

BC Forestry Climate Change Working Group

Frequently Asked Questions

1. What is the BC Forestry Climate Change Working Group?

The BC Forestry Climate Change Working Group is made up of representatives from the pulp and paper, sawmilling and forestry sectors. It was established to provide information on the role that BC's forests play in tackling climate change and to promote the BC forest products sector as the supplier of choice for sustainable, renewable, climate-friendly products to markets around the world.

2. What organizations make up the BC Forestry Climate Change Working Group?

The BC Forestry Climate Change Working Group includes industry representatives from the pulp and paper, sawmilling and forestry sectors, including:

- Council of Forest Industries (COFI)
- Coast Forest Products Association (CFPA)
- Forest Products Association Canada (FPAC)
- Interior Lumber Manufacturing Association (ILMA)
- Pulp and Paper BC
- Binational Softwood Lumber Council
- Canada Wood

3. How does BC's forest industry help to tackle climate change?

The forest industry helps in three ways. First, BC is a leader in sustainable forest management, which is critical because healthy, growing forests absorb more carbon dioxide (CO₂) and are less susceptible to fire, insects and decay. Second, BC is a major producer of wood products. When trees are made into wood products, much of the tree's carbon continues to be stored indefinitely—in things like furniture and homes—and forests are regenerated with new trees that absorb even more carbon dioxide. Third, BC's solid wood and pulp and paper mills are major producers and users of renewable, clean wood waste bio-energy and have the potential to increase their production many fold.

4. What is sequestration?

Sequestration is part of the photosynthesis process in which trees absorb carbon dioxide, release oxygen and store (or "sequester") the carbon.

5. How does wood store carbon?

Trees absorb CO₂ from the air as part of chemical process called photosynthesis, utilizing the carbon to produce sugars for tree growth. As a tree grows, the carbon is stored within its leaves, woody biomass and in the soil around it. When trees are made into forest products, such as furniture or lumber, the carbon continues to be stored for the lifetime of the product.

6. Isn't it better to keep the trees in the forests?

At a certain point in their lifecycle (usually between 60 and 100 years), tree growth and thus CO₂ absorption slows down. Eventually, the trees die and slowly start to decompose, releasing the stored carbon back into the atmosphere. The dying and decomposition process is often accelerated by insects, disease and fire.

Through sustainable forest management, including careful harvesting of mature trees and prompt regeneration, carbon storage can be maximized. This is because young trees have a higher rate of carbon absorption than old trees and healthy forests are less susceptible to insects, disease and fire.

7. Has the mountain pine beetle epidemic impacted carbon sequestration?

Beetle-killed forests are by definition forests that are dead or contain a large proportion of dead trees. As these trees decompose, they are in fact releasing their stored carbon back into the atmosphere. Worse still, they are occupying ground that could be regenerated with young, healthy forests that could once again absorb large amounts of CO₂. This is one reason for active harvesting and reforestation of these areas.

8. How does wood compare to steel or concrete as a building product?

Lifecycle assessment (LCA) studies have shown that wood requires substantially less energy to manufacture, transport, construct and maintain than materials such as steel and cement. The processes for manufacturing steel, concrete or plastic are also fossil fuel-intensive, and result in substantially higher greenhouse gas emissions.

9. What is bio-energy?

Bio-energy is energy (thermal and electrical) derived from biomass, which is organic matter available on a renewable basis and includes forest and mill residues, wood and wood wastes. Because biomass is an abundant and renewable substitute for fossil fuels, it is viewed as being increasingly important both within British Columbia and worldwide.

10. How is wood carbon-neutral as a bio-fuel?

Converting wood and forest biomass into energy is considered carbon neutral because of wood's relatively short lifecycle and the fact that burning biomass returns carbon that was only recently removed from the atmosphere. Additionally, this release of carbon is equal to the amount that would have been released had the wood decomposed naturally.

This is in sharp contrast to fossil fuels, which release carbon that has been trapped for hundreds of thousands, if not millions of years. Substituting bio-energy fuels for fossil fuels recycles existing carbon rather than introducing new carbon into the atmosphere.

11. Where do paper products fit into this process?

Paper products are made from trees and, like wood products, they continue to store the tree's carbon for the duration of their product life. However, unlike wood products they are usually less long-lived and thus recycling is critical.

Recovering or diverting these materials from landfills not only provides fibre content for recycled paper products, it keeps these materials from decomposing and releasing their carbon into the atmosphere. Canada now recycles almost three times as many paper products as it did two decades ago and uses five million tonnes of recycled paper.

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