

# Climate-Smart Wood Sourcing: The Importance of Transparency



**The Climate Smart Wood Group (CSWG) helps the building sector in North America identify and procure climate-smart wood products, including mass timber.**

**Climate Smart Wood products** are those that stem from, or otherwise support, Climate Smart Forestry, as well as recycled / reclaimed / reused wood. The CSWG works to achieve transparency in wood supply chains based on the belief that the value wood products can provide for improved climate, ecological, and economic outcomes are better understood, quantified and supported by improved data availability. This will enable markets to place value on the social and climate impacts of wood. The content of this document is drawn from CSWG's **Climate Smart Wood Procurement Guide**.

## Wood Products Supply Chains: Growing Evolution in Forest Carbon

Engineered wood products pass through a complex supply chain, which may include landowner, logging contractor, sawmill, distributor, manufacturer, and developer or end-user. Historically, limited visibility has existed across the wood supply chain. This restricts information about the origins of wood products and associated ecological and social values.

**However, significant changes are occurring in the forest products sector: 1) Growing demand from the Architecture, Engineering, and Construction (AEC) sector for transparency and supply chain-specific reporting of carbon impacts of wood products, and 2) Growing availability of data demonstrating a wide range of forest carbon changes in working forest landscapes where wood products originate.**

Building sector leaders are seeking a better understanding of the cumulative impacts attributable to timber production as a necessary component to justify the increased use (and targeted procurement of wood) to decrease the embodied carbon of materials and buildings. Embodied carbon is a critical component of efforts to decrease the carbon footprint of buildings. Supply chain transparency can clarify

where a wood product falls on the spectrum of carbon impacts — between originating from a forest emitting carbon vs. sequestering carbon (e.g., see figure 1 for the differences in embodied carbon of timber among different counties and landowner types). This differentiation allows interested buyers to procure from suppliers and landowners demonstrating leadership in climate-smart wood.

## Definitions

**Embodied carbon** for building materials is a measure of the greenhouse gas impacts attributable to a building material, including the manufacturing, transportation, installation, maintenance, and end of life.

**Climate-smart forestry** increases forest resilience in the face of climate change and sequesters and stores more carbon over time when compared to conventional practices. Full definition [here](#).

**Transparency** is the disclosure of information about both the supply chain and origin. In the forest industry, there are two main components: 1) Supply chain mapping and 2) Disclosure of information about the source forest(s).

## Differentiating Between Wood Products with Supply Chain Specific Data

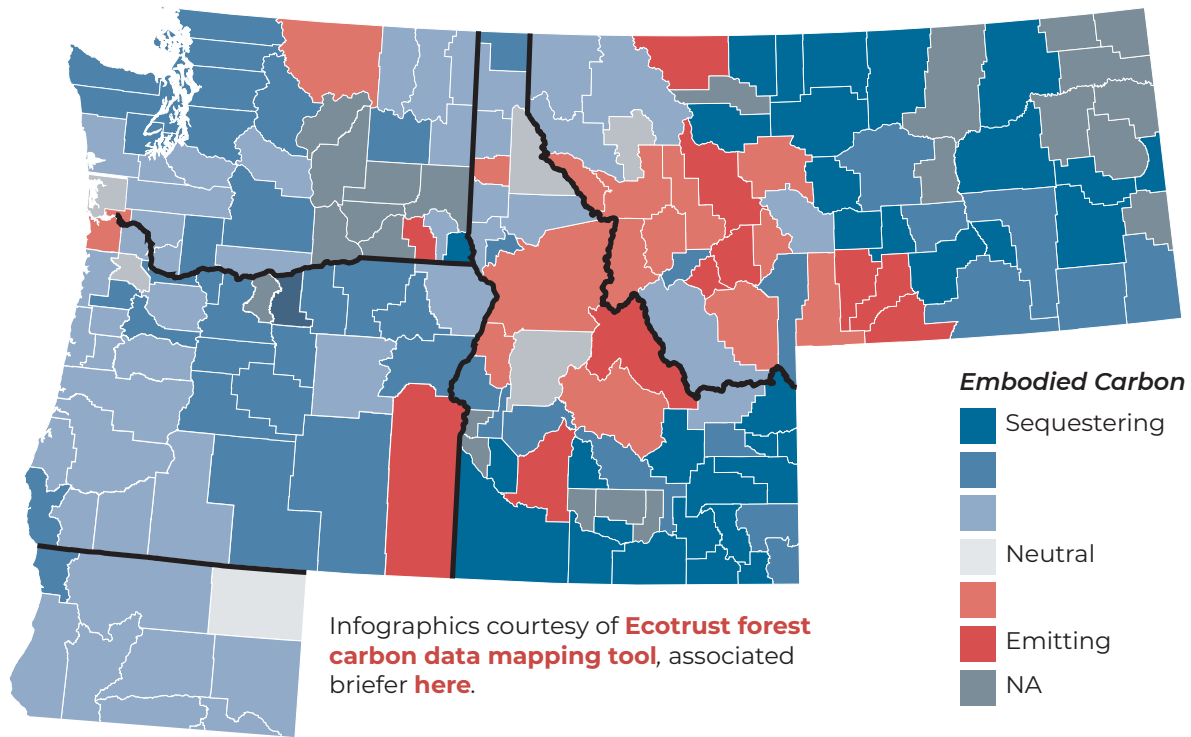
Environmental Product Declarations (EPD) are the most widely used tool in the AEC sector to document and quantify environmental impacts across the life cycle of specific products. The current wood Product Category Rule (PCR), which governs how environmental impacts are calculated in EPDs, allows for the use of industry average and supply chain specific upstream data from mill sources. Generally, most engineered wood products utilize industry average upstream data, which leaves significant room for improvement. Additionally, although landscape level carbon fluxes are not considered within the calculated impacts of an EPD, the PCR does allow for supplemental information to be reported in the EPD. Section 7.5 of the PCR states: “*Categorization of sources of wood fiber according to their forest management or certification systems may be provided in accordance with ASTM D7612-10.*” Supply chain specific data within wood EPDs can be improved using more mill-specific manufacturing data and the provision of the supplemental information on wood fiber sources.

Regarding landscape level carbon fluxes, ***the current prevailing practice for wood product EPDs is to assume carbon neutrality if nationwide forest area or carbon stocks are non-declining.*** Forest management practices across the United States are diverse, with widely varying forest carbon dynamics. At the local and regional scales where timber production and procurement decisions are made by landowners, sawmills, and forest product manufacturers, working forest landscapes across the US range widely from net carbon sequestration to net carbon emission. ***This broad assumption of carbon neutrality ignores observable carbon impacts of wood products (both positive and negative) from different types of forest owners and geographic areas of the country.***

Increasingly, industry leaders are gradually moving towards product- and supply chain-specific carbon impact assessments to differentiate the wood products they produce from their competitors. In the interim, disclosure of information such as landowner type, country and state/province of origin, and

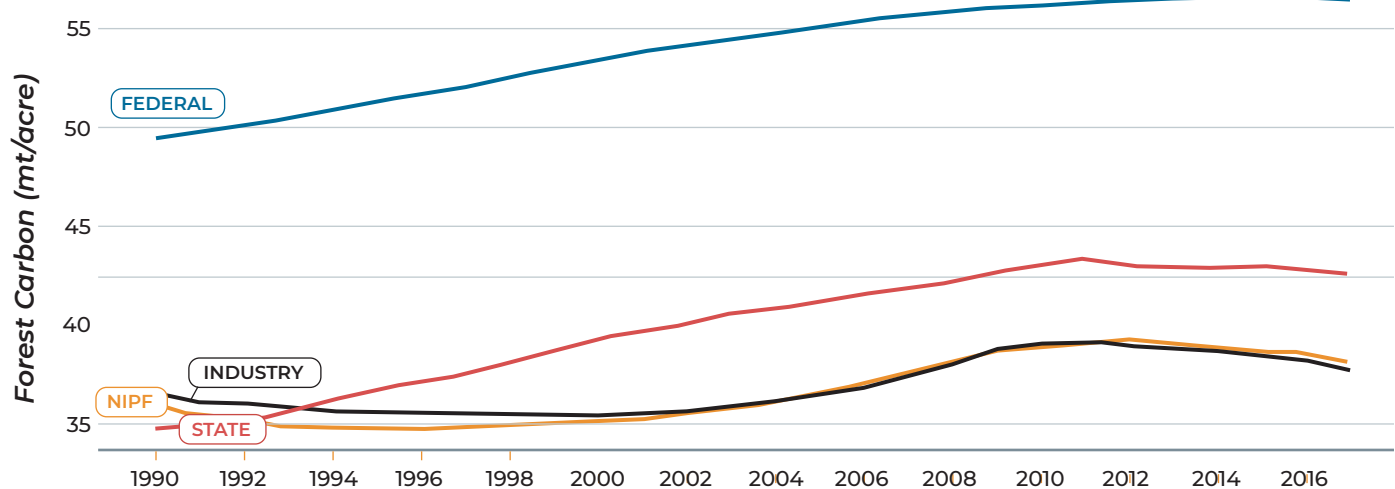
certification status can help buyers move beyond an assumption of carbon neutrality to understand carbon impacts and other values and preferences, e.g., sourcing wood from forests managed by tribal nations or local small forest landowners. Providing this supply chain-specific information will also prepare suppliers for future marketplace expectations.

Figure 1. Embodied carbon of timber, 2002-2015; average embodied carbon by county



The lack of transparency and reporting at appropriate scales means that green builders and other consumers in the market are presented with a biased and incomplete view of the differences among timber producers and supply chains, and producers in the market generally are rendered unable to act upon any direct incentives for continual improvement or to foster competition within the forest sector by delivering and being recognized for best-in-class climate and community impacts.

Figure 2. Forest Carbon stocks by ownership in King County: State, Federal, Industry, Non-Industrial Private Forest



## Benefits of Transparency in the Wood Supply Chain

Supply chain transparency is necessary to identify and direct market demand to climate-smart wood products with lower embodied carbon. Transparency is valuable in the wood supply chain for the following reasons:

- + Creates conditions among wood product suppliers for a “race to the top” with regards to the provision of climate benefits as companies vie for market share and purchasing power of climate-conscious wood purchasers.
- + Helps meet Environmental, Social, and Governance goals and illuminates the full range of possibilities to meet project goals. Builds an understanding and potential to elevate climate-smart forestry, community, conservation, and equity opportunities that align with consumer values.
- + Attracts new market opportunities and spotlights leadership among forest owners providing quantifiable climate and community benefits who are typically disadvantaged by commodity timber markets, including tribal nations and family forest owners.
- + Allows AEC project teams to develop stronger relationships with suppliers, which can help reduce cost and supply chain risk related to material availability and build networks contractors can leverage to secure future project bids.
- + Can make visible the climate impacts of shipping mass timber products over long distances, to avoid undermining emissions reduction goals.
- + Enables a deeper connection to the people and forests that produce the wood products used in our buildings.

## Enabling Climate-Smart Wood Procurement

Sourcing climate-smart wood is an opportunity to support climate change mitigation, local communities and economies, and competitiveness of local businesses. Both public and private efforts are needed to support the transition to greater transparency, including: tools and resources to gather consistent data; policies and voluntary efforts to encourage information disclosure; requests to suppliers to deliver and document the origins of climate-smart wood; and investment in landowners and suppliers providing climate-smart wood.

In the private sector, individual efforts are occurring at the level of many companies in the architecture, engineering, and construction sector in the Pacific Northwest, as well as among building owners/developers.

In the public sector, numerous State and Federal policies utilize EPDs to procure lower carbon building materials. These policies are often referred to as “Buy Clean” policies. Some of these policies request or require varying levels of supply chain transparency via EPDs, although very few of these policies have yet required transparent reporting of wood origins. As outlined in this briefing, EPDs can be supplemented with wood sourcing information to better support Climate Smart Wood procurement. Washington State’s Buy Clean Buy Fair (SB 5322/HB 1282) legislation is a rare example of this type of policy that includes both transparent reporting of wood sources along with the increasing use of EPDs.

**Get Involved** To learn more, sign up for the newsletter, and become a member of the Climate Smart Wood Group, visit

[www.climatesmartwood.net](http://www.climatesmartwood.net)

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