



Canada's accelerating forest carbon crisis

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For the last two decades, Canada's managed forest lands have been logged faster than they have grown back. This imbalance has created a huge — and rapidly rising — new source of carbon dioxide (CO₂) pouring into our already destabilized climate.

That's according to the data in Canada's [National Inventory Report](#). Canada reports the emissions from its managed forest lands in two parts. One part is the CO₂ emitted by harvested wood. The second part is the CO₂ absorbed, or emitted, by the managed forest.

My first chart shows these two parts and how they've changed decade by decade.

Harvested wood CO₂ is shown by the orange bars. These emissions have remained business-as-usual high, at around 1,400 million tonnes of CO₂ (MtCO₂) every decade.

For scale, this is one of the largest sources of CO₂ in Canada's economy, far exceeding emissions from passenger vehicles, buildings or electricity generation.

The second part of the equation is forest CO₂. It's shown by the green bars. This is the net CO₂ balance from many processes. New growth pulls CO₂ out of the air, while many forms of decay, plus wildfires, emit CO₂ back into the air.

Back in the 1990s, new growth was winning out, and the forest was able to remove more CO₂ from the air than harvested wood was emitting. That's shown on the chart by the green bar descending even more than the orange bar rose in that decade. This led many people to view wood as carbon-neutral.

But during the 2000s, new growth declined, while tree death, decay and wildfire increased. As a result, the forest only removed half as much CO₂ from the atmosphere. Logging, however, and thus harvested wood CO₂, stayed high. This mismatch pumped 600 MtCO₂ into the atmosphere over that decade.

During the 2010s, forest growth continued to falter, while death, decay and wildfire continued to surge. The huge, and hugely valuable, carbon sink at the heart of Canada's managed forest lands [completely vanished](#) — and the forest flipped to become a net carbon source, emitting CO₂. That's shown on the chart by the green forest-growth bar heading upwards in that decade — adding CO₂ to the air instead of removing it.

During this decade, harvested wood continued to emit 1,400 MtCO₂ while the forest now *emitted* 200 MtCO₂ on top of that. The atmosphere gained the combined total of 1,600 MtCO₂.

An accelerating crisis

My first chart showed decade totals. My next chart shows the running total since 1990. This view lets you see how the crisis has accelerated, unchecked.

Canada's forests are being logged faster than they can grow back and are spewing CO₂ into our already destabilized climate, writes columnist @saxifrages. #Logging #CO₂ #ClimateChange

The downward start to the line shows that back in the early 1990s, Canada's managed forest removed more CO₂ from the air than logged wood emitted. By 1995, a total of 350 MtCO₂ had been removed from the atmosphere.

But then, around 1995, everything changed direction.

In every five-year span since 1995, logged wood emitted more CO₂ than the forest took in. And as the chart shows, the amount added to the atmosphere continues to rocket upwards.

In total, more than 2,000 MtCO₂ of forest carbon has piled up in the atmosphere since 1990. That's two *billion* tonnes of planet-warming and ocean-acidifying CO₂ — more than 50 tonnes per Canadian.

And it shows no sign of stopping.

Does this look like climate safe forestry to you? And is anyone responsible for slowing down this CO₂ tsunami?

Canada's new carbon math

Under the default forest carbon accounting rules set up by the Intergovernmental Panel on Climate Change (IPCC), Canada would have to account for all the CO₂ emissions arising from managed forests in balancing its forest carbon books. That would insure someone was responsible for reining in these emissions. Canada used to follow these IPCC rules.

In recent years, however, Canada has switched to its own forest carbon accounting rules, designed to [ignore billions of tonnes of CO₂ while deferring billions of tonnes more](#). Under its new carbon math, even business-as-usual logging in a managed forest that is hemorrhaging CO₂ still pencils out as *climate positive* on paper. In fact, logging has been so incredibly climate positive — on paper — over the last couple of decades that Canada has awarded itself more than 100 MtCO₂ worth of forest carbon credits for it.

Clearly, both the industry and the government are planning to continue unabated logging in Canada. And just as clearly, that will mean the new flood of CO₂ piling up in the atmosphere is going to continue unabated as well.

The climate, of course, doesn't pay attention to our pencil-and-paper forests. It blindly reacts to the amount of CO₂ being added to it.

So, if like me, you're concerned by the huge scale and rapid pace of this new climate threat, tough luck.

Source:<https://www.nationalobserver.com/2022/05/17/analysis/canada-accelerating-forest-carbon-crisis>