

BC Forestry Climate Change Working Group

How BC Forests and Wood Products Are Helping to Address Climate Change

Forests

Forests help to address climate change by reducing the amount of greenhouse gases in the atmosphere. They absorb carbon dioxide (CO₂), utilizing the carbon (C) to produce sugars for tree growth, and release the oxygen (O₂) back into the air. As a tree grows, the carbon is stored in its leaves, branches, solid woody stem, and in the soil around it. Because forests can absorb and store (or sequester) carbon over an extended period of time, they are considered “carbon sinks.”

Young, vigorously growing trees have a higher rate of CO₂ conversion than mature trees. Trees typically grow most in the early to middle years, with growth dropping off as they reach maturity. In BC, this drop happens when the tree is between 60 and 150 years old (depending on the species and environmental factors). When a tree is harvested, about half of the carbon stays in the forest and the rest is removed in the logs, which are then converted into wood products. As the area is regenerated the forest once again begins to absorb and store carbon.

Forest Products

Wood and paper products continue to store the absorbed carbon. This keeps it out of the atmosphere for the lifetime of the products and beyond, even when they're recycled. Using wood products also results in less fossil fuel consumption to manufacture, transport, construct and maintain when compared to steel, concrete or plastic and, as a result, is responsible for far less greenhouse gas emissions. Advancements in technology allow pulp and paper producers to include up to 100 per cent recycled fibre in new paper and paperboard products.

Bio-energy

BC as a region is North America's largest producer of green biomass power, generating enough electricity to power 450,000 homes annually. Converting forest biomass, such as wood waste and logging residues, into bio-energy provides a carbon neutral energy source. When used instead of fossil fuels to generate steam and electricity, this results in avoided CO₂ emissions.

When it comes to mitigating climate change, BC's forests and forest products are part of the solution. Government and business leaders can help by developing policies and procurement processes that encourage the use of more forest products from well-managed forests.

For more information on the BC Forestry Climate Change Working Group and the role of BC's forests as a tool to combat climate change, visit: www.BCclimatechange.ca