

THE LOW CARBON BUILDING SOLUTION TO HELP FIGHT CLIMATE CHANGE

Audain Art Museum
Image courtesy of Patkau Architects

Grown and harvested within the context of British Columbia's leading sustainable forest management regime, Pacific HemFir is a natural building solution that helps mitigate climate change, locking in carbon over the wood product's lifetime.

Science shows that it is possible to construct zero-carbon buildings—and even make them a net carbon sink—by using renewable materials such as wood. This means that B.C. forest products—particularly fast-growing Pacific HemFir—are the eco-friendly choice, especially compared to non-renewable, carbon intensive materials such as steel or concrete.

Carbon Cycle

Closely related to climate change is the earth's carbon cycle. The carbon cycle illustrates the continuous transfer of carbon from land and water to the atmosphere and living things. Forests are a vital part of this carbon cycle, both storing and releasing it in a dynamic process of growth, decay and renewal.

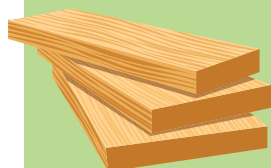
Keeping forests healthy is a critical part of removing harmful emissions and cooling our planet. Healthy forests help mitigate climate change by storing carbon and producing wood products. Sustainably grown and harvested wood products have further lifecycle benefits: trees absorb carbon as they grow and when made into wood products continue to store that carbon over their lifetime.

Mature harvested trees are replaced with young forests, which grow vigorously and store greater quantities of carbon. As trees mature, this rate slows. Harvesting mature trees helps keep the forests young and healthy while at the same time locking up carbon in wood buildings, over their lifespan, delaying or preventing the release of CO₂ emissions. Natural regeneration and replanting continue this cycle.



The average single-family home in Canada stores almost **30 tonnes of CO₂** within the wood products used for its construction.

Carbon remains stored in wood products for **the life of the product**.

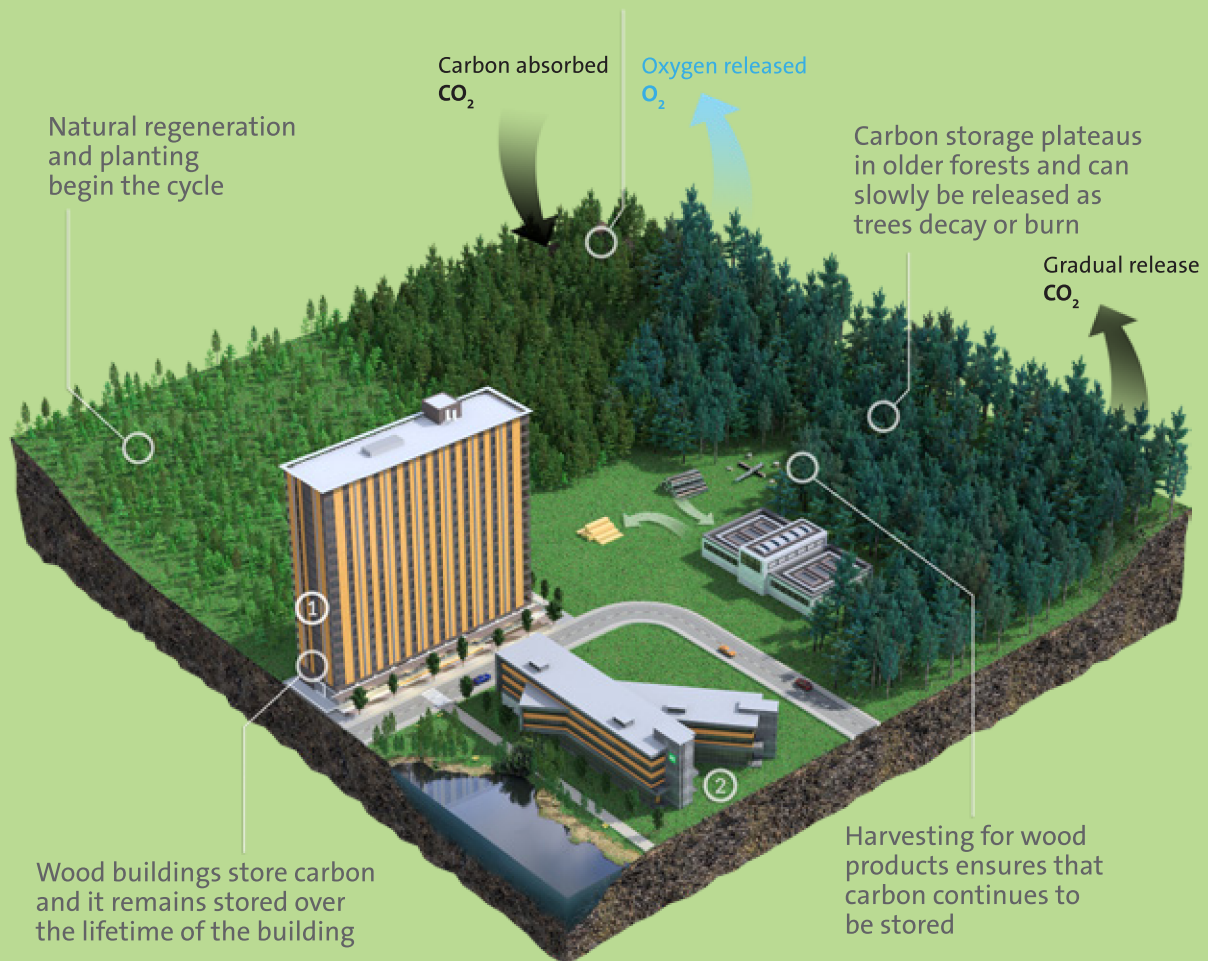


The amount of carbon stored within a wood product is directly proportional to the density of the wood: Pacific HemFir is strong, dense and durable.

TACKLE CLIMATE CHANGE BY USING WOOD

Carbon Cycle: Sustainable Forest Management and Wood Products

Growing forests absorb carbon dioxide and release oxygen



① Brock Commons Tallwood House at the University of British Columbia is an 18-storey wood building completed in 2017.

Carbon stored and avoided greenhouse gas emissions: 2,432 metric tons of CO_2 . Equivalent to 511 cars off the road for a year.

② Mountain Equipment Co-op Headquarters in Vancouver, British Columbia was completed in 2014.

Carbon stored and avoided greenhouse gas emissions: 2,940 metric tons of CO_2 . Equivalent to 618 cars off the road for a year.

Illustration courtesy naturallywood.com

Wood is the Only Renewable Structural Building Material

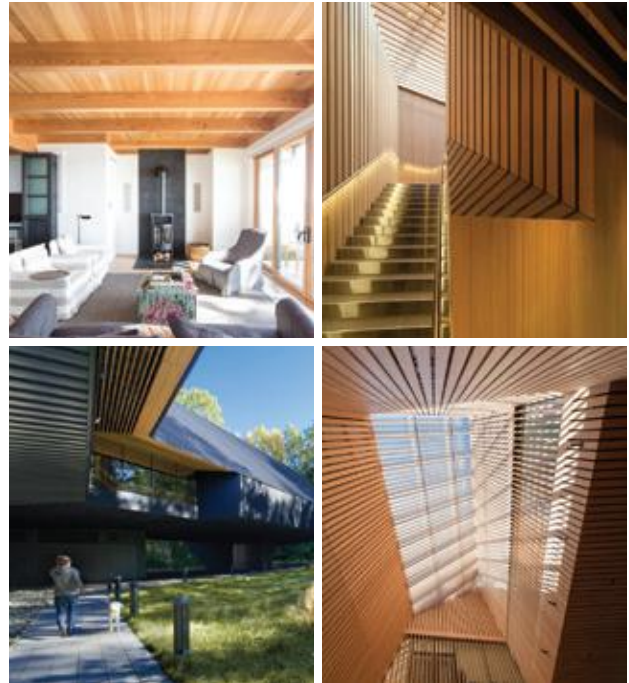
Pacific HemFir is 100% renewable. Building materials produced from this plentiful species are sustainable and carbon friendly.

This is because wood products and building systems have the ability to store large amounts of carbon. For example, 1 m³ of HemFir lumber stores nearly 1 tonne of CO₂ equivalent. The amount of carbon stored within a wood product is directly proportional to the density of the wood. Pacific HemFir is strong, dense and durable, all important attributes that make Pacific HemFir a high value, low carbon solution for building projects.

Wood products store more carbon in the wood fibre than is released during the harvesting, manufacturing and transportation stages of their lifecycle. These embodied impacts are becoming even more important to customers, designers, specifiers and regulators.

Building more with wood, when paired with region-specific forest management practices, can deliver significant emissions reductions for B.C., according to the Pacific Institute for Climate Solutions. Using the latest science, B.C. researchers are finding ways to minimize the impacts of wildfires and maximize the amount of CO₂ absorbed by the province's forests. Companies are also maximizing the value of every tree cut and eliminating waste, using whatever is left over to generate clean bioenergy. Under the best-case scenario modelled by the researchers, they concluded that B.C.'s forest sector could potentially contribute to 35% of the province's 2050 emissions reduction target.

B.C.'s sustainable forestry practices, combined with the widespread use of wood as a construction material, helps to mitigate greenhouse gas emissions. By managing our forests sustainably, increasing our use of wood products over carbon intensive materials and maximizing their reuse and recycling, our forestry and building sectors can contribute significantly to the climate solution.



Images courtesy of Western Forest Products and Patkau Architects

The Low Carbon Natural Choice

Pacific HemFir is responsibly harvested to sustain and protect British Columbia forests and their ecosystems. Growing customer demand for sustainably produced B.C. wood products supports strong local economies while providing climate solutions to the world.

By choosing Pacific HemFir for your next project, you are selecting the renewable, low carbon building material of choice for customers throughout North America and around the world.

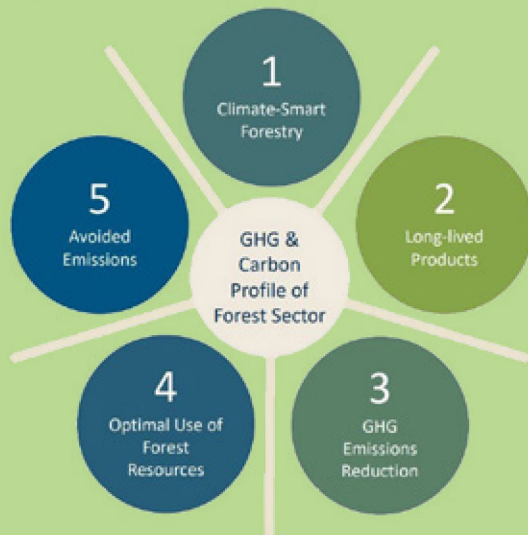
Moreover, building with sustainable, renewable Pacific HemFir supports a low carbon future for our planet, meeting the environmental, social and economic needs of current and future generations.

Carbon Calculator

To learn more about the carbon benefits of building with wood, this easy-to-use calculator tool will help you find out the estimated carbon benefits of your building project. Visit:

www.cwc.ca/en/design-tools/carbon-calculator

CLIMATE POSITIVE FORESTRY & FOREST PRODUCTS



1. Maintaining forest health & sequestering land-based carbon
2. Locking up carbon for the long term
3. Reducing Scope 1 and 2 GHG emissions by 65% and 45% since 1990 and contributing to greening the electrical grid
4. Optimizing recycling and contributing to bio-based economy
5. GHG mitigation benefits when GHG-intensive products are substituted with forest products

Illustration courtesy of Forest Products Association of Canada

Where to Buy

Committed to quality products, the sustainability of our forests and the future of our industry, contact these companies for more information on Pacific HemFir products and retailers.

RIVERSIDE FOREST PRODUCTS

T: (1) 604.580.4500

TEAL JONES

WHITEWOOD LUMBER SALES

T: (1) 604-587-8700

BC WOOD SPECIALTIES GROUP

T: (1) 604-882-7100

TOLL FREE IN NORTH AMERICA:
1-877-422-9663

SKEENA SAWMILLS LUMBER SALES

T: (1) 604-800-5990

WESTERN FOREST PRODUCTS

T: (1) 604-648-4500

INDEPENDENT WOOD PROCESSORS ASSOCIATION BC

EMAIL: CONTACT@IWPABC.COM

OUR PARTNERS



Canada



Forestry Innovation Investment

For more information about British Columbia wood products and the sustainably managed forests they come from, visit naturallywood.com.