CIRCULAR CHOICES FOR A COMPETITIVE EU BIOECONOMY

Growing a circular future
In the European Union (EU), the providers of high-quality wood, fibre-based, paper and board products and packaging, and renewable energy solutions represent a sustainable, circular and integrated European value chain which will be crucial to enable the EU to reach the net zero goal by 2050.

The Cross-sectoral Coalition supporting Circular Choices for the EU's Bioeconomy1 offers a wide range of renewable solutions and bio-based products that contribute to European resilience and strategic autonomy, to the transition towards a circular bioeconomy, and to the decarbonisation of the built environment. These are the necessary preconditions to achieve the EU's net zero ambitions. The solutions we offer are sustainably sourced from across Europe thanks to our members’ steadfast commitment to sustainable forest management. During recent crises, we have been highly adaptable, playing a key role in providing essential products and services to society. As a homegrown sector, we will help to build European resilience and implement the green transition.

WE REPRESENT GLOBAL AND EUROPEAN LEADERSHIP IN:

The future circular bioeconomy as an innovation lab

Embracing the digital transition

Recycling and end-of-life energy recovery

Sustainable forest management

Renewable, carbon-neutral, biodegradable, and durable products

Renewable energy solutions and negative emissions

Resilience in security of supply of the materials and technologies necessary for the circular transition

ABOUT US

Coalition members collectively represent experts in the EU forestry sector, the wood, fibre-based paper, and board products industry, and in renewable energy provision. We offer circular and affordable solutions to deliver a net-zero economy by optimising the use of sustainable and renewable wood and wood fibre-based products and energy in a responsible and resource-efficient manner.

Caring for the EU’s forests means caring for people’s needs. Sustainable forest management has been a success thanks to the commitment and efforts of forest owners and managers. Their decisions today will echo far into the future.

OUR OBJECTIVES

To offer the world the most sustainable, innovative, and competitive wood, paper, board, and fibre-based solutions.

To provide environmental, social, economic, and hygienic solutions to society while making sure that forests are managed in a sustainable manner and are thereby healthy and resilient, biodiversity-friendly and well adapted to climate change.

To support and work with the EU institutions towards creating an enabling policy environment for our sectors to collectively reach EU fossil fuel emissions mitigation equivalent to 30%.

KEY SECTORS (ordered by NACE code)

- Forests and forest management (02)
- Sawmilling and planing of wood (16.10)
- Wood-based products (16.21)
- Parquet (16.22)
- Other builders, carpentry and joinery (16.23)
- Wooden containers (16.24)
- Pulp (17.11)
- Paper, board (17.12)
- Packaging (17.21)
- Tissue and other fibre-based manufacturing (17.22, 17.23, 17.24, 17.29)
- Printing (18.1)
- Furniture (31)
- Wood bioenergy (35.11, 35.30)

KEY FIGURES (2018)

- 806 Mt CO₂ eq² annually sequestered in the forest, stored in products, substituted for high-carbon alternatives or substituting fossil fuels–removing the equivalent of 20%³ of EU total fossil emissions
- €520 billion turnover representing 3% of EU GDP and 18% of EU bioeconomy⁴
- 4 million direct employees representing 2% of EU and 19% of EU bioeconomy⁵
- 20% of EU manufacturing companies represented
- 90% of Coalition’s round wood supply originates from EU forests⁶

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3. Ibid.
5. Ibid.
In 2019, we were responsible for carbon removals equivalent to 20% of EU fossil emissions through substitution via wood-based products, sequestration in forests, and stock in forests and wood-based products.

Our sectors have the ambition to mitigate carbon emissions in the EU to the equivalent of at least 30% of EU fossil fuel emissions by 2030. To succeed in this endeavour, we would welcome the opportunity to work with the EU institutions towards the definition of the right policy conditions to ensure the optimal use of sustainable and renewable wood-based products and support sustainable forest management.

Looking ahead to 2050, wood-based products and sustainable forest management must play an essential role in meeting society’s needs and in decarbonising the European economy, not to mention facilitating net-zero emissions.

Life cycle assessment studies that compare the environmental impacts of products show that wood building products have a lighter environmental footprint than alternative materials and offer clear environmental advantages at every stage. The manufacture of wood products requires less fossil fuel than non-wood alternative building materials, including concrete, metals, and plastics.

Over the coming years, we plan significant investments in green technologies for production processes and supply chains – this is an area where the wood working industries and fibre and paper producers are already ahead of other EU manufacturing industries. We aim to reach carbon neutrality in manufacturing by 2050.

Making sustainable products the norm by offering renewable and recyclable alternatives to fossil-based materials in the form of wood and fibres

We supply renewable and local substitutes for materials and products such as plastics, steel and/or cement, that are CO₂-intensive in production or based on fossil energy. We work to ensure that these products and solutions are derived from sustainably-managed and resilient forests, now and in the future.

We work to ensure that products and solutions fit the future capabilities of European forests.

Wood, paper, board, and fibre-based products offer real alternatives to fossil-based products as they come from renewable sources, are recyclable and/or biodegradable and can generate renewable energy at the end of their life cycle. They also contribute to improving water stewardship, as most of the water used is returned in good condition to the environment, and they mitigate climate change by locking in carbon as wood-based products in construction, furniture, packaging, and other applications are natural, sustainable carbon stores.

The circular bioeconomy offers competitive, alternative solutions today and extensive opportunities tomorrow. Our sector will become a springboard for diverse products and industries, multiplying the use and application of fibre-based materials and textiles, nanocellulose, biocomposites, biochemicals and food additives.

With forecasts predicting that 75% of the world’s population will be living in urban areas by 2050, it is paramount that cities become more sustainable – this means using more sustainably-sourced wood building products. Increasing the use of renewable materials in buildings, mainly wood, would contribute to decarbonise the built environment while contributing to the bioeconomy.

The bioenergy sector is paving the way for sustainability via the ground-breaking Renewable Energy Directive, a first-of-its-kind legislation that sets mandatory sustainability criteria for our sector; an example that many other sectors could follow.

Meeting increased demand for raw materials by maximising new secondary streams

Our sector is a circular bioeconomy leader and a champion in recycling and end-of-life energy recovery.

We contribute to waste reduction in the circular economy by closing material loops:

- We have set a recycling rate target of at least 90% by 2030 for the fibre-packaging sector. This is the benchmark to aspire to while recognising technical constraints.
- We ensure that waste is minimised wherever possible, and that valuable natural resources are used in the most efficient and economical way possible while boosting recyclability.
- Prefabricated wood components, used in both wooden frames and mass timber constructions, have helped solve many design and engineering challenges including material and time efficiency, reduced waste, high-performing and energy-efficient passive designs.
- Prefabricated construction reduces generation of construction waste compared to traditional construction methods, as waste generation is prevented from occurring at the source of construction waste.

Protecting and advancing consumer health and safety

Forest fibre-based products play a key role in minimising the spread of diseases and improving food safety and hygiene by supplying products that are both hygienic and sustainable. They also help ensure that perishable products are safe to use by offering sustainable solutions to protect them in transit.

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The biophilic attributes of wood help improve human well-being. Living in a wooden home reduces blood pressure and stress levels like a walk in the woods does.

Engineering and prefabrication of wood construction have improved built assemblies while improving the health and safety of construction workers.

Paper and board food contact materials contribute to EU food security and eradicate food waste.

**Working to maintain healthy and resilient forests and strengthening their environmental benefits**

- The forestry sector has contributed to biodiversity preservation at the same time as supporting the transition to a circular bioeconomy. Sustainably-managed forests are, and should remain, a home for biodiversity. Despite forests facing unprecedented pressures due to changing climate conditions, Europe's forest ecosystems remain among the most biodiverse European land ecosystems today\(^\text{12}\). This is confirmed by several measurable factors\(^\text{13}\). We continuously adapt forest management to climate change constraints and opportunities, based on the most up-to-date science and facts.
- We restore EU forests impacted by natural disturbances, pests, and diseases.
- We identify opportunities for expanding forest areas and increasing their productivity.
- We provide non-wood products such as nuts, fruits, mushrooms, and honey to society and provide more added value from those products.
- We explore voluntary solutions to enhance the provision of economically-valued forest-based services, in particular carbon sequestration and biodiversity, through the additional payment for ecosystem services.

**Sequestering carbon from the atmosphere and storing carbon in trees and products**

- Carbon sequestered in products adds to the carbon sequestered in forests. Improved utilisation of wood assortments can lead to the increased production of wood products and consequently positively influence the existing carbon pool.
- We contribute to increasing carbon stock in forests, with wood harvesting remaining below the annual natural increase.
- We contribute to ensuring the sink functions of forests. The fact that this function has decreased since 2013\(^\text{14}\) does not mean a reduction of carbon stock in forests but a slower rate of CO\(_2\) absorption due to a variety of factors. These include forest damage and dieback, age class structure and tree species composition, forest fires, pests and diseases which influence the health of forests. Calibrated and effective human intervention is necessary to address these worrying trends.
- Between 1990 and 2020, the carbon stock in EU forests increased by 48%\(^\text{15}\). Since 2013, roundwood production has increased by 11%\(^\text{16}\). This shows that, if conditions are met for forests to be sustainably-managed, storing carbon in forests does not conflict with providing wood for forest-based products. The two can co-exist.
- By 2050 and beyond, Bioenergy Carbon Capture and Storage (BECCS) and Pyrogenic CCS (PyCCS, to make biochar) will become key technologies to go beyond carbon neutrality and become climate positive – an essential path to European decarbonisation.

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12. The latest Forest Europe report showed positive trends for most biodiversity-related indicators and, according to the State of Nature in the EU 50% of forest habitats listed in Annex 1 of the EU habitats directive are in good condition, with forest ecosystems showing the most positive trends of their conservation status. Forest Europe, ‘State of Europe’s Forests 2020’, 2020, available at https://foresteurope.org/wp-content/uploads/2016/08/SoEF_2020.pdf

13. As an example, the common forest bird index in the EU has been relatively stable over the last four decades. Pan-European Common Bird Monitoring Schema, available at https://pecbms.info/trends-and-indicators/indicators/indicators/EU_Fo/

14. In 2020, the annual carbon sink was 24% lower than in 2013


16. European Forest Institute EFI, ‘Key questions on forests in the EU’, available at https://efi.int/forestquestions
90% of our roundwood supply originates from EU forests\textsuperscript{17}.

We provide jobs and contribute to enhancing multiple services in both urban and rural areas.

We contribute to making rural areas attractive to live in and well maintained.

We provide places that contribute to recreation, societal enjoyment and people’s health and well-being.

We contribute to the renovation and building of energy efficient homes, in line with the objectives of the European Bauhaus Initiative.

**2030 POLICY RECOMMENDATIONS FOR A NET ZERO EU BY 2050**

We are a cross-sectoral coalition that recognises and supports the EU’s efforts to move towards climate neutrality. While addressing societal needs, we enhance sustainability and ensure European strategic autonomy and competitiveness via the sustainable management of sources of valuable raw materials such as our forests, and also secondary raw materials, including recycled paper and board. This will build the resilience that Europe needs to face the challenges of tomorrow.

In recent years, EU forest-related policies have been addressed by focusing on certain functions of forests, in particular biodiversity and carbon sequestration, with limited appreciation of the complex concept of sustainable forest management. We believe a different mindset and approach is needed to allow forests to deliver on all society’s needs and for forest owners and managers to have trust and willingness to keep investing in their forests. In a potential situation of widespread shortages of raw materials, driven in part by insufficiently assessed and unbalanced new biodiversity protection targets and legislation, as well as irreversible impact of climate change on forest ecosystems, the key role of our industries in providing sustainable and low carbon products will encounter limits, and as a result wood and fibre-based products will be unable to play their optimum and important role in achieving climate neutrality. It is essential to thus guarantee the raw material supply for our sector, while ensuring the ecological and societal functions of sustainable forest management.

**We propose the following recommendations in five policy areas** to address the challenges that Europe faces on raw materials and supply, circular bioeconomy and environment, climate and energy, strategic autonomy, and topics associated with sustainable forest management. In summary, we call on the EU institutions to facilitate the proper functioning of the Single Market to ensure access to the raw materials needed for the circular transition and their efficient use, and to facilitate trade within and outside our sector within a structure that supports robust sustainable forest management. In many instances, EU regulation is not the most appropriate lever to facilitate this shift – we should trust in the functioning of the market if the appropriate structures are in place to support its seamless operation.

**Sustainable Supply and Efficient Use of Raw Materials**

Access to – and efficient use of – raw materials is needed for the EU to reach its goals of climate change mitigation and adaptation, circularity, and resilience of European value chains. By ensuring the right market conditions, the supply of wood and fibre from European, sustainably-managed forests can meet society’s needs and play an essential part in meeting these goals.

The promotion of – and support for – the use of all wood-based products, from short rotation products to long-lived ones and energy as a substitute for fossil-based products, should be underpinned by the maintenance of efficient wood supply chains. In this context, the application of the cascading principle\textsuperscript{18} in line with market and regional specificities along the lines of the European Commission’s 2018 guidelines is crucial for a resource-efficient use of wood.


The following policy recommendations will help overcome challenges regarding access to – and efficient use of – raw materials:

- Acknowledge the climate benefits of wood-based products:
  - Take account of the wood products substitution factor in climate change policy, including upfront embodied carbon to cover the whole life carbon cycle of materials used.
  - Set a science-based definition for renewable carbon as a sub-category of sustainable carbon and use the definition consistently in EU legislation.
- Acknowledge the climate benefits of wood-based products:
  - Assess all product-related legislation to ensure that sustainability requirements are consistent in the market and do not overlap in different EU regulatory frameworks – this will help the EU to build a competitive circular bioeconomy.
  - Recognise the need to have an effective and efficient harmonised set of rules aimed at removing any remaining barriers to the marketing of construction products at EU level. Significantly limit the administrative and financial burdens that an unnecessarily oversized Construction Products Regulation (CPR) would entail; the revised CPR should be clear, lean, predictable, and easily applicable by the industry to foster investment and innovation, thereby enabling the construction ecosystem’s transition to a green, resilient, and digital future.

- Completion of the circular economy 1: Harmonisation of separate collection systems across the EU - for paper this means collection through the paper stream or, for composite paper\footnote{This guidance does not challenge existing systems, but could give advice in situations where certain fractions of paper packaging are not yet separately collected. 4evergreen, ‘Guidance on the Improved Collection and Sorting of Fibre-based Packaging for Recycling’, 2023, available at https://4evergreenforum.eu/about/guidelinesandprotocol/}, products in the mixed recyclables stream.

- Completion of the circular economy 2: Ensure a functioning internal market for secondary raw materials - materials that have been recovered from the waste stream but need to be recycled - as well as ensuring and promoting sufficient primary raw materials:
  - Recognising the role of our value chain in the sorting, collecting, and recycling processes.
  - Increasing the targets for recovery of all wood wastes to 90% and simultaneously moving technical barriers and standards that impede the full recycling of wood waste.
  - Implementing a ban on wood going to landfill.
  - Avoiding mandatory recycled content that, for already highly recycled materials, will be counterproductive.

- Harmonisation of all food contact materials under the Food Contact Materials Regulation while allowing a level playing field for fresh and recycled fibres. Sectoral guidelines are essential to achieve this harmonisation.
- Support research and innovation for the use of non-wood fibres and secondary fibres that cannot be separately collected.
- Assess the impact of legislation that impacts forests with respect to the availability of wood for the circular bioeconomy within the context of the mid-term review of the EU Forest Strategy 2030.

**Circular Bioeconomy and Environment**

Fibre-based and wood-based products provide renewable and recyclable alternatives to fossil-based materials. A supportive policy framework is needed to accelerate their uptake.

- Acknowledge the environmental and societal benefits of reusing and recycling products derived from renewable resources to maintain carbon cycles in line with the principles of resource efficiency and cascading use.
Securing access to affordable fossil-free energy is key for our industries’ global competitiveness and ultimate viability in Europe. An enabling policy framework is needed to ensure that industry has the capacity to further invest in industrial transformation to achieve the 2050 net zero targets.

Climate and Energy

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— Incentivise industrial symbiosis and voluntary integration of industry with energy systems to ensure systemic emission reductions. Encourage the use of nature-based products that reduce our society’s energy consumption and remove carbon from the atmosphere, in line with the objectives of the Green Deal and New European Bauhaus, and especially in public procurement, which could set the example.

— Safeguard the industry’s global competitiveness against the risk of carbon leakage or material leakage.

— Facilitate on-site renewable energy production, including the use of waste and residues for bioenergy, to contribute to Europe’s energy self-sufficiency.

— Unlock funding opportunities for de-risking investments in improving energy efficiency, CO₂ avoidance and switching to renewable energy.

— Encourage innovation in energy efficiency, unlock access to research and development funding and facilitate product innovations which play an important role for our value chain’s circularity model.

— Recognise and support our sectors’ efforts in carbon footprint calculation and reduction by encouraging calculation systems based on specific data for raw materials and input products including end-of-life.

— Science-based legislation on sustainability criteria that guarantees the sustainability of bioenergy and reduces risks for investors.

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21. Reference to existing peer reviewed comparative LCA studies are available at https://www.fefco.org/eu-policy/recycling-vs-reuse-packaging-project.
— Support the local and regional use of forest residues to strengthen sustainable forest management, including thinning, forest mitigation, pest control, disease management, forest fire protection, and the energy transition in rural areas.

**Strategic Autonomy**

The resilience of supply chains needs to be strengthened with an integrated and flexible EU Single Market that allows industry to remain globally competitive.

— Favour nature-based materials, such as wood, paper, and fibre-based products over fossil-based alternatives.

— Promote a policy framework where water and soil use are addressed locally, based on the different industrial and societal needs.

— Embed the circular bioeconomy as a fully integrated, resilient European value chain in policy.

— Establish a wood-based Industrial Alliance that would be the ideal tool to further optimise the use of our raw materials in technologies and innovations that enhance the material efficiency and circularity of wood-based materials and products on an industrial scale.

— Enhance predictability by clarifying regulations for 2030 at an early stage, including sector commutative and related impact assessments.

— Support multilateralism to address global challenges such as climate change and promote sustainable development.

— Negotiate, implement, and enforce EU bilateral trade agreements to ensure and further develop access to third markets while ensuring reciprocity.

— Secure fair competition on EU markets and third country markets for EU industry and its products, with tools that should not be limited to the Carbon Border Adjustment Mechanism (CBAM). CBAM is not a workable solution for all industry sectors to address carbon leakage risks.

— Recognise that the underperformance of the standardisation process is a crucial obstacle to the smooth functioning of the Single Market. For this reason, well-defined and reliable guidelines for standardisation technical committees, as well as consultation and involvement of Member States and industry stakeholders in the evaluation and adoption process of standardisation deliverables, are of utmost importance.

— Elaborate new instruments to have a more efficient monitoring of the compliance with EU regulations of imported products and ensure effective controls.

— Set up and implement mechanisms to correct any environmental distortion of competition on export markets.

— Secure fair competition on European wood supply markets by better addressing unfair trade practices by third countries through a more effective use of trade defence instruments.

— Provide appropriate policy measures to address the shortage of staff and lack of skilled workers by supporting access to specialised professional paths and increasing the attractiveness of our sectors.

**Sustainable Forest Management**

Multifunctional and sustainably managed forests are important contributors to a European circular bioeconomy. This requires forest management practices tailored to local circumstances and needs. In this context, the recognition of the EU subsidiarity principle is a pre-condition to support the value of sustainable forest management across the EU.

— Acknowledge the value of and need for multifunctional management of forests and diverse forest management practices as guiding principles for EU forest-related policies, based on the subsidiarity principle and on Member State forestry laws and guidelines on how to best address sustainable forest management in their respective geographical and socioeconomic conditions.
Enable conditions to fulfil sustainable forest management on the ground by European forest owners and managers, in particular active measures to adapt forests to climate change, thus safeguarding forest habitats for the maintenance and enhancement of forest biodiversity.

Diversify sources of income in forestry through the evaluation of ecosystem services adapted to local conditions, subject to a voluntary approach and accompanied by appropriate financial tools.

Support wood mobilisation and enhance research and reliable information on the potential for wood mobilisation.

Work towards a good understanding of a sustainable and multifunctional forestry concept by the public, thus ensuring better public knowledge and society’s acceptance of forest management operations.

Acknowledge the difference between carbon stock and forest sinks and their respective trends and rationale.

Assist forest owners, in particular small-scale and new generation owners, by providing advisory services and financial support to investments and operational forest management.

Support the forest work force by adapting education, training, knowledge exchange and the development of new skills, in order to prepare future generations to better respond to current and future challenges.

Strengthen research and innovation (R&I) including adaptation to climate change and demand for future forests.

These recommendations would improve the policy framework in a way that would allow the Cross-sectoral Coalition to fully deploy its contributions to the EU’s goals for 2030 and help drive the transition towards a circular bioeconomy and our collective 2050 net zero ambitions.