



European Wood Policy Platform | Policy Paper 2024

A WOOD-BASED CIRCULAR BIOECONOMY FOR A SUSTAINABLE EUROPE

GREEN CONSTRUCTION AND INNOVATIVE
WOOD SOLUTIONS

ABOUT

The **European Wood Policy Platform, WoodPoP**, actively contributes to shaping the framework conditions for **sustainable wood-based value chains** and develops **wood-related policy solutions, measures and recommendations**.

Through the exchange between **policy makers, industry and research**, the platform stimulates innovation and helps to strengthen the role of wood to mitigate climate change and to support a **clean, just and competitive transformation** of Europe.

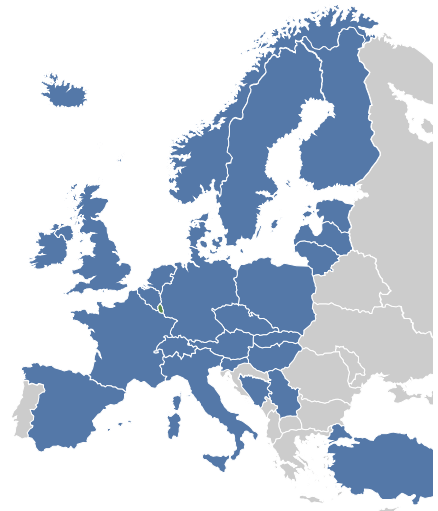


More at woodpop.eu

WoodPoP unites representatives from public bodies and entities from 27 countries including 2 observers.



British Columbia (observer)



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RATIONALE

This Policy Paper contributes to a joint understanding between public and private actors along the value chain for strengthening the wood-based circular bioeconomy in Europe with a special focus on the construction sector.

It identifies critical fields of action and the necessary structural short to long-term framework conditions, as well as suitable instruments and resources to this end.

This paper targets a pan-European audience on national and regional levels, integrating global perspectives, allowing it to reach beyond European borders. While particular focus is placed on the dialogue with European Union policy and decision-makers, the Policy Paper takes into account national, regional, sub-regional diversity and specific policy needs of the whole pan-European continent to foster the wood-based circular bioeconomy.

Engagement in the platform is voluntary and does not imply financial or legal commitments. It commits to supporting a sustainable wood policy at the pan-European level.





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DEFINITION

For the purpose of this Policy Paper, sustainable wood policy is understood as the following:

▼ A sustainable wood policy integrates the principles of Sustainable Forest Management (SFM) into the wood-based value chain, ensuring a holistic approach from sustainable forest management to the end product meeting both present day and future needs.

This policy encompasses environmentally sound practices, social responsibility, and economic viability throughout the entire process of timber production, processing, and distribution.

By considering sustainable forest management and the wood-based value chain, the policy aims to maintain forest health and biodiversity, support local economies, and promote the use of sustainably sourced wood products that contribute to a resilient and environmentally friendly wood-based circular bioeconomy.

THE PAN-EUROPEAN WOOD-BASED SECTOR

The wood-based sector englobes the mobilisation and first transformation of wood, building and construction activities, production side streams, reuse and recycling aspects¹.

The wood-based sector is a key player in the transition towards a more innovative, inclusive, and sustainable society, specifically contributing to rural development and the job creation considering primary, secondary raw materials and offsite prefabrication.

527 bn euros

direct gross value added

1,114 bn euros

total gross value added
(direct, indirect, and induced)

3.3%

direct share of
total economic output

7.1%

total share of overall
economic output

1 in 16 euros

is generated directly or indirectly
by the forestry and wood industry

7.9 million

direct jobs

17.5 million

total jobs

1 in 16 jobs

is generated directly or indirectly
by the forestry and wood industry

Source: Econmove, Economica (2023) The economic impact of the forestry and wood industry in Europe in terms of bioeconomy, Vienna

¹ Definition used from the Wood Circus Project; www.woodcircus.eu



PRINCIPLES

1. Sustainable wood policies are based on the premise of **sustainable forest management**. These policies are the basis of supply for the material and energetic uses of the renewable resource: wood.
2. Sustainable forest management aims to ensure that forests supply goods and services meet both **present day and future needs**, contributing to the sustainable and inclusive development of communities.
3. In addition to forest products (comprising of both wood and non-wood forest products), sustainably managed forests provide **important ecosystem services**, such as carbon sequestration, biodiversity conservation, recreation, well-being, cleaning of air and the protection of water.
4. To ensure balance between forest conservation and wood production, it is necessary to identify and differentiate between the **various forest ecosystems in Europe**, their characteristics, dynamics and contributions to tackling climate change and biodiversity loss.
5. Wood plays a vital role in the **transformation towards a carbon-neutral and circular bioeconomy and a climate-positive society**.
6. Wood and wood products are vital components for **healthy, liveable and sustainable living and working spaces**.
7. Wood and wood-based products constitute a sustainable and aesthetic **alternative to fossil-intensive and non-renewable products** for many consumers.
8. **Circular thinking, eco-design, and actions in all stages of processing and service life**, allowing the reuse of the relevant product system and its materials, are indispensable for the efficient use of wood as a renewable yet limited resource.
9. Greening of urban areas with forests and wood buildings can **improve the quality of living** and contribute to better air quality, heat reduction and well-being.

CHALLENGES AND OPPORTUNITIES

1. There is a need to **foster the use of wood from sustainably managed forests** as well as woody biomass from other sources (e.g. farms or waste) as renewable resources, and to **systematically integrate the wood-based value chain into the transition to a climate-neutral economy and society**.
2. **Attention and public interest** in the potential of wood, wood-based products, and the wood-based value chain **should be further increased** in the coming years.
3. As a renewable resource, wood and wood-based products from sustainably managed forests are an **immediately available solution to help mitigate climate change** by substituting fossil-intensive and non-renewable materials and fuels.
4. Wood products are **highly versatile**, store carbon within their lifetime, and offer viable alternatives to materials such as concrete, steel, plastics, and synthetic fibres.
5. Wood buildings store carbon throughout their life cycle, have the potential to reduce the use of energy for cooling and heating, and offer a **positive impact on wellbeing and health**.
6. Wood is suitable for building and renovations of small to high-rise buildings, whether for private or public construction and, therefore, should play a crucial role in the European Renovation Wave.
7. The possibilities for **digital revolution**, automation, pre-fabrication and utilization of artificial intelligence are countless.
8. Wood encourages **innovation** and presents **versatile uses**. Its effects on health and wellbeing, its mechanical, chemical, physical, and acoustic properties as well as its workability allow for numerous new solutions.
9. Wood offers numerous opportunities for a **circular bioeconomy**. As a renewable yet limited resource, the **efficient use** of wood is essential. By applying the cascading principle where appropriate, resource efficiency and minimising waste can be achieved.
10. The wood-based sector creates **green jobs, livelihoods, and local development** in urban and rural areas.
11. Despite the outstanding sustainability and economic benefits of wood products, their market presence remains limited, with wood construction accounting for only 2-3% of the market share in Europe.

Therefore, targeted policy interventions are urgently needed to promote these sustainable practices and unlock the full potential of wood products in the market.

1

WOOD SOURCING AND SUPPLY CHAIN MANAGEMENT

To sustainably source wood and promote transparency and traceability in the wood supply chain, we call on all relevant public and private actors to:

- a. **Strengthen sustainable forest management**, including reforestation, climate-adaption, biodiversity conservation and ecosystem resilience.
- b. Ensure the **availability of wood resources** for all wood-based industries, inter alia for industries producing wood-based products with long-lasting carbon cycles, replacing fossil-intensive and non-renewable products.
- c. Increase **social acceptance** of mobilising wood as an integral part of the multifunctional role of sustainable forest management.
- d. Provide **incentives** (but avoid market distortion) and other public and private capital, as well as positive recognition for companies to further adopt responsible sourcing practices.
- e. Harmonise and **simplify interdependencies** of different regulations for timber mobilisation and timber trade (EUDR, Lacey Act, Japanese Clean Wood Act, RED III, etc.) and accommodate for substantial reduction in bureaucracy (reducing red tape) of the existing regulatory framework.
- f. Foster an **integrated value chain approach** connecting and supporting industry and forestry owners in the digitalisation of their operations, including the potential use of new technologies.
- g. **Enhance the role of Information and Communication Technologies (ICT) and digitalisation** in the forestry sector by implementing advanced technologies such as **Artificial Intelligence (AI), Internet of Things (IoT), blockchain, and data analytics** to improve traceability, optimise resource management, and streamline operations across the supply chain.
- h. Use and **improve feasible traceability and transparency tools** for materials delivered from wood, providing reliable information on available resources whilst investing in research and development along the entire value chain.
- i. Provide **training** for companies throughout the supply chain, including loggers, processors, traders, and retailers, on best practices for traceability.
- j. Support **small-scale producers and suppliers**, inter alia through capacity-building initiatives, to comply with regulatory and certification requirements, promoting inclusivity and fairness in the supply chain.

2

CIRCULAR UTILISATION

To improve resource efficiency and circularity, we call on all relevant public and private actors to:

- a. Create an environment that supports circular thinking, eco-design, and action **in all stages of processing and service life**, allowing the reuse and recycling of the relevant product system and its materials.
- b. Create favourable conditions for **reuse and recycling of wood** in line with value retention to extend its life cycle as much as possible. Secondary wood should be directed to product uses following the cascading principle to maximise value-added and long-term carbon storage.
- c. Support the development of **infrastructure** for the collection, sorting, and processing of wood residues and post-consumer wood, and encourage the development of markets for recycled and recovered wood products.
- d. Work towards a minimum level playing field on **wood waste management** including a clear and single definition of hazardous waste to prevent wood waste, optimise recycling and reuse rates, and ensure sustainable energy recovery.
- e. Consider the **role of wooden biomass for energetic use** as a sustainable and renewable energy source where feasible and viable, e.g. on a regional and local level or as part of critical infrastructures.
- f. Encourage the **sequential use of biomass** as a material maximising economic, environmental and social benefits with a final use as an energy source.
- g. Integrate **end-of-life uses** throughout the value chain and incentivise eco-design of buildings for disassembly, to facilitate the dismantling and **recovery of building elements** allowing them to be reused or recycled.
- h. Foster **new circularity business strategies** to develop innovative technologies and methods that enhance the efficient and, where viable, cascading use of wood, promoting environmentally friendly practices.

3

WOOD PROCESSING AND MANUFACTURING

To promote value-adding and resource efficiency in the European processing and manufacturing industry, we call on all relevant public and private actors to:

- a. Incentivise **investments** in modernisation, enhanced efficiency and productivity, better resource management including new value chains.
- b. Support actions aimed to boost circularity, improve co-production and co-creation and create **higher value products** throughout entire value chains for companies of all sizes through innovation and new business models.
- c. Speed up pre-fabrication of building products with the aim to **minimise construction work onsite** and maximise prefabrication.
- d. Support frameworks to increase manufacturers' capabilities to **bring secondary materials back** into processing and manufacturing to boost circularity and intake from the industry.
- e. Support companies' efforts to **minimise emissions** of their own operations.



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A carbon handprint is the positive counterpart to a carbon footprint, measuring actions that positively impact the climate. If your handprint equals your footprint, you are carbon neutral; if it exceeds, you are climate positive.



CONSTRUCTION AND BUILDINGS

To incentivise the use of wood as a sustainable building material, we call on all relevant public and private actors to:

- a. Contribute to a new European framework for the use of wood in **mass-market development** and high standard engineered and architectural solutions.
- b. Develop, streamline, **harmonise, and simplify codes** and standards regarding wood construction across countries, supporting the efficient and effective functioning of a pan-European market, building on the EU Common Market with its shared rules and bilateral agreements with third countries, for instance, the European Economic Area.
- c. Progressively review and **remove obstacles for wood construction**, such as that on height and floor area allowances throughout national building codes and standards, incorporating scientific research results, knowledge, and practical experiences from early adopters and frontrunning countries and regions to remove barriers to timber construction, including renovation activities.
- d. Launch and adopt **pan-European, national, regional and local wood construction programmes/initiatives**.
- e. Mandate **harmonised reporting on emissions** for new buildings and major renovations and introduce maximum limit values on whole-life carbon/embodied emissions (to be progressively lowered), in line with science-based carbon budgets.
- f. Apply scientifically based **Life Cycle Analysis (LCA) accounting rules**, that duly reflect and quantify wood's climate benefits of long-term biogenic carbon storage, in Product Environmental Footprint (PEF) and Environmental Product Declarations (EPDs). The LCA should follow a harmonised standard from a European/international standardisation organisation, and financial and technical assistance should be offered to SMEs.
- g. Introduce **carbon handprint regulation**, and enable and promote the environmental and economic value of long-term carbon cycles in and on buildings in new construction and renovations.
- h. Promote **modular and industrialised solutions** for construction and building renovation.
- i. Leverage **public procurement policies** to promote environmentally friendly construction, for example, by favouring the use of wood-based materials, novel concepts, prefabricated building elements and other wood products.
- j. Encourage the **adoption of innovative wood construction techniques** among builders, architects, engineers, and workers through training programmes and other support schemes.
- k. Accompany efforts with **guidance documents** for different user groups, from suppliers to end users, at local, national, European and global levels.
- l. Develop **risk management** of buildings throughout their life cycle.



Decarbonisation of the construction sector will require a general transition from high carbon construction technologies to lower carbon technologies.

Five technological switches are facilitated by wood-based products:

Concrete Replacement: Mass timber and cross-laminated timber (CLT) offer lighter, sustainable alternatives to traditional concrete, reducing carbon emissions in building foundations and structures.

Steel Replacement: Glued laminated timber (glulam) and engineered timber structures provide strong, durable options that can replace steel in beams and columns, lowering the overall carbon footprint.

Masonry Replacement: Timber frame construction offers an efficient, low-carbon substitute for traditional masonry, simplifying assembly and reducing material weight.

Insulation replacement: Nature-based insulation materials are excellent alternatives for glass wool, stone wool, Expanded Polystyrene (EPS) and polyurethane. Flexible and rigid softboards tremendously lower the carbon footprint and act as a damp barrier.

Fossil Fuel Replacement: Biomass energy can replace fossil fuels in heating and energy generation, leveraging wood waste and by-products for a more sustainable energy source.

5

DEVELOP SMART AND NOVEL WOOD USES

To support innovation, research and development and to significantly expand the range of innovative wood solutions, we call on all relevant public and private actors to:

- a. Encourage and support **pan-European and transnational programmes** to foster innovation, research, and development, including grant schemes and funding opportunities.
- b. Support **long-term and/or formal collaboration commitments**, notably public-private partnerships and other forms, such as innovation hubs, clusters, transfer platforms, networks, and communities of practice.
- c. Create **enabling conditions for novel uses of wood and pulp**, including processing residues and post-consumer wood, and for **reuse and recycling**, replacing non-renewable materials.
- d. Support the **commercialisation, market uptake, knowledge transfer and business startup** for new and innovative uses inter alia by streamlining regulations and permitting procedures.
- e. Endorse and support research on renewable and natural building materials addressing **key future topics** such as hardwoods, underutilised and new tree species and all their **potential uses**.
- f. Highlight wood and wood products as vital components for **healthy and sustainable living and working spaces**, including for healthcare and wellbeing facilities.
- g. Address and integrate the **end-user's perspective** and social dimension (considering the New European Bauhaus) in research and new developments.
- h. Promote **the efficient use of wood through digitalisation** (artificial intelligence), leveraging technologies such as IoT and data analytics to optimise resource management and enhance sustainability in wood production and consumption.
- i. Encourage the **finance sector to invest in innovative wood solutions**, providing the necessary funding and support for startups and projects that focus on sustainable practices and circular economy principles.

6

SKILLS AND EDUCATION

To strive for the necessary expertise and skills along the wood-based value chain, we call on all relevant public and private actors to:

- a. Foster **advanced, modern, and interdisciplinary education** and vocational training courses.
- b. Provide sufficient education programs and well-equipped educational institutions at all levels and **encourage enrolment** in these programs from the primary to the tertiary level.
- c. Co-finance modern **pedagogical research equipment** for the implementation of practical training in schools and companies as educational partnerships.
- d. Support the introduction of courses (compulsory or elective) that encourage the **acquisition of woodworking skills** in other educational and study programs.
- e. Promote the **mutual recognition of diplomas and training across** countries at pan-European (and global) level and the development of training courses offered, such as **micro-credentials**, as part of upskilling and reskilling of employees in the woodworking industry across different profiles and backgrounds.
- f. Support **job creation** in wood-based industries and throughout the entire value chains with tailored, inclusive educational programs that specifically **encourage women's participation, address skill shortages, and accommodate diverse age profiles**.
- g. Utilise **skills intelligence** to systematically **identify skills gaps and emerging needs**, enabling the development of responsive curricula and training programmes aligned with evolving market demands and technological advancements.
- h. Promote **open courses and online learning platforms** to enhance accessibility, allowing beginners to easily start with foundational skills.
- i. Support **education, training and lifelong learning** of technical and operational personnel in the wood-based sector, and notably also in other relevant sectors and the general society through collaboration, for instance, with the NEB Academy.

7

COMMUNICATION AND AWARENESS

To engage with society, local communities, and relevant actors, we call on all relevant public and private actors to:

- a. Highlight the **contribution of sustainably managed forests and wood products** to tackling climate change and advancing their opportunities within a circular bioeconomy.
- b. Send a clear message that **sustainable management makes forests climate resilient**, while providing wood to substitute fossil-intensive materials.
- c. Encourage consumers, architects, decisionmakers, and businesses to contribute to the **green and digital transformation of the built environment** by using sustainably sourced wood products.
- d. Promote the **importance of wood utilisation through public awareness campaigns** based on the latest scientific evidence.
- e. Assess the need for **sufficient capacities and resources** necessary for complying with regulations and effective implementation of existing strategies and programmes.
- f. Urge governments, regions, communities, municipalities, and other relevant entities to embrace and prioritise the multiple benefits of wood in their **planning and sustainable development endeavours**, as well as in **public construction projects and procurement**.





8

GOVERNANCE: REGULATORY COMPLIANCE, HARMONISATION, AND CIRCULARITY

To support coherent and effective wood policy development, we call on all relevant public and private actors to:

- a. Create **enabling political, legal, financial, structural, and socio-economic frameworks** for sustainable integrated wood-based value chains.
- b. Encourage and advance designated **pan-European, national and regional wood programs and initiatives**, integrating best practices from European and national wood-related initiatives and actions, supporting the transition towards a circular bioeconomy.
- c. Develop and adapt **codes, norms and standardisation** to support the use of wood and wood-based products.
- d. Consider an **ambitious national wood construction quota** in public procurement.
- e. Foster **cooperation between public and private partners** as accelerators to transition to a wood-based circular bioeconomy.
- f. **Eliminate market and technical barriers to trade** for European domestic wood producers and facilitate the adoption and recognition of international, European and national standards, while avoiding any unintended negative consequences (e.g. leakage effect).
- g. Support **risk-sharing financing** and combined investment in woodworking and construction sector.
- h. Foster **meaningful engagement and participatory processes** to consult stakeholders in the development of forest and wood-related policies.
- i. Provide **adequate, integrated information and data** on a pan-European level for the use of wood in construction and other relevant sectors.
- j. Increase the **contribution of the wood sector to mitigate climate change** and support a **clean, just and competitive transformation** of Europe.

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