

Managing BC's Forests for a Cooler Planet

CARBON STORAGE, SUSTAINABLE JOBS AND CONSERVATION

Summary

CLIMATE CHANGE HAS HIT BC FORESTS HARD. A billion or more pine trees are now dead in the interior of the province, the result of an insect attack of unprecedented proportions, made worse by warmer than average winter temperatures. Meanwhile, due to unusually dry conditions, forest fires burn with increasing intensity.

As greenhouse gases continue to accumulate in the Earth's atmosphere, there is a pressing need to manage our forests in new ways. Properly done, management techniques that maximize carbon storage both in our forests and forest products can go a considerable way to counteracting greenhouse gas emissions elsewhere in society. Such efforts can also create a stronger, more diversified and more sustainable forest economy.

Climate change also brings the opportunity to create new alliances—as we've done with this study, bringing together environmentalists, loggers, and pulp and paper workers as co-publishers to jointly present a new model for forest management.

Traditionally, discussions of forest usage have been arguments between two polar opposites: conservation versus human use. We propose instead a model where forest managers choose from an array of options, with the bottom line being vastly improved carbon storage in our forests and forest products.

BC is blessed with an abundance of forests that store tremendous amounts of carbon. The longer these trees live, the more CO₂ they pull out of the atmosphere and store, thus offsetting greenhouse gas (GHG) emissions.

Forest conservation is a powerful and much needed tool as societies struggle to lower overall GHG emissions. In that regard, it's particularly important to conserve more of BC's older coastal temperate rainforests, with their disproportionately large pools of stored carbon, and the rarer and smaller interior temperate rainforests. Conservation is also one of the best ways to give trees a more than fighting chance to adapt in the face of changes in average temperatures and site-specific rises or declines in precipitation.

by Ben Parfitt

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SUMMARY: The full report can be downloaded from www.policyalternatives.ca/coolforests



David Suzuki Foundation



SIERRA CLUB BC

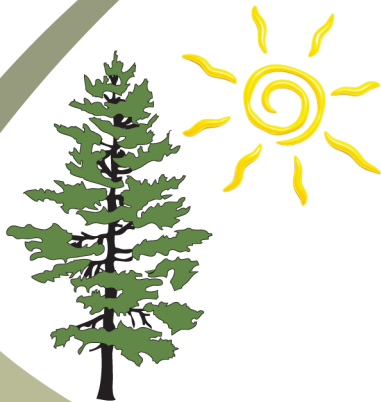


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DOWNWARD SPIRAL



Global warming causes higher temperatures.



Higher temperatures increase the risk of disease and infestation, such as the mountain pine beetle. As trees die and rot, more GHGs are released into the atmosphere.



Dead trees increase the risk of forest fires, which emit more GHGs into the atmosphere, again increasing global warming.

At the same time, there is growing awareness that some forests no longer do a very good job of storing carbon. Studies suggest that in much of the interior of the province forests have switched from carbon storehouses to GHG emissions sources. One billion or more pine trees stand or lie dead following the epic beetle attack that began in the 1990s and is only now coming to an end. As the dead trees decay, GHGs will be released back into the atmosphere. Making matters worse, many such forests may be at increased risk of catching fire due to these same warmer and drier conditions and the abundance of beetle-killed trees. Such fires result in uncontrolled, large pulses of GHG emissions into the atmosphere, which then increases the risk of future fires, and so on.

Making matters more complex, logging forests—even dead forests—has implications for our climate. Whenever trees are removed, logging sites become sources of CO₂ emissions for years, due to the release of the stored gas from exposed forest soils.

But this does not provide a compelling reason to stop all logging. Most of us live in houses or apartments that are built, in part, from wood. Wood is also put to many other uses that most of us, most of the time, see as good. And, crucially, every solid piece of wood utilized continues to store the carbon from the tree from which it came. This storage only ceases when renovations or demolition result in the wood going to bioenergy plants, recycling depots or landfills.

This is just one of the many points of tension in an ongoing debate over how best to manage our vitally important forest resources in light of the challenges posed by climate change.

This paper advocates for a broad approach to managing our publicly-owned forest resources. It invites us to re-imagine forestry in BC, not through the traditional (and opposing) lenses of either maximizing human use, or maximizing protected areas, but rather, with a view towards maximizing carbon storage. This approach includes:

- Conserving more forest;
- Increasing the age at which the forests we use for sources of lumber and other wood products are logged;
- Eliminating egregiously high levels of wood waste at logging sites;
- Charting a new way forward for reforestation and rehabilitating forestlands;
- Promoting solid wood products as the first and best use of the wood coming out of our forests, because of their carbon-storing capacity;
- Carefully weighing under what circumstances wood-based energy may make sense from a climate change perspective; and
- Fully accounting for all forest carbon in both forests and forest products.

A carefully coordinated approach to managing BC's public forests ensures that a natural wall of defence against climate change is maintained. Critically, it also ensures that realistic prospects continue for forestry-derived jobs in our province. With public investment in reforestation leading the way, the foundation for a strong forest economy in future years is possible. But that economy rests, more than ever, on a healthy environment. Such will be the case only with a coordinated approach to addressing the tremendous challenges that global warming poses for BC's forests.

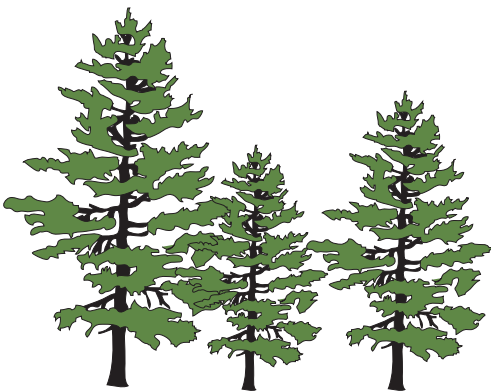
THE CARBON FOREST: 10 STEPS FORWARD

Maximizing the carbon stored in BC's forests and forest products requires a coordinated, multi-faceted effort. This report lays out a 10-point plan for doing so.

1. **CONSERVE MORE FORESTS.** In light of the stresses that forests face as a result of climate change, BC should increase the area of old-growth and, in some cases, second-growth forests conserved. Where such increases occur and by how much should be decided by a provincially appointed, independent science panel that reports publicly.
2. **DELAY OR REDUCE LOGGING ACTIVITIES IN CERTAIN FORESTS TO INCREASE CARBON STORAGE.** BC should pioneer a new system for deciding what forests are logged and when, called the Carbon Cut Calculation or CCC, replacing the existing Annual Allowable Cut (AAC).
3. **LET MANY TREES LIVE LONGER BEFORE THEY ARE LOGGED.** More time should pass between logging cycles in certain managed forests so that trees are allowed to grow older and store more carbon.
4. **ACCOUNT FOR CARBON IN THE "URBAN FOREST."** All carbon temporarily stored in forest products should be accounted for in a broad strategy to optimize carbon storage in both forests and wood products.
5. **LIMIT WOOD WASTE.** A zero tolerance policy on usable wood waste at all logging sites should be mandated.
6. **ESTABLISH CARBON PLANTATIONS.** Well managed, carbon plantations should be established on a portion of the land base, first for their carbon-storing properties, and second, where appropriate, as supply sources for new bioenergy facilities.

Properly done, management techniques that maximize carbon storage both in our forests and forest products can go a considerable way to counteracting greenhouse gas emissions elsewhere in society. Such efforts can also create a stronger, more diversified and more sustainable forest economy.

MOVING FORWARD



Conserve more forest, allow trees to live longer before they are logged, and promote carbon plantations.



Limit wood waste and proceed with caution when using waste wood for energy.



Count the carbon stored in wood products. Promote solid wood manufacturing for carbon storage and jobs.

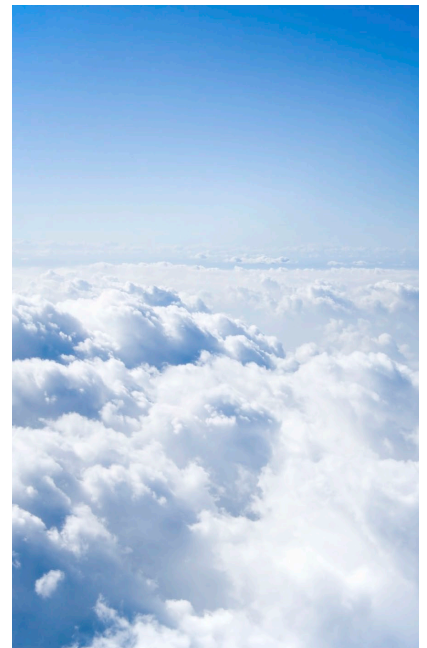
Bioenergy opportunities do exist and should be pursued. But scale is important, as is linkages with other activities that turn logs into lumber and other solid wood products that store carbon.

7. **PROMOTE WOOD.** Wise use of lumber and other solid wood products is the smart choice from a carbon storage perspective, and should be promoted as such.
8. **PROCEED WITH CAUTION WHEN BURNING WOOD FOR ENERGY.** Bioenergy opportunities do exist and should be pursued. But scale is important, as is linkages with other activities that turn logs into lumber and other solid wood products that store carbon.
9. **COMMIT FULLY TO A TRUE NO NET DEFORESTATION POLICY.** With one notable exception, BC should lead by example and have a true, no net deforestation policy. The one exception being on the edge of communities where fewer trees may be precisely what is needed to reduce the risk of catastrophic forest fires.
10. **ACCOUNT FOR ALL FOREST CARBON DEBITS AND CREDITS.** All forest carbon credits bought and sold in a regional market for tradable carbon credits must account for all debits and credits. Only when the carbon stored is in addition to the carbon that would be stored in the course of normal events should a marketable credit be claimed.

THE CLIMATE JUSTICE PROJECT

The Climate Justice Project is a multi-year initiative led by CCPA and the University of British Columbia in collaboration with a large team of academics and community groups from across BC. The project connects the two great “inconvenient truths” of our time: climate change and rising inequality. Its overarching aim is to develop a concrete policy strategy that would see BC meet its targets for reducing greenhouse gas emissions, while simultaneously ensuring that inequality is reduced, and that societal and industrial transitions are just and equitable.

This report is co-published by BC Government and Service Employees’ Union; Communications, Energy & Paperworkers Union; David Suzuki Foundation; Pulp, Paper and Woodworkers of Canada; Sierra Club of Canada – BC Chapter; United Steelworkers District 3 – Western Canada; and Western Canada Wilderness Committee.



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1400 – 207 West Hastings Street, Vancouver BC V6B 1H7
604.801.5121 | ccpabc@policyalternatives.ca

www.policyalternatives.ca

