



Overview

Forest products:

Priority actions towards a nature-positive future

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Introduction

As stewards of some 30% of the world’s forests that are primarily managed for the production of forest products, forest businesses play a critical role in maintaining and enhancing these forests’ valuable ecosystem services, while delivering a renewable supply of wood.

Managing nature risks is key for the forest sector, as it is highly dependent on thriving ecosystems for its prosperity, most notably for the wood fiber that flows throughout the production process. Long time horizons dictated by the length of harvest cycles also make the sector particularly exposed to climate and nature risks, with trees planted today needing to be resilient to changing climatic conditions over years and decades.

To halt and reverse nature loss while building resilience and meeting the growing demand for forest products, the forest sector needs to evolve towards an inclusive circular bioeconomy based on wood from sustainable working forests as a renewable and recyclable material. Scaling up this alternative economic

model requires deliberate and collaborative action along the full life cycle of forest products.

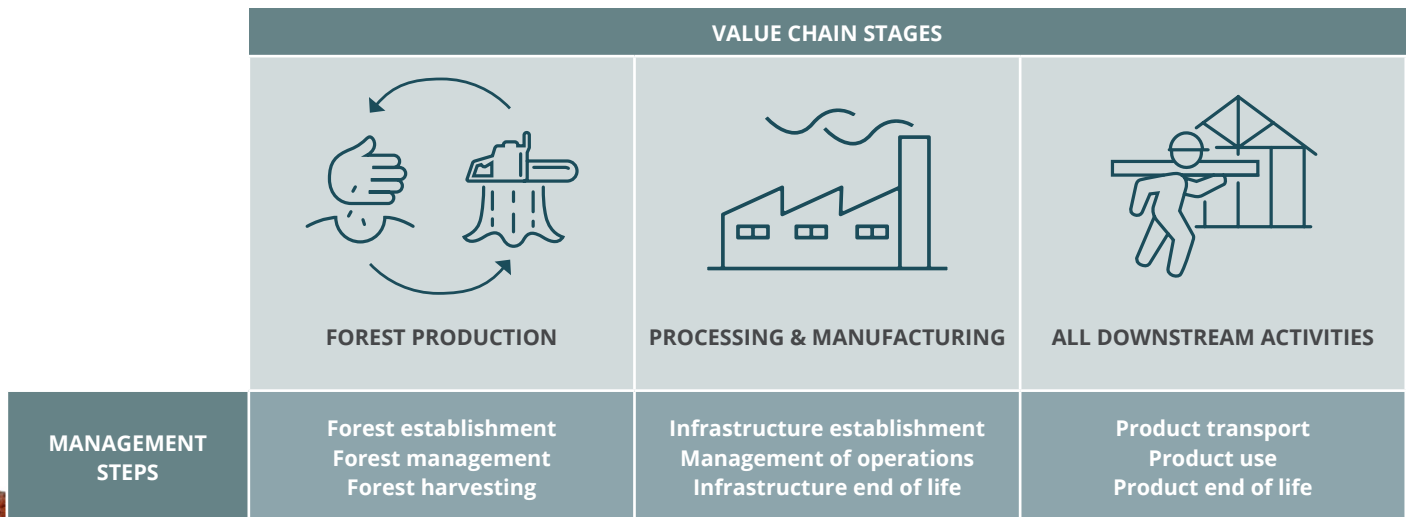
To complement ongoing sustainability initiatives, all businesses need to **Assess, Commit, Transform and Disclose** ([ACT-D high-level business actions on nature](#)). They should acknowledge the value of nature to their business; assess and measure their impacts and dependencies on nature; set transparent, time-bound, science-based targets; take actions to address their key impacts and dependencies; and publicly disclose performance and other relevant nature-related information.

This overview provides a sector-level summary of potential key impacts and dependencies on nature. Importantly, it also sets out the priority actions that all businesses should take now to transform their businesses and ensure the forest products sector plays its role in halting and reversing nature loss by 2030 - the mission at the heart of the [Kunming-Montreal Global Biodiversity Framework](#).

Scope of this overview

The forest sector ([SICS code: RR.2](#)) includes all economic activities that generally depend on the production of goods and services from forests, including pulp, paper, packaging, construction materials, furniture, biomaterials, bioenergy and more.

Forest products sector value chain (as covered in this overview)



Nature-related impacts

To protect and enhance the ecosystems on which they depend forest businesses should direct their efforts towards addressing the most significant impacts on nature in their operations and value chains, namely:

- **Biodiversity and habitat loss** – Forests are the largest terrestrial carbon sinks, and they provide habitat for 80% of global terrestrial biodiversity. Conversion of natural forest into plantations, as well as forest degradation and deforestation linked to unsustainable forest management leads to biodiversity loss and climate change. Although agriculture is the main driver of deforestation, between 2001-2015, 2-13% of forest conversion to other uses was due to tree plantations for wood products,^{1,2} with a sharp decline since 2013.³ Over the same period, an estimated 26% of global forest disturbances were due to degradation linked to forest products. This figure represents a temporary reduction in tree canopy cover (e.g., after harvest), without any indication of the severity.^{4,5}
- **Greenhouse gas (GHG) emissions** – As some segments of the forest products sector are energy intensive, reducing the reliance on fossil fuels is crucial. In 2021, on average, 67% of forest products companies' energy came from renewable sources, mostly through the use of woody biomass derived from harvesting, processing and manufacturing wood fiber.⁶
- **Freshwater use** – In forest production, water-demanding tree species and nursery irrigation require large amounts of water. Water is also a critical input in industrial facilities used mostly to pulp the wood and recovered fiber, to make paper and generate power.
- **Pollution** – Production facilities can cause significant air, water, soil and noise pollution. In industrial facilities, these impacts come mainly from the incineration of process residuals and waste, the discharge of chemicals and wastewater, as well as solid waste disposal. They also come from waste disposal and decomposition in landfills further downstream.

Nature-related dependencies

The high dependency of the sector on nature products and services provides a strong incentive to steward the world's working forests to the highest standards of sustainable forest management to protect and enhance invaluable ecosystem services and resources. Forest businesses depend on the following nature services and goods in their operations and value chains:

- **Wood fiber** – Wood is a key direct physical input throughout the production process.
- **Freshwater** – Water is needed at many stages of the value chain including forest operations, pulp and paper mills, as well as paper recycling operations.
- **Soil quality** – Healthy soils are essential for the growth of healthy forests. Degraded soils are prone to erosion and are nutrient-poor and water-permeable.
- **Bio-remediation ecosystem services** – Bioremediation occurs when biological systems such as micro-organisms prevent the contamination of soils and water by transforming toxic pollutants (for example, from fertilizers) into less-hazardous or non-hazardous forms.
- **Disease and pest control** – Without nature's ability to regulate disease and pest populations, forests would be left vulnerable to parasites, bacteria, fungi or viruses, resulting in widespread losses or reductions in yields.
- **Climate regulation** – Climate regulation is critical for the sector as non-adapted forest ecosystems become increasingly unstable in a warming climate, leading to greater incidences of forest fires, droughts and pest outbreaks.

These dependencies strengthen the business case to invest in the protection and restoration of nature.



Priority actions and opportunities

Through its impacts and dependencies on some of the world's most valuable ecosystems, the forest products sector has a key role to play in the transition to a nature-positive economy. As a business in the forest products sector, you can reduce your company's negative impacts on nature, mitigate risks to your operations and unlock commercial opportunities by prioritizing four key actions:

- 1. Maintain and enhance working forests** – Avoid deforestation and the conversion of areas of significant biodiversity value to intensively managed forests. Scale-up sustainable forest management practices as prescribed by global forest certification systems ([FSC](#), [PEFC](#) & [SFI](#)). Protect and restore areas of significant biodiversity and carbon value, connectivity between habitats, native or endangered tree species, as well as carbon removals in soils and forests. Implement these actions on degraded land to further augment their impact.
- 2. Reduce the impacts of processing, manufacturing and transportation** – Avoid establishing new operations in areas of significant biodiversity value or water stress. Reduce carbon emissions as well as water use, waste and pollution from production facilities and transportation. Reduce and reuse operational waste and improve product design to maximize lifetime and recovery potential. Restore areas of significant biodiversity value in or around mill sites.

3. Maximize the recovery of materials and products – Reduce the use of unsustainable materials by stimulating their substitution with sustainable forest products. Reduce waste by promoting the reuse of residuals and by-products by other industries, and engage with customers to promote the reuse, recovery and recycling of forest products.

4. Partner and advocate beyond your value chain – To catalyze system-level transformation, advocate for governments to raise policy ambitions for nature, and stretch beyond your business's boundaries through thoughtful and deliberate partnerships. Invest in actions to halt and reverse nature loss in your landscapes and regions of operations, for example, through context-based landscape management approaches co-developed with Indigenous People and local communities.

Importantly, efforts to deliver these priority actions and transform the sector must be delivered in alignment with a just and equitable transition, including meaningful dialogue with affected groups, such as employees, local communities, Indigenous Peoples and marginalized communities.

Adopting the priority actions can help businesses contribute to societal and environmental objectives, including the Global Biodiversity Framework (GBF) and the Sustainable Development Goals (SDGs). [Read the GBF-SDG mapping to see how the priority actions can contribute to these objectives.](#)



Resources

This overview was derived from the WBCSD report [Forest Sector Nature-Positive Roadmap](#).

In addition, the following **sector-specific guidance and tools** are currently available to businesses in the forest products sector:

- [Forest Products Sector Guide to the Natural Capital Protocol](#) (WBCSD, 2018)

- [The Corporate Ecosystem Services Review: Guidelines for identifying business risks and opportunities arising from ecosystem change](#) (WBCSD, 2012)

- [FSC Risk Assessment Platform](#)

- Certification standards ([FSC](#), [PEFC](#) & [SFI](#))

For additional **sector-agnostic resources**, please refer to Business for Nature's [High-level Business Actions on Nature](#).

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References

¹ [Deforestation displaced: trade in forest-risk commodities and the prospects for a global forest transition](#) (F. Pendrill, et al., 2019)

² [Estimating the Role of Seven Commodities in Agriculture-Linked Deforestation: Oil Palm, Soy, Cattle, Wood Fiber, Cocoa, Coffee, and Rubber](#) (World Resources Institute, 2020)

³ [How much forest has been replaced by plantation wood fiber?](#) (World Resources Institute)

⁴ [Forests and Deforestation](#) (H. Ritchie and M. Roser, 2021)

⁵ [Classifying drivers of global forest loss](#) (P. G. Curtis, et al., 2018)

⁶ [Global Forest Resources Assessment](#) (FAO, 2020)