

Submission to Pre-Budget Consultations for the 2020 Budget

International Boreal Conservation Campaign

Recommendations

Recommendation 1: that Budget 2020 include support for Indigenous leadership in climate action, including dedicated support for Indigenous Guardians initiatives.

Recommendation 2: that Budget 2020 include long-term, sustained investments in increasing the pace of establishment of IPCAs and other conservation measures in order to maintain and protect boreal carbon stores and support Indigenous leadership in conservation.

Recommendation 3: that Budget 2020 invest in work to ensure that the national carbon accounting system accurately reflects the boreal.

Recommendation 4: that Budget 2020 invest in supporting practices that maintain the integrity of boreal carbon stores, including, potentially, strategies to manage fire in boreal ecosystems in partnership with Indigenous Guardians.

Summary

In addition to providing habitat to iconic species such as woodland caribou and up to three billion songbirds, waterfowl and shorebirds, Canada's vast boreal forests, wetlands and peatlands store extraordinary amounts of carbon. Protecting these carbon stores through protected areas and other conservation measures would help lower the risk that they are emitted to the atmosphere and is a crucial part of any long-term climate response strategy.

Canada's boreal is also home to hundreds of Indigenous communities who have a vital leadership role to play in implementing climate response strategies, consistent with their rights, title and land stewardship responsibilities.

This submission outlines steps Canada could take to more effectively incorporate boreal conservation and Indigenous leadership into efforts to address the climate emergency. In particular, it recommends enhanced federal investments in Indigenous Guardians and in efforts to increase the pace of protected areas establishment in partnership with Indigenous communities.

Introduction

The International Boreal Conservation Campaign is a coalition of Indigenous peoples, conservationists, scientists, business and civic leaders with a shared vision of protecting and sustaining the natural, cultural and economic values of the Boreal region for the benefit of future generations. IBCC was initiated by The Pew Charitable Trusts and operates as a partnership of Pew, Ducks Unlimited Incorporated, Ducks Unlimited Canada, the Indigenous Leadership Initiative, and the Boreal Songbird Initiative.

IBCC's work is shaped by a shared vision, articulated in the Boreal Forest Conservation Framework. This vision recognizes the unique ecological and cultural values of the boreal, including its globally significant role in storing carbon. The Framework calls for ambitious efforts by all governments to increase conservation of the region by protecting at least half of the boreal and ensuring world-leading sustainable development on the remainder.

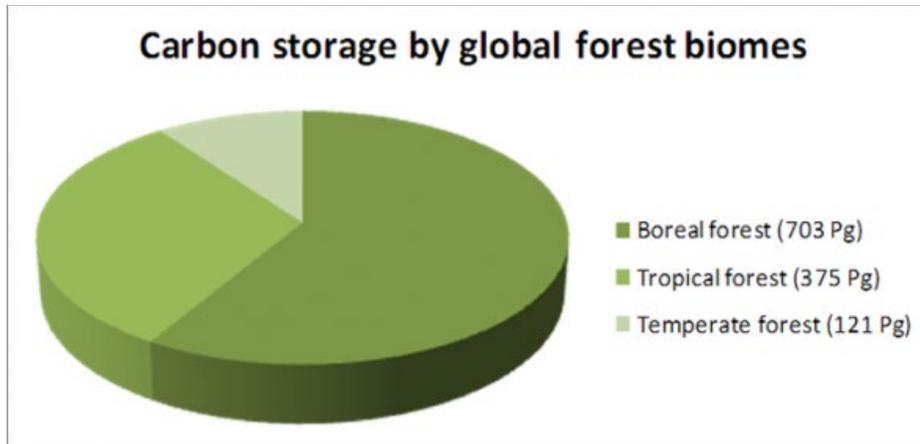
IBCC offers this submission to underscore the critical relevance of Canada's boreal to Canada's climate strategy and transition to a low carbon economy.

Context

1. The global boreal region is the world's largest terrestrial carbon storehouse

According to a 2009 report¹ endorsed by the International Boreal Conservation Science Panel, the global Boreal forest holds more carbon in storage than any other region of the globe, perhaps two or three times as much carbon as is found in the tropics.

¹ Matt Carlson, Jeff Wells and Dina Roberts, 'The Carbon the World Forgot', Canadian Boreal Initiative and Boreal Songbird Initiative, 2009.



Canada's boreal region constitutes a significant portion of this global storehouse. Scientifically conservative estimates of total carbon stores in Canada's boreal suggests there are at least 71.4 billion tonnes of carbon in forest ecosystems and at least 136.7 billion tonnes in peatland and wetland ecosystems. Many scientists estimate that the true volume of carbon within Canada's boreal forest region may be two or three times higher than these current estimates.

This conservative estimate (208 billion tonnes of carbon) is equivalent to roughly 500 years of Canada's annual carbon emissions from the burning of fossil fuels.

2. The wetlands and peatlands of the northern boreal can play a key role in both mitigation and adaptation to climate change

Only the southern part of Canada's boreal region is considered by governments to be part of the so-called "managed boreal forest". This area, much of which has been allocated to commercial forestry and other industrial uses, is generally considered to be a net carbon sink over the long term, although it can move from being a net carbon sink to a net carbon source in some years with large areas impacted by fires.

The northern portions of the boreal ecosystem are, in some areas, dominated by peatlands and bogs, which store at least twice the amount of carbon stored in forest ecosystems. Much of these northern regions are underlain by permafrost, under which are often vast stored carbon pools.

Boreal wetlands serve an integral climate change function by providing much needed resiliency in the face of extremes of floods and droughts and also aid in fire suppression, which helps protect important carbon reservoirs across the region.

As the most intact remaining forest on earth, the boreal ecosystem also has exceptionally high potential to accommodate plants and animals forced to shift northward due to climate change and to allow healthy resilient populations of animals and plants currently in the region to have greater opportunity to adapt and survive.

3. Improper management and development of this critical resource may undermine Canada's emissions reduction efforts.

There are many ways that carbon in Canada's boreal can be released, such as the development of roads, seismic lines, mines, forest harvesting, hydropower, and other land-use changes.

If disturbed or dewatered, peatlands and bogs are prone to substantive releases of GHGs. For example, draining 1 hectare of boreal peatland releases an estimated 5,877 tonnes of CO₂ Equivalents. Conversely, changes to water flow across peatlands and bogs that increase water table depths may increase emissions of methane, one of the most potent GHGs.

There are a number of best management practices (road building practices, land planning, restoration of roads/seismic/pipelines, etc.) that can minimize or mitigate the impact of climate change across the boreal region.

However, current carbon accounting practices do not currently track either carbon storehouses or potential releases of carbon from new developments in the boreal. This threatens the effectiveness of Canada's climate response strategies and the shift to a low carbon economy.

4. Given that they are on the frontlines of many climate impacts, and their role as decision-makers throughout the boreal, Indigenous Peoples have a crucial leadership role to play in managing these carbon reserves. Indigenous Guardian initiatives can play a vital role in supporting these efforts.

Climate action in the boreal and across Canada needs to be led by and delivered in partnership with Indigenous peoples, consistent with their rights, title, and land management responsibilities.

Indigenous Peoples in Canada have stewarded and managed the lands and waters in their traditional territories since time immemorial. Recognizing and supporting Indigenous peoples as leaders in land management and protection can play a key role in achieving true reconciliation between Indigenous and non-Indigenous Peoples.

Indigenous Guardians are a powerful expression of this approach. Indigenous Guardians help care for the land. Drawing on traditional knowledge and western science, they act as 'eyes and ears' for their communities by monitoring ecological health (including climate impacts), maintaining cultural sites, protecting sensitive areas, and contributing to management decisions.

There are currently more than 40 Indigenous Guardians initiatives in place across the country. Budget 2017 included support for a \$25 million Indigenous Guardians pilot project to expand this model. Creation of a National Indigenous Guardians Network is also underway to support the work of existing Guardians initiatives and to empower more communities to design and launch their own programs.

Support for Guardians represents a unique opportunity to advance climate resilience, biodiversity conservation and reconciliation with Indigenous peoples, while also providing certainty to industry and opportunities for sustained economic growth.

5. Indigenous Protected and Conserved Areas in Canada's boreal region can play a vital role in conserving carbon storehouses and contributing to climate resilience.

Many Indigenous communities are also eager to create Indigenous Protected and Conserved Areas (IPCAs) managed and stewarded by Indigenous Guardians. Many of the IPCAs being proposed in the boreal are in highly carbon rich areas.

As part of its efforts to meet Canada's international biodiversity commitments - including the target of protecting 17% of our lands and waters by 2020 - Budget 2018 announced a landmark investment in nature conservation, including a \$175 million Challenge Fund to support the establishment of IPCAs and other conservation measures across the country.

While these investments have considerable potential to advance conservation and climate resilience in the boreal, they are short-term in nature and do not provide long-term stewardship support through Guardians to new protected areas as they are created. This has the potential to stall progress towards both the government's 2020 goals as well as any longer-term international biodiversity commitments that may emerge.

6. Indigenous Guardians can also play a leadership role in other climate response activities

Although estimates vary and still carry uncertainties, some experts say wildfires account for up to 20% of total global greenhouse gas emissions. This amount is increasing and may reach 30% in coming decades. Yet current global carbon accounting rules treat emissions from forest fires in Canada as if they do not exist, although these impacts account for on average approximately 25 percent of Canada's total contributions to the global carbon crisis. Moreover, addressing the growing threat of forest fires in Canada may be a cost-effective way to achieve very real reductions in Canada's actual emissions. More research is needed to formulate and implement policies to address the carbon impacts of wildfires, but Indigenous Guardians could play an instrumental role in that effort.

Wildfires have always been a natural part of the ecology of most of Canada's forests, including the Boreal region. However, in great part because climate change impacts are exacerbated at high latitudes, the frequency and intensity of fires in Canada's forests has been increasing for several decades. As a result, in Canada's "managed forests", the modest carbon sequestration impact of tree growth has been overwhelmed and the balance has swung from a net carbon sink to a net source.

For decades, for ecological and economic reasons, Canada's wildfire suppression policies have utilized a triage approach. Firefighting effort has been concentrated in those areas closest to communities and structures, or in the commercial forest zone, but has allowed remote fires to burn unchecked. Remote fires tend to be the most extensive fires, accounting for the majority of carbon emissions. Driven by unusually warm temperatures and more frequent drought, these fires now appear to exceed their normal range and behaviour. The ecological basis for letting those remote fires burn may no longer be valid.

Moreover, though fighting those remote fires would require increased public investments, the resulting avoidance of carbon emissions could be one of the most cost-effective means of limiting Canada's overall contribution to the climate crisis. If, after further analysis, this approach and associated investments seem warranted, Indigenous Guardians (especially those already trained as forest fire responders) could provide a critical part of the necessary workforce.

Recommendations

1. That Budget 2020 include support for Indigenous leadership in climate action, including dedicated support for Indigenous Guardians initiatives.
2. That Budget 2020 include long-term, sustained investments in increasing the pace of establishment of IPCAs and other conservation measures, in order to maintain and protect boreal carbon stores to ensure they are not emitted to the atmosphere, thereby undermining the effectiveness of Canada's climate change response strategies.
3. That Budget 2020 invest in work to ensure that the national carbon accounting system accurately reflects the boreal, both in terms of existing stores as well as potential carbon releases from proposed land-use changes. This requires, among other things, revised and refined estimates for the full range of terrestrial and aquatic ecosystems, as well as inclusion of the entire boreal, not just the 'managed' forest'.
4. That the government invest in designing land use planning decisions and resource management practices to maintain the integrity of these carbon stores. This could include strategies to manage fire in partnership with Indigenous Guardians.