use of forests, will be zero by 2050. The goal of a net zero carbon footprint has been labelled "carbon neutrality".

The main objective of the Roadmap for Carbon Neutrality 2050 is to identify and analyse the implications associated with technically feasible, economically viable and socially accepted alternative trajectories.

The Roadmap foresees alternative low-carbon development paths until 2050 in four areas of intervention linked to the main sectors responsible for GHG emissions and/or carbon sequestration: energy; transport and mobility; waste; agriculture; forest; land use. These are based on three multifaceted aspects: socioeconomic scenarios; circular economy; societal participation.

The Roadmap considers and systematizes the work done under the National Strategy for Adaptation to Climate Change, endorsing within its actions lines to tackle its impacts and the vulnerabilities, comprising: the prevention of rural wildfires; implementation of practices of soil conservation and fertility; boosting the resilience of ecosystems, species and habitat's to the effects of climate change; preventing the installation and expansion of invasive species, diseases transmitted by vectors, agricultural and forest pests and diseases. The financing

instruments mobilized to implement the actions and measures of the roadmap are laid down on it.

National integrated energy and climate plan 2030

The National Integrated Energy and Climate Plan 2030 is the principal policy instrument for energy and climate. It was updated in 2024, in compliance, at national level, with the EU Regulation on the Governance of the Energy Union and Climate Action, and the regular updates issued under it.

The Plan recognizes the role of forests and forest biomasses toward the measures of action to decarbonize the economy, promote sustainable agriculture and enhance carbon sequestration, advocating the:

- Augmentation of the natural capacity of forests as carbon sinks;
- Promote more effective agroforest management to reduce burned areas and other biotic negative impacts;
- Promote the production and use of renewable energy sources in forest sector;
- Adopt forest practices more efficient in the use of energy and water;
- Promote R&I (research and innovation) projects to support agroforestry sustainable management;
- Foster R&I projects in the domain of agro forestry decarbonization and energy efficiency;
- Enhance the role of bioeconomy to decarbonization;
- Promotion circular economy in industries.

The National Roadmap for Adaptation 2100

The preparation of the project National Roadmap for Adaptation 2100 ended in 2024. The work done assessed Portugal's vulnerability to climate change, the costs to economic sectors in adapting to the expected impacts of climate change by 2100 and the socioeconomic costs of inaction.

National Strategy for Climate Change Adaptation 2020

The National Strategy for Climate Change Adaptation 2020, which was extended until 31 Dec 2025, sets goals and the models to implement adaptation solutions in the different sectors - agriculture, biodiversity, economy, energy and energy security, forests, human health, security of people and goods, transport, communications and coastal zones.

The Strategy aims to foster the inclusion of those solutions into sectoral policies and in territorial planning, envisaging to help central, regional and local administration and policy makers to find the means and tools to implement the adaptation solutions based on technical-scientific knowledge and good practices.

This Strategy includes six thematic across-sectorial areas, including forestry: research and innovation, financing and implementation, international cooperation, communication and dissemination, adaptation in spatial planning and adaptation in water resources management.

Climate Change Adaptation Action Program

The Climate Change Adaptation Action Program complements and systematizes the work carried out in the context of the previews National Strategy for Adaptation to Climate Change. The Program elects eight lines of action with direct intervention in the territory and infrastructures, complemented by a transversal line. These lines aim to address the main impacts and vulnerabilities identified for Portugal.

The Program lines of action and correspondent measures encompass:

- Rural fire prevention (e.g. economic valorization of biomass; creation of discontinuity buffers and plots; reconfiguration of infrastructures and support systems);
- Conservation and improvement of soil fertility (e.g. erosion control; water retention; soil composition and structure);
- Diseases, pests and invasive species (e.g. enhancement of genetic material; disease control and invasive alien species; surveillance; information and communication);
- Capacity building, awareness raising and adaptation tools (e.g. monitoring and decision making; capacity building and planning; communication).

The operationalization of the Program is ensured through two parallel approaches to promote adaptation actions: one in the short term (by 2020); and one in the medium term (by 2030). These approaches embody guidelines to mobilize financial resources. Additionally, at medium term, policies and political instruments are also defined and, the Plan, promotes the implementation of structural actions to

reduce the vulnerability of the territory and economy to climate change impacts.

Circular economy and cascading use of biomass

The new Circular Economy Action Plan adopted in March 2020 in EU is one of the keystone blocks of the European Green Deal.

In Portugal the Circular Economy strategy, roadmap and action plan, are framed in line with the goals of the European Commission. The ambition set out for Portugal 2050 was designed to leverage and spur development of work within the Action Plan for the Circular Economy (APCE), Government Order n.º 190-A/2017, which advocates on its elements (DGAE, 2025):

- A carbon neutral economy that is efficient and productive in its use of resources encompassed by neutral GHG emissions and effective use of materials, with the significant fall in their extraction, importing and in final waste generated, attaining better management and value extraction from the resources in circulation;
- Knowledge as impulse, enhancing solutions in products, services, business models, consumption/use and behaviour with lower emissions and resource intensity, integrated into business models that spur job creation, efficient and effective use of mobilized resources, and their lasting economic value;
- Inclusive and resilient economic prosperity through economic development impacting all sectors of society and the resilience against price and risk volatility and gradually decoupled from negative environmental and social impacts;
- A flourishing, responsible, dynamic and inclusive society.

The Plan considers three levels of actions:

- Macro, structural in scope, produces transversal and systemic effects which enable society to appropriate the principles of the circular economy;
- Meso, or sectoral, covering actions or initiatives defined and accepted by all players in the value chain of sectors relevant to raising productivity and the efficient use of resources, seizing the economic, social and environmental benefits;
- Micro, regional or local, related to actions or initiatives defined and accepted by all regional and/or local government, economic and social actors which incorporate a local economic aspect and which emphasise this in the approach to social challenges.

The different levels of actions are inter-related and reinforce each other positively, creating feedbacks that evolve the context iteratively and allow knowledge, policies, projects and results to be consolidated, spurring the actors involved.

The example of the Portuguese forest sector is reiterated by the long-term practices under the principals of circular economy and cascading use, covering resources efficiency and reutilization of by-products and residues.

Sustainable Bioeconomy

Portugal approved the Action Plan for Sustainable Bioeconomy (Government Order 183/2021), in line with EU policies, namely the 2018 EU bioeconomy strategy update, the European Green Deal and with the Development Goals of the United Nations 2030 Agenda. The Plan recognizes the central role of sustainable and circular bioeconomy as an efficient option to promote, deepen and facilitate the green transition.

It is assumed present challenges requires jointly actions in diversified and transformative strategic areas, entailing commitments and measures to promote sustainable production and new business models, research and innovation and priority access to financing (APA, 2025b).

The Portuguese Action Plan for Sustainable Bioeconomy cover five key intervention axis:

- Enhance sustainable production and the intelligent use of bio based regional resources;
- Promote research, development & Innovation, strengthening scientific capabilities and the national technological excellence;
- Develop sustainable circular bioindustries, innovating value chains and processes;
- At societal level, promote knowledge and skills capabilities through education and training; and
- Monitoring Bioeconomy to assess developments, understand the limits of ecosystems and promote certification

The Plan also covers the measures under the Portuguese Recovery and Resilience Plan (RRP) within the promotion of sustainable bioeconomy, endorsing

public and private investments on textiles, clothing, footwear and the actions for natural resins valuing.

The bioeconomy potential of primary bio resources, resulting from well-established forestry chains, agriculture, fishing and aquaculture activities, is underlined and linked with the other sectors of the economy, envisaging the promotion of new synergies. The Plan vision is focused on processing and adding value to bio raw materials, accounting with the involvement of traditional sectors in establishing new productive chains.

Forestry and forest-based chains

The Action Plan for Sustainable Bioeconomy emphasizes the forestry key role as a contributor to the bioeconomy.

Besides the forest territorial representation on Portuguese territory (36%), the bio resources based on forests, to be further processed, are integrated under a plethora of activities, comprising, timber for construction, wood furniture, textiles, clothing and footwear, bioplastics, paper, chemicals (as derived from resins), cork stoppers, bioenergy, etc..

From the bioeconomy perspective, the whole Portuguese forest sector has long demonstrative examples of the application of good practices:

- Resin, presently, natural resins are being valued as a bioproduct, potentiating larger applications on the market;
- Biocharcoal, its application to improve soil fertility is being considered as an option instead of chemical fertilizers;
- Wood residues and post-consumer timber have been used largely, following the circular economy principles, as raw by materials on wood panels and furniture industries.

The development of forest based bioconomy faces several structural challenges, summarizing the large prevail of smallholding and absent forest owners, associated with the high risks linked to forest investments.

In this context, the Action Plan for Sustainable Bioeconomy lines up on the measures to promote bioeconomy based on forest the structuring of primary activities through the :

- Promotion of active sustainable forest management;
- Scale up the unity of management areas (ex: from Integrated areas of Landscape Management to Forest Management Unities & land tenure reform);
- Strengthening research, development & Innovation, envisaging the sustainability of raw materials supply and along the value chains, is considered of outmost relevance to promote bioeconomy based on forests too.

Forest Policy

The Portuguese forest sector is subordinated to the instruments of political administration provided in the 1976 Portuguese Constitution and endorsed by the Forest Policy Act of 1996 (Law n.º 33/96), as well as other specific legislation.

The European commitments on forest policies are incorporated in the Portuguese National Strategy for Forests (NSF), which was approved in 2006 and updated in 2015, by the Government Order n.º 6-B/2015.

The NSF assumes the maximization of the total economic value of forest as its main purpose, and it's organized in the following strategic objectives: minimization of fire risks and biotic agents; specialization of the territory; enhancement of productivity through sustainable forest management; internationalization and increase in products value; to enhance efficiency in general and to improve the sector's competitiveness.

The NSF aims and targets are articulated within seven Regional Forest Plans (PROF).

The PROF (Decree-Law n. º 16/2009, in its present redaction) are national sectorial policy instruments, embodied under the scope of the Portuguese territorial planning legal system. At regional scale, they encompass the strategic framework, guidelines and specific norms regarding the use, occupation and forest management.

Forest Intervention Plan 2025–2050

In 2024, the XXIV Portuguese Government presented the Forest Intervention Plan 2025-2050 (FIP 2025-2050). The present Government (XXV) entails as priority measure under its programme the application of the FIP 2025-2050, allocating an average annual investment of €246 million until 2050 to its

implementation, which is to be financed under the Portuguese environmental fund.

The Plan is structured around four key pillars: valorisation, resilience, ownership, and governance, aiming to economically enhance forests, strengthen their resilience, clarify ownership, and improve sector governance. Envisages to generate value in the forest sector by increasing productivity, promoting multipurpose use, and improving the profitability of forest producers, including the valorization of non-timber forest products.

In the resilience perspective, the Plan foresees strengthening rural fire crime investigation teams, promote fuel load reduction through grazing and other land-based activities, complemented by the monitoring and control of invasive species, the enhancement of native tree species, and the reinforcement of the forest ranger program.

At the governance level, the role of municipalities, Intermunicipal Communities, and forest producer organizations is to be reinforced.

Forest Management

The Forest Intervention Zones (FIZ) created by Decree-Law n.º 127/2005 (altered by Decree-Law n.º 15/2009, with Declarations of rectification n.º 10/2009, Decree-Law n.º 2/2011, n.º 27/2014 and n.º 67/2017) endorse the association of forest owners and/or forest producers for a common management, enabling the cooperative management of forest lands and mitigating their splitting up. This legal instrument enables the combination of forest properties to create larger management unities. The FIZ main objectives are: to promote sustainable management in forest spaces; to coordinate a planned way, the protection of forest and natural spaces; to reduce ignition and fire propagation conditions; to recover these spaces.

The Forest Management Plan (FMP) legislation (Decree-Law 16/2009, in its present redaction) establishes mandatory FMP on public and community forests, on private properties, above a size defined regionally under each PROF, and on the "forest intervention zones" (FIZ).

The small forest holdings, below the size of mandatory FMP and not integrated by a FIZ zone, are still subject to the minimum standards endorsed by each PROF. These standards entail:

- Preventive forestry standards;
- General forestry standards;
- Forestry models adopted within each PROF following the homogeneous division of the region in sub-regions.

In the Mainland, about:

- 287 FIZ are constituted, which cover 2.032 million ha (22% of total mainland; 63% of the forest area)
- 4,336 FMP are approved, which cover 1.996 million ha, corresponding to 62% of the total forest area. Eucalyptus stands have an FMP coverage rate above the national average.

Afforestation

The new EU Regulation 2023/1115 on deforestation-free products, to be applied at national level after 2025, aims to bring down greenhouse gas emissions and biodiversity loss by boosting the consumption of 'deforestation-free' products and reducing the impact on global deforestation and forest degradation.

The Regulation is part of a plan to tackle deforestation, first outlined, in 2019, within the EU Action to Protect and Restore the World's Forests, and later confirmed by the European Green Deal, the EU Biodiversity Strategy for 2030 and the Farm to Fork Strategy (European Commission, 2025b).

In Portugal, the legal regime of the afforestation and reforestation actions (Decree-Law n-º. 32/2020, third amendment to Decree-Law 96/2013) lays down the essential technical standards and the minimum qualifications to be considered in afforestation and reforestation projects, their design and subscription.

Forest Biomass for Energy

The production and use of forest biomass for energy is regulated by the Decree-Law n.º 5/2011, in its present version. Within its terms, to benefit the incentive established by the legislation, the promoters of forest biomass power plants are, namely, obliged to:

- Organize and maintain a system of data records that allows the identification of the type and characteristics of the biomass consumed at the plant;

- Deliver an action plan for 10 years developed in close articulation with forest producers and local authorities, aiming the sustainability of biomass supply in the long term.

The legal regime for new forest biomass for energy centrals is endorsed by Decree-Law 64/2017, in its present version. This regime binds the installation of new biomass power centrals within the production of electrical and thermal energy in cogeneration or trigeneration systems, limiting fossil fuel incorporation to a maximum per centage of 5%, as auxiliary and starter fuel. The installation of new biomass plants within the proximity of critical fire risk zones is imposed.

Research and Innovation in forestry

The Portuguese National Strategy for Forests (NSF) acknowledges the different components of the value of forests services - regulating, cultural, supporting and provisioning, such as timber and cork - stressing the need for tools to improve their economic valuation and to assess the forest ecosystem's condition.

New technological advances based on digitalization processes and Artificial Intelligence (AI) are seen to be instrumental in the analyses of complex forestry and environmental data, enabling predictive modelling and the application of better sustainable practices on forests and forestry-based values.

Those tools are being developed and implemented under the concept of Forest 4.0. It is recognized they are transforming forestry and the knowledge about forests and based activities, namely, to provide greater protection, prediction and anticipation of the impact of rural fires, both in the forests assets, in the forest-based sector, on energy use and in transportation. The Forest 4.0. tools are considered a top priority of forest research and investments in public and private policies, strategies and investments.

The public and private forestry stakeholders have been proactively and efficiently using the public and private funds to support investments to incorporate new technologies into forestry practices. The governance organization within research and innovation frames the quality of the results attained with those investments. Network approaches have been established to accomplish those goals.

The Competence Centres (CC) are foreseen in the National Strategy for Forests (NSF) and in the Agriculture's Strategy for Agro-food and Forestry Research and Innovation. They bring together a set of existing capabilities in the various dimensions of knowledge of forestry through the involvement of entities from the National Scientific and Technological System (STCN), Forest companies, and public Administration bodies. The partners forming part of the CC are embodied within the definition of sectoral research agendas.

So far, the Competence Centres in activity explicitly focusing on the forest sector are the:

- CC of cork oak and cork;
- CC of Pinus pinea and pine nuts;
- CC of Pinus pinaster;
- CC of oaks and endemic broadleaves is still in the phase of being launched.

12.1.3. Biotic and abiotic disturbances

Wildfires

The number of wildfires decreased by 47% in 2024 compared to the 10-year average. The average size of these wildfires however was significantly bigger than in previous years, leading overall to a 22% increase of the burnt area over the 10-year average area burnt.

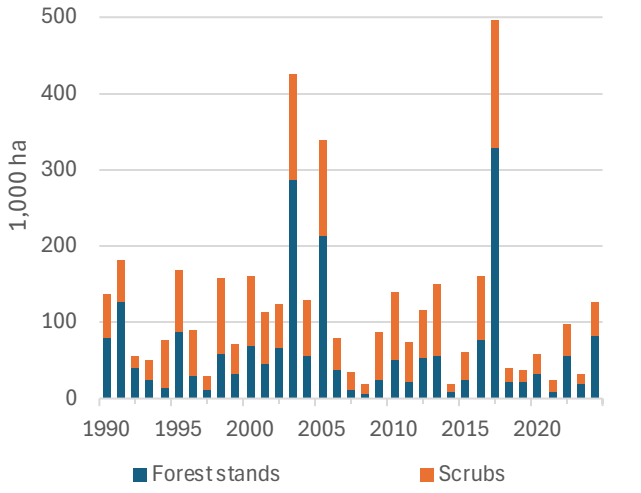
In 2024, as of 15 October, the third highest burnt area was observed, in spite of the lowest number of fires (6,299) since 2014. The total burnt area was 136,424 ha, of which (Graph 12.2) 126,789 ha were in forest space (81,206 ha in forest stands and 45,583 ha in scrublands); and 9,635 ha in agriculture lands (ICNF, 2025).

This emphasis on the extreme impact of rural fires severity in 2017, when a total burnt area of 537,131 ha was registered comprising: 497,462 ha in forest space (328,851 ha in forest stands and 168,611 ha in scrublands); and 39,669 ha in agriculture areas.

The quality of burnt wood is depreciated or even inappropriate for industrial uses. Even so, a part of the burnt wood can be used by wood-based chains, changing the short-term timber market pattern.

GRAPH 12.2

Portugal: Burnt areas in forest stands and scrublands (2000-2024) [1,000 ha]



Source: ICNF, 2025.

12.1.4. Traceability and supply chains

Harvest and cutting legal regime

The Decree-Law 31/2020 establishes the mandatory declaration of cuts, extraordinary cuts, thinning or uprooting of forest trees to be commercialized or auto-consumed by industry. To grant traceability, the communication of the operations within the primary transformation and the exports of wood are endorsed too under this legislation. The declaration is to be made in digital format in the specific electronic Cutting Information System (SiCorte) located at the Institute for Nature Conservation and Forests (ICNF, I.P.), the National Forest Authority website.

The premature cutting of Eucalyptus and Pinus species in areas superior to two ha requires the previews authorization by the National Forest Authority (Decree-Law n.º 173/88). In Eucalyptus the criteria defined by law to consider the felling as premature entail the stands with at least 75% of trees with less than 12 centimetres of diameter, or 37.5 centimetres, of perimeter, at chest height.

Timber and Timber Products Markets

The EU Timber Regulation-EUTR (Regulation (EU) n.º 995/2010), applied since 2013, , is to be repealed when the Regulation on Deforestation-free Products enters into force, after 2025. The EUTR aims to counter the timber and timber product's illegal logging and trade. The main obligations of this regulation are:

- Prohibits the placing on the EU market of illegally harvested timber and products derived from such timber;
- Requires traders who place timber products on the EU market for the first time to exercise 'due diligence'.

The legislation to apply the Timber Regulation in Portugal (Decree-Law n.º 76/2013) establishes the register of all the operators with activity in the country as mandatory. The register is made electronically through a platform named «RIO system» located at ICNF, I.P., the competent authority, website in https://www.icnf.pt/florestas/fileirasflorestais/operadordemadeiraederivados

The register was considered essential to identify the operators working in Portugal, enabling to plan the monitoring actions to verify the application of the "due diligence".

Certification schemes

The export orientation of Portuguese forest sector is the dominant factor on the option for certification schemes. Presently two systems are followed:

- PEFC with 360 thousand ha of certified area, 6,963 forest producers and managers, 271 Chain of Custody certificates related to 746 certified enterprises (PEFC Portugal, 2025).
- FSC with 682,390 ha of certified area, corresponding to 336 certificates of forest management, 9 certificates of forest ecosystems service, 698 Chain of Custody certificates, and 2 projects certification (FSC Portugal, 2025).

12.2. Market Developments

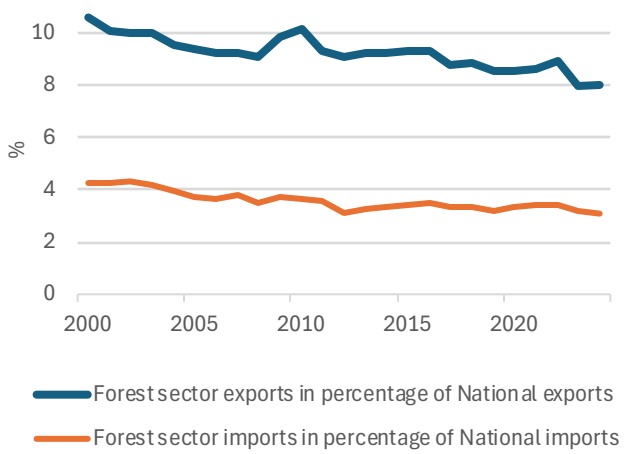
12.2.1. General overview

The Portuguese forest sector has long been export oriented. Forest products exports have been among the country's main exports, accounting in the current millennium for 9% of the total exports, while the sector is only responsible for 4% of the imports (Graph 12.3).

After 2012 the exports surpass the imports in more than 2.5 thousand million euros, surpassing 3 thousand million euros 2024 (Table 12.1), making the forest sector one of the most international markets dependent sectors of the Portuguese economy (Statistics Portugal, 2025b).

GRAPH 12.3

Portugal: Share of forest products in national export and import values (2000- 2024) [%]



Source: Statistics Portugal, 2025 b.

TABLE 12.12

Portugal: Forest sector commercial balance (2000-2024)[euro and %]

	Commercial balance [million €]		*Coverage rate of exports over imports [%]*	
Year	***Forest sector***	***National***	***Forest sector***	***National***
2000	939	-18,491	148	60
2001	818	-18,701	141	60
2002	894	-16,619	146	63
2003	1,061	-15,181	157	66
2004	1,004	-18,340	152	63
2005	1,010	-20,242	153	61
2006	1,263	-20,654	162	63
2007	1,271	-21,632	156	64
2008	1,284	-25,347	157	61
2009	1,194	-19,682	162	62
2010	1,628	-21,379	176	64
2011	1,847	-16,723	186	72
2012	2,348	-11,161	232	80
2013	2,515	-9,710	236	83
2014	2,455	-10,978	224	81
2015	2,567	-10,711	224	82
2016	2,510	-11,385	216	81
2017	2,521	-14,671	208	79
2018	2,600	-17,589	203	77
2019	2,576	-20,074	200	75
2020	2,360	-14,388	205	79
2021	2,675	-19,527	194	77
2022	3,199	-31,083	185	72
2023	2,822	-27,808	184	74
2024	3,024	-28,348	191	74

Source: Statistics Portugal, 2025b.

Portugal is a price-taker in international markets. The fact that a large share of forest production is exported and that Portugal is primarily a price taker makes it very vulnerable to market developments elsewhere (Rego et al, 2014).

The dependency on international markets and the recent instability in tariffs applied on various wood and wood derived products, affect the forest sector's economy and the confidence of enterprises and market actors in the sector. These developments and factors could eventually lead to altered production and trade flows in the short term.

12.2.2. Wood and timber-based product markets

The overview of timber production in the current millennium as shown by the forestry accounts (table 9.2) done by Statistics Portugal (2025d), indicates that the production, in value (real prices: base 2016), of coniferous timber for industrial uses has been decreasing, observing the average annual variation of -1%, between 2000 and 2022. In the current decade (2010 to 2022) positive changes of 0.3% (annual) and 4% (total) are to be noted. The non-coniferous roundwood shows a positive shift since 2000 (average 2%) and between 2020 and 2022 (9%).

The production in volume (cubic metres) between 2024 vis-à-vis 2010 (Faostat, 2025; EUROSTAT, 2025a), as reported under the Joint Forest Sector Questionnaires (JFSQ), shows on average:

- Between 2010 and 2024, the reduction of -1% in the coniferous timber removals, whilst the non-coniferous timber has been rising on average 4%.
- In the present decade (2020-2024) the trends were similar, thought in coniferous the decline was sharper (-7.5%), whereas the average increase in non-coniferous was minor (2.4%) (Table 12.2).

TABLE 12.23
Portugal: Forest production structure (2000-2022)

		2000	2010	2020	2022	2020/2022	2000/2022		2010/2022	
		Million euros				rate of change (%)				
						annual	annual average	Total	annual average	total
Forestry and logging output at basic prices		1,304	1,172	1,214	1,217	0.3	-0.3	-7	0.3	4
Forestry goods at basic prices		1,006	855	748	759	2	-1	-24	-1	-11
Timber	Coniferous timber for industrial uses	191	142	141	147	5	-1	-23	0.3	4
	Sawlogs and veneer logs - coniferous	162	119	125	129	4	-1	-20	1	9
	Pulp wood (round & split) - coniferous	27	17	12	12	4	-3	-54	-2	-27
	Other wood - coniferous	6	6	5	6	26	0.1	1	-0.02	-0,2
	Non-coniferous timber for industrial uses	205	269	271	294	8	2	44	1	9
	Sawlogs and veneer logs -non-coniferous	2	6	5	8	49	11	221	3	30
	Pulp wood (round & split) - non-coniferous	201	261	264	285	8	2	42	1	9
	Other wood - non-coniferous	2	2	1	1	12	-1	-22	-2	-22
	Biomass for energy	50	50	59	60	2	1	20	2	20
	Growing stock	261	132	56	59	5	-4	-78	-5	-56
Other products	Cork	355	244	197	178	-10	-2	-50	-2	-27
	Nursery forest plants	6	4	4	4	13	-1	-27	1	12
	Other forestry products	19	17	24	23	-4	1	25	4	39
Secondary non forest activities		62	64	96	96	1	3	54	5	51
Net added value		795	756	709	689	-3	-1	-13	-1	-9

Source: Ministry of Environment and Climate Action Portugal, 2025.

12.2.3. Keystone market drives in forestry

As no substantial changes in forest sector capacity are foreseen on the short-term, the forecasts on sector market developments would recommend a steady trend into a "business as usual scenario". Though, significant changing drivers might impact forest sector production and trade flows presently, both in the domestic as at the international scope.

On the short and medium term, the core drivers of timber and derived products production and trade are considered to be:

- The rise of risks, such as wildfires and phytosanitary disturbances, also deriving from climate change impact, which might lessen the production in forests to critical levels, threatens the stable and sustainable domestic supply of timber and non-timber product. The short-term forecast predicts the rise in roundwood availability up to a certain level, as some of the damaged timber can be processed by industries, namely for pulp and panels. Still, on the medium/long term a downward shift is prospected in raw timber domestic supply, resulting from the joint action of disturbances and constrains in forest timber production.
- The environmental and societal pressure and diverse perspectives on the use of forest land, also reflected in legalisation, bounds the scale up of roundwood national production.
- The repercussions on trade deriving from a global shift toward higher tariffs and non-tariff barriers, with emphasis on the instability/uncertainty resulting from the new tariff rates policy and the escalating transport costs might affect flows patterns, favouring the domestic or regional use of timber.
- The new policy measures encompassing bioeconomy, circular economy and bio based cellulose products prospects a raising shift in end timber products demand, in particular wrapping products and in recovered materials, as well as in forest biomass for energy production.
- The prospected upward shift in the construction of new buildings or renovation of existing housing, even supported by public funds, forecast the increase of timber products utilization in construction activities too.

On tropical timber and derived products, a "business as usual" on imports and exports is foreseen, despite the restrictions imposed by the timber regulation (Reg. EU 995/2010) on tropical wood markets, it is assumed the experience resulting from its application already for some years prevents major and significant changes in trade patterns in the years to come.

12.3. Gender and Human Rights related to Forest Sector

In Portugal, since 2017, the economic activities directly related with forest chains are, on average, responsible for 74 thousand jobs, corresponding to 2.3% of the total employment (table 12.3). The sector employment is larger when wholesale and retail trade are included, with around 100 thousand employees (GEP, 2025).

Employment in the forest sector is more concentrated in coastal areas. Nevertheless, forest jobs are also significant in the remaining territory, having an essential role in the mitigation of economic structural fragilities in inland regions.

The Gender Employment Gap[23] (EUROSTAT, 2025b) was on average 6.6%, since 2010 (5.7%, in 2024). In part, this is also reflected on the lower rates of occupational accidents (Table 12.4) observed in women, in comparison to men (GEP 2025).

Gender inequality still prevails regarding the average gross monthly earnings of employees as shown in table 12.5 (GEP, 2025). The Gender Pay Gap (GPB)[24] was on average 11.3% since 2010 (8.6%, in 2023). In agriculture, forestry and fishing the observed GPG was 5.4%, in 2023 (EUROSTAT, 2025b; GEP, 2025).

TABLE 12.45

Portugal: Forest sector employment (2017-2022) [1,000]

	2017	2018	2019	2020	2021	2022
Forestry, logging and related services	8.7	6.7	5.9	6.1	9.0	9.7
Manufacture of wood, wood products, except furniture; of cork and cork products	24.8	25.5	25.5	24.6	24.9	26.2
Manufacture of pulp, paper and paperboard and related products	11.6	12.8	12.7	13.1	13.2	13.8
Manufacture of furniture	24.2	33.2	28.2	26.3	27.7	27.1
Resins and resin products	0.3	0.2	0.2	0.2	0.3	0.3
Fruits and nuts	0.2	0.2	0.2	0.4	0.5	0.6
Forest sector (total)	69.7	78.6	72.8	70.7	75.7	77.7
Total	2,947	3,060	3,111	3,086	3,102	3,337

Source: GEP, 2024.

TABLE 12.6

Portugal: Occupational accidents in total economy and forest related activities (2023)

	Total		Man		Women	
	no. [1,000]	[%]	no. [1,000]	[%]	no. [1,000]	[%]
Agriculture, Forestry and Fishing	5.73	3.1	4.82	3.9	909	1.5
Manufacture of wood, wood products, except furniture; of cork and cork products	2.44	1.3	2.07	1.7	373	0.6
Manufacture of pulp, paper and paperboard and related products	687	0.4	538	0.4	149	0.2
Manufacture of furniture	2.77	1.5	2.27	1.8	503	0.8
Total	184.61	100	124.23	100	60,380	100

Source: GEP, 2025.

TABLE 12.78

Portugal: Average monthly wage by sex (2017-2024) [euro]

	2017	2018	2019	2020	2021	2022	2024
Average	1,133	1,170	1,210	1,251	1,294	1,368	1,124
Men	1,237	1,274	1,312	1,349	1,396	1,476	982
Women	1,011	1,047	1,087	1,131	1,172	1,238	928

Source: GEP, 2025

[23] Gender Employment Gap: the difference between the employment rates of men and women aged 20-64. The indicator is part of the EU Sustainable Development Goals (SDG) indicator set

[24] Gender Pay Gap: The unadjusted Gender Pay Gap (GPG) represents the difference between average gross hourly earnings of male paid employees and of female paid employees as a per centage of average gross hourly earnings of male paid employees.

13. SLOVENIA

Logar valley or Logarska dolina in the Alps of Slovenia. streetflash / stock.adobe.com

13. Slovenia [25]

13.1. General economic trends [26]

Economic growth is expected to slow in 2025 (0.8%) and is anticipated to be much lower than the spring forecast (2.1%), mainly due to a decline in exports linked to issues in the European industry. According to the first annual assessment by the Statistical Office of the Republic of Slovenia (SURS), gross domestic product increased by 1.7% in 2024, which is 0.1% higher than the first assessment based on quarterly data. Although the uncertainty regarding trade policies has decreased after the trade agreements by the United States of America with important partners, including the EU, it still remains high. This year, economic growth will be driven by domestic consumption, especially household consumption, supported by relatively high employment levels and accelerated wage growth. After the stagnation in 2024, a slight growth in investments in fixed assets is expected in 2025, while construction investments will mainly increase in non-residential and infrastructure projects. Due to the high occupancy of capacities in processing activities, production investments will also increase. The growth of government consumption will be more moderate than in 2024 and lower than spring forecasts, mainly due to the moderate growth of social transfers in kind and expenditure for goods and services. In connection with the reconstruction following the floods, social transfers and investment expenditures, which support private consumption and investment, will increase in 2025.

Employment will decrease by 0.2% on average in 2025, but will mostly stagnate in the next two years, despite the expected higher economic growth. This will be mainly influenced by demographic factors, whereby the new employment inflow will mostly be based on foreign workers. Unemployment will remain low; levels in 2025 will remain similar to the ones achieved in the past year, and will go on to decrease, with the historically low number of unemployed persons, mainly due to their transition to inactivity and retirement. Nominal wage growth in 2025 will amount to 7.5% (10% in the public sector and 6% in the private sector), and will exceed the levels achieved in 2024. Actual growth will be higher than a decade ago. Wage reform significantly contributes to high growth in the public sector, and its impact will decrease in the coming years. In the private sector, wage growth will continue as well, due to labour market pressures and the impact of wage increases in the public sector; due to the companies' tendencies to maintain competitiveness, however, actual growth is expected to be more moderate than in the past couple of years.

Inflation will amount to 2.9% in 2025, which is slightly higher than in 2024, mainly due to higher food prices, and will be higher than spring forecasts. It is expected to decrease to around 2.3% in the next two years. Rising service prices will remain relatively high due to labour shortages, as well as demand amid projected growth in disposable income. Other indicators do not show any major pressures on price growth; production and import prices have slowed down, and energy prices are also lower. Past administrative measures and network charges will contribute to inflation in the short term, while t a gradual moderation in the long run is expected, mainly due to slower growth in food prices, where the impact of climate change on production volumes and costs will continue to be felt. Core inflation will remain slightly above 2% in the long run.

The autumn forecast is mainly accompanied by negative risks, mostly related to the international environment, and partly also to the domestic one. The biggest threat to lower GDP growth is the possible escalation of trade tensions and increased uncertainty, which would weaken investment in sectors related to international trade. An additional risk is the possible deterioration of confidence in financial markets, which could lead to stricter financing conditions and greater reticence of companies and households alike. Geopolitical risks (war conflicts in the Middle East and in Ukraine) also contribute to the uncertainty, which could cause higher prices of energy products, food and transport,

[25] Submitted by the Ministry of Agriculture, Forestry and Food of the Republic of Slovenia and the Slovenian Forestry Institute to the 83rd Session of the ECE Committee on Forests and the Forest Industry (COFFI) Geneva, 2-1 November 2025.

[26] This Chapter is reproduced from the publication: Autumn forecast of economic trends 2025. IMAD, 2025.

as well as disruptions in supply chains. In the domestic environment, risks mainly arise from limited capacity to carry out large investments and rising labour costs.

13.2. Policy measures

In December 2024, the Government of the Republic of Slovenia adopted an updated the National Energy and Climate Plan (NECP), which sets out Slovenia's key guidelines for 2030: reducing GHG emissions by at least 55% by 2033, increasing energy efficiency, increasing the share of renewable energy sources, and phasing out fossil fuels. The Plan covers all sectors of energy use and is based on professional dialogue and a comprehensive environmental impact assessment, which confirms its positive effects. Some of the important highlights are the gradual departure from coal, the strengthening of low-carbon sources, the decision about a new nuclear power plant by 2028 and the transformation of the CO_2 tax into a dedicated tax to support sustainable investments and reduce energy poverty. Approximately €57 billion of investments in the 2021–2030 period will be needed to meet the targets, of which around €22 billion will be invested in energy and climate measures (building renovation, electricity grids, dispersed production of renewable energy sources, industry). The public sector will contribute approximately €6.9 billion, mainly to railway infrastructure, mobility, and public buildings.

Access to national and European financial resources (cohesion, Recovery and Resilience Facility, climate and modernization funds) will be crucial. The NECP enhances energy independence and fosters green jobs and a just transition, while reducing dependence on fossil fuels and contributing to long-term climate neutrality. Consistent implementation of the adopted measures remains a key challenge, while a new ten-year plan by 2040 will be prepared in 2027–2028. The Government has also adopted a framework for the issuance of bonds of the Republic of Slovenia related to the fulfilment of sustainability goals (sustainability-linked bonds – SLB). This bond is a special type of green bond, the conditions of which are directly related to the achievement of the goals of the NECP – reduction of emissions, increase in the share of RES, and improvement of energy efficiency. The issuance of the SLB represents an additional financial evaluation of these commitments, strengthening the credibility of Slovenia on international financial markets (VLADA, 2025).

In December 2024, the Government of the Republic of Slovenia adopted the Action Plan for the Management of Energy Efficiency in the Economy by 2030, which sets out measures to reduce energy use, energy costs and GHG emissions, thus contributing to greater competitiveness of the economy, energy security, and new jobs. A special emphasis is placed on the efficient use of energy in industry, the introduction of energy-efficient equipment, and better access to information for small and medium-sized enterprises. Greater transparency, which is another important element, will be ensured through the digitization of energy audit procedures, which will provide a better insight into the potentials of the economy and accelerate the green transition. The Action Plan is aligned with the objectives of the 2021–2030 Slovenian Industrial Strategy and the National Energy and Climate Plan (NECP), and is also a milestone within the framework of the Recovery and Resilience Plan. The measures will be implemented in the 2024-2030 period, and funding is provided by the Recovery and Resilience Plan, the 2021–2027 Cohesion Policy and the Climate Change Fund (MECE, 2024).

At an extraordinary session in April 2025, the National Assembly of the Republic of Slovenia adopted an amendment to the Wildlife and Hunting Act. The amendment introduces several important changes, such as the mandatory labelling of cloven-hoofed game immediately after shooting, the establishment of a more regulated and transparent system of issuing permits for hunting guests, the strengthening of the protection of game during the laying and breeding of younglings, the enactment of a special protection status of game as a natural heritage of the country, and the definition of night hunting. The amendment also introduces new records of injured parties, provides a clearer definition of compensation responsibilities, contains revised procedures for the appointment of hunting guards, and introduces a two-year planning of hunting grounds. The mandatory labelling of cloven-hoofed game will be introduced from 1 May 2026, and the online portal for submitting electronic reports of damage caused by

wildlife will start being used on 1 January 2026, which is also when permits for hunting guests will start to be used. The amendment also introduces additional financial mechanisms to compensate for damages caused by wildlife, especially jackals. For this purpose, the transitional period during which the State remains responsible for the damage shall be extended until 1 September 2029 (Official Gazette of the Republic of Slovenia, 2025a).

In September 2025, the National Assembly adopted the amendment of the Forest Act. This amendment changes the definition of forest protection work in order to adapt it to actual conditions in the field. Driving outside of the forest roads and public and uncategorised roads used for public road traffic is prohibited. It is only allowed for tasks related to forest management. The amendment of the act brings certain changes and amendments that enable the digitalization of the management and decision-making tasks of the Slovenian Forest Service (SFS) in the administrative process. Since the Service annually issues around 100 thousand administrative decisions, the digitalization will contribute to the efficiency of its work. This should be achieved through digitalization and integration of data from existing official databases kept by other bodies – including the Ministry of the Interior (Central Civil Registry), the Supreme Court of the Republic of Slovenia (computerised land register) and the Surveying and Mapping Authority of the Republic of Slovenia (real estate cadastre).

The composition of the council of the SFS is set to change, with the abolition of membership for the regional unit council representatives. Pursuant to the amendment, the council will now have 13 members. The tasks of the councils of the 14 regional units of the SFS will also change. The main task, i.e. determining the forest management plan proposal of the forest management unit and the two-year hunting management plan of the area, will be maintained, while the authorizations and the method of appointing forestry supervisors will change. Up until now, the forestry supervisors were appointed by the Minister; pursuant to the amendment of the Act, they will now be appointed by the CEO of the SFS. In addition, fines for misdemeanors will also change, in order to adjust them according to inflation. The auxiliary, temporary and permanent warehouse for forest wood assortments are also set out, as is the large-area monitoring of forests, i.e. the preparation of the national forest inventory comparable to those established in other European countries (Official Gazette of the Republic of Slovenia, 2025).

In June 2025, at the meeting of the Committee of Deputies of the Permanent Representatives (Coreper I), the Polish presidency sought the support of EU member states to grant a mandate for representation in trilateral negotiations between the European Commission, the European Parliament, and the Council of the EU on a proposal for a Regulation on the production and marketing of forest reproductive material. Slovenia does not support the proposal, as it does not include solutions that would be acceptable for Slovenia.

In July 2025, the National Assembly adopted the Climate Act, which establishes a systemic framework for mitigating and managing climate change in the next decade. The Act transposes European directives into Slovenian legislation, establishes the obligation to prepare a long-term climate strategy, a comprehensive energy and climate plan (NECP), a climate change adaptation strategy and regional action plans, and introduces a sectoral climate risk assessment and a monitoring system for the implementation of measures. Key topics include the extension of the Emissions Trading System (ETS) to buildings and transport, the implementation of the Carbon Border Adjustment Mechanism (CBAM), emission reporting, and the management of fluorinated gases and ozone-depleting substances. The law also brings economic opportunities: nearly €2 billion in European funds over seven years, incentives for energy renovation of buildings, heat pumps, zero-emission vehicles and public transport, and financial support for companies in decarbonization and the circular economy. Mechanisms are included to monitor progress and additional measures in the event of backlog. An important part is the Social Climate Fund (€477 million), which aims to reduce energy and mobility poverty and support the transition to cleaner forms of heating and mobility (MECE, 2025).

In April and May 2025, the European Commission adopted a package of simplifications to Regulation (EU) 2023/1115 on deforestation-free products (the EUDR), which are expected to reduce the administrative and financial burdens of operators by around 30%. Key innovations include: the possibility of annual and group reporting, and clear exemptions for certain products (e.g. packaging, used wood, bamboo, free promotional flyers). In May, the EC published a list of countries by risk of deforestation. Most countries, including all EU member states and major trading partners, are classified as low risk, while only four (Belarus, Myanmar, the Russian Federation and North Korea) are classified as high-risk. Classification determines the extent of control overdue diligence statements. Questions remain regarding the implementation of the regulation in the EU member states, including Slovenia. Slovenia and its operators are committed to further simplifying the implementation of the EUDR (EU, 2023; EU, 2025).

Within the framework of the Slovenian Strategy for Sustainable Smart Specialization (S5), the Strategic Development and Innovation Partnerships (SRIPs) have formulated new action plans by 2026, with some SRIPs adapting the focus areas and product lines within the priority areas of S5. The adjustments were confirmed on 28 March 2025 at the correspondence meeting of the Government Working Group to support the implementation of S5, which led to the updating of the "Table of Focus Areas and Product Directions".

The new table is applicable to all tenders published after 31 March 2025, while the older one remains applicable to tenders of the ECP 21–27 Programme before that date. Both versions may be used for the "Promoting the implementation of research and development programmes (TRL 3-6)" call. The changes ensure the continuity of the process as well as the consistency of measures, with strategic guidelines and effective support for innovation and development of key areas.

13.3. Market factors [27]

According to the first annual assessment by the Statistical Office of the Republic of Slovenia (SURS), the gross domestic product increased by 1.7% in 2024. Over the next two years, exports are expected to recover, with a slightly higher growth in foreign demand. The growth of investments will be focused on increasing the capacity of the export sector, and the construction of infrastructure and housing facilities. Based on the data on construction activity, further growth of investments is expected, which will also be supported by the reconstruction after the floods and the use of funds from the Recovery and Resilience Plan. Growth in private consumption will strengthen with higher real income growth, which will be influenced by further wage growth and lower inflation. The propensity to save is expected to be closer to the long-term average. The growth of State consumption will fluctuate in the next two years, mainly due to the introduction of new rights under the long-term care system.

After 2021, the volume of salvage logging in Slovenian forests has been increasing again, the main causes being natural disasters (especially windbreaks and snowshoes) and bark beetles. The priority of the SFS, the forest industry, owners of the forests and forestry work operators is therefore to rehabilitate forests that have been damaged due to natural disasters. In 2024, the rehabilitation tree felling represented 45% of the total trees that were felled in that year. ZGS data from January to August 2025 show a 37% decrease in the volume of salvage logging, compared to the same period in 2024. In 2025, the SFS began preparations for the renewal of forest management plans of forest management units (GGN GGE), which will enter into force in 2026, namely for 10% of the area of Slovenia.

In the course of 2025, the new Regulation (EU) 2023/1115 on deforestation-free products (the EUDR) caused increased concern of companies regarding the traceability of timber origin, administrative burden, and adaptation of supply chains, which already had an impact on timber trade in Slovenia even before its implementation.

[27] Data sources: IMAD, SURS, SFS and the Slovenian Forest Institute

After 2021, the import of oak logs with bark from the USA into the EU has stopped due to an oak disease called the "oak wilt", caused by the Bretziella fagacearum quarantine pest. In June 2023, the European Commission has issued a regulation setting out specific phytosanitary measures in terms of the import of oak logs with bark to the EU territory; inter alia, the time period of possible import is set out, as well as the provision that goods must include a phytosanitary certificate, and the provision setting out the timber storage and processing method. There are few processors of red and white oak logs in Slovenia.

In the wood processing industry (NACE C16), in the current year 2025, the production index has increased by 6.3% in the first seven months compared to the same period in the previous year. Conversely, in the paper and paper products industry (NACE C17), the index of industrial production decreased by 1.4% in the first seven months compared to the same period in 2024. In the furniture industry (NACE C31), the index of industrial production decreased by the same share as in NACE C17, by 1.4%. Sales revenues in NACE C16 increased by 10.7% in the first seven months compared to the same period in the previous; furthermore, they decreased by 10.6% on the domestic market and by 10.7% in export. When it comes to NACE 17, sales revenues in this first half of 2025 decreased by 2.8%, due to sales to foreign markets (-3.7%), while sales revenues in the domestic market remained the same compared to the first half of 2024. In terms of NACE C31, total sales revenue decreased by 2.6%, at the expense of sales on the domestic market (-9.3%), while the index of sales revenue on the foreign market increased by 8.9%.

In Slovenia, there are a number of instruments that enable the promotion of sustainable investments, innovation, and an increase of the added value in the forest-wood chain, which also contribute to achieving the strategic goals of the circular economy. Among the most important are the Climate Change Fund, managed by the Ministry of Environment and Spatial Planning, the Forestry Fund, managed by the Ministry of Agriculture, Forestry and Food, public tenders to promote development, investment, digitization and, as a result, greater processing of wood, the tenderer of which is the Ministry of Economy, Tourism and Sport, and the financial support provided to companies for strategic sustainable and circular transformation by the Public Agency of the Republic of Slovenia for the Promotion of Entrepreneurship, Internationalization, Foreign Investments and Technology (SPIRIT Slovenia). The Slovenian Environmental Public Fund (Eco Fund) provides grants and favourable loans for environmentally friendly investments of economic operators.

13.4. Developments in the wood products market [28]

13.4.1. Roundwood

2024

In 2024, the volume of production of forest wood assortments (hereinafter: FWA) amounted to 4.869 million m^3, which is 8% more compared to 2023. One of the main reasons for the increase in FWA production in 2024 compared to 2023 is the 15% increase in the volume of salvage logging (2.091 million m^3 or 45% of total logging, according to decisions issued and received). In 2024, the highest number of salvage logging was due to wind (42%) and bark beetles (35%). In addition, the salvage logging of windfall from July 2023 continued. The FWA production of softwood amounted to 2.645 million m^3 in 2024 and increased by 15% compared to 2023. The FWA production of hardwood is increasing from 2020 onwards, reaching 2.23 million m^3 in 2024 (+1% compared to 2023). The structure of FWA conifer production is dominated by the saw and veneer group with 72%, while the FWA hardwood is dominated by the firewood group with 56%.

The Slovenian FWA market began to cool down in 2023, which also continued in 2024. Due to the recession of the European economy, especially construction and the related wood processing industry, the demand for spruce logs was significantly reduced during 2024. This was followed by stable but lower prices of these assortments

[28] Data sources: SURS, 2025; IMAD, 2025; CCIS 2025a, CCIS 2025b; SFS 2025; Slovenian Forest Institute, 2025; recalculations, analysis and interpretation of the Slovenian Forest Institute

on the market. 2024 was also characterized by a decline in the prices of wood composite panels, which caused a sharp drop in the prices of mainly industrial deciduous wood intended for the production of panels. High stocks of energy wood in 2024 led to a decrease in their prices. Low prices on the FWA market and difficulties in sales also affected the volume of logging in private forests. In the structure of purchase of FWA from private forests, the purchase of coniferous logs prevailed in 2024 with more than 60%, followed by the purchase of coniferous pulpwood. In 2024, purchase prices from private forests decreased in most FWA compared to 2023. The average purchase price of softwood logs in 2024 amounted to €76.88 per m^3 excluding VAT, which is 5% less compared to 2023. Prices decreased the most for industrial wood of lower quality and firewood, by an average of 20% compared to 2023. After more than a decade of increasing the price of oak logs, which reached a record value in 2023 (€248.38 per m^3 excluding VAT), the price declined by 7% in 2024.

In 2024, FWA exports amounted to 1.592 million m^3, which represents a 16% increase compared to 2023. Exports increased in all groups of roundwood, with the exception of firewood. In the structure of FWA exports, industrial hardwood prevailed with 42% in 2024, with a predominant share of beech wood of all dimensions. The exports of this group amounted to 674,000 m^3 and were record-breaking. In 2024, most of the industrial hardwood (59%) was exported to Italy. The import of roundwood started declining after 2021: in 2024, it was 8% lower compared to 2023 and amounted to 582,000 m^3. The import of industrial softwood decreased the most. The structure of roundwood imports in 2024 is dominated by the group of logs for sawing and softwood veneer (31%), followed by industrial hardwood (26%). In 2024, Slovenia recorded a total import of 179,000 m^3 of coniferous logs, of which 59% came from Italy. The majority (78%) of industrial deciduous wood was imported from Croatia. In the balance of foreign trade, FWA has been recording a foreign trade surplus for the last 20 years, which reached record values in the period of extensive natural disturbances and bark beetle gradations (2014–2018), ranging from 1.930 million m^3 to 2.625 million m^3. In 2024, the trade surplus of FWA amounted to 1.01 million m^3, of which 0.523 million m^3 of trade surplus for FWA of coniferous trees was intended for industrial processing.

2025

This year, the FWA production volume is expected to be slightly lower compared to the volume in the previous year, mainly due to natural disasters and bark beetle gradation from January to August. According to the ZGS data, 14% fewer felling decisions for (regular and sanitary) timber were issued from January to August 2025 than in the same period in 2024.

The average price of softwood logs from private forests from January to July 2025 amounts to €88.77 per m^3 without VAT, which is 14% more compared to 2024. In the first half of 2025, the average price also increased for hardwood logs, i.e. by 5% compared to the first half of 2024. In terms of softwood, prices of wood for pulp and panels in the first half of 2025 are 3% higher than in the same period in 2024; in terms of hardwood, they are 3% lower. The most pronounced drop in prices in 2025 was recorded for firewood: the average price from January to July 2025 amounted to €44.51 per m^3 without VAT, which is 13% less than in the same period in 2024.

According to data provided by SURS about the purchase quantities of FWA from private forests, the purchase dropped by 4% in the first seven months of 2025, compared to the same period 2024. The purchase of softwood logs increased by 8%, while the most pronounced decrease was recorded in the segment of hardwood panels and firewood. Only around a half of the quantity of round timber entering the market in one year is considered in the research on the purchased quantity prepared by SURS.

Based on currently available data on foreign trade with roundwood for the period January to July 2025, it is estimated that volumes of exports decrease compared to 2024, namely by around 10%. The largest decrease in exports is expected in industrial hardwood and softwood logs. It is estimated that the import of roundwood increased by around 4% compared to 2024, mainly due to the increase in the import of industrial softwood. According to forecasts, the import of softwood logs will

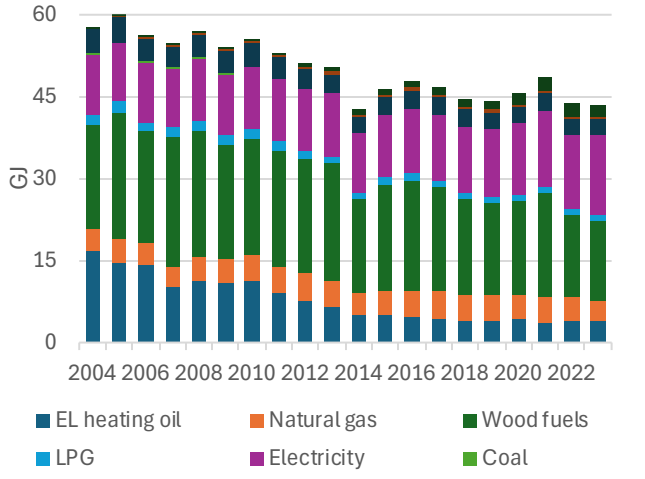
decrease by about 20% compared to 2024. According to forecasts, the foreign trade surplus will decrease in 2025 compared to 2024, amounting to about 830,000 m^3.

13.4.2. Wood biomass for energy

Households in Slovenia use approximately 1.5 million tonnes of wood fuel on average, predominantly logs, followed by pellets, chips and finally briquettes, for energy purposes. In small combustion installations, with the exception of an open fireplace, it is permitted to use natural wood in all forms (firewood, sawdust, pieces, chips, bark, cones) and wood residues resulting from the treatment and processing of wood and the production of furniture, briquettes or pellets from natural wood, gas oil, other types of liquid fuel and natural gas and liquefied petroleum gas. In open fireplaces, however, the use of fuel is more limited, since only natural wood in pieces can be used, including bark (logs, chips, sedges, cones), wood scraps or briquettes or pellets made from natural wood.

GRAPH 13.1

Slovenia: Consumption of different fuels in households by energy source (2004- 2023) [TJ]



Source: SURS, 2025.

In recent years, Slovenia has seen a trend in the transition of many households to other energy products, especially to electricity and natural gas. As a consequence, the number of households using wood fuel is decreasing. In the structure of the use of energy-generating products in households, wood fuels accounted for 34% in 2023, which is the same share as in 2022 and, at the same time, the lowest share after 2004. The same share (34%) is also represented by electricity, which has thus reached the highest level in the last twenty years (Graph 13.1). The data show a gradual shift of households from traditional to more modern forms of heating. Growth in the share of electricity also has environmental consequences, as it can contribute to reducing GHG emissions and providing cleaner air, especially in urban areas, while increasing dependence on electricity and electricity prices, which poses new challenges for households.

Wood fuels are and will remain an important source of energy, especially in rural areas, where there is a long tradition of wood consumption for heating, which is mainly due to the fact that many households own forests and that wood is still readily available as a raw material. Compared to fossil fuels, wood fuels are more environmentally friendly, especially when they are used in modern heating systems and obtained in a way that respects the principles of sustainability and sustainable forest management. In addition to the environmental aspect, they also play an important role from an economic point of view, as they can contribute to the energy independence of households and the strengthening of the local economy. The Slovenian Forestry Institute monitors wood fuel prices in Slovenia and regularly publishes them at http://wcm.gozdis.si/cene-lesnih-goriv.

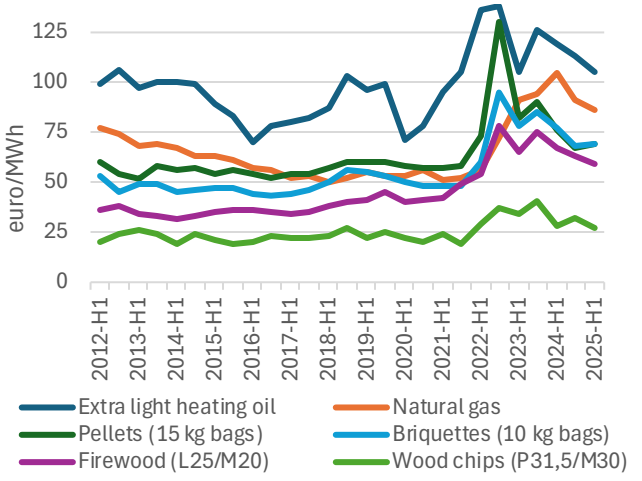
In Slovenia, wood fuel is among the cheapest energy sources. Comparing the prices of wood fuels with fuel oil (prices expressed in euro per MWh including VAT), it appears that, in the first half of 2025, wood chips were the cheapest among wood energy sources (as much as 74% cheaper), while firewood was 44% cheaper and briquettes were 35% cheaper than heating oil. Pellets as the most expensive form of wood biomass were, however, 35% cheaper than heating oil.

In 2022, the prices of energy sources have increased significantly with ; the highest increase in the prices of wood fuels ever in the second half of 2022 since the start of monitoring the wood fuel market. Wood fuels, however, remained the least expensive source. At the beginning of the 2022/2023 heating season, the price difference between heating oil and pellets dropped to a record low. Said difference amounted to less than 6%. After 2022, wood fuel prices have decreased, but remain

higher than before the energy crisis. At the end of the 2024/2025 heating season, the prices of firewood (14%) and chips (6%) decreased compared to the beginning of the heating season. In the case of pellets and briquettes, however, prices increased slightly, for less than 3% for pellets and for less than 1% for briquettes. The price of extra light heating oil in May 2025 was around €106 per MWh (including VAT) and decreased by 7% as regards the beginning of the 2024/25 heating season. At the end of September 2025, the price amounted to €111 per MWh (including VAT), which represents a 3% increase compared to the end of the previous heating season.

GRAPH 13.2

Slovenia: Semi-annual fuel prices (2011-2025) [€ per MWh incl. VAT]



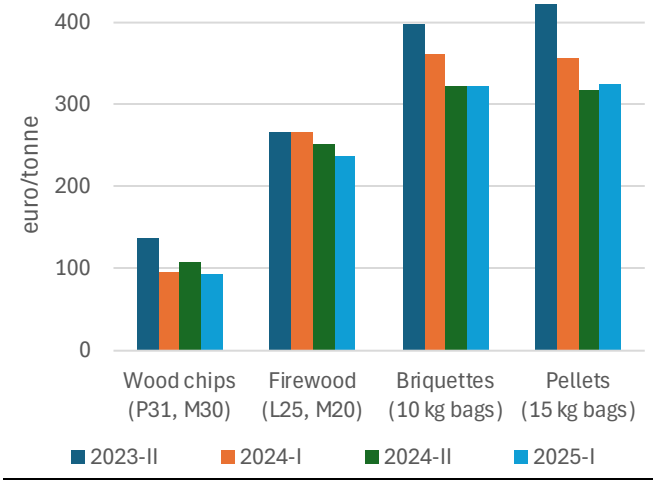
Note: euro per MWh incl. VAT: euro per megawatt hour including VAT.
Source: Slovenian Forestry Institute, 2025.

Wood fuel prices are usually higher at the beginning of the heating season than at the end, and it is thus expected that the prices increase at the beginning of the new heating season. Looking at the entire 15-year price collection period, wood fuel prices are rising. In 2022, due to unstable conditions (energy crisis), there was a marked increase in the prices of wood fuels, even up to more than 100% in the case of pellets. After that year, prices fell, but were never the same as before 2022.

In Slovenia, logs are a locally available energy source allowing for the energy independence of households. For an efficient burning with the reduction of the emissions of dust particles, the logs to be used in small heating devices must be dry. On the Slovenian market, the biggest demand is for beech firewood with humidity levels of approx. 20% (air dry firewood) and lengths between 25 and 33 cm. The price of such firewood at the end of the 2024/25 heating season amounted to €237 per tonne and was 6% lower than at the beginning of the heating season, as well as 11% higher compared to the same period in 2024.

GRAPH 13.3

Slovenia: Wood fuel prices beginning/end of heating seasons (2023-2024) [€/t incl. VAT]

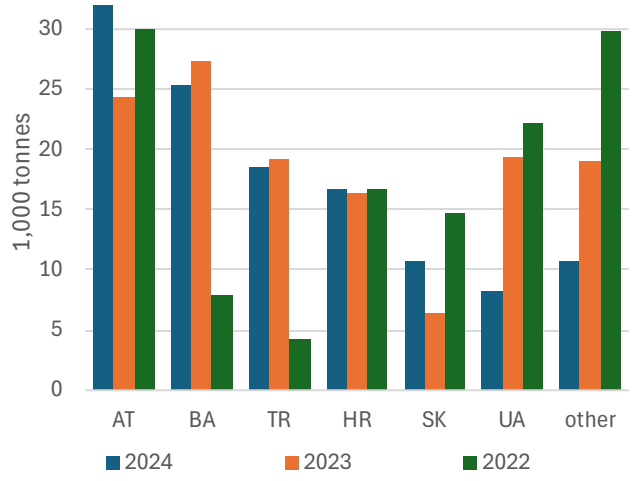


Source: Slovenian Forestry Institute, 2025.

2024 is the fourth consecutive year that Slovenia is a net exporter of wood pellets. According to the information obtained by the Statistical Office of the Republic of Slovenia (hereinafter: SURS), export amounted to 126,600 tonnes import amounted to 122,800 tonnes. Export of pellets has been decreasing since 2021; in 2024, it decreased by 9% compared to 2023. The import of pellets in 2024 was the lowest after 2013 and decreased by 7% compared to 2023. The external trade surplus therefore amounts to 3,800 tonnes in 2024, which indicates a slightly higher production volume than consumption. In 2024, the largest imports of pellets came from Austria (26%), followed by Bosnia and Herzegovina (21%), Türkiye (15%) and Croatia (14%). Compared to 2023, the import of pellets from Slovakia (+66%) and Austria (+33%) increased the most in 2024, while the import of pellets from Ukraine continued to decrease: in 2020, Slovenia imported 58,300 tonnes of pellets from Ukraine, which decreased to only 8,200 tonnes in 2024. In Slovenia, exports of pellets to Italy have dominated for many years; in 2024, Slovenia exported 82% of the total export volumes, i.e. 103,900 tonnes. This is followed by Austria with a 9%

share, while smaller quantities were also exported to Croatia, Lithuania, France, and some other countries.

GRAPH 13.4
Slovenia: Import of pellets by countries (2022-2024) [1,000 t]



Notes: AT: Austria; BA: Bosnia and Herzegovina; TR: Türkiye; HR: Croatia; SK: Slovakia; UA: Ukraine.
Source: Statistical Office of the Republic of Slovenia, 2025.

The main consumers of wood pellets are households, followed by larger public buildings and other users. According to the data on the production of pellets in Slovenia, collected by the Slovenian Forest Institute, the production of pellets in Slovenia has been constantly rising for the past decade. There are currently 29 registered producers in Slovenia. Smaller producers continue to dominate, producing less than 5,000 tonnes of pellets per year (69% of the total number of registered companies). The largest producer produced over 50,000 tonnes of pellets in 2024, while three producers produced between 10,000 and 20,000 tonnes of pellets. Domestic production of pellets in 2024 amounted to 175,000 tonnes, which means that the amount of production has increased by 7% compared to 2023.

Wood chips are mainly used for energy purposes. The largest consumer of wood chips is Termoelektrarna toplarna Ljubljane, consuming around 110,000 tonnes per year. Consumption of wood chips intended for energy purposes and for manufacturing in the wood composite panel, mechanical pulp and chemicals industries decreased by around 20% in 2024 compared to 2023. According to data for foreign trade, Slovenia exported 475,800 tonnes of wood chips to the foreign market in 2024, which is 2% more than in 2023. Of these, 64% of the quantities were exported to the Austrian market, 13% were exported to the Italian and to the Croatian market, and 10% to the Hungarian market. The import of wood chips in 2024 amounted to 68,300 tonnes, which is the lowest quantity after 2008; most of the quantities (81%) were imported from neighbouring Croatia, followed by Austria with 13%.

13.4.3. Certified wood products

Currently, 272,417 ha of forests are certified by the FSC system, which is the same amount as in September 2024. This represents 23% of the area of all forests in Slovenia. 88% of FSC-certified forests are State-owned forests. The company Slovenski državni gozdovi d. o. o. (SiDG), which manages national forests, holds several group scheme certificates, along with the certification of national forests, namely three FSC CoCs, one FSC FM/CoC and one PEFC CoC. As part of the FSC SiDG group schemes, 33,182 ha of forests of seven major private forest landowners, 94 wood processing companies and 11 wood traders are currently certified.

The area of forests certified pursuant to the PEFC system in recent years remains approximately the same, currently amounting to 302,606 ha of forests. The greater part of this area (77%) is represented by national forests managed by the company SiDG d.o.o. The regional PEFC certification scheme currently includes 1,276 forest owners, who manage their own forests, i.e. 5 less than during the same period of 2024.

Companies use the FSC and PEFC certificates for tracking wood origin predominantly as a marketing mechanism for export markets and compliance with green public procurement policies. The number of companies with the FSC certificate for tracking certified wood (CoC) is currently 259 (+2.37% compared to September 2024), while the number of companies with the PEFC certificate for tracking certified wood (CoC) is 95, the same as in 2023.

13.4.4. Value-added wood products

The Slovenian furniture industry produced net sales revenues in the amount of €435 million in 2024, which is 1% more compared to 2023 and represents 1.1% of net

sales revenues in relation to the whole processing industry in the country. In the area of furniture production (NACE C31), net sales revenues in foreign markets in 2024 increased by 2.3% compared to the previous year, and their share in the structure of net sales revenues amounts to 38.7%. In 2024, the added value per employee in the C31 manufacturing activity increased by 5.8% compared to 2023, amounting to €43,617.

The furniture industry production index (the entire furniture industry in NACE C31), which also includes the production of wooden furniture, decreased by 1.4% in the first seven months of 2025 compared to the same period in the previous year. Total revenue from sales decreased by 2.6% in the compared periods. At the same time, the total revenue from sales on the domestic market decreased by 9.3%, while on foreign markets, it increased by 8.9% compared to the same period in 2024.

13.4.5. Sawn softwood

In 2024, despite the continuation of the poorer performance of the primary wood processing industry, the processing of softwood logs increased slightly compared to 2023. According to the information of the Chamber of Commerce and Industry of Slovenia, the main reasons for the poorer performance of the wood processing industry in Slovenia in 2023 and 2024 are: the tightening of tax burdens, which have reached their highest level since 2008, the increase in electricity costs for larger consumers, uncertain conditions in the international environment, and the lack of qualified staff. The quantitative scope of sawn softwood production in 2024 amounted to 1.009 million m^3, which represents an 8% increase compared to 2023. After 2022, the import of sawn softwood is increasing: in 2024 it amounted to 0.703 million m^3, which represents an increase of 12% compared to 2023. In 2024, the value of imported sawn softwood per unit increased by 5% compared to 2023. The export of sawn softwood products has been increasing since 2020, amounting to 0.902 million m^3 in 2024, which is 5% more than in 2023. The value of exports per unit of goods decreased by 1% in 2024.

For 2025, gradual improvement of the situation in the field of operations of the sawmill industry is expected compared to 2024 and 2023. Companies in this industry are again investing more in the modernization and expansion of production, and new investments in technological modernization and the increase of capacity of existing Slovenian sawmills processing softwood are also foreseen for the coming years. At the same time, there is an increasing number of smaller sawmills that have ceased their activities in the recent period, citing higher tax pressures, more expensive electricity, an uncertain international environment, and lack of staff as the main reasons for this cessation. It is estimated that the processing of softwood logs and the production of sawn softwood will slightly decrease in 2025 compared to 2024. It is estimated that both import and export of sawn softwood will increase compared to 2024.

According to the Slovenian Forest Institute, the average sales prices of construction sawn softwood in 2025 remained the same compared to 2024. Methodologically speaking, C24/S10 construction wood with and without CE mark, planks, boards, and slats are classified into this group. The prices of construction sawn softwood in 2025 were quite constant; the median value of spruce construction wood in February and May 2025 amounted to €260 per m^3 excluding VAT, and increased to €270 per m^3 excluding VAT in August.

13.4.6. Sawn hardwood

The production of sawn hardwood decreased by 10% in 2024 compared to 2023, amounting to 143,000 m^3. According to the Slovenian Forest Institute data, Slovenia currently has less than 20 sawmills that process over 5,000 m^3 non-coniferous logs per year. The import of sawn hardwood varies between years, in 2024 it amounted to 99,000 m^3 (+12% compared to 2023), the value per unit of imported goods decreased by 16% compared to 2023. The export of sawn hardwood is decreasing after 2022; in 2024, it amounted to 82,000 m^3, which is 11% less than in 2023. The value of exported sawmill products from hardwood per unit decreased by 15% in 2024 compared to 2023.

After a marked decline in the export of oak logs in 2023, this export increased once again in 2024, mainly due to a renewed increase in exports to China. In 2024, Slovenia exported 54,000 m^3 of oak logs to China, which represents an 84% increase compared to 2023 and is comparable to the levels achieved in 2022. The forecasts for 2025 show a level of export of oak logs to China that is comparable to 2024. Increased exports of these assortments cause problems with the supply of raw materials to domestic processors.

In 2025, estimates show that the scope of production of sawn hardwood will be comparable to production in 2024. In the course of 2025, sawmills that process hardwood logs will also face the difficult operating conditions presented in the previous chapter. In 2025, imports and exports of sawn hardwood are estimated to remain at a similar level than in 2024.

The quantities and values recorded in the production, the import and export of sawn wood from tropical tree species are negligible. A similarly low level of sawn wood from tropical trees foreign trade is foreseen for 2025.

In the coming years, a greater investment in a new sawmill plant for the cutting of hardwood logs is expected.

13.4.7. Wood-based panels (including veneer)

Production of all types of wood-based panels, including veneer, amounted to 240,000 m^3 in 2024, of which 218,000 m^3 were panels. Two thirds of wood-based panels were produced from softwood, while 92% hardwood was used for veneer production. The production of wood panels was 3% higher in 2024 compared to 2023, and the production of veneer was 9% lower. The trend of reducing the consumption of wood panels stopped in 2024; it amounted to 227,000 m^3, which represents a 9% increase compared to 2023. When it comes to the consumption of wood panels, 69% of them are particle boards that are entirely imported in Slovenia. For 2025, estimates foresee a similar volume of production of wooden panels as in 2024, as well as a 7% increase in the volume of production of veneer compared to 2024. According to estimates, the consumption of wood panels and veneer will be at a similar level in 2025 as in 2024.

In 2024, 156,000 m^3 of particle boards (including OBS boards) were used in the manufacture of furniture and in construction, which amounts to a 7% increase compared to the previous year. Domestic production of particle boards is no longer present in Slovenia after 2015. For 2025, predictions anticipate a slightly lower consumption of particle boards than in 2024.

The consumption of fibreboards in Slovenia has been fluctuating through the years and is, quantitatively speaking, one of the lowest consumptions compared to other types of wood-based panels. In 2023, fibreboard consumption was the lowest in the last 15 years and amounted to 16,000 m^3; in 2024, it increased to 27,000 m^3, which is the most after 2018. There is one company engaged in the production of MDF and HDF fibreboards in Slovenia.

Plywood panel production is dominated by panels made from three layers of softwood glued together, of which the greater part of production is exported. In 2024, the production of panels remained the same as in the previous year, amounting to 95,000 m^3. The consumption of plywood has been decreasing since 2021; in 2024, it amounted to 44,000 m^3, which is the smallest amount in the 2015–2024 period.

In 2023 and 2024, the production of veneer decreased: in 2024, it amounted to 23,000 m^3 (-11% compared to 2023). Companies involved in the production of cut veneer in Slovenia are predicting an increase (by a couple per cent) in the volume of production for 2025. The quantities recorded in the production, the import and export of veneer from tropical tree species are negligible. The best part of sliced veneer manufacture is performed as a service for customers within the EU.

13.4.8. Pulp and paper

The production volume of mechanical wood pulp saw an important decrease in 2023 and in 2024; in the 2015–2022 period, annual production averaged 88,000 tonnes, whereas this share was 44% lower in 2024. The main reasons for this are the rising operating costs and the exchange of raw material from one of the manufacturers of newspaper in Slovenia. The production of wood pulp in 2024 increased by 11% compared to 2023, amounting to 50,000 tonnes. In

2024, the import of mechanical pulp represented 7% of the total import of all types of wood pulp. The exported quantities of mechanical pulp were negligible; the production in Slovenia has been integrated in its entirety.

According to the Chamber of Commerce and Industry of Slovenia, the production of paper in Slovenia increased by 17% in 2024 compared to 2023, amounting to a total of 579,000 tonnes. The largest growth (+28% compared to 2023) is recorded for packaging paper and cardboard, which otherwise represent the largest share in the structure of paper production in Slovenia. According to estimates, paper and cardboard production will decline by a few per cent in 2025 compared to 2024.

In the first seven months of 2025, the C17 industry recorded a decrease in the industrial production index in the amount of 1.4% compared to the same period in the previous year. Furthermore, sales revenue also decreased by 2.8% compared to the same period in 2024.

13.4.9. Innovative wood products

The SMARTI company specialises in the development and production of advanced scanning systems for the wood industry, the primary task of which is to optimise production processes in the processing of boards and logs. Their devices enable high-performance four-sided, 3D and X-ray scanning, supported by their own artificial intelligence and machine vision algorithms. In this way, it is possible to accurately detect defects, perform sorting according to quality, and determine the strength classes of wood. X-ray technology additionally provides insight into the interior of the material, which enables early detection of hidden defects and, consequently, provides for a more efficient cutting. Compared to existing systems, SMARTI iCon enables faster and more accurate scanning of boards. The system enables board transport speeds of up to 800 metres per minute, using newly developed proprietary AI technology and other machine vision algorithms. The new software features enable more advanced optimization of board cutting and sorting which, in the framework of the production process, represents an efficiency increase of up to 5% compared to previous systems.

The modular system of FRESH wooden prefabricated houses by Marles d.o.o. represents an integrated philosophy and an innovative approach to modern prefabricated construction. It responds to the current needs of users, while at the same time addressing environmental and spatial challenges. The system combines three fundamental dimensions: technological efficiency, low-carbon construction, and a high culture of living. FRESH is based on a combination of proven experience and new principles of sustainable, flexible wooden prefabricated construction. This is an advanced structured modular concept that allows for diverse building typologies, from compact living units to larger buildings. This opens up space for adaptation to the individual wishes of clients, as well as to specific location conditions. The core of the system consists of four pre-designed, prefabricated, fully recyclable wooden building blocks. These elements make it possible to create a variety of architectural designs and flexible living solutions. FRESH is a smartly structured and flexible construction system that enables nearly unlimited variations of house typologies.

Ledinek Engineering d.o.o. presented a more economical version of the powerful CLT press system, which has been successfully implemented throughout the world over the years. The synonym for the superior quality of industrial automated compression of CLT panels has been adapted to the markets in which construction with sustainable materials is still being established. The press was optimised with structural modifications and reduced energy consumption; furthermore, the dimensions of the machine for standard transport were also adjusted. The press, however, retained the modularity of the previous press, with an added function of pressing GLT elements. This optimised press for CLT and GLT elements therefore consumes less energy, enables easy transport, and opens up the possibilities of sustainable construction with wood.

13.4.10. Residential construction and building

The trend of residential construction is slowly increasing after 2015. In 2024, 13,808 dwellings were under construction in Slovenia, of which 5,165 were completed by the end of the year, which is 5% more than in 2023. In 2024, most of the dwellings were completed in the

Osrednjeslovenska region (31%), followed by the Podravska statistical region (19%). In the first eight months of 2025, 3,872 building permits were issued for new buildings and the change of use of buildings, which is 1% more compared to the same period in 2024.

Company activity within the Manufacture of other builders' carpentry and joinery (NACE: C16.230), which consists of the manufacture of prefabricated wooden buildings, builder's joinery (windows, doors, stairs etc.), glued laminated roof trusses and roofing, panelling, wooden shingles, slats and decorations made of wood and wooden shutters, was not as successful in 2024, since the net profit decreased from €41.4 million in 2023 to €24.8 million. Nevertheless, this segment still records the highest net profit in the activity C16, Woodworking and processing. The growth of sales revenues created by companies in this industry on foreign markets decreased by 4.8% compared to 2023, which also holds true for net sales revenues in foreign markets which decreased by 8%.

Slovenia is a traditional net exporter of wooden windows and doors. The export of wooden windows and doors has been decreasing in recent years; in 2024, the export of doors decreased by 12% compared to 2023, and the export of wooden windows decreased by 38%. In 2024, the import of wooden windows and doors decreased compared to 2023, with the import of wooden windows decreasing by 38% and the import of wooden doors decreasing by 19%.

TABLE 13. 1
Slovenia: Economic indicators - GDP (2024-2027)

	2024	*2025**	*2026**	*2027**
GDP				
GDP, real growth [%]	1.7	0.8	2.1	2.2
GDP, nominal growth [%]	5.3	4.2	5.0	4.9
GDP current prices [euro billion]	67.4	70.3	73.8	77.4
Exports of goods and services, real growth [%]	2.3	-0.2	2.8	3.1
Imports of goods and services, real growth [%]	4.3	2.4	3.1	3.4
External balance of goods and services (contribution to growth in p.p.)	-1.3	-2.0	-0.2	0.1
Private consumption, real growth [%]	3.8	2.2	2.2	2.4
Government consumption, real growth [%]	7.3	1.6	3.8	2.3
Gross fixed capital formation, real growth [%]	-0.3	0.8	3.0	2.5
Change in inventories and valuables (contribution to growth	-0.2	1.0	-0.3	0.0
EMPLOYMENT AND PRODUCTIVITY				
Employment according to the SNA, growth [%]	0.5	-0.2	0.1	0.1
Number of registered unemployed, annual average,	46.0	45.1	44.5	43.9
Registered unemployment rate [%]	4.6	4.6	4.5	4.4
ILO unemployment rate [%]	3.7	3.6	3.6	3.5
Gross wage per employee, nominal growth [%]	6.2	7.5	5.5	5.3
Gross wage per employee, real growth [%]	4.1	4.9	3.1	3.0
private sector	4.9	3.4	2.9	3.0
public sector	2.5	7.3	3.5	3.0
Labour productivity (GDP per employee), real growth [%]	1.3	0.9	1.9	2.0
BALANCE OF PAYMENTS STATISTICS				
Current account BALANCE [euro billion]	3.1	1.8	1.6	1.4
as a % of GDP	4.5	2.6	2.2	1.9
PRICES AND EFFECTIVE EXCHANGE RATE				
Inflation (Dec/Dec), [%]	1.9	2.9	2.3	2.3
Inflation (annual average), [%]	2.0	2.5	2.4	2.2
Real effective exchange rate deflated by unit labour costs	-0.3	2.9	2.1	1.1
ASSUMPTIONS				
Foreign demand (imports of trading partners), real growth [%]	0.8	1.9	2.1	2.5
GDP in the euro area, real growth [%]	0.9	1.2	1.3	1.4
Brent Crude oil price [USD/barrel]	80.5	69.8	65.4	65.2
Non-energy commodity prices in USD, growth [%]	9.0	4.5	-0.5	-0.5
USD per € exchange rate	1,082	1,127	1,160	1,160

Notes: * 2025-2027 IMAD autumn forecast, September 2025.
Sources: IMAD, 2025; SURS, 2025; BS, 2025 ; ECB, 2025 ; EIA, 2025 .

14. SWEDEN

Sunset over lake. Artem / stock.adobe.com

14. Sweden [29]

14.1. Market drivers

14.1.1. Key market drivers in late 2024 and early 2025

This report is a summary of the most important events affecting the wood market over the past 12 months since the last report. The overall economic situation in Sweden has been characterised by continued measures to bring down inflation, which has again been higher than the central bank's target of two per cent during 2025, and a prolonged economic downturn due to the uncertain global situation with increased trade barriers. Overall, these factors have led to reduced demand, more bankruptcies and a weaker labour market, which is holding back consumption and investment. How this has affected the various segments of the wood market is described below. On the supply side, the implementation of the EU Green Deal, together with possible national policy changes creates some uncertainty. The increased impact of forest damage is also worrying.

14.1.2. Market situation

During the spring the progress of the Swedish forest industry is being greatly overshadowed by global events and the future looks increasingly uncertain.

The industry continues to be pressured by a high-cost situation and strained raw material supply, which affects profitability, not least in the wake of relatively weak demand in certain segments. This has in turn led to several announced production cuts. Although product prices are generally at a higher level than normal, in some cases they have had difficulty keeping up with the cost increase.

Despite these challenges, Swedish forest industry exports continued to perform strongly in 2024 and remained at the peak levels from the pandemic. Over the past three years, the export value has stabilized at a level of around 185 billion Swedish Krona (around USD19 billion). Driven not least by strong global demand for pulp, where there has been a shortage during periods of 2024. At the same time, the Swedish currency (krona) has been weak for a period, which has supported the Swedish industry. Now that the krona has shown signs of strengthening, there is a risk of putting further pressure on the industry.

American trade policy has proven to be fast-moving with tariffs changing on a daily basis. From a forest industry perspective, the American market does indeed account for 5–10 per cent of Swedish exports, and Sweden represents approximately 20 per cent of the value of the EU's forest industry exports to the US. But at the same time, what is of particular concern to the industry is the consequences on global world trade and trade policy, and how global trade flows can be affected. For an export-intensive industry, global free trade is important.

The Swedish forest industry is currently in a challenging the situation, but the prospects for the medium term are still good. The Swedish Forest industry operates in an industry that produces sustainable products and where future demand is expected to grow faster than supply.

14.2. Key policies affecting the market

14.2.1. EU Nature Restoration Regulation

The EU Nature Restoration Regulation came into force August 2024, setting legally binding restoration targets for the long-term recovery of nature in Europe. Its overarching objective is to restore 20 % of EU's degraded ecosystems by 2030 and all by 2050, also adding time-bound targets for specific ecosystems (incl. forest), habitats, and species. Impact on raw materials depends national implementation. EU member states shall prepare Nature Restoration Plans, which will outline how EU member states plan to deliver on the targets of obligations, taking their national context into account. The Swedish Environmental Protection Agency was mandated by government to develop a draft national restoration plan, in cooperation with other government agencies. The draft is set to presented by February 2026 after which government will decide on the final Swedish restoration plan.

[29] Submitted by the Swedish Forest Agency, Skogsstyrelsen, to the 83rd Session of the ECE Committee on Forests and the Forest Industry (COFFI) Geneva, 2-4 November 2025.

14.2.2. Renewable energy policies and their impacts on forest products markets

The revised EU renewable energy directive (REDIII) entered into force 21 May 2025. Amongst others the sustainability criteria for woody biomass have been sharpened, e.g. concerning biomass from primary and old-growth forests. In September 2024 the Swedish Forest Agency sent its report to government with proposals for the implementation of the revised directive. Consequently, Government proposed changes to national legislation, expected to enter into force 1 December 2025. As of yet the exact impact on costs and administrative burden for forest owners and the rest of the forest sector are unclear.

14.2.3. Carbon certification

At the end of 2024, the EU adopted a Regulation on carbon removals and carbon farming (CRCF) which sets up a voluntary certification system across the EU for certifying permanent carbon removals, carbon farming and carbon storage in long-lasting products ((EU) 2024/3012). Expert groups are currently working on the development of methodologies for eligible carbon removals activities, which are necessary for the practical implementation of the Regulation.

14.2.4. Bioeconomy

The new EU Bioeconomy Strategy, due for adoption by the end of 2025, aims to advance innovation and maintain the EU's leadership in the bioeconomy. It will propose actions to unlock the potential of bioeconomy innovations, so that they can reach the market, generating green jobs and growth. The strategy will also focus on reinforcing circularity and sustainability, while contributing to the decarbonization of the EU economy. It will set the framework conditions to enable bioeconomy startups, entrepreneurs and new business models to thrive. Currently, the outcomes of the EU's public consultation on the forthcoming strategy are being analysed.

14.2.5. Biotic and abiotic disturbances

Forest damage in 2024 is characterized by continued extensive browsing damage and a significant reduction in bark beetle infestations. It has been previously established that the drought year of 2018 triggered the bark beetle outbreak that the forestry sector has since been struggling to control. Although 2024 was not a drought year, drought stress effects are still visible in the forest, most likely linked to the hot and dry summer of 2018. On Gotland, a widespread decline in vitality was observed during 2024, in the form of reduced growth and increased pine mortality in planted pine stands aged 20–60 years situated on poor and sandy soils. This decline has been gradual but has accelerated since the dry summer of 2018.

This year's undulate browsing inventory (Äbin), which included nearly 50,000 sample plots across the country, shows that annual damage to pine remains high. Overall, Äbin shows that 12 per cent of pines in young forests (1–4 metres tall) have sustained annual damage. This is more than twice the societal target of a maximum of five per cent

Bark beetle damage has continued to decrease. The National Forest Inventory's targeted damage survey in 2024 showed that damage has decreased by 95 per cent since 2021, when it peaked. This suggests that the outbreak has subsided and returned to a more normal level after a long outbreak cycle that began during the extremely hot and dry summer of 2018. In total, it is estimated that just over 34 million forest m^3 of spruce have been killed by spruce bark beetles since the outbreak began.

Dutch elm disease continues to spread throughout the country, and 2024 appears to have been a particularly aggressive year. Reports of infected elms came from nearly all counties in Götaland and Svealand, especially urban areas. In Gothenburg, a large number of elms were found to be infected during 2024. On Gotland, where monitoring and control efforts have been ongoing since 2007, a significant increase in Dutch elm disease cases was reported compared to 2023. In 2023, about 5,200 infected elms were found, while in the summer of 2024, 7,200 cases were detected.

In 2023, infections by Diplodia were recorded on lodgepole pine in Hälsingland—this was the first confirmed Diplodia attack on lodgepole pine in Sweden and likely the northernmost finding in the

world. In 2024, further infections on lodgepole pine were observed in Dalarna and Gävleborg counties.

The unsettled summer weather during 2024 resulted in a relatively low number of forest fires. Using mainly satellite imagery and SOS alert points, the Swedish Forest Agency registered 117 unplanned forest fires approximately half a ha or larger during the year. The total area affected amounted to approximately 185 ha, which is considerably lower than in 2023 (530 ha) and 2022 (460 ha). No major storms hit Sweden during 2024. However, a severe weather event named Jari struck the Norrland coast from November 20 to 22, bringing strong winds and abundant snow. The storm was estimated to have damaged approximately 100,000 m^3 of forest. A somewhat larger storm hit the inland of Norrland (mainly Jämtland County) in January 2025. It is estimated that approximately 250,000–300,000 m^3 m^3 of forest were felled during the storm.

14.2.6. Raw material supplies

In recent years, high demand and rising timber prices have pushed Swedish harvesting levels close to their maximum potential. This has also led to increased imports of raw material for the Swedish forest industry. The supply of raw material is the most limiting factor for the forest industry.

Over the past decade, growth in the Swedish forest has declined, not least due to problems with drought. This has led to some concern about the long-term wood supply and the need for measures to secure or increase growth. Preliminary results from recent years indicate that this trend has been broken, and some recovery can be observed.

For several years, bark beetle damage created a need for salvage logging, which locally resulted in an oversupply. This situation has now stabilized.

The implementation of the EU Green Deal, together with possible national policy changes, creates some uncertainty on the supply side. This is particularly true for the Nature Restoration Law. Parts of the planned harvesting resources require extensive consultations with, among others, the reindeer husbandry sector, and in other cases, court proceedings.

14.2.7. Traceability and supply chains

The demand for and need for well-functioning traceability is increasing in the Swedish forest sector, driven by evolving EU legislation. Since 2013, the EU Timber Regulation (EUTR) has governed the placing of timber and timber products on the EU market, aiming to prevent trade in illegally harvested wood. In Sweden, inspections began in 2014 following the implementation of national legislation. The regulation emphasizes supply chain transparency, requiring operators to conduct risk assessments and maintain documentation on the origin of timber, including country of harvest and tree species.

The Swedish Forest Agency conducts risk-based inspections, primarily targeting importers, but also including domestic traders and timber purchasers. Companies are required to establish and maintain a due diligence system (DDS) that is regularly updated and effectively minimizes the risk of illegal timber entering the supply chain. Species identification through sampling remains an integral part of enforcement activities.

Looking ahead, the EUDR will replace the EUTR. During a transitional period, the EUTR will continue to apply to certain wood products. The EUDR introduces stricter traceability obligations, requiring that products placed on or exported from the EU market be deforestation-free, legally produced, and covered by a DDS. Operators must be able to trace the origin of commodities down to geolocation coordinates, and verification data must be linked through a reference number generated by the EU Information System and shared throughout the supply chain.

Inspections under the EUDR are expected to follow similar procedures as under the EUTR. Complementary national legislation in Sweden is anticipated in 2026, further reinforcing traceability as a central component of market access and regulatory compliance.

14.3. Market developments

In the short term, market development remains marked by weak construction activity in Sweden and Europe, which has dampened demand for sawn

timber and other building-related wood products. At the same time, demand for pulp remains strong on the global market, supported by structural growth in sustainable packaging and hygiene products, although volatility is expected to continue. Product prices, while still elevated compared with historical levels, are increasingly challenged by the slowdown in the economy and changing trade flows.

Swedish exports have stabilized at high levels, but the strengthening of the krona could limit competitiveness going forward. Trade policy uncertainty, particularly in the US, is also a factor that may affect global trade flows.

In the medium term, the outlook for the Swedish forest industry remains positive. The transition towards a bio-based economy and the growing demand for sustainable materials suggest that long-term demand will increase at a faster pace than supply, providing opportunities for continued strong development in the industry.

14.3.1. Wood raw materials

In 2024, the total harvested net volume amounted to 70.4 million m^3, representing a decrease of 2 per cent compared with the previous year (see Table 14.1). Harvesting in 2025 is projected to reach 70.7 million m^3, a small increase of 0.4 per cent of the harvested volume.

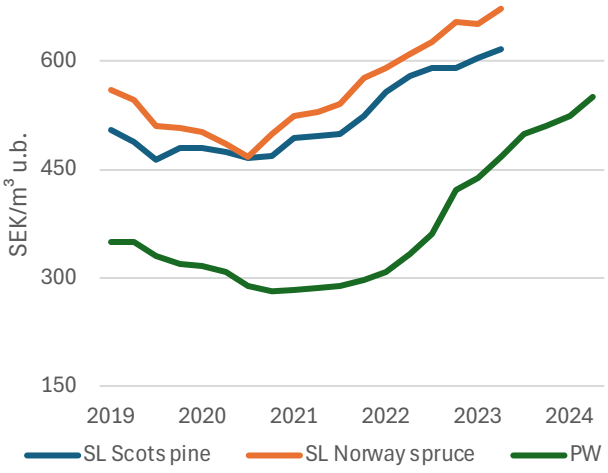
TABLE 14.1
Sweden: Wood raw materials production (2024-2026)[m^3]

	2024 preliminary	*2025 forecast*	*2026 forecast*
[	***[M m³ u.b.]***	***[%]***	
Net felling	70.4	±0	-1
Removals of coniferous sawlogs	34.2	±0	-1
Removals of pulpwood	30.2	+2	-1
Removals of fuelwood	5.6	-2	±0
Import of roundwood	9.2	-2	±0
Production of chips and residues	16.4	±0	±0

Note: M m^3: roundwood in million m^3 solid volume exclusive bark.
Source: Swedish Forest Agency, 2025.

The price of sawlogs has increased significantly as a result of the timber shortage. The shortage of spruce has contributed to a particularly sharp increase in the price of spruce sawlogs. Between Q1 2021 and Q1 2025, the price of spruce sawlogs rose by 139 per cent, while pine sawlogs increased by 109 per cent (Graph 14.1). The price of pulpwood has also followed this upward trend, rising by 124 per cent over the same period.

GRAPH 14.1
Sweden: Quarterly prices sawlogs and pulpwood (2011-2025) [SEK per m^3 u.b.]



Notes: SL: sawlogs; PW: pulpwood (softwood and hardwood); SEK: Swedish Krona; u.b: under bark.
Source: Swedish Forest Agency, 2025.

14.3.2. Sawn softwood and sawn hardwood

Production of sawn softwood is expected to remain stable at 17.8 million m^3 in the coming years, according to information from the Swedish Forest Industries. High timber prices are exerting pressure particularly on sawmills in the southern part of Sweden, where prices are at their highest. It is also in the southern half of the country that sawmills are being closed or reducing operations due to declining profitability, as well as efforts to push timber prices downward.

The sharp rise in the export price index for sawn wood in 2021–2022 was driven by strong global demand and limited supply. As pandemic restrictions eased, construction and renovation activity accelerated, while demand from major markets such as the United States and China added further pressure.

At the same time, bark beetle infestations in Central Europe reduced timber availability, and global logistics disruptions, including container shortages and high

freight costs, constrained supply further. Rising raw material costs and a weak Swedish Krona also contributed to higher export prices in Swedish Krona.

Since then, prices have declined significantly due to weaker demand from the global economic slowdown and reduced housing construction, while a stronger krona has lowered export values, bringing prices down from the extraordinary highs of 2021–2022.

Production of sawn hardwood accounts for less than 1 per cent of total sawn timber production. The raw material consists mainly of oak and birch and is used in furniture manufacturing and the interior design industry.

14.3.3. Wood-based panels

In 2023, the total production of particle boards and plywood amounted to 687,000 m^3, representing a 3 per cent decrease from the previous year, according to the Swedish Federation of Wood and Furniture Industry (TMF). Since 2012, Sweden has had no production of fibreboard. The number of manufacturers of wood-based panels in Sweden has consistently been three producers for the last decade. A comparable volume, 663,000 m^3 of wood-based panels, is imported from other countries.

14.3.4. Pulp and paper

The Swedish pulp industry exports approximately 90 per cent of its output and has for several years benefited from a weak krona. Over the past year, however, the krona has strengthened by 10 per cent against the US dollar. This appreciation has adversely affected the profitability of pulp mills exporting market pulp, where revenues are heavily exposed to US dollar-denominated markets.

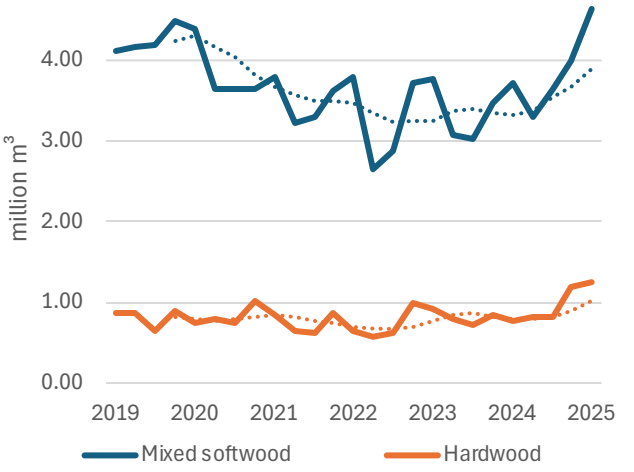
In addition to exchange rate effects, the pulp industry is under pressure from the economic downturn and an international overcapacity in market pulp, while the price of domestic raw material has increased (Graph 14.1) Pulpwood inventories over the past year, from the third quarter of 2024 to the second quarter of 2025, were 19 per cent higher than in the previous year (Graph 14.2). This indicates that the pulp industry is struggling to find outlets for its products.

TABLE 14.2
Sweden: Production and export of woodpulp and paper and paperboard (2024-2026) [tonnes]

	2024	*2025**	*2026**
	[million t.]	*annual change [%]*	
Wood pulp production	11.4	-2	+1
Wood pulp export	3.5	+2	+1
Paper and paperboard	8.1	-2	+1
Paper and paperboard export	8.2	-1	±0

Note: *: forecast.
Source: Swedish Forest Industries, 2025.

GRAPH 14.2
Sweden: Stocks of pulpwood (2019-2025) [million m^3]



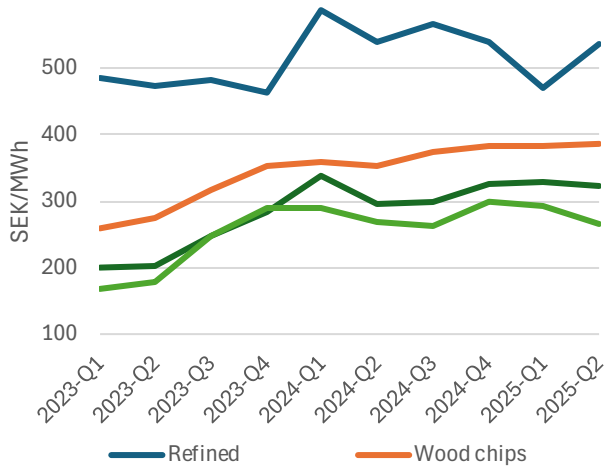
Note: The inventory data are reported as end-of-quarter values, reflecting a snapshot in time. Dotted lines show moving average over four quarters
Source: Swedish Forest Agency, 2025.

14.3.5. Wood energy

The price increases for unprocessed wood fuels began in 2022 in connection with the Russian Federation's invasion of Ukraine and the subsequent sanctions against the Russian Federation and Belarus. For processed wood fuels, the upward trend had already started in 2021 because of reduced availability of natural gas from the Russian Federation in Europe. Historically, Swedish prices for wood chips have been below international levels but have gradually converged. The mild weather in 2024 reduced demand in the district heating sector and contributed to lower prices (Graph 14.3). Low electricity prices have also diminished demand for biomass fuels. At the same time, reduced sawmill production may lead to a lower supply of by-products available for use as biomass fuels.

GRAPH 14.3

Sweden: Quarterly wood fuel prices for district heating (2023-2025) [SEK/MWh*]



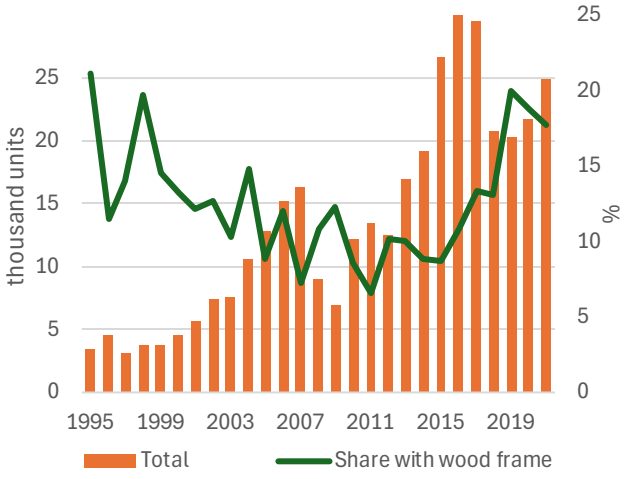
Notes: *excluding TVA; SEK: Swedish Krona; MWh: Megawatt hour.
Source: Swedish Energy Agency, 2025.

14.3.6. Housing and construction

In 2022, the Riksbank began raising interest rates after a prolonged period of low rates. As a result, housing starts for multi-dwelling buildings declined by 65 per cent from 2022 to 2023 (Graph 14.4). Although the share of multi-dwelling buildings with timber frames increased slightly, the overall decline in construction has had a significant negative impact on timber house companies.

GRAPH 14.4

Sweden: New multi-dwelling buildings and the share built in wood frame (1995-2021)



Source: Statistics Sweden, 2025.

In 2024, interest rates began to be lowered gradually, and order intake during the year amounted to 3,684 apartments according to TMF statistics, an increase of 129 per cent compared with 2023, while for single-family houses the figure was 2,891, representing an increase of 12.1 per cent.

The demand for housing in Sweden remains high, and the National Board of Housing, Building and Planning (Boverket) estimates that 523,000 new dwellings will be needed during the period 2024–2033. However, there are considerable uncertainties in the forecast, which has been revised downward by 77,000 dwellings compared with the previous forecast for 2021–2030

14.4. Gender and Human Rights Issues in the Forest Products' Sector

Men have greater power than women to influence the forest and how it is managed. The sector is characterized by a traditionally male culture, and men dominate the labor market, in leading positions and as forest owners.

At the same time, there is increased awareness within the forestry sector of problems, and a desire for change. One example is the national forum Forest Sector Gender Equality Council (Skogssektorns jämställdhetsråd). The council includes 35 members from the sector, devoted to work for a positive change for gender equality work within the sector as a whole. The various members consist of companies, industry organizations, trade unions, authorities, research, education and other networks. The common goal is "An inclusive and equal forestry sector where everyone, regardless of gender, has the same power and right to act, influence and develop."

The Swedish Forest Agency has a high ambition to support and drive development throughout the forestry sector. The agency has set goals to contribute to the Swedish gender equality policy goals, and works with strategic gender mainstreaming.

15. UKRAINE

carpathian nature scenery with river on a sunny day in spring. trees along shore and forest on the hill. mountainous landscape of ukraine beneath a blue sky with fluffy clouds. Pellinni / stock.adobe.com

15. Ukraine [30]

15.1. Market Drivers

Military actions in Ukraine not only have a significant impact on the internal situation in the country but also affect global timber markets, likely leading to long-term consequences. Sanctions and restrictions imposed against the Russian Federation in responseto their military actions in Ukraine will likely contribute to a further rise in prices for wood products both in Ukraine and Europe.

The environmental consequences of the ongoing military actions in Ukraine will likely include the weakening of environmental regulations and an increase in logging volumes in response to heightened demand for timber. This, in turn, may lead to a greater scale of deforestation, including illegal logging.

According to the NGO "Forest Initiatives and Society," based on a survey of forest users (official statistics that fully reflect the volumes of illegal logging across all categories of forest users in Ukraine are currently unavailable), the following dynamics of illegal logging have been observed: a gradual decline was seen from 2019, when the volume was 125.3 thousand m^3, to 24.3 thousand m^3 in 2022. However, since 2023, the figures have begun to rise again: 30.3 thousand m^3 in 2023 and 39.6 thousand m^3 in 2024, which constitutes 0.2% and 0.27% of the legal logging volume, respectively.

This increase in illegal logging volumes over the last two years indicates a negative trend that affects the functioning of the domestic timber market and leads to increasing volumes of illegally obtained timber entering the woodworking industry. It should be noted that the officially recorded volumes of illegal logging (5295 cases in 2024) reflect only a fraction of the real volumes, which is a negative factor in the context of Ukraine's aspiration for EU membership. Furthermore, the low level of identification of persons involved in unauthorized felling, as well as limited compensation for the damage caused to the forest fund, contribute to the recurrence of such offenses, undermining efforts to conserve forest ecosystems and strengthen environmental protection legislation.

Timber price dynamics remain one of the key discussion topics among participants in the construction, forestry, and woodworking sectors. Despite improvements in supply chain operations, the market continues to face a number of factors that keep prices at a relatively high level.

The combination of macroeconomic trends, growing global demand, and structural challenges on the supply side suggests that no significant reduction in lumber prices occurred in 2025. The construction boom in the United States is one of the stimuli for lumber exports in 2025. The increase in wood product prices in EU countries, which also contributes to exports from Ukraine, is partly due to a reduction in the volume of damaged timber that previously lowered its overall market value. Additionally, the decreased availability of quality raw materials creates extra price pressure in Europe.

Ukraine was one of the first states to support the European Green Deal (EGD), arguing it offered an opportunity to influence the minimization of environmental risks and threats through participation in joint decarbonization projects. The dialogue between Ukraine and the EU on the implementation of its provisions began in February 2021.

The implementation of the EGD creates new opportunities for Ukraine within the framework of European integration but also requires business adaptation and restructuring in line with the requirements of the new EU environmental policy (particularly in the forestry and woodworking sectors). In 2025, the European Parliament positively assessed Ukraine's progress in reforming the energy sector and its gradual harmonization with the EGD's goals. The development of the legal infrastructure for preventing environmental offenses, particularly crimes against the environment, was separately noted. At the same time, the European Parliament's Resolution speaks of the necessity to "effectively combat illegal logging, in

[30] Submitted by the State Forest Resources Agency of Ukraine to the 83rd session of the UNECE Committee on Forests and the Forest Industry (COFFI) Geneva, 2-4 November 2025.

line with sustainable forest management and environmental protection standards, including illegal logging in the Carpathian old-growth forests."

Experts from the World Wide Fund for Nature (WWF), in their comments on the European Commission's 2025 Report on Ukraine's progress towards EU membership, suggest that Ukraine needs to expand and improve the mechanisms for applying EIA and SEA procedures. Particular attention is recommended for their application to all plans, programmes, and projects, especially in the context of the country's postwar reconstruction.

However, the practical implementation of the EIA procedure for clearcutting carried out by forestry enterprises creates a number of economic and organizational challenges. In particular, it significantly complicates and slows down the implementation of measures to maintain the biological stability of stands. As a result, there is a reduction in the volume of legal logging, which negatively impacts the functioning of the domestic timber market. The artificially created deficit of commercial unprocessed timber leads to increased competition among woodworking enterprises for the limited resource, which further stimulates an increase in prices for commercial roundwood. This creates obstacles to the stable development of the country's woodworking industry. Despite these difficulties, deviations from the EIA and SEA requirements cause concern, especially in the forestry and agricultural sectors. This could lead to non-compliance with the European Union's environmental standards, which is critical for Ukraine's integration into the European legal space.

One of the additional factors contributing to the reduction in the volume of roundwood entering the domestic Ukrainian market is the transition to close-to-nature forestry, which is currently being actively implemented in the Carpathian region. This approach involves a ban on clearcutting with the introduction of selective and gradual systems, as well as a shift from artificial reforestation (creating forest cultures) to natural regeneration of forests and the formation of complex, uneven-aged, multi-layered, and biologically stable forest ecosystems, particularly those adapted to the effects of climate change.

Close-to-nature forestry has a positive impact on biodiversity conservation, forest resilience, and the improvement of their ecological status. However, this approach is accompanied by a decrease in the intensity of logging and a deterioration of the financial and economic performance of the forestry sector as a structure that pays for logging operations to private business entities.

On December 30, 2025, the European Union Deforestation Regulation (EUDR) will enter into force in Ukraine for timber product exporters, particularly large operators and traders in the woodworking sector. Among the main requirements of the EUDR is to prohibit the entry into the EU market of products that have caused deforestation or forest degradation in the process of their production. The Regulation requires full traceability of the supply chain for wood products—from their place of origin to the final consumer. A mandatory element is the geolocation of the timber harvesting sites, which should ensure the precise determination of its growing location.

The application of the EUDR provisions significantly strengthens the environmental responsibility of Ukrainian exporters towards European partners, stimulating increased transparency and sustainability in supply chains. Specifically, mandatory control elements include: an electronic logging ticket, an electronic consignment note (e-CN) with photo fixation, an electronic certificate of timber origin, and other tools aimed at preventing illegal timber operations. While the implementation of these procedures will help improve environmental control and reduce the level of illegal logging, it also creates an additional economic burden on businesses related to the costs of ensuring compliance with the new requirements.

It is expected that the implementation of the EUDR may lead to a temporary reduction in the volume of Ukrainian woodworking product exports to EU countries in early 2026, due to the adaptation period for market operators. At the same time, in May 2025, the European Commission granted Ukraine low-risk

country status in accordance with the EUDR requirements, which is a positive assessment of reforms in the sphere of environmental responsibility of the forest sector and may contribute to the further strengthening of trade relations with the EU.

Key directions of Ukraine's state policy in the forestry and woodworking sectors remain the continuation of the moratorium on the export of unprocessed commercial timber, the introduction of zero quotas on the export of fuelwood, the implementation of an electronic timber accounting system, and the functioning of transparent exchange trading. These measures are declared as reforms aimed at developing the domestic woodworking industry, reducing corruption, and increasing the transparency of the timber market's functioning.

September 2025 marks three years since the start of the large-scale reform of the forestry management system in Ukraine, which was accompanied by the creation of the state specialized enterprise "Forests of Ukraine" (SE "Forests of Ukraine")—the largest forestry entity in Europe. Currently, this enterprise is the main supplier of wood raw materials to the domestic market of Ukraine. During the reform process, woodworking shops were removed from the structural production units (forest districts) of SE "Forests of Ukraine." This made it possible to direct an additional over 2 million m^3 of wood per year to the woodworking industry. The next stage of the reform plans the corporatization of SE "Forests of Ukraine" with its subsequent transformation into a state joint-stock company. Such a transformation provides the opportunity to attract funds from International Financial Organizations (IFOs) for infrastructure development, technological base modernization, and increased efficiency of the forestry sector's functioning.

Among the measures reforming the Ukrainian forestry sector, the initiative for the mandatory sale of the entire volume of round timber and industrial fuelwood exclusively through the mechanism of exchange trading (auctions) received an ambiguous assessment from the public and representatives of the woodworking industry. This approach is viewed as a tool to ensure transparency, reduce corruption risks, and stimulate fair competition. The mechanism for selling timber from forestry enterprises to entities in the woodworking sector is key to ensuring equal access to resources for all categories of market participants (small, medium, and large enterprises).

In conditions of limited timber supply and a large number of consumers, tension is rising among different categories of market participants regarding resource allocation. Despite ongoing attempts to regulate the situation, the draft law "On the Timber Market" is still not adopted as of September 2025, and its various versions have been under discussion since 2021. At the current stage, the main critics of the current system of exchange-traded timber sales are small businesses in the woodworking sector, who believe that the existing mechanism favors large businesses and contradicts the principle of non-discrimination. In particular, they emphasize the need to create mechanisms that would ensure proportional access to resources and take into account the limited financial and operational capabilities of small businesses.

15.2. Market Development

15.2.1. Wood Raw Materials

In 2024, 14.89 million m^3 of roundwood were harvested in Ukraine—2.4% less compared to 2023 (0.37 million cubic metres). The decrease in the total harvesting volume occurred mainly due to a reduction in fuelwood harvesting: its volume amounted to 8.11 million m^3, which is 5.8% (or 0.5 million cubic metres) less than the previous year. At the same time, commercial roundwood harvesting increased to 6.78 million m^3, which is 0.14 million m^3 (or 2%) more than in 2023.

The decrease in fuelwood harvesting volumes may be due to several factors: export restrictions, which reduced the economic feasibility of its harvesting, and a reduction in the population in rural and front-line areas, which consequently decreased the demand for firewood for heating.

In terms of fuelwood species, 3.55 million m^3 account for coniferous species (up 6.7% from 2023), while 4.57 million m^3 are broadleaf species (a decrease of 13.7%).

In the assortment structure of commercial roundwood (6.78 million cubic metres), coniferous species predominate - 5.27 million m^3, or 77.8% of the total volume. The share of broadleaf species is 1.51 million m^3 (22.2%). This structure confirms the continued orientation toward the production of lumber, construction, and structural wood products.

The legislative ban on the export of commercial roundwood, which has been in effect since 2017, remained valid in 2024. Fuelwood export is also restricted—the quota for round timber is 0 tonnes. This makes it impossible to export unprocessed wood abroad, instead stimulating the development of the domestic woodworking industry.

An important step in 2024 was the separation of woodworking shops from the branches of SE "Forests of Ukraine", which contributed to the additional release of roundwood into the domestic market. This partially reduced competition for wood raw materials among private woodworking enterprises.

In the future, after the war ends and large-scale reconstruction begins, demand for commercial roundwood from the construction sector and the woodworking industry is expected to grow. However, the pace of this growth remains uncertain due to a lack of precise data on economic losses and the scale of future investment in Ukraine's recovery.

15.2.2. Sawn Softwood

Sawn softwood dominates in Ukraine, accounting for over 80% of the total production volume. In 2023, 2.717 million m^3 were produced—with no significant changes compared to the previous period. Of this volume, 1.627 million m^3 were exported, which is approximately 60% of the total production. This indicates some recovery in export activity after a significant decline in 2022.

At the same time, domestic consumption slightly decreased—by 9.2% compared to the previous year but remained at a fairly high level—1.092 million m^3. This confirms stable demand for sawn softwood in Ukraine, primarily in the areas of construction, infrastructure repair, and the erection of defensive structures.

Imports of sawn softwood remain consistently small—only about 2 thousand m^3, which does not significantly affect the domestic market.

The trend toward a balance between export and domestic consumption is expected to continue in the coming years. This is due to both limitations on timber harvesting volumes and the growing needs of the domestic market.

15.2.3. Sawn Hardwood

In 2023, 484 thousand m^3 of sawn hardwood were produced in Ukraine, which is almost 1.7 times more compared to 2022 (287 thousand cubic metres). Export of sawn hardwood amounted to 249 thousand m^3, which is 39.9% less than the previous year, and its share in production remained quite high—about 51.4%. Imports, as before, remained insignificant at only 2 thousand m^3. Domestic consumption increased to 237 thousand m^3, up 21.5% from 2021 (195 thousand cubic metres).

The dynamics of sawn hardwood volumes in 2023 indicate some recovery in production and growth in domestic demand after a sharp decline in 2022. Despite exports remaining a key sales channel, the share of domestic consumption in the total production volume has increased significantly, which may indicate a gradual shift toward a more balanced market.

15.2.4. Veneer Sheets

In 2024, veneer production in Ukraine amounted to 216 thousand cubic metres—at the level of 2022, but still below 2021 figures. Imports remained insignificant—only 4 thousand m^3, which is less than 2% of the volume of domestic production.

About 125 thousand m^3 of veneer were exported, which corresponds to 58% of the total production volume. At the same time, domestic consumption reached 95 thousand m^3 (up 43.9% from the previous year), indicating a significant revitalization of demand in the domestic market not only compared to 2022 but

also to the pre-war period—volumes exceeded the 2021 level (79 thousand cubic metres).

Despite the stabilization of production, a full recovery to 2021 figures has not yet occurred.

15.2.5. Wood-based Panels

In 2023, the wood-based panels market in Ukraine showed signs of stabilization after significant fluctuations caused by the crises of previous years. Production of most types of products, including plywood, particleboard (chipboard), OSB, fibreboard (hardboard/softboard), and MDF/HDF panels, remained at the 2022 level or showed a slight increase.

At the same time, a significant reduction in imports was observed for most panel types in 2023 (with the exception of high-tech OSB and MDF/HDF panels), which may indicate an overall decrease in demand. Specifically, plywood imports decreased almost twofold—from 18 to 10 thousand m^3, and particleboard imports by 35%, from 37 to 24 thousand m^3.

Against the background of a decrease in exports, especially plywood (from 166 to 64 thousand cubic metres) and particleboard (from 292 to 178 thousand cubic metres)—domestic consumption increased, indicating a reorientation of these products toward the domestic market.

OSB panel production volumes remained stable during the war period (2022–2023), and exports were at a high level (34% of production volumes), along with a significant (more than 9 times) reduction in imports.

In the fibreboard segment in 2023, a slight decrease in domestic consumption was recorded (from 522 to 508 thousand cubic metres), as well as imports (by 9.7%) while maintaining a stable level of production and export.

MDF/HDF panels (118 thousand m^3, exceeding production volumes in 2023 by 1.5 times) and other panels (15 thousand m^3 in 2023 with no domestic production) remain import-dependent segments. At the same time, a certain growth in domestic demand is observed in the MDF/HDF segment, although it lags behind pre-war volumes by more than 2.5 times.

Overall, export activity decreased during wartime (2022–2023) in most panel categories (except OSB), likely due to logistical barriers and the loss of some external markets.

The consumption structure in 2023 indicates the relative resilience of the domestic panel market despite general economic difficulties. National producers partially compensated for the reduction in exports with growing domestic demand, which supports the industry. The decrease in imports against the backdrop of stable or growing production confirms the trend toward import substitution.

Slight changes in the production of certain panel types indicate the high adaptability of the industry to difficult conditions. The preservation of production capacities is a positive signal for the economy, especially given the limited access to resources. The overall market dynamics suggest a gradual recovery of the wood-based panel sector in Ukraine despite ongoing challenges.

15.2.6. Pulp and Paper

The pulp and paper raw materials market in Ukraine is characterized by the complete absence of national production and a high level of import dependence. In 2023, the main volumes of domestic consumption were ensured by the supply of imported wood pulp (37 thousand tonnes) and pulp (a total of 37 thousand tonnes, of which 32 thousand tonnes was bleached sulphate pulp).

In 2019–2021, a gradual increase in imports was observed across all main commodity categories, indicating stable domestic consumption and industry development. However, starting from 2022, against the backdrop of full-scale military actions, disruption of logistics chains, and a decrease in industrial demand, import volumes significantly decreased—almost twofold compared to 2021. In 2023, imports remained stable at the reduced level. At the same time, the import of mechanical wood pulp and semi-chemical pulp was completely stopped. There are no signs of recovery to pre-war volumes yet.

The paper and cardboard market in Ukraine showed signs of gradual stabilization in 2023 after a significant decline caused by the full-scale military actions in 2022. Total domestic consumption of industry products increased by 5.8% compared to the previous year and amounted to 1.315 million tonnes, which, however, remained below the pre-crisis level of 2021.

The volumes of domestic production remained at 982 thousand tonnes, showing no growth trend, which indicates limited investment in the restoration of production capacities. At the same time, imports of paper and cardboard increased in 2023 by 14.7%—to 375 thousand tonnes, which points to an increased structural dependence of the market on external supply sources.

Export of paper and cardboard decreased in 2023 by 36.4% compared to 2022 (to 42 thousand tonnes), which indicates the industry's reorientation toward satisfying domestic demand. The situation in the printing paper segment remains particularly critical, where over 95% of consumption volumes are provided by imports.

The production of household and hygiene paper was maintained at a stable level in 2023 (156 thousand tonnes), while domestic consumption increased to 171 thousand tonnes, which is a record figure for the last five-year period. A similar dynamic was observed in the packaging paper and cardboard segment: consumption increased by 3.8% (to 973 thousand tonnes), against a backdrop of stable production and increased imports.

Recycled paper processing in Ukraine remained stable throughout 2019–2023, amounting to about 725 thousand tonnes annually. At the same time, domestic consumption in 2023 was 30.7% lower compared to the peak level of 2021. Along with a decrease in import volumes, this may indicate a general slowdown in economic activity, a reduction in domestic demand for paper products, and a decline in industrial production—especially in sectors with high consumption of packaging materials.

Overall, in 2023, the Ukrainian paper product market was characterized by a partial recovery of domestic demand, while production remained at crisis level, imports compensated for the deficit, and export activity continued to decline.

15.2.7. Wood Energy

In 2025, the Renewable Energy Sources (RES) sector in Ukraine continues to develop actively, despite the difficult conditions and challenges of wartime. Ukraine entered the top 10 countries globally for the pace of RES development and ranked among the top 5 European countries for solar energy development.

Large-scale damage to RES facilities due to military actions spurred active recovery work in 2025. According to estimates by the Ministry of Energy of Ukraine, up to 75% of RES facilities were damaged during the war. Renewable energy is set to become one of the priority sectors for Ukraine's post-war recovery.

Bioenergy in Ukraine (production of liquid biofuels, biogas, use of pellets, logging and agricultural waste) significantly lags behind wind and solar sources in the RES structure. According to the National Renewable Energy Action Plan until 2030, the share of RES in gross final energy consumption should reach 25% in 2030. However, the government plans to update the National Energy and Climate Plan in 2025 by analyzing achieved results, adjusting goals, policies, and measures in light of the challenges of the war and opportunities for accelerating the green transition.

Furthermore, the share of biomass along with biogas is expected to reach almost 81% of all RES in the heat energy sector in 2030 (involving 35.3 million tonnes of oil equivalent of solid biomass). In the electricity generation sector, as of early 2024, 24 biomass electricity facilities with a total electrical capacity of 178 MW were operating under the "green" tariff in Ukraine. Through the construction and commissioning of new bio-generation capacities, electricity production from biomass could be increased to 3850 GWh in 2030 (with a total capacity of about 876 MW).

In Europe, due to high gas prices, there is a demand for bioenergy products for heating, particularly from wood: firewood, pellets, etc. Given the ban on the

export of fuelwood from Ukraine, the supply of other types of energetic wood resources to European markets is stimulated.

Specifically, pellet imports to Ukraine ceased entirely in 2023, while export volumes increased by 16.4% compared to the previous year (to 482 thousand tonnes), with their share in production exceeding 96% during 2022–2023. Pellet production volumes also increased in 2023 by 16.3% (to 500 thousand tonnes), while domestic consumption, conversely, decreased by 21.7% (to 18 thousand tonnes). This is likely due to the fact that the traditional rural population in Ukraine prefers fuelwood for heating their homes, given sufficient harvesting volumes during annual forest felling.

In 2025, to stimulate the expansion of RES use, particularly solid biofuels, "green" tariffs continue to operate in Ukraine. These are established for consumers' generating installations. Their size depends on the energy source and the capacity of the installation, as well as the date of its commissioning.

15.2.8. Certification of Forests and Forest Products

According to the State Strategy for Forest Management of Ukraine until 2035, forest certification is a marketing tool to increase the competitiveness of forestry production. The Strategy envisages that comprehensive state support should be provided for the national PEFC forest certification system and the international FSC certification system as the basis for healthy competition while achieving common goals.

According to the Operational Plan for the implementation of the State Strategy for Forest Management of Ukraine in 2022–2024, at least 10 enterprises should be certified under the PEFC system and 50 under the FSC system. According to SE "Forests of Ukraine" data as of 11.12.2024, 4.69 million ha of forests (95.6% of the total area) are certified under the FSC system; the number of certified branches is 95. Under the PEFC system, 202.75 thousand ha are certified in 7 branches.

15.2.9. Housing and Construction

In 2024, the construction of residential buildings with a total area of 3.9 million m^2 began in Ukraine, which is 7.2% less compared to 2023. The structure of new residential construction remains predominantly oriented towards multi-apartment buildings, which accounted for 94.4% of the total volume. At the same time, growth is observed in the single-family housing segment: in 2024, its construction area increased by 19.4% year-on-year and reached 196.6 thousand m^2.

Significant growth was also recorded in the construction of dormitories – 22.7 thousand m^2, which is more than three times the figure for 2023. This dynamic may indicate a growing need for temporary or social housing for internally displaced persons, students, or workers.

After reaching a peak level in 2021 (12.7 million m^2), the total volume of residential construction in Ukraine sharply declined due to the full-scale war. In 2022, the construction volume decreased almost twofold—to 6.7 million m^2. The decline continued in 2023, with a further reduction of 37% compared to the previous year. In 2024, the rate of decline slowed down, which may indicate the beginning of stabilization in the construction sector. The overall dynamics suggest a gradual adaptation of the industry to wartime conditions and a potential approach to the recovery stage in the medium term.

In 2024, a significant revival in the non-residential construction sector was recorded in Ukraine: the total area of facilities where construction began amounted to 4.41 million m^2, which is 54% more compared to 2023. The main contribution to the growth was provided by industrial and warehouse facilities, whose area almost doubled – from 1.18 million m^2 to 2.32 million m^2. This indicates the activation of logistics and production processes in the country.

Significant growth was also recorded in the category of hotel and similar buildings (up 183%), which may reflect the gradual recovery of the tourism sector, as well as the internal mobility of the population. Moderate growth is observed in the office and retail real estate segments—up

15% and 5% respectively, which may indicate a stabilization of the commercial real estate market.

At the same time, a decrease in construction volumes was noted in the area of transport and telecommunication infrastructure (down 23%), which remains the least dynamic among the main categories. A positive dynamic is observed in the field of public leisure, education, and healthcare, where the construction volume increased by 36%. This is likely related to the implementation of programmes for the restoration of critically important social infrastructure.

After a significant decline in 2022–2023, caused by the consequences of the war, non-residential construction is showing signs of recovery. Despite this, current volumes still have not reached the levels of 2019 or 2021. Overall, the structure of non-residential construction in 2024 indicates a gradual adaptation of the economy to protracted crisis conditions and the formation of the basis for sustainable recovery.

In the context of post-war recovery and support for domestic demand for construction services in Ukraine, the "eRecovery" compensation programme is an important state policy tool. Its implementation began in 2023 and aims to provide citizens with financial support for repairing damaged housing or purchasing new housing to replace that destroyed as a result of military actions.

The programme has demonstrated significant results in two key areas. Firstly, compensation for damaged housing was received by over 97 thousand people, with the total amount of payments exceeding 9.6 billion hryvnias for almost 154 thousand submitted applications. Secondly, compensation for destroyed housing in the form of housing certificates was received by over 20 thousand people, with the total amount of issued certificates amounting to 29.1 billion hryvnias, and the number of submitted applications exceeding 52 thousand. Over 11.6 thousand citizens have already purchased new housing with certificates, of which more than 5 thousand are internally displaced persons (IDPs).

The cost of construction in Ukraine will continue to rise, which is due to objective processes, including increased demand and inflation. According to the assessment, as of 31 December 2024, Ukraine's needs for the reconstruction and restoration of infrastructure and housing amount to almost 524 billion USD. The determined amount is approximately 2.8 times the nominal GDP of Ukraine for 2024.

15.3. Gender & Human Rights

Equality between men and women is enshrined in the Constitution of Ukraine, Part II, Article 24. Ukrainian legislation is the basis of gender equality policy, with the leading law in this area being the Law of Ukraine "On Ensuring Equal Rights and Opportunities for Women and Men" (2005), alongside the Law of Ukraine "On Principles of Preventing and Counteracting Discrimination in Ukraine" (2012). Since 2017, the position of Government Commissioner for Gender Policy of Ukraine has been in effect. The state is implementing the Concept for Preventing and Counteracting Domestic Violence until 2023, which is based on international standards and the relevant Law of Ukraine.

As of 01.01.2024, men prevail in managerial positions in the sphere of material production in Ukraine. Specifically, their share is:

- 82.1% in construction;
- 80.2% in agriculture, forestry, and fishing;
- 78.5% in industry.

15.3.1. Gender Equality in Forestry

Overcoming gender inequality in the forestry sector is one of the issues planned for resolution through the implementation of the State Strategy for Forest Management of Ukraine until 2035, approved on December 29, 2021. Section I of the Strategy states that gender inequality—the insufficient representation of women in forestry, especially in managerial and responsible positions—is one of the main problems in the forestry sector that requires resolution. Therefore, to implement the gender aspects of the Strategy, the Gender Action Plan for the Forestry Sector of Ukraine for 2022–2025 was developed.

15.3.2. SE "Forests of Ukraine" Personnel Structure

SE "Forests of Ukraine" is a strategic enterprise that implements the policy formulated by the State Forest Resources Agency and is the main production force of the forestry sector in Ukraine.

The actual number of employees at SE "Forests of Ukraine" as of 31.12.2024 is 22,022 people.

- 73% of employees have higher or incomplete higher education.
- The share of women in the enterprise's personnel structure is 15%.
- The workforce is **predominantly male**, which is associated with the peculiarities and specifics of the industry.

Gender equality at the enterprise is regulated by a separate section of the Collective Agreement. Equal employment opportunities are ensured. The enterprise initiates various projects to disseminate equal opportunity practices, encouraging employees to create equal opportunities for working men and women in the process of employment and managerial decision-making. Respect for employees' rights in accordance with current legislation is ensured.

In January 2024, the international project "Fem2forests" was launched within the framework of the Interreg Danube Region Program. It united 15 partners from 9 countries, including Ukraine. The initiative is aimed at overcoming gender inequality and attracting girls and young women to the forest sector. The project provides for the development of innovative career pathways, the strengthening of the gender component in education, and the creation of favorable conditions for women's employment in forestry.

It is worth noting that the trends observed in the forestry sector and the timber market of Ukraine during 2022–2024 are likely to persist in the coming years, as the military conflict in the country continues.

The recovery and sustainable development of the forest and woodworking sectors, as well as the economy in general, will require significant time after the cessation of hostilities. The pace and effectiveness of this recovery will largely depend on attracting substantial investments into the forestry sector. A comprehensive approach to financing is necessary, involving the participation of the state, private business, international donors, and potentially, reparations from the aggressor state.

16. UNITED KINGDOM

Aerial drone view of Keswick and Derwent Water at golden hour in summer. Whitcomberd /stock.adobe.com

16. United Kingdom [31]

16.1. General economic trends

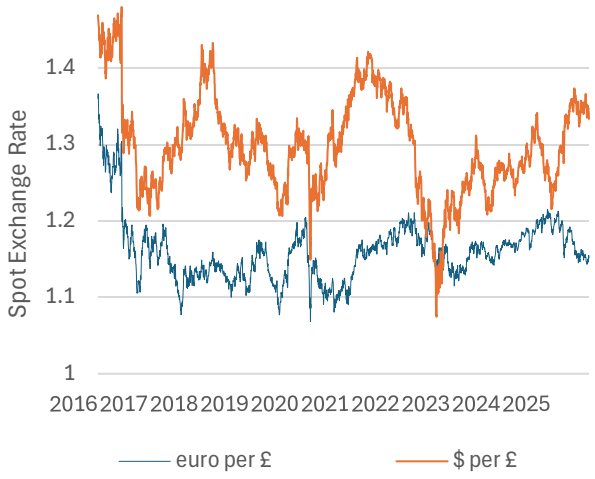
16.1.1. Overview

After a strong start in 2025, the economy in the United Kingdom is in a challenging period. It has a weakening underlying fiscal outlook, weak productivity and subdued underlying GDP growth. Although GDP growth increased to 0.7% in Q1 this fell to a 0.3% increase in Q2 2025, registering lower GDP growth than Q1 and Q2 of 2024, 0.8% and 0.6%, respectively.

In 2025, there was a continuation of the rise in the value of the pound sterling against the US dollar (Graph 16.1), due to more than US dollar moderation through monetary policy than to the strength of economic performance of the United Kingdom.

GRAPH 16.1

United Kingdom: Exchange rate pound sterling to euro and US dollar (2016-2025)



Notes: Spot Exchange Rates; £: pound sterling.
Source: Bank of England Database, 2025.

The Federal Reserve is easing its monetary policy in response to a contracting labour market and the impact of trade tariffs, putting downward pressure on the value of the US dollar as it becomes less attractive to investors. The Pound Sterling's weakness against the Euro is due to a market perception of a Eurozone which is on a path to relative, albeit modest, economic health and stability. Eurozone growth forecasts of 0.9% to 1.3%, with loosening monetary policy from the European Central Bank, contrasts with the United Kingdom's significant headwinds and slowing growth.

16.1.2. Monetary Policy

The Bank of England's (BoE) Monetary Policy Committee (MPC) vote on whether to raise, lower or maintain the Bank of England's Base Rate, upon which many other interest rates are based. Setting 'the interest rate' is one of the key macroeconomic instruments in monetary policy that help to address the Bank of England's inflation target of 2% and stimulate economic growth.

Since the introduction of tighter monetary policy – with interest rates at a 16-year high of 5.3% in August 2023 - inflation has been on a downward path. The MPC voted to cut the Base Rate a further 0.3 % to 4% in August 2025. Since then, the inflation rate has risen to around 4% due to increases in energy, regulatory and food prices. The BoE expect inflation thereafter to gradually fall back to the 2% target in the medium-term. No further cut is expected in the short term.

GRAPH 16.2

United Kingdom: Households' Savings Ratio (2015-2025) [%]

Note: Current price: £m.
Source: ONS, 2025b.

The Household Saving Rate continues to be at an historic high in the United Kingdom. Higher interest

[31] Submitted by Forest Research, the Research Agency of the Forestry Commission of the United Kingdom of Great Britain and Northern Ireland, to the 83rd session of the UNECE Committee on Forests and the Forest Industry (COFFI) Geneva, 2-4 November 2025.

rates increased the Household Saving Rate in 2024 – from 9.0% in the first quarter of 2024 to 11.7% in Q4 of 2024. The increased rate coincided with cost-of-living pressures and slower growth in household consumption. Over the first two quarters of 2025, this rate decreased to 10.7% in Q2 up from 10.5% in Q1 (Graph 16.2). The BoE's disinflationary monetary policy path may be exacting downward pressure on the savings ratio, as decreased saving implies increased consumer confidence and spending. Following a fall of 0.9% in Quarter 1 2025, real household disposable income (RHDI) per head increased in the latest quarter by 0.2%. Economic growth in the United Kingdom is partly dependent on a decreased savings ratio.

16.1.3. GDP Growth

Change in Gross Domestic Product (GDP) is currently considered the main indicator of economic growth. It measures the market value of all 'final' goods and services produced over a period of time (i.e. monthly, quarterly, or annually) in monetary terms.

The GDP of the United Kingdom is estimated to have increased by 0.3% in Q2 2025.This follows an increase of 0.7% in Q1, strong growth from the 0.2% growth in Q4 2024. The latest quarter growth was driven by increases of 0.4% in services and 1.0% in construction, while the production sector fell by 0.8%.

Annual growth is expected to fall from an overall growth rate of 1.2% in 2025 to 1.1% in 2026.

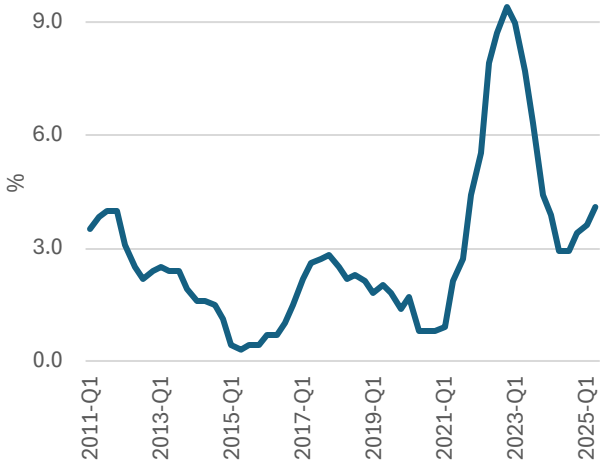
16.1.4. Inflation

The Consumer Prices Index (CPI) shows the rate at which prices are rising, or falling, in the domestic economy (Graph 16.3). As stated above, The Bank of England's (BoE) target for inflation is 2% per year.

There was a sharp rise in inflation in 2022 due to COVID-19 pandemic induced demand and supply shocks, rising to around 10% in October 2022. From this peak, the annual Consumer Prices Index including owner occupiers' housing costs (CPIH) inflation rate generally decreased to 3.4% in Q4 2024. However, it has risen to 4.1% in the latest 2025 estimates.

There were upward contributions from four sectors: restaurants, hotels (rising by 3.8% in the 12 months to August 2025), motor fuels and food (rising by 5.1% year in the same period). The largest downward contributions to the change in the annual rate came from transport services and housing services.

GRAPH 16.3
United Kingdom: Consumer Prices Index (2011-2025) [%]



Notes: Consumer Prices Index including owner occupiers' housing costs annual rate: All Items 2015=100.
Source: ONS, 2025b.

16.1.5. Employment

The employment rate for 16- to 64-year-olds (seasonally adjusted) in the United Kingdom is 75%. Since mid-2023, there has been a modest increase, although it remains below the pre-COVID-19 pandemic high – as seen in the latest quarter (Graph 16.4).

GRAPH 16.4
United Kingdom: Seasonally adjusted employment rate (2011-2025) [%]

Note: 16- to 64-year-old.
Source: ONS, 2025b.

16.2. Policy measures

16.2.1. Forestry policy in the United Kingdom

Domestic forestry policy in the United Kingdom is a devolved matter. Devolution of forestry was completed in April 2019, but some cross-border collaboration remains for a number of functions as agreed by Ministers. Scotland, England and Wales are each delivering some of these functions (commissioning and monitoring of forestry research, management of the United Kingdom's Forestry Standard and Woodland Carbon Code, Plant Health (forestry) and Forest Reproductive Material functions, provision of economist advice).

Both the government of the United Kingdom and the devolved administrations are committed to sustainable forest management, as articulated in the Forest Europe Ministerial agreements. Sustainable forest management serves as an overarching concept and framework and the approach by the United Kingdom to delivery is set out in its Forestry Standard (fifth edition) published in 2023.

International forestry policy remains a matter reserved to the government of the United Kingdom.

In March 2019 the government of the United Kingdom announced its ambitious woodland creation targets to help meet 'Net Zero' commitments made in May 2019 and to improve habitats and provide public benefits such as biodiversity, water regulation and benefits to human health. New planting rates rose to 20,660 ha in 2023/24 but reduced to 15,580 ha in 2024/25.

16.2.2. Government priorities

England

Priorities in England are set out in the 2023 Environmental Improvement Plan and include expanding and connecting the woodland resource; managing our woodlands for biodiversity, climate and sustainable forestry, mobilising green finance and the private sector, protecting and improving the woodland resource and connecting people with trees and woodland. The revised plan is due to be published in 2025. A statutory target was also legislated for in 2023 to increase tree canopy and woodland cover to 16.5% of England's land area.

The response to tree pests and diseases continues to be a priority. The Demarcated Area for the control of Ips typographus was extended in June 2024 to include parts of East Anglia to prevent potential spread of the pest. This is in line with eradication action being undertaken by the Forestry Commission to manage outbreaks.

Scotland

In Scotland, forestry is recognised as having an important role in contributing to emissions reduction targets through carbon sequestration which is a specific objective of woodland creation. The current Climate Change Plan (third report on policies and proposals), updated in December 2020, sets out how the Scottish Government will meet its GHG emission reduction targets for the period 2017-2032.

To support the delivery of the Climate Change Plan, the Forestry Grant Scheme offers financial support for the creation of new woodland and the sustainable management of existing woodland. All applications are assessed against the Forestry Standard of the United Kingdom and associated guidelines.

Scotland's Forestry Strategy 2019-2029 was published in February 2019 and presents the Scottish Government's 50-year vision for Scotland's forests and woodlands and sets out a 10-year framework for action. It was developed in consultation with a broad range of stakeholders.

Wales

As part of the Welsh Government's plan to tackle the climate emergency it has committed to plant 43,000 ha of new woodland by 2030, and 180,000 ha by 2050, in line with the 'balanced pathway' set out by the Climate Change Committee.

Priorities in Wales continue to be guided by Woodlands for Wales, the Welsh Government's fifty-year strategy for trees and woodlands.

Northern Ireland

In Northern Ireland the Forest Service delivers forestry and plant health functions on behalf of the Department of Agriculture, Environment and Rural Affairs (DAERA).

The Forestry Act (Northern Ireland) 2010 requires the Department to promote afforestation and sustainable forestry, to encourage public enjoyment and recreational use of its forests. The Act defines forestry to include the production and supply of timber and other forest products, the maintenance of adequate reserves of growing trees and the management and development of forests to contribute to the protection of the environment, biodiversity and the mitigation of, or adaptation to, climate change.

Forest Service's work substantially supports the Department's vision of 'Sustainability at the heart of a living, working, active landscape valued by everyone' and the Strategic Outcomes in the DAERA business plan). Forest Service work streams are aligned to the Department's strategic objectives as set out in Sustainability for the Future – DAERA's Plan to 2050, its vision for 'Green Growth' and its contribution to Programme for Government Strategic Outcomes including 'We live and work sustainably – protecting the environment', for which DAERA has lead responsibility.

The 'Forests for Our Future' programme was launched in March 2020 and is aimed at helping achieve the United Kingdom's net-zero carbon target by 2050 as well as contributing to the enhancement of the landscape and biodiversity, and improving the health and well-being of those that enjoy this natural resource. Over this decade the Forests for Our Future programme aims to plant 18 million trees or 9,000 ha of new woodland and is a foundation initiative of the Executive's Green Growth strategy which is being developed by DAERA. Forest Service will continue to actively engage in developing policies in agricultural and environmental land use to establish the role trees have within these policies in the pathway to net carbon zero.

The Northern Ireland Climate Action Plan under the Climate Change Act (Northern Ireland) 2022 will take forward DAERA's afforestation commitments in line with its legislative obligations for a balanced pathway to Net Zero carbon emissions by 2050.

16.2.3. Plant health

The Forestry Commission website outlines current restrictions and conditions for the import, export and internal movement of regulated wood, wood products and bark (GOV UK, 2025).

16.2.4. Carbon markets

In England, the government's Woodland Carbon Guarantee, giving landowners the option to sell their verified Woodland Carbon Units to government at a guaranteed price, has held eight auctions to date. The average price for verified Woodland Carbon Units in 2024 (Auction 8) was around £25 per tonne of carbon dioxide equivalent (tCO_2-eq); the scheme is currently closed (Woodland Carbon Code, 2025a).

The number of projects registered with the Woodland Carbon Code sits at 2,185 as of 30 June 2025 (Woodland Carbon Code, 2025b). The predicted sequestration of registered projects has more than quadrupled since March 2020, increasing from 5.8 million tonnes of carbon dioxide equivalent at the end of March 2020 to 29.3 million tonnes of carbon dioxide equivalent by June 2025. In June 2025, 806 projects had been validated [32] to the Code.

The Woodland Carbon Code website provides a 'central point' for buyers and sellers to connect.

In May 2025, the Emissions Trading Scheme (ETS) Authority of the United Kingdom consulted on integrating GHG removals in its emissions trading scheme. The Government Response, published in August 2025 stated that 'the Authority has not yet made a decision on whether high-quality United Kingdom woodland removals should be included in its ETS. This is because stakeholders have raised concerns on issues around permanence, cost and other wider impacts. The Authority has listened to these concerns and has assessed new evidence and explored additional safeguards since there is a strong case for integrating woodland.

[32] Validated: is the initial evaluation of a project or group against the requirements of the Woodland Carbon Code. Upon completion a project/group will receive a 'Validation Opinion Statement'. The project/group will then be certified for a period of up to 5 years.

16.3. Market drivers

16.3.1. Overview

Most forest product markets in the United Kingdom have shown a slight recovery in 2024 following a reduced demand in 2023. Trade with Ireland is being affected by windblow in Ireland and plant health restrictions.

The Timber in Construction Roadmap (2025) sets out a number of commitments by government and industry to increase the use of timber in construction. The actions set out in the roadmap are expected to lead to an increase in demand for c16 sawnwood in the next couple of years (GOV UK, 2025b).

The forecast for the construction market remains poor. The fall in demand from construction had, at least partly, been driven by increasing prices and changes in exchange rates.

Sales within and exports from the EU may continue to be impacted by compliance with EU Deforestation Regulation (EUDR) requirements from 1 January 2025. Closures of sawmills in Europe may also have an impact on the market of the United Kingdom.

16.3.2. Prices

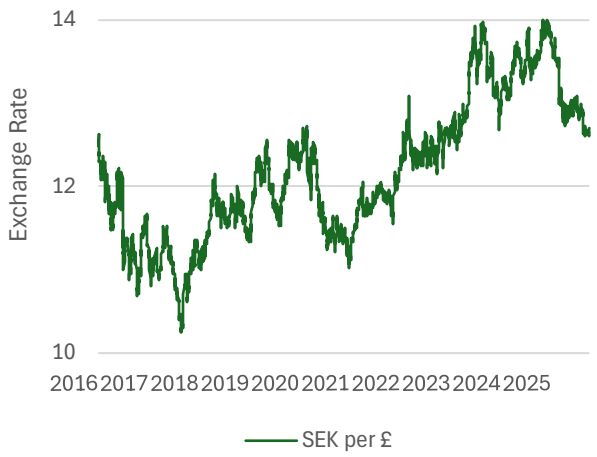
Exchange rates are seen as a major influence on timber prices in the United Kingdom. As noted in the economic overview (section 16.1), there has been a general increase in the value of the Pound Sterling which rose against the US dollar (Graph 16.1) in the first half of 2025. Following an increased period in late 2024, the value of Pound Sterling against the Swedish Krona declined from January 2025 onwards, reverting by April to the level last seen in 2023 (Graph 16.5).

Timber prices in the United Kingdom are monitored via three price indices and based on sales by Forestry England, Forestry and Land Scotland, and Natural Resource Wales.

The Coniferous Standing Sales Price Index for Great Britain was 0.6% lower in real terms in the year to March 2025, compared with the previous year. The Softwood Sawlog Price Index was 32.7% higher in real terms in the six months to March 2025, compared with the corresponding period of the previous year. The Small Roundwood Price Index was 15.6% higher in real terms in the six months to March 2025, compared with the corresponding period of the previous year (Graph 16.6).

GRAPH 16.5

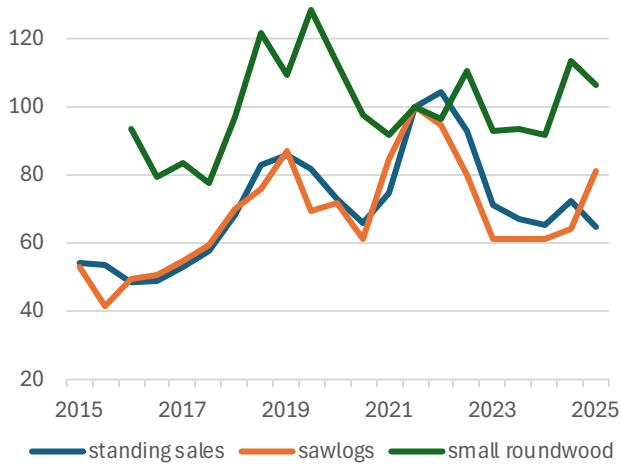
United Kingdom: Exchange rate of Pound sterling to Swedish Krona (2016-2025) [SEK/£]



Notes: SEK: Swedish Krona; Spot Exchange Rate (Swedish Krona into Sterling).
Source: Bank of England, 2025.

GRAPH 16.6

United Kingdom: Price indices for standing timber and logs (2015-2025)



Notes: Data assessed for March and September each year. September 2021=100; Great Britain; indices in real terms.
Source: Forest Research, 2025.

16.3.3. Construction, manufacturing, and distributive trades

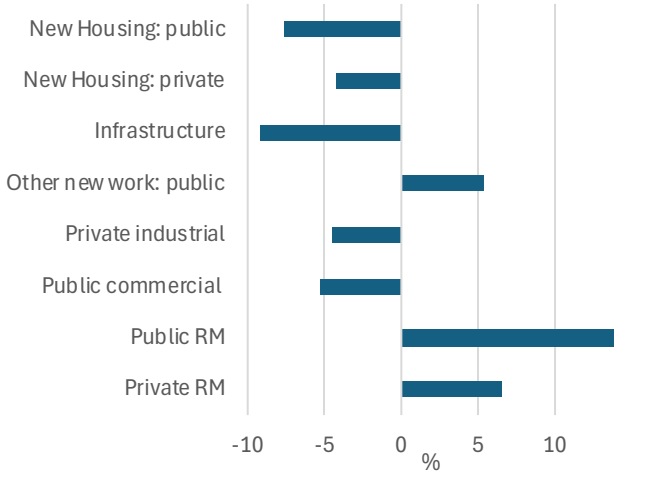
Construction

In the United Kingdom, the value of manufacturer sales of builders' carpentry and joinery was £4.4 billion in 2024, a 14.5% decrease from the previous year.

The Construction Material Price index has shown a decrease of 1.4% for 'All Work' from 2023 to 2024 (Department for Business and Trade, 2025).

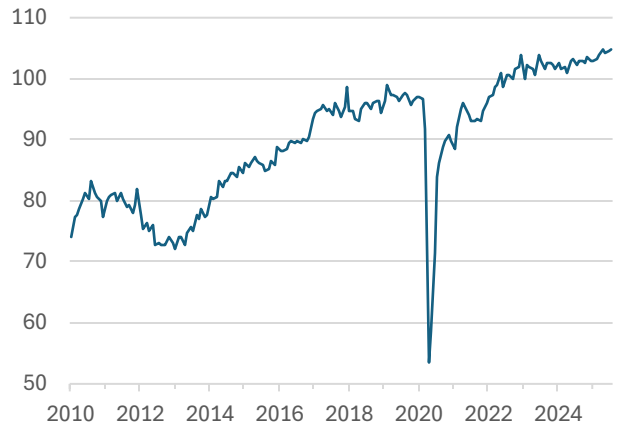
Between 2023 and 2024, the construction industry output decreased across most of the sectors, apart from repair and maintenance, and public other new work, where a slight increase was recorded (Graph 16.7). Overall, the construction industry output index for all work increased by 0.5% between 2023 and 2024 (Graph 16.8).

GRAPH 16.7
United Kingdom: Construction industry output annual change (2024) [%]



Notes: Volume seasonally adjusted data; RM = repair and maintenance.
Source: ONS, 2025b.

GRAPH 16.8
United Kingdom: Monthly construction industry output index (2010-2025)

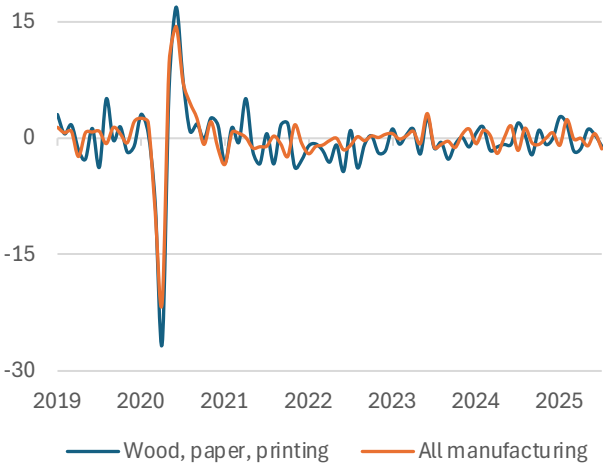


Notes: all work; Index 2022=100.
Source: ONS, 2025b.

Manufacturing and distributive trades

Manufacturing output in the United Kin grew by 0.2% between July 2024 and July 2025. Over the same period, the United Kingdom's index of production for the wood, paper products and printing sector, grew by 0.6% (Graph 16.9).

GRAPH 16.9
United Kingdom: Manufacturing output index monthly change (2019-2025) [%]



Source: ONS, 2025b.

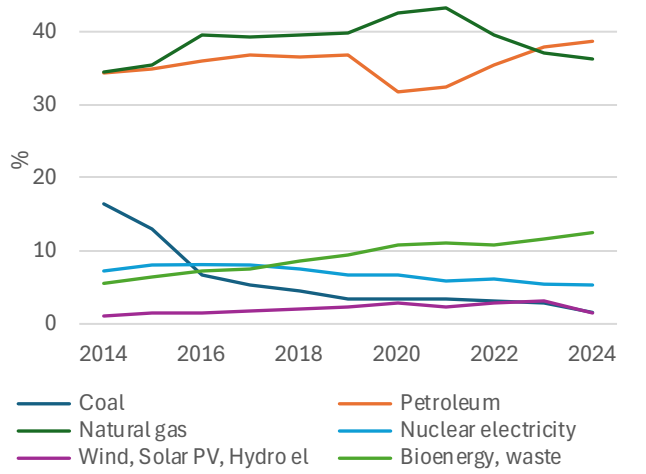
16.3.4. Energy

The share of energy produced by bioenergy and waste in the United Kingdom was 12.5% in 2024, 1.0 per centage point higher than in 2023 (11.5%). This follows a period of increasing market share since 2010.

The use of renewables to generate electricity and heat has increased from 7.0 million Mtoe in 2010 to 23.4 Mtoe in 2024. In addition to heat and electricity, renewables are also consumed in the transport sector as liquid biofuels and also biogases are injected into the gas grid. These uses totalled 1.2 Mtoe in 2010, increasing to 3.4 Mtoe in 2024. Plant biomass (including wood) accounted for 38% of renewables used for heat and electricity generation (i.e. excluding those used in transport and biogas injected into the gas grid) in 2024.

GRAPH 16.10

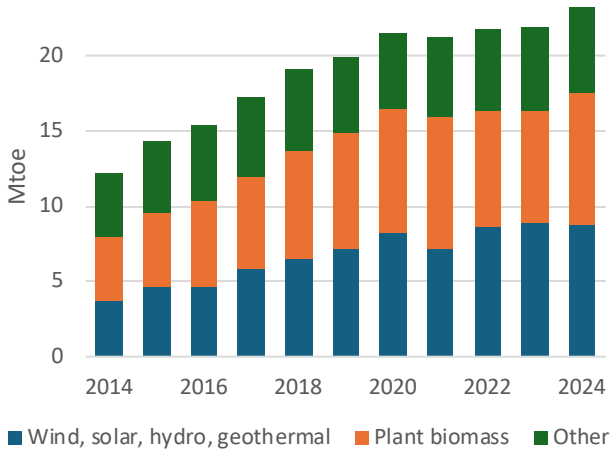
United Kingdom: Consumption of primary fuels (2014-2024) [%]



Notes: Excludes net electricity imports.
Source: DUKES, 2025a.

GRAPH 16.11

United Kingdom: Heat and power production from renewables (2014-2024) [Mtoe]



Notes: Mtoe = million tonnes of oil equivalent; Plant biomass includes wood; Other includes biogases, animal biomass, biodegradable energy from waste, and heat pumps; Excludes liquid biofuels in transport and biogases injected into the grid.
Source: DUKES, 2025b.

16.4. Developments in forests and forest products markets sector

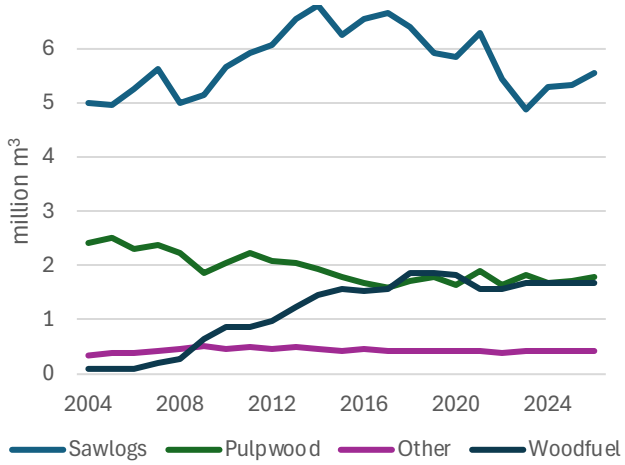
16.4.1. Wood raw materials

United Kingdom's coniferous roundwood production increased from 8.8 million m^3 u.b. in 2023 to 9.1 million m^3 u.b. in 2024, an increase of 3%. Production is expected to remain at 9.1 million m^3 u.b. for 2025 and increase to 9.4 million m^3 for 2025.

Non-coniferous roundwood production has remained stable at around 0.7 million m^3 between 2023 and 2024. Production is expected to remain at 2024 levels in 2025 and 2026.

GRAPH 16.12

United Kingdom: Coniferous roundwood production (2004-2026) [million m^3]



Notes: 2025: estimate; 2026: forecasts.
Source: Forest Research, 2025.

16.4.2. Wood energy

Wood energy in the United Kingdom is produced from a range of wood products, including roundwood, sawmill products, wood pellets and recovered wood.

The use of recovered wood for woodfuel has stabilised in recent years, with an estimated 2.9 million tonnes used in 2024.

The majority of wood pellets consumed in the United Kingdom are imported. In 2024, imports of wood pellets totalled 9.3 million tonnes, with around 80% of this quantity imported from North America. A further 0.3 million tonnes of wood pellets were produced in the United Kingdom.

16.4.3. Certified forest products

There were 1.44 million ha of woodland (44% of the total woodland area in the United Kingdom) certified in March 2025 under FSC scheme or the PEFC scheme.

The proportion of certified roundwood produced from woodlands in the United Kingdom has largely stabilised over the last 10 years. In 2024, an estimated

79% of all coniferous roundwood produced in the United Kingdom came from certified woodlands.

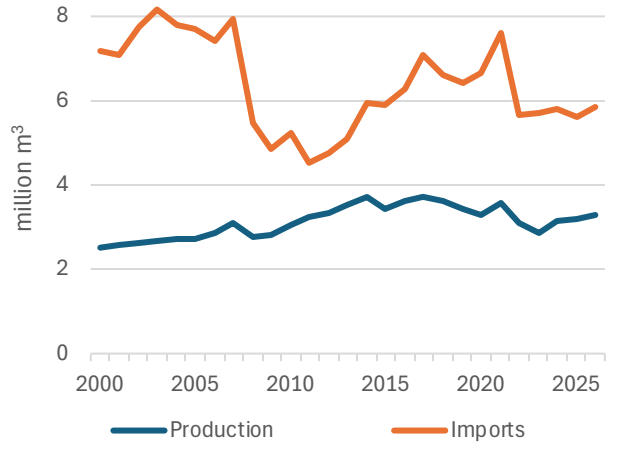
Figures reported by sawmills suggest that around 85% of sawlogs were certified in 2024.

16.4.4. Sawnwood

Coniferous sawnwood production increased by 10% in 2024 to 3.2 million m^3. Production is expected to remain roughly the same in 2025 and increase to 3.3 million m^3 in 2026.

Imports of coniferous sawnwood increased by 2% to 5.8 million m^3 in 2024. Estimates for 2025 suggest a slight decline to around 5.6 million m^3, followed by an increase in 2026 to 5.8 million m^3. Imports accounted for 97% of apparent consumption of non-coniferous sawnwood in the United Kingdom and totalled 0.5 million m^3 in 2024.

GRAPH 16.13
United Kingdom: Coniferous sawnwood production and imports (2000-2026) [million m^3]



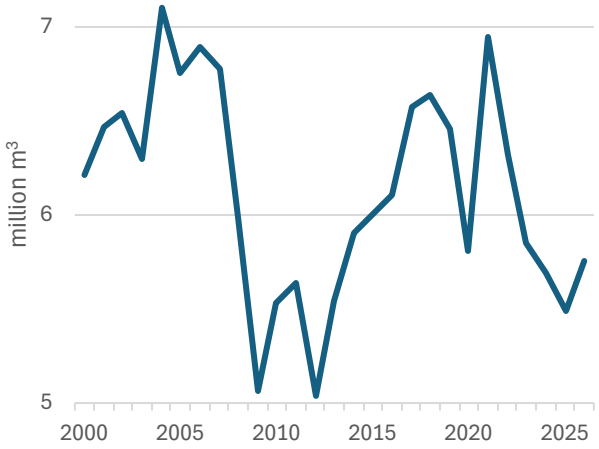
Notes: 2025: estimates; 2026: forecast.
Source: Forest Research, 2025.

16.4.5. Wood-based panels

Particleboard (including OSB) and MDF consumed in the United Kingdom are both produced domestically and imported, while plywood and other hardboards consumed in the United Kingdom are imported.

The United Kingdom consumed around 5.7 million m^3 of wood-based panels (plywood, particleboard and fibreboard) in 2024, a 3% decrease from 2023. This is expected fall to 5.5 million m^3 in 2025 and increase to 5.8 million m^3 in 2026. Production of particleboard (including OSB) totalled 2.3 million m^3 in 2024, a 2% decrease from the previous year. The United Kingdom produced 0.6 million m^3 of MDF in 2024, down 5% from 2023.

GRAPH 16.14
United Kingdom: Consumption of wood-based panels (2000-2026) [million m^3]

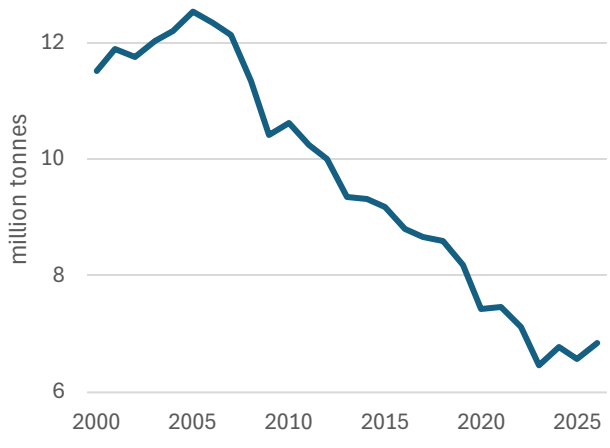


Notes: 2025: estimates; 2026: forecast.
Source: Forest Research, 2025.

16.4.6. Pulp and paper

Paper and paperboard consumption in the United Kingdom increased by 5% in 2024 to 6.8 million tonnes, following the previous year. It is estimated that consumption will increase to around 6.6 million tonnes in 2025 and then to 6.9 million tonnes in 2026.

GRAPH 16.15
United Kingdom: consumption of paper and paperboard (2000-2026) [million tonnes]



Notes: 2025: estimates; 2026: forecast.
Source: Forest Research, 2025.

16.5. Gender and Human Rights Issues in the Forest Products' Sector

The Equality Act 2010 (LEGISLATION GOV UK, 2025a) legally protects people in the United Kingdom from discrimination in the workplace and in wider society. It covers the following 'protected characteristics:

- age
- gender reassignment
- being married or in a civil partnership
- being pregnant or on maternity leave
- disability
- race including colour, nationality, ethnic or national origin
- religion or belief
- sex
- sexual orientation

Other protections also exist for workers, such as the Gangmasters (Licensing) Act 2004 (LEGISLATION GOV UK, 2025b). An Employment Rights Bill is due to become law later in 2025 (GOV UK. 2025c).

References

APA. 2025a. Clima. Agência Portuguesa do Ambiente. Available at: https://apambiente.pt/clima.

APA. 2025b. Bioeconomia. Agência Portuguesa do Ambiente. Available at: https://apambiente.pt/apa/bioeconomia.

ARUP. 2025. Market Opportunities for Timber in Construction in Ireland (in press). Report commissioned by the Department of Enterprise, Tourism and Employment. Timber in Construction Steering Group. 2025.

Association of the Austrian Wood Industries. 2025. Industry Report 2024 2025. Available at: https://www.holzindustrie.at/media/vtrg512k/branchenbericht_2024-2025_fachverband-der-holzindustrie-oesterreichs.pdf

Austropapier. 2025. Association of the Austrian Paper Industry, 06/2025. Annual Report 2024. Available at: https://austropapier.at/wp-content/uploads/2025/04/Branchenbericht_24-25.pdf

Bank of England Database. 2025. Available at: https://www.bankofengland.co.uk/boeapps/database

Bankier. 2024. State Forests warns: Timber supply may be lower in 2025. Available at: https://www.bankier.pl/wiadomosc/Lasy-Panstwowe-ostrzegaja-Podaz-drewna-w-2025-r-moze-byc-mjsza-8795740.html

Biznes. 2025. Available at: https://biznes.pap.pl/wiadomosci/firmy

BMEL. 2021a. Bundesministerium für Ernährung und Landwirtschaft. 2021. Waldstrategie 2050. Available at : https://www.bmleh.de/SharedDocs/Downloads/DE/_Wald/Waldstrategie2050.html

BMEL. 2021b. Bundesministerium für Ernährung und Landwirtschaft. 2021. Federal Ministry of Food and Agriculture (BMEL). Available at: https://www.charta-fuer-holz.de/fileadmin/charta-fuer-holz/dateien/service/mediathek/Web_ENGL_BMEL_Charta_130721_komplett_1250.pdf

BMELH. 2025a. Federal Ministry of Agriculture, Food and Regional Identity. 2025. Mehr Laub, weniger Fichte: Rohholz bleibt stabil verfügbar, Baumartenmix wandelt sich. Available at: https://www.charta-fuer-holz.de/charta-service/presse/presse-detail/mehr-laub-weniger-fichte-rohholz-bleibt-stabil-verfuegbar-baumartenmix-wandelt-sich

BMELH. 2025b. Federal Ministry of Agriculture, Food and Regional Identity. 2025. Waldentwicklung und Rohholzaufkommen. Available at: https://www.bmleh.de/SharedDocs/Downloads/DE/Broschueren/weham.pdf

BMLUK. 2025. Federal Ministry of Agriculture and Forestry, Climate and Environmental Protection, Regions and Water Management, 26/05/2025. Felling Report 2024. Available at: https://www.bmluk.gv.at/themen/wald/wald-in-oesterreich/wald-und-zahlen/holzeinschlagsmeldung-2024.html

BMUB. 2016. Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB). 2016. Climate Action Plan 2050 Available at: https://climate-laws.org/document/climate-action-plan-2050_37a5

BMUV. 2023. Bundesministerium für Umwelt, Klimaschutz, Naturschutz und nukleare Sicherheit. 2023 Federal Action Plan on Nature-based Solutions for Climate and Biodiversity. Available at: https://www.bmuv.de/fileadmin/Daten_BMU/Download_PDF/Naturschutz/ank_2023_kabinett_lang_en_bf.pdf

BMWK. 2021. Bundesministeriums für Wirtschaft und Klimaschutz. 2021. Federal Climate Action Act. Available at: https://www.gesetze-im-internet.de/englisch_ksg/englisch_ksg.html

BMWK. 2024. Bundesministeriums für Wirtschaft und Klimaschutz. 2024. BGBL I Nr. 235 vom 16.07.2024. Available at: https://www.recht.bund.de/bgbl/1/2024/235/VO.html

BMWSB. 2022. Bundesministerium für Wohnen, Stadtentwicklung und Bauwesen. 2022. Sofortprogramm gemäß § 8 Abs. 1 KSG für den Sektor Gebäude. Available at : www.bmwsb.bund.de/SharedDocs/downloads/DE/veroeffentlichungen/bauen/sofortprogramm-sektor-gebaeude.pdf

BWE. 2025. German Ministry for Economic Affairs and Energy. 2025. Federal Government's 2025 autumn projections. Available at: https://www.bundeswirtschaftsministerium.de/Redaktion/DE/Artikel/Wirtschaft/Projektionen-der-Bundesregierung/projektionen-der-bundesregierung-herbstprojektion-2025.html

CCIS. 2025a. Chamber of Commerce and Industry of Slovenia. Wood Processing and Furniture Association. Available at: https://eng.gzs.si/

CCIS. 2025b. Chamber of Commerce and Industry of Slovenia. Paper and Paper Converting Industry. Available at: https://www.gzs.si/dan_papirnistva/ENG/Organizers/PPCIA

COFORD. 2021. All Ireland Roundwood Production Forecast 2021-2040. COFORD, Kildare St., Dublin 2. Available at: < www.coford.ie/media/coford/content/CofordAllIrelandRoundwoodBookREVISED150721.pdf

Coillte. 2025. A Greener Future for All. 2024 Annual Report, 2024. Available at: < www.coillte.ie/wp-content/uploads/2025/05/Coillte-2024-Annual-Report.pdf>

CSO. 2025a. Forest Wood Removals 2024. Central Statistics Office.

CSO. 2025b. New Dwelling Completions Q4 2024. Central Statistics Office.

CZMA. 2019. Ministry of Agriculture of the Czech Republic 2019. Koncepce biohospodářství v České republice z pohledu resortu Ministerstva zemědělství na léta 2019–2024. Available at: https://mze.gov.cz/public/portal/mze/-q330521–-vlH6qrbW/koncepce-biohospodarstvi-v-cr-z-pohledu?_linka=a259465

CZMA. 2019. Ministry of Agriculture. 2019. Koncepce biohospodářství v České republice z pohledu resortu Ministerstva zemědělství na léta 2019–2024. Available at: https://mze.gov.cz/public/portal/mze/-q330521—vlH6qrbW/koncepce-biohospodarstvi-v-cr-z-pohledu?_linka=a259465

CZMA. 2020a. Ministry of Agriculture of the Czech Republic). 2020. Koncepce státní lesnické politiky do roku 2035. Available at: https://mze.gov.cz/public/portal/mze/-q321885---f1OQNPBk/koncepce-statni-lesnicke-politiky-do?_linka=a563502

CZMA. 2020a. Ministry of Agriculture. 2020. Koncepce státní lesnické politiky do roku 2035. Available at: https://mze.gov.cz/public/portal/mze/-q321885---f1OQNPBk/koncepce-statni-lesnicke-politiky-do?_linka=a563502

CZMA. 2020b. Ministry of Agriculture of the Czech Republic Ministry of Agriculture. Průvodce využitím dřeva ve veřejných zakázkách. Available at: https://mze.gov.cz/public/portal/mze/lesy/surovinova-politika-pro-drevo/novinky/pruvodce-vyuzitim-dreva

CZMA. 2024. Ministry of Agriculture (MA). 2024. Surovinová politika pro dřevo. Available at: https://mze.gov.cz/public/portal/mze/-a48340---kGKlJMp6/surovinova-politika-pro-drevo

CZMA. 2024. Ministry of Agriculture of the Czech Republic. Surovinová politika pro dřevo. Available at: https://mze.gov.cz/public/portal/mze/-a48340---kGKlJMp6/surovinova-politika-pro-drevo

CZME. 2021. Ministry of Environment. 2021. Strategický rámec cirkulární ekonomiky České republiky 2040. Available at: https://mzp.gov.cz/system/files/2025-03/OCEO-Cirkularni_Cesko_2040-20250331.pdf

CZME. 2021. Ministry of Environment. 2021. Strategický rámec cirkulární ekonomiky České republiky 2040. Available at: https://mzp.gov.cz/system/files/2025-03/OCEO-Cirkularni_Cesko_2040-20250331.pdf

CZMF. 2025. Ministry of Finance. Macroeconomic Forecast – August 2025. Available at: https://www.mfcr.cz/en/fiscal-policy/macroeconomic-analysis/macroeconomic-forecast/2025/macroeconomic-forecast-august-2025-61035.

CZMIT. 2025. Ministry of Industry and Trade. 2025. Nové stavební normy otevírají cestu moderním dřevostavbám. Přinesou mimo jiné udržitelnější a rychlejší výstavbu. Available at: https://mpo.gov.cz/cz/rozcestnik/pro-media/tiskove-zpravy/nove-stavebni-normy-oteviraji-cestu-modernim-drevostavbam--prinesou-mimo-jine-udrzitelnejsi-a-rychlejsi-vystavbu--288796/

DAFM. 2022. Shared National Vision for Trees, Woods and Forests in Ireland until 2050. Department of Agriculture, Food and the Marine, Government of Ireland. 2023. Available at: < www.gov.ie/en/department-of-agriculture-food-and-the-marine/press-releases/shared-national-vision-for-forestry-2050-published/>

DAFM. 2023a. Ireland's Forest Strategy (2023-2030). Department of Agriculture, Food and the Marine, Government of Ireland. 2023. Available at: < assets.gov.ie/static/documents/irelands-forest-strategy-2023-2030.pdf>

DAFM. 2023b. Forest Strategy Implementation Plan. Department of Agriculture, Food and the Marine, Government of Ireland. 2023. Available at: < assets.gov.ie/static/documents/forest-strategy-implementation-plan-including-the-forestry-programme-2023-2027.pdf>

DAFM. 2023c. Timber in Construction Steering Group. Department of Agriculture, Food and the Marine, Government of Ireland. 2023. Available at: < www.gov.ie/en/department-of-agriculture-food-and-the-marine/publications/timber-in-construction-steering-group/>

DAFM. 2024. Annual Review and Outlook for Agriculture, Food and the Marine 2024 - Chapter 4 – Forestry. Department of Agriculture, Food and the Marine, Ireland. 2024. Available at: < www.gov.ie/en/department-of-agriculture-food-and-the-marine/publications/annual-review-and-outlook-for-agriculture-food-and-the-marine-2024/>

DAFM. 2025. Forest Statistics Ireland 2025. Department of Agriculture, Food and the Marine, Ireland. 2025. Available at: www.gov.ie/en/department-of-agriculture-food-and-the-marine/collections/forest-statistics-and-mapping/#annual-forest-sector-statistics >

DESTATIS. 2025a. German statistical office. 2025. Producer price indices for logging products from national forests: Germany, months, logging products„(StBA-genesis table 61231-0002). Available at:

https://www.destatis.de/EN/Themes/Economy/Prices/Price-Indices-In-Agriculture-And-Forestry/Tables/Producer-prices-forestry.html

DESTATIS. 2025b. German statistical office. 2025. Amount of damaged timber logged dropped to 27.3 million m^3 in 2024. Available at: https://www.destatis.de/EN/Themes/Economic-Sectors-Enterprises/Agriculture-Forestry-Fisheries/Forestry-Wood/forestry-wood.html

DESTATIS. 2025c. German statistical office. 2025. Land- und Forstwirtschaft, Fischerei. Wald und Holz. Available at: https://www-genesis.destatis.de/datenbank/online/statistic/42271/table/42271-0003/search/s/aG9iZWw%3D

DESTATIS. 2025d. German statistical office. 2025. StBA-genesis table 42271-0003. 16.1 Säge-, Hobel-u. Holzimprägnierwerke. Available at: https://www.destatis.de/DE/Themen/Branchen-Unternehmen/Landwirtschaft-Forstwirtschaft-Fischerei/Wald-Holz/_inhalt.html

DESTATIS. 2025e. German statistical office. 2025. StBA-genesis table 42271-0003. 16.21 H.v.Furnier-, Sperrholz-, Holzfaserplatten-und-spanplatten. Available at: https://www-genesis.destatis.de/datenbank/online/statistic/42271/table/42271-0003/search/s/aG9iZWw%3D

DESTATIS. 2025f. German statistical office. 2025. StBA-genesis table 42271-0003. 17.1 H.v.Holz-u. Zellstoff, Papier, Karton u. Pappe. Available at: https://www-genesis.destatis.de/datenbank/online/statistic/42271/table/42271-0003/search/s/aG9iZWw%3D

DGAEG. 2025. Economia circular. Direção-Geral de Atividades Económicas. Available at: https://www.dgae.gov.pt/servicos/sustentabilidade-empresarial/economia-circular.aspx.

DHLGH. 2024. Amendments to Draft Revision of National Planning Framework. Department of Housing, Local Government and Heritage, Government of Ireland. 2024. Available at: < www.gov.ie/en/department-of-housing-local-government-and-heritage/press-releases/government-agrees-to-progress-amendments-to-draft-revision-of-national-planning-framework-ambitious-new-housing-targets/

Die Papierindustrie. 2025. Papier 2025 – Statistiken zum Leistungsbericht [Statistics on the Annual Report]. Tab. N8; N16, N18. Available at: https://www.papierindustrie.de/fileadmin/0002-PAPIERINDUSTRIE/07_Dateien/XX-LB/PAPIER_2025_Leistungsbericht_digital.pdf

DPER. 2021. National Development Plan 2021—2030. Department of Public Expenditure, Infrastructure, Public Service Reform and Digitalisation, Government of Ireland. 2021. Available at: www.gov.ie/en/department-of-public-expenditure-infrastructure-public-service-reform-and-digitalisation/publications/national-development-plan-2021-2030

DUKES. 2025a. Department for Energy, Security and Net Zero. Inland consumption of primary fuels and equivalents for energy use, 1970 to 2024 (DUKES 1.1.1). Available at: Inland consumption of primary fuels and equivalents for energy use, 1970 to 2024 (DUKES 1.1.1)

DUKES. 2025b. Department for Energy, Security and Net Zero. Renewable sources used to generate electricity and heat and for transport fuels (DUKES 6.4). Available at: Renewable sources used to generate electricity and heat and for transport fuels (DUKES 6.4)

ECO.NOMIA. 2024. A INICIATIVA ECO.NOMIA. Secretaria Geral do Ambiente & Ministério do Ambiente & Crescimento Verde & CENSE. Available at: https://eco.nomia.pt/.

EEA. 2025. Europe's environment 2025. Country profile. Available at: https://www.eea.europa.eu/en/europe-environment-2025/countries/estonia

EEEA. 2023. Yearbook Forest 2023. Estonian Environment Agency. 2025. Available at: https://keskkonnaportaal.ee/et/metsa-aastaraamatud

EEEA. 2025a. National Forest Inventory 2024. Estonian Environment Agency. 2025. Available at: https://keskkonnaportaal.ee/et/teemad/mets/metsastatistika-sh-smi

EEEA. 2025b. Estonian Wood Balance 2023. Estonian Environment Agency. 2025. https://keskkonnaportaal.ee/et/puidubilanss-ulevaade-eesti-puidukasutuse-mahust

EEEIS. 2025. Estonian Business and Innovation Agency. 2025. Available at: https://eis.ee/ida-virumaale-kerkib-oiglase-ulemineku-fondi-kaasabil-eesti-kaasaegseim-puidutootlemistehas/

EEMF. 2025. Summer 2025 Economic Forecast of the Ministry of Finance. Available at: https://www.fin.ee/sites/default/files/documents/2025-08/Rahandusministeeriumi%202025.%20aasta%20suvine%20majandusprognoos.pdf

EEPFA. 2024. Forestry Forum. Estonian Private Forest Association. 2024. Available at: https://erametsaliit.ee/kasulikku/koolituste-ja-seminaride-ettekanded/

EEPFA. 2025. Overview of the timber market, Q2 2025. Estonian Private Forest Association. 2025. Available at: https://erametsaliit.ee/puidu-hinnainfo/

ERR News.2023b (new). Available at: https://news.err.ee/1609045046/parnu-county-sawmill-closure-results-in-30-job-losses

ERR News. 2023a. Available at: https://news.err.ee/1609007987/stora-enso-closes-napi-sawmill-100-people-to-lose-jobs

ERR News. 2023b. Available at: https://news.err.ee/1609045046/parnu-county-sawmill-closure-results-in-30-job-losses

ERR News. 2023c. Available at: https://news.err.ee/1609116812/south-estonian-sawmills-reducing-volumes-making-layoffs

ERR News. 2025a. Available at: https://news.err.ee/1609757640/estonian-cell-pulp-mill-to-halt-production-for-two-months

ERR News. 2025b. Available at: https://news.err.ee/1609816257/3-companies-qualify-for-total-44-million-in-major-investment-support

ERR News. 2025c. Available at: https://news.err.ee/1609712478/state-forest-center-secures-deal-with-vkg-for-ida-viru-county-bioproducts-plant

EU. 2023. European Union. Regulation (EU) 2023/1115 of the European Parliament and of the Council of 31 May 2023 on the making available on the Union market and the export from the Union of certain commodities and products associated with deforestation and forest degradation and repealing Regulation (EU) No 995/2010 (Text with EEA relevance). Available at: https://eur-lex.europa.eu/eli/reg/2023/1115/oj/eng

EU. 2025. European Union Deforestation Regulation, Regulation (EU) 2023/1115 of the European Parliament and of the Council. 30 December 2025 – start of legislation for large and medium-sized enterprises, and 30 June 2026 for small and micro enterprises.

European Commission. 2025a. Commission's priorities 2019-2024. Available at: https://commission.europa.eu/strategy-and-policy/priorities-2019-2024_en.

European Commission. 2025b. Forests. Available at: https://environment.ec.europa.eu/topics/forests_en.

EUROSTAT. 2025a. Roundwood removals by type of wood and assortment. Available at: https://ec.europa.eu/eurostat/web/main/data/database

EUROSTAT. 2025b. Employment rate by sex. Available at: https://ec.europa.eu/eurostat/web/main/data/database

EUROSTAT. 2025b. Employment rate by sex. Available at: https://ec.europa.eu/eurostat/web/main/data/database

FAOSTAT. 2025. Forestry Production and Trade. 2024. Available at: https://www.fao.org/faostat/en/#data/FO.

FGMRI. 2025. Forestry and Game Management Research Institute (FGMRI). 2025. Zpravodaj ochrany lesa. Available at: https://www.vulhm.cz/aktivity/vydavatelska-cinnost/zpravodaj-ochrany-lesa/

Fibenol. 2025. Available at: https://fibenol.com/news/fibenol-latvia-all-you-need-to-know

Forest Research. 2025. Available at: https://www.forestresearch.gov.uk/

Forstfrauen. 2025. Die Forstfrauen das Netzwerk. Available at: https://www.forstfrauen.at

FSC Portugal. 2025. dados da certificação em Portugal. Available at: https://pt.fsc.org/pt-pt/sobre-a-certificacao/dados-e-estatisticas.

FSC. 2025.Avaialble at: https://connect.fsc.org/fsc-public-certificate-search

GEP. 2025. Séries Cronológicas QUADROS DE PESSOAL 2013 – 2023. Gabinete de Estratégia e Planeamento (GEP). Ministério do Trabalho, Solidariedade e Segurança Social. Available at: http://www.gep.mtsss.gov.pt.

GOV PL. 2025.Budget Law for 2026. Explanatory Memorandum. Council of Ministers, Warsaw, August 2025. Available at: https://www.gov.pl/web/premier/projekt-ustawy-budzetowej-na-rok-20221

GOV UK. 2025a. Importing and exporting wood and timber products. Available at: https://www.gov.uk/government/collections/importing-and-exporting-wood-and-timber-products

GOV UK. 2025b. Policy paper - Timber in construction roadmap 2025. Available at: https://www.gov.uk/government/publications/timber-in-construction-roadmap-2025/timber-in-construction-roadmap-2025

GOV UK. 2025c. Promotional material - Employment Rights Act 2025: factsheets. Available at: https://www.gov.uk/government/publications/employment-rights-bill-factsheets

Holzbau Deutschland. 2024. Lagebericht 2024. Available at : https://www.holzbau-deutschland.de/fileadmin/user_upload/eingebundene_Downloads/2025-06-06_Lagebericht_2025_webversion.pdf

Holzkurier. 2025a. Declined roundwood imports. Available at: https://www.holzkurier.com/rundholz/2025/10/oesterreich-importe-nadelsaegerundholz-januar-bis-juli-2025.html

Holzkurier. 2025b. Roundwood price overview July 2025. Available at: https://www.holzkurier.com/rundholz/2025/08/rundholz-preisbild-juli-2025.html

ICNF. 2025. 8.º Relatório Provisório de Incêndios Rurais – 2024. Institute for Nature Conservation and Forests Available at: https://www.icnf.pt/api/file/doc/2c59a4dae34c3968.

ICNF. 2025. 8.º Relatório Provisório de Incêndios Rurais – 2024. Institute for Nature Conservation and Forests. Available at: https://www.icnf.pt/api/file/doc/2c59a4dae34c3968.

IGTA. 2025. Forestry & Timber Yearbook 2025. Irish Timber Growers Association. Dublin

IMAD. 2025. Institute of Macroeconomic Analysis and Development of the Republic of Slovenia. Autumn Forecast of Economic Trends 2025. Available at: https://www.umar.gov.si/fileadmin/user_upload/napovedi/jesen/2025/angleski/Autumn_Forecast_2025_.pdf

Ireland. 2021. Climate Action and Low Carbon Development (Amendment) Act 2021. Dublin: The Stationary Office. Retrieved from www.irishstatutebook.ie/eli/2021/act/32/enacted/en/html

Jochem et al. 2015. Jochem D, Weimar H, Bösch M, Mantau U, Dieter M (2015). Estimation of wood removals and fellings in Germany: a calculation approach based on the amount of used roundwood. Eur J Forest Res 134(5):869-888, DOI:10.1007/s10342-015-0896-9. Available at: https://link.springer.com/article/10.1007/s10342-015-0896-9

LEGISLATION GOV UK. 2025a. Equality Act 2010. Available at: https://www.legislation.gov.uk/ukpga/2010/15/contents

LEGISLATION GOV UK. 2025b. Gangmasters (Licensing) Act 2004. Available at: https://www.legislation.gov.uk/ukpga/2004/11/section/4

LKÖ. 2025. Austrian Chamber of Agriculture, 14/10/2025. Timber Market Report of the Austrian Chamber of Agriculture. Available at: https://www.waldverband.at/wp-content/uploads/2025/10/Holzpreise-Oktober-2025.pdf

MECE. 2024. Slovenian Ministry of Environment, Climate and Energy. Akcijski načrt upravljanja energetske učinkovitosti v gospodarstvu do leta 2030. Action Plan for Energy Efficiency Management in the Economy until 2030. Available at : https://www.gov.si/assets/ministrstva/MOPE/Energetika/AN_URE_gosp_2023.pdf

MECE. 2025. Slovenian Ministry of Environment, Climate and Energy. 2025. Climate Law – a development opportunity for Slovenia, people and businesses. Available at: https://www.gov.si/novice/2025-06-05-podnebni-zakon-razvojna-priloznost-za-slovenijo-ljudi-in-podjetja/

MESKG. 2025. Ministry of Emergency Situations of the Kyrgyz Republic

Ministry of Finance (MF). 2025. Macroeconomic Forecast – August 2025. Available at: https://www.mfcr.cz/en/fiscal-policy/macroeconomic-analysis/macroeconomic-forecast/2025/macroeconomic-forecast-august-2025-61035.

Ministry of Industry and Trade (MIT). 2025. Nové stavební normy otevírají cestu moderním dřevostavbám. Přinesou mimo jiné udržitelnější a rychlejší výstavbu. Available at: https://mpo.gov.cz/cz/rozcestnik/pro-media/tiskove-zpravy/nove-stavebni-normy-oteviraji-cestu-modernim-drevostavbam--prinesou-mimo-jine-udrzitelnejsi-a-rychlejsi-vystavbu--288796/

MOA. 2025. Ministry of Agriculture, Rural Development and Environment of the Republic of Cyprus. Timber Forecast Questionnaire, Cyprus contribution 2025. Available at: https://unece.org/housing-and-land-management/coffi-market-forecasts

MOF. 2025. Republic of Cyprus Ministry of Finance. Stability Programme 2025-2028. June, 2025. Available at: https://www.gov.cy/media/sites/11/2024/06/stability_programme_24-27_en.pdf

Naturgefahren. 2025. About the network we4DRR. Available at: https://www.naturgefahren.at/kooperationen-internationales/we4DRR/about.html

OECD. 2025. Organisation for Economic Co-operation and Development. “Quarterly GDP” (indicator). Available at: www.oecd-ilibrary.org/economics/quarterly-gdp/indicator/english_b86d1fc8-en

Official Gazette of the Republic of Slovenia. 2025a. Amendment to the Wildlife and Hunting Act Available at: https://www.uradni-list.si/glasilo-uradni-list-rs/vsebina/2025-01-3056/pravilnik-o-dovolilnici-za-lovske-goste and https://www.uradni-list.si/glasilo-uradni-list-rs/vsebina/2025-01-3057/pravilnik-o-izvajanju-izrednega-posega-na-nelovnih-povrsinah-in-uporabi-lovskega-orozja-na-nelovnih-povrsinah

Official Gazette of the Republic of Slovenia. 2025b. Act on Amendments to the Forest Act (ZG-H). Available at: https://www.uradni-list.si/glasilo-uradni-list-rs/vsebina/2025-01-3048/zakon-o-spremembah-in-dopolnitvah-zakona-o-gozdovih-zg-h

ONS. 2025a. Office for National Statistics, September 2025). GDP quarterly national accounts, UK. Available at: https://www.ons.gov.uk/economy/grossdomesticproductgdp/bulletins/quarterlynationalaccounts/previousreleases

ONS. 2025b. Office for National Statistics. 2025. Available at: https://www.ons.gov.uk/

PEFC Portugal. 2025. Estatísticas. Available at: https://pefc.pt/.

PEFC. 2025. Available at: https://www.pefc.org/find-certified

Polish Central Statistical Office. 2025a. Ochrona środowiska 2024, GUS, Warszawa 2024 (Environment 2024, Statistics Poland, Warsaw 2024); Produkcja przemysłowa w 2024 roku, GUS, Warszawa 2025 (Manufacturing in 2024, Statistics Poland, Warsaw 2025) Avalable at : https://stat.gov.pl/obszary-tematyczne/przemysl-budownictwo-srodki-trwale/¬przemysl/pro-dukcja-wyrobow-przemyslowych-w-2024-r-,3,22.html

Polish Central Statistical Office. 2025b.Efekty działalności budowlanej w 2024 roku, GUS, Warszawa 2025 (Construction results in 2024, Statistics Poland, Warsaw 2025) (https://stat.gov.pl/obszary-tematyczne/przemysl-budownictwo-srodki-trwale/-budownictwo/efekty-dzialalnosci-budowlanej-w-2024-r-,3,20.html#).

Polish Central Statistical Office. 2025c. Biuletyn Statystyczny, GUS, Warszawa 2025, nr 7 (Statistical bulletin, Statistics Poland, Warsaw 2025, no 7) (https://stat.gov.pl/obszary-tematyczne/inne-opracowania/informacje-o-sytuacji-spoleczno-gospodarczej/biuletyn-statystyczny-nr-72025,4,164.html).

Polish Forest Research Institute. 2025. Krótkoterminowa prognoza występowania ważniejszych szkodników i chorób infekcyjnych drzew leśnych w Polsce w 2025 roku, Instytut Badawczy Leśnictwa, Sękocin Stary 2025 (Short-term forecast of occurrence of major pests and infectious diseases of forest trees in Poland in 2025, Forest Research Institute, Sękocin Stary 2025). Available at: https://www.gov.pl/web/dglp/raporty-i-prognozy

Polish National Centre for Emissions Management. 2025. Krajowy Ośrodek Bilansowania i Zarządzania Emisjami. Available at: https://www.kobize.pl

Polish State Forests Directorate General. 2024. Raport o stanie lasów w Polsce 2023, Dyrekcja Generalna Lasów Państwowych, Warszawa 2024 (Report on the condition of forests in Poland 2023, State Forests Directorate General, Warsaw 2024). Avaialble at : https://www.lasy.gov.pl/pl/informacje/publikacje/informacje-statystyczne-i-raporty/raport-o-stanie-lasow/raport-o-stanie-lasow-2023-interaktywny.pdf/view

ProPellets. 2025. Available at: https://www.propellets.at/

Rego, F.; Constantino, L.; Louro, G.. 2014. Forest Policies in a Changing International Context. Springer. World Forests 19. Forest Context and Policies in Portugal. Present and Future Challenges, pp 219-233.

RynekPapierniczy.pl. 2025. Crisis in the timber sector. Government report on "stabilization" is untrue. Available at: https://www.rynekpapierniczy.pl/artykul/kryzys-w-sektorze-drzewnym-rzadowy-raport-o-stabilizacji-mija-sie-z-prawda-5147

SEAI. 2016. Energy in Ireland 1990–2015. 2016 Report. 2016. Sustainable Energy Authority of Ireland.

SEJM. 2024. Meeting records of the Committee on Economy and Development /No. 36/ and the Committee on Environmental Protection, Natural Resources and Forestry /No. 33/. Available at: https://www.sejm.gov.pl/Sejm10.nsf/biuletyn.xsp?skrnr=OSZ-33

SFS. 2025. Slovenia Forest Service. Available at: https://www.zgs.si/en/

Slovenian Forest Institute. 2025. Available at https://www.gozdis.si/en/

Statistics Estonia. 2025a. Available at: https://andmed.stat.ee/en/stat/majandus__toostus__toostustoodanguindeksid

Statistics Estonia. 2025b. Available at: https://andmed.stat.ee/en/statsql/majandus__valiskaubandus__kaupade_vk/VKK10

Statistics Estonia. 2025c. Available at: https://andmed.stat.ee/en/stat/majandus__energeetika__energia-tarbimine-ja-tootmine__aastastatistika/KE0240

Statistics Estonia. 2025d. Available at: https://andmed.stat.ee/en/stat/majandus__energeetika__energia-tarbimine-ja-tootmine__aastastatistika/KE062

Statistics Estonia. 2025e. Available at: https://stat.ee/en/labour-force-survey

Statistics Estonia. 2025f. Available at: https://andmed.stat.ee/en/stat/majandus__palk-ja-toojeukulu__palk__aastastatistika/PA5335

Statistics Portugal. 2025a. Statistical Yearbook of Portugal - 2022; Lisboa, Instituto Nacional de Estatística, IP. Available at: www.ine.pt. Statistics Portugal, 2025b. Statistics on external trade of goods. Available at: www.ine.pt.

Statistics Portugal. 2025b. Statistics on external trade of goods. Available at: www.ine.pt.

Statistics Portugal. 2025c. Estatísticas da Construção e Habitação - 2024. Lisboa Instituto Nacional de Estatística, I.P. Available at: www.ine.pt.

Statistics Portugal. 2025d. Forestry Economic Accounts, satellite accounts. Available at: www.ine.pt.

Statistics Portugal. 2025f. Recenseamento da população e habitação - Censos 2021, I.P. Available at: www.ine.pt

SURS. 2024. Statistical Office of the Republic of Slovenia. Available at: https://www.stat.si/statweb/en

The Nature Fund. 2025. Available at: https://loodushoiufond.ee/projektid/susinik

TI-WF. 2025. Thünen Institute of Forestry. Fellings and Use of Roundwood Available at: https://www.thuenen.de/en/institutes/forestry/figures-facts/holzeinschlag-und-rohholzverwendung

UBA 2025a. Umweltbundesamt. 2025. Germany on track for 2030 climate targets Available at: https://www.umweltbundesamt.de/en/press/pressinformation/germany-on-track-for-2030-climate-targets).

UNCCD. 2025. The United Nations Convention to Combat Desertification (UNCCD). Available at: https://data.unccd.int/country-overview?country=PRT.

UNCCD. 2025. The United Nations Convention to Combat Desertification (UNCCD). Available at: https://data.unccd.int/country-overview?country=PRT.

VKG. 2025. Available at: https://www.vkg.ee/en/bioproducts/

VLADA. 2025. National Energy and Climate Plan (NECP). Government of the Republic of Slovenia. Available at: https://commission.europa.eu/document/download/19e1a8df-ca9a-4a37-9e3e-8d360b75d06c_en?filename=SI%20%E2%80%93%20FINAL%20UPDATED%20NECP%202021-2030%20%28English%29.pdf

WIFO. 2025. Austrian Institute of Economic Research, 7/10/2025. Austria Gradually Emerges from Recession. Economic Outlook for 2025 and 2026. Available at: https://www.wifo.ac.at/en/news/austria-gradually-emerges-from-recession

Woodland Carbon Code. 2025a. The quality assurance standard for UK woodland carbon projects. Available at: https://www.woodlandcarboncode.org.uk/

Woodland Carbon Code. 2025b. Interim statistics. Available at: https://www.woodlandcarboncode.org.uk/statistics#para-354-2-0

– – –