



Victorian
Forest
Products
Association

CARBON BENEFITS OF WOOD PRODUCTS



“TREES TAKE SUNLIGHT AND TURN IT INTO CARBON THROUGH PHOTOSYNTHESIS AT NO COST AND ARE THE ONLY TECHNICALLY FEASIBLE AND COST-EFFECTIVE OPTION TO GET TO NET-ZERO” (DIANA GIBBS)

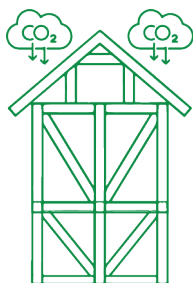


About 50% of the dry weight of wood is carbon. Over time, the ability of trees to absorb carbon decreases, meaning new plantings are important.



Every year, 4.7 million t CO₂-e is stored in our built environment from sawn softwood harvested from Victorian pine plantations.

We remove more carbon from the atmosphere than we emit: Locally grown and processed wood has an average negative carbon footprint of -819 kg CO₂ per m³. This includes harvest, haulage, processing, drying, and packaging.¹



Existing building policies overlook wood's carbon storage benefits:

- i. Each two-storey house sequesters around 37 t CO₂-e (single-storey: 22.185 tCO₂-e)²
- ii. Wood products continue to store carbon during their lifespan.
- iii. Maximising the use of wood products in typical houses could result in a net saving of around 30 t CO₂-e per house.



Choosing wood makes sense for builders: timber is typically cheaper than steel. Wood also has lower GHG emissions in extraction and manufacturing than bricks, aluminium, and concrete; substituting wood for non-wood products therefore reduces GHG emissions.



Transitioning to bio-based products is essential for reaching sustainable development goals; forestry residues can be used for bioenergy, e.g., biofuel, displacing the use of fossil fuels.

Initiatives and policies could include:

1. Promoting the optimal use of harvest and processing residues, including incentives for novel bioproducts and bioenergy
2. GHG Accounting methods for emissions trading where the full value of carbon in forests and wood products is included
3. Building rating schemes that assign value accurately to both the physical carbon storage and the substitution benefit
4. End-of-life schemes that promote the most favourable emissions reduction outcome for the various wood products

Sources:

¹ <https://fwpa.com.au/wp-content/uploads/2023/09/Forests-Plantation-Wood-Products-and-Australias-Carbon-Balance-.pdf>

² <https://fwpa.com.au/how-much-wood-in-an-average-house-14-58-m3->



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The Victorian Forest Products Association (VFPA) is the primary industry organisation representing the timber and wood fibre sector in Victoria. This encompasses businesses engaged in the cultivation, managing, and harvesting of our renewable Victorian forests. VFPA's members include timber processors, pulp and paper manufacturers, and enterprises involved in value-adding throughout the supply chain. We welcome everyone involved in the wood industry.