Greening Construction with Sustainable Wood: Frequently Asked Questions

1. **Will increased use of wood in construction contribute to increased deforestation? Will increased demand for wood in construction result in increased harvesting?**
   The main driver of deforestation is the conversion of forests to agricultural land and pastoral land.[1] It is possible to meet the demand for timber for construction without causing deforestation by harvesting timber within the range of forest growth through sustainable forest management (SFM). However, the risk is real if promotion of increased used of wood in construction is not linked to policies, regulations or incentives to prevent deforestation and manage forest sustainably. The FCLP's mission is to accelerate global progress to halt and reverse forest loss and land degradation by 2030, while delivering sustainable development and promoting an inclusive rural transformation. It should also be noted that boosting economic value of forests through increased or higher value usage of supply of wood may counteract pressure to convert forests into other land uses. Therefore, the actions taken or supported through this initiative are expected to support countries' efforts in reducing deforestation and forest degradation.

2. **Given the FCLP's mission is to halt and reverse forest loss and land degradation, shouldn't we look to decrease the demand for wood rather than increase it?**
   The FCLP's mission is to accelerate global progress to halt and reverse forest loss and land degradation by 2030, while delivering sustainable development and promoting an inclusive rural transformation, through a voluntary and focused partnership of countries that are making a strong contribution to this agenda through national action and international collaboration.

   Sustainable development is needed to meet the growing needs of the growing global population. Due to the projected increase in population, living standards and associated economic activity, globally, the use of wood in construction is expected to double by 2030 and triple by 2060, along with increased use of other materials.[2] Increased use of wood, when it comes from sustainably managed forests, forms one part of the wider set of solutions needed to reach the ultimate goal of sustainable development; meeting our Sustainable Development Goals, including climate targets, in the face of this increased demand from the buildings and construction sector will require many complementary actions. Demand for primary materials can be reduced through increases in efficiency in their use. It is also critically important to shift to materials with lower life-cycle emissions and consider the reuse/recycling of wood products as a way to address increased demand for wood in the future and potentially reducing the need for new wood fibre from the forest.

[1] FAO, 2020: https://www.fao.org/3/cb7449en/cb7449en.pdf
[2] OECD, 2018: https://www.oecd.org/environment/waste/highlights-global-material-resources-outlook-to-2060.pdf; WBCSD, 2020: https://www.wbcsd.org/contentwbc/download/10806/159810/1.

To better manage the impact of existing and increasing demand for wood, it is critically important that it is sourced from sustainably managed forests. The increased use of wood from sustainably managed forests can form part of this shift to a circular economy and contribute to sustainable development.

3. **How can we be assured that wood in construction comes from sustainably managed forests?**
   There are a number of tracking and traceability systems, timber legality frameworks and SFM certification standards[3] in use today and these provide some degree of assurance. One of the priority actions under this initiative focuses on this question, with a view to identifying and promoting one or more systems or approaches that can be integrated into procurement policies. In many countries, national and sub-national policies - including legislation and regulations - exist to ensure SFM practices are used for wood harvesting. All governments must work on ensuring that strong sourcing safeguards in the form of laws, regulations and other tools are in effect to ensure sustainable management of forests.[4]

4. **What is sustainable forest management?**
   The United Nations General Assembly recognises that sustainable forest management (SFM) is a "dynamic and evolving concept, which aims to maintain and enhance the economic, social and environmental values of all types of forests, for the benefit of present and future generations".[5] The SFM concept encompasses both natural and planted forests in all geographic regions and climatic zones, and all forest functions, managed for conservation, wood production and multiple other purposes, at the local, national and global levels.

   The 2019 IPCC Special Report on Climate Change and Land[6] states (with high confidence) that "sustainable forest management can prevent deforestation, maintain and enhance carbon sinks and can contribute towards GHG emissions-reduction goals. Sustainable forest management generates socio-economic benefits, and provides fibre, timber and biomass to meet society's growing needs. While sustainable forest management sustains high carbon sinks, the conversion from primary forests to sustainably managed forests can result in carbon emission during the transition and loss of biodiversity." Furthermore, "enhanced forest protection, improved forest and agricultural management, fuel-switching and adoption of efficient cooking and heating appliances can promote more sustainable biomass use and reduce land degradation, with co-benefits of reduced GHG emissions, improved human health, and reduced workload especially for women and youth (very high confidence)".

5. **If increased demand from the construction sector increases the total amount of harvested wood, what is the net impact on the GHG balance?**
   The GHG impact of tree harvesting depends on several factors, including the existing

[3] FAO Sustainable Forest Management Toolbox: https://www.fao.org/sustainable-forest-management/toolbox/modules/forest-certification/in-more-depth/en/
[4] FAO 2020: https://www.fao.org/3/ca9825en/ca9825en.pdf, p.99.
[5] UN Forest Instrument 2015: https://www.un.org/esa/forests/documents/un-forest-instrument/index.html
[6] IPCC 2019: https://doi.org/10.1017/9781009157988.001

management system (or lack thereof), the type, physical structure and age of the forest, and the use of the harvested wood products. Exploitation of forests in an unsustainable manner is currently a significant source of emissions, hence the ongoing and increasing support and pressure to increase the amount of forest land globally that is managed on a sustainable basis and to store the carbon in the wood for longer periods while also substituting for non-wood materials. In its State of the World's Forests 2022 report[7], the FAO noted that replacing a non-wood material with a wood product would, on average, avoid carbon emissions of 0.9 kg of carbon for every 1 kg of carbon in wood.

The actions taken or supported through this initiative must contribute to reducing forest loss and land degradation, and to enhancing forest carbon sinks, as appropriate to each country's circumstances. According to the IPCC[8], "sustainable forest management can maintain or enhance forest carbon stocks, and can maintain forest carbon sinks, including by transferring carbon to wood products, thus addressing the issue of sink saturation (high confidence). Where wood carbon is transferred to harvested wood products, these can store carbon over the long-term and can substitute for emissions-intensive materials reducing emissions in other sectors (high confidence)."

Sustainably sourced long-lived wood products (such as wood-based construction products) are considered to provide environmentally sound alternatives to other building materials that require more energy to produce, such as steel, aluminum and concrete. Substituting emissions-intensive building materials with wood products can contribute to reducing overall GHG emissions. It is also important to recognize that there are ways to meet increased demand for wood in the construction sector by adapting the way we manufacture wood products (i.e. efficient use of wood fibre through engineered wood products and other value-added products) and the way we design buildings to promote reuse and recycling of materials. Approaches such as design for disassembly, for example, is one way to help meet demand while mitigating the need for more harvest and related impact on GHG balances.

6. **Will increased use of wood in construction contribute to a loss in biodiversity?**
If regulations or incentives to prevent deforestation or manage forests sustainably also include biodiversity values and objectives, biodiversity loss can be avoided. Within their jurisdictions, all governments should work on ensuring that strong sourcing safeguards in the form of laws, regulations and other tools, are in effect to ensure the sustainable management of forests, including conservation of biodiversity. The FCLP's mission is to accelerate global progress to halt and reverse forest loss and land degradation by 2030, while delivering sustainable development and promoting an inclusive rural transformation. It should also be noted that boosting the economic value of forests through increased or higher value usage of the supply of wood from sustainably managed forests may counteract pressures to convert forest into other land uses, which is a key driver of biodiversity loss. Therefore, the actions taken or supported through this initiative must contribute to reducing deforestation rates and increase global coverage of SFM,

[7]FAO 2022: https://www.fao.org/3/cb9360en/online/cb9360en.html
[8] *ibid*

which must include biodiversity values and objectives.

7. **How will this initiative affect or consider the interests of Indigenous Peoples and local communities?**
   Indigenous Peoples and Local Communities (IP&LC) have expertise in SFM on their territories while using traditional knowledge. Examples are Guatemala with ACOFOP, Mexico in Oaxaca and other states, and Brasil in Rondonia. It has been proven that deforestation and degradation in IP&LC territories are less compared even with natural protected areas; SFM has been a tool for conserving forests while using wood resources.

   Indigenous Peoples can be beneficiaries of the use of wood in construction when markets are created or expanded for wood or wood-based products that come from sustainable sources, enabling better recognition of the value of traditional knowledge and biodiversity conservation applied in the communities of Indigenous Peoples and local communities. Similarly, incentives designed to improve environmental performance such as regulations that require that the wood come from sustainable sources, can increase the opportunities for communities that have been managing their forests sustainably. Working/encouraging the expansion of sustainable sourcing requirements for wood used in construction, in policy or regulation, should contribute to addressing problems of poor application or enforcement of SFM standards and illegal logging in the territories of Indigenous Peoples and local communities.

8. **Isn't it better to repurpose existing buildings – even if the material has high embodied carbon – rather than build new constructions from sustainable wood?**
   The building sector is a massive contributor to climate change and resource depletion. While one of the solutions to address these problems includes renovating and repurposing buildings or re-using building components instead of newbuild, global construction needs are growing, with building stock expected to almost double by 2050. Retrofitting of existing buildings is a less carbon-intensive process because it doesn't require fabricating new carbon-intensive building elements, thus reducing the amount of embodied carbon emissions. This current initiative is set in the context of the broad principles of the circular economy and promoting the use of low carbon materials more generally, including promoting material efficiency.

   In conjunction with a circular economy approach and reduction of emissions throughout the supply chain, from resource extraction to material production to disposal, enabling policies that support low carbon construction can be expected to result in reduced life cycle GHG emissions and an increase in carbon stocks and removals.

9. **How does this initiative align with taking a whole life-cycle approach to decarbonising construction?**
   This current initiative is set in the context of the broad principles of the circular economy and will work closely with organisations such as GlobalABC who work on implementing a whole life-cycle (WLC) approach into policy for the built environment. A WLC approach should look to:[9]

[9] Strategy from: GlobalABC website, & United Nations Environment Programme (2023). *Building Materials and the Climate: Constructing a New Future*. Nairobi

- **Avoid:** material overuse and new material extraction by building (with) less, re-using and recycling buildings and materials wherever feasible.
- **Shift**: away from high-impact conventional materials towards innovative earth- and bio-based ones such as wood, bamboo and biomass.
- **Improve**: conventional, non-renewable and high-carbon materials - such as concrete, steel and aluminium, and only using them when necessary.

10. **Don't we need plantation timber to support a growing bioeconomy?**
    The 2019 IPCC Special Report on Climate Change and Land[10] states (with high confidence) that "sustainable forest management can prevent deforestation, maintain and enhance carbon sinks and can contribute towards GHG emissions-reduction goals. Sustainable forest management generates socio-economic benefits and provides fibre, timber and biomass to meet society's growing needs. While sustainable forest management sustains high carbon sinks, the conversion from primary forests to sustainably managed forests can result in carbon emission during the transition and loss of biodiversity." The International Sustainable Forestry Coalition launched in September 2023 is an example of how industry leaders in the global forestry sector are committed to the transition to a circular bioeconomy by carefully managing plantations and semi-natural forests to balance conservation and production functions.

11. **Might an increased demand for wood in buildings and construction increase the incentives for illegal harvesting?**
    Recognizing the current level of illegal exploitation of forests, all governments should work on ensuring that strong sourcing safeguards in the form of laws, regulations and other tools are in effect to ensure the sustainable management of forests, regardless of the intended use of the harvested wood. Where illegal timber harvesting is rampant due to the lack of regulations, lack of resources for monitoring and enforcement and/or due to insufficient legal, economic or other safeguards or incentives for the forest owner to maintain the forests, the additional value generated from an increased demand for sustainable wood for construction, as opposed to illegally logged timber, should help to reduce illegal harvesting.

[10] IPCC, 2019: https://doi.org/10.1017/9781009157988.00