Greenpeace Canada submission to the *Strategic Assessment of Climate Change – Draft Technical Guide*, October 25th 2021

Summary

The *Impact Assessment Act* (IAA) requires federal authorities to consider whether projects hinder or contribute to Canada's Paris commitment to limit global warming to 1.5 degrees Celsius. To ensure consistency, the federal government has published a draft guidance document titled: *Technical Guide Related to the Strategic Assessment of Climate Change*.[1] In Greenpeace's view, a key premise of this guidance - that so-called offsets can be used to avoid reducing emissions - will undermine our progress towards our Paris commitment. It should therefore be rejected.

Limiting warming to 1.5 degrees Celsius will require rapidly phasing out fossil fuels[2], so that the limited carbon we can successfully sequester in forests and other ecosystems[3] can be used to address the most difficult-to-reduce emissions and to remove some of the atmospheric CO2 added over the last century of burning fossil fuels. There is no room in such a scenario for "offsets" that allow the continued burning of fossil fuels.

Rather, it is imperative that the focus in an impact assessment process be on enabling projects that have low or zero carbon and not enabling high emitting projects that simply don't fit in a zero carbon world. In short, we are arguing that projects that don't reduce GHG emissions (both project and land use emissions) hinder our progress towards our Paris commitments. However, projects contributing to our commitments would 1) reduce direct emissions 2) reduce emissions from land use and 3) increase forest carbon sinks.

Specifically, we are recommending against the use of offsets from forest carbon dioxide removals because:

- The worsening state of our nation's forests as mismanagement combined with climate change's impacts have negatively affected their ecological integrity and turned them into net emitters.
- We cannot offset our way to zero emissions as achieving the necessary emission reductions will require rapid and deep decarbonization to near zero across all projects, sectors, and economies. We need the limited additional carbon we can sequester in forest ecosystems to offset our past fossil fuel emissions, not tomorrow's pollution.

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[1] https://ehq-production-canada.s3.ca-central-1.amazonaws.com/8dc74ea5473aab4741945b51354ec34c91c90d15/original/1628696659/c94bd77e711ab39e596c5cf785673443_Strategic_Assessment_of_Climate_Change_Technical_Guide_EN_-_Final_PDF.pdf

[2] "Net Zero by 2050: A Roadmap for the Global Energy Sector" IEA May, 2021 https://www.iea.org/reports/net-zero-by-2050

[3] "There aren't enough trees in the world to offset society's carbon emissions – and there never will be" Bonnie Waring April 23, 2021 https://theconversation.com/there-arent-enough-trees-in-the-world-to-offset-societys-carbon-emissions-and-there-never-will-be-158181

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- Significant challenges with forest offsets make them unreliable for tracking and achieving reductions, including permanence, geologic vs biologic timeframes, natural limits to additional sequestration, leakage, and additionality.

Introduction

We appreciate the opportunity to contribute our comments on the draft *Technical Guide Related to the Strategic Assessment of Climate Change*. As we continue to make efforts to reverse global climate change and achieve our 1.5°C goals, it is critical that in decision-making processes such as the federal impact assessment we enable low and zero carbon projects. The impact assessment process must avoid approving high carbon, business-as-usual, projects that we attempt to "mitigate" with imperfect solutions.

CLIMATE TEST

In the context of project approval, a climate test is a set of rules for assessing whether a project fits within our national and international climate commitments; fits within a shrinking carbon budget as we work towards a net-zero emission by 2050; and ultimately tests the economic viability of projects in a world moving to net-zero.

It is imperative that the focus in the climate test focus on enabling projects that have low or zero carbon, as opposed to projects using offsets to enable high emitting projects that simply don't fit in a zero-carbon world. As many in Canada have noted,[4] the exclusion of a climate test from the *Strategic Assessment of Climate Change* (SACC) is a major failing. This creates a significant gap in the process as such a test would help to ensure that we have strong guideposts to ensure we stay within our climate budgets and commitments and are approving resilient and low/zero carbon projects.

CARBON DIOXIDE REMOVAL (CDR)

Carbon dioxide removal (CDR) refers to the process of removing CO2 from the atmosphere (the opposite of emissions as CO2 is removed and achieve 'negative emissions'. There are two main types of CDR: either enhancing existing natural processes that remove carbon from the atmosphere (e.g., by increasing its uptake by trees, soil, or other 'carbon sinks') or using chemical processes to, for example, capture CO2 directly from the ambient air and store it elsewhere (e.g., underground).

Offsets are a good example of an imperfect solution enabling high-emitting business-as-usual projects. We cannot offset our way to zero emissions as achieving our necessary emission reductions will require rapid and deep decarbonization to near zero across all projects, sectors, and economies.

The net-zero approach currently assumes that there are no limits to compensating one's own emissions with reductions or increased carbon removal elsewhere. In fact, all activities compete for limited ways in which carbon uptake

[4] "Some advice to Canada on how to stop failing on climate change" West Coast Environmental Law, Climate Action Network Canada, Ecojustice, Environmental Defence, Pembina Institute and Équiterre. https://www.wcel.org/blog/some-advice-canada-how-stop-failing-climate-change last accessed Oct 22nd, 2021

can be increased, like land for forest conservation and restoration. They also compete with the reality that we need the limited additional carbon we can sequester in ecosystems to offset our past fossil fuel emissions, not tomorrow's emissions.

It is particularly challenging to believe that forest carbon dioxide removal (CDR) should be considered in any net-zero approach. In Canada, there are no vast sources of unused forest CDR to be used to offset our way out of limiting fossil fuel development and the sector's gigantic ghg emissions[5]. The opposite is true as the mismanagement of our country's forests combined with the worsening impacts of climate change (droughts, fires, pine beetles, etc) have turned our forests into net emitters[6]. Any efforts to create offsets from forest CDR will furthermore come up against significant challenges including permanence, geologic vs biologic timeframes, natural limits to additional sequestration, leakage, and additionality.

Forest Carbon Dioxide Removal and Offsets

There is immense beauty and inherent value in the forests and ecosystems found in Canada. These forests are also Indigenous Cultural Landscapes, shaped by Indigenous knowledge and practices since time immemorial and continuing today. We must make efforts to restore the ecological integrity and CDR potential of our forests through a rights-based approach while respecting that nature is not just a solution for carbon removal and storage.[7] This requires much swifter progress on meeting Canada's target of 30% protection of the land by 2030 at a minimum[8] and empowering Indigenous leadership through Indigenous Protected and Conserved Areas (IPCAs).[9]

Forest CDR can be an added benefit to stronger, more resilient, and ecological diverse forest that provides a needed contribution to achieving our 1.5C goals. Yet we must understand that there are ecological limits to the potential of forest CDR and that they cannot be an offset to our large industrial emissions[10]. The critical focus should be on getting our own emissions under control by taking immediate and comprehensive action. We need this action to control our own emissions, so that the limited carbon we can sequester in ecosystems can be used to offset the emissions from the last 100 years of burning fossil fuel.

The expansion of offset usage for the purpose of "efficiently" enabling big polluters to continue to emit while nature sequesters this emitted carbon dangerously undermines our pathway to

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[5] The oil and gas sector is Canada's leading GHG emitter (26%) while emissions from fossil fuel consumption (transportation, fuel for electricity and heat) is 80.1%. Canada's 2021 National Inventory Report https://publications.gc.ca/site/eng/9.506002/publication.html last accessed Oct 22nd, 2021

[6] "One of Canada's biggest carbon sinks is circling the drain" By Barry Saxifrage May 7th 2021 National Observer https://www.nationalobserver.com/2021/05/07/news/canada-carbon-sink-managed-forests-circling-drain last accessed Oct 22nd, 2021

[7] See Net Zero and Nature - Climate Land Ambition and Rights Alliance: https://www.clara.earth/net-zero-and-nature

[8] Canada joins the High Ambition Coalition for Nature and People https://www.newswire.ca/news-releases/canada-joins-the-high-ambition-coalition-for-nature-and-people-847311784.html

[9] Indigenous Leadership Initiative - Indigenous Protected and Conserved Areas https://www.ilinationhood.ca/indigenous-protected-and-conserved-areas

[10] Waring, 2021

1.5°C. That approach is entrenched if we allow forest CDR offsets into the impact assessment process as that would enable emissions that should be avoided in the project's design or result in projects that simply don't fit in a zero-carbon world. The science is clear: to prevent this global crisis from getting worse, we need to cut greenhouse gas (GHG) emissions immediately, while simultaneously protecting and restoring vast natural ecosystems.

Not only does enabling offsets from forest CDR steal from the reduction we need from natural ecosystems, but there are also significant problems with these types of offsets:

- Impermanence: Any benefits from offsetting carbon with forests are only as certain as the future of the forests themselves — which is to say, not at all, given climate change's impact on forest and increased natural or man-made dangers [11](fires, logging, droughts, pests), in addition to offset programme failures[12]. The benefits of phasing out fossil fuels and keeping all that carbon in the ground instead of burning it are, by contrast, permanent.
- Timing: Fossil fuel emissions happen immediately, while nature-based CDR takes much longer as tree growth takes decades and other processes may take thousands or even millions of years. If we continue our current fossil fuel use we create a time lag that fuels higher temperature increases and larger climate impacts before atmospheric CO_2 can be reduced. The carbon cycle in our biosphere is not the place to store hundreds of thousands of years' worth of extracted and burned geological fossil carbon[13].
- Leakage: at a global level, protecting forests in one location can be undermined if it only serves to cause logging or deforestation elsewhere[14]. This leakage risk seriously undermines the climate benefits that are claimed in forest related offsets.
- Additionality: Carbon offset proponents assume that forests would be destroyed or kept unproductive (leading to less carbon uptake) without their intervention. Considering our need restore and nurture our forest ecosystems such that their limited capacity to absorb carbon can be maximized, how can we know be sure that a 'carbon offset' forest wasn't going to be conserved or restored anyway[15]?

Net Emissions from Canada's Forests

In Canada, the mismanagement (e.g. logging) of our country's forests combined with the worsening impacts of climate change (droughts, fires, pine beetles, etc) have turned them into

[11] Climate change Impacts on Forest. NRCan. https://www.nrcan.gc.ca/climate-change/impacts-adaptations/climate-change-impacts-forests/impacts/13095 last accessed Oct 22nd, 2021

[12] "An Even More Inconvenient Truth" by Lisa Song ProPublica. https://features.propublica.org/brazil-carbon-offsets/inconvenient-truth-carbon-credits-dont-work-deforestation-redd-acre-cambodia/ last accessed Oct 22nd, 2021

[13] "The Carbon Cycle and Atmospheric Carbon Dioxide" IPCC https://www.ipcc.ch/site/assets/uploads/2018/02/TAR-03.pdf last accessed Oct 22nd 2021

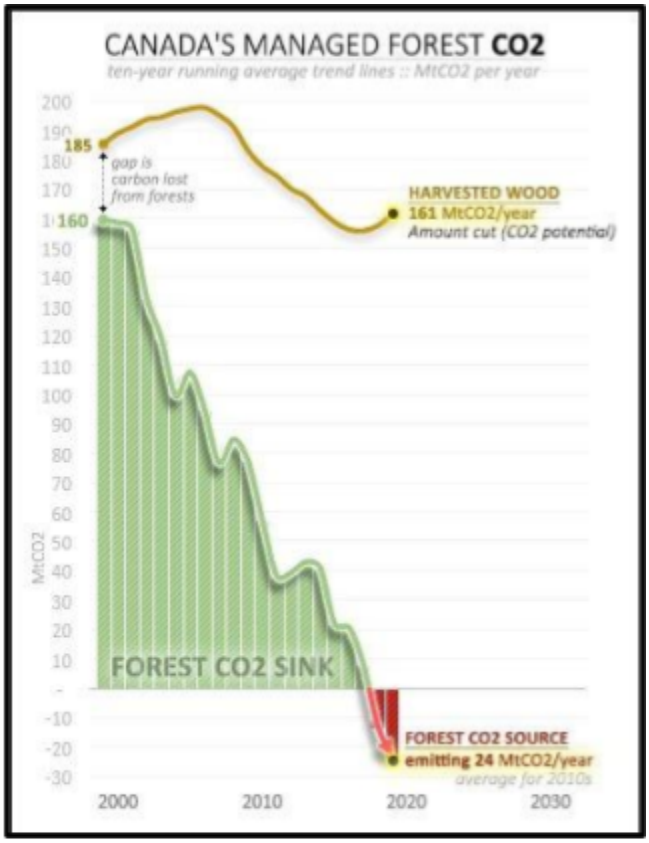
[14] Rethinking forest carbon offsets By Dr. Charles D. Canham https://www.caryinstitute.org/news-insights/feature/rethinking-forest-carbon-offsets last access Oct 22nd, 2021

[15] ibid

net emitters.[16] That carbon deficit worsens when we consider the GHG emissions from burning the wood we harvest from our forests.[17]

Achieving the necessary changes in the carbon budget for Canadian forests is a huge task. There is a critical need for action in Canada's forests to reverse our current trend and return our forests to being healthy and diverse ecosystems with the added benefit of improved CDR. These CDR improvements are critically needed to manage Canada's overall national emissions and to get us on track to meet our 2030 and 2050 climate commitments. As a result we cannot siphon off any forest CDRs to offset current or future industrial emissions.

In no modelled pathway can the Paris goals be achieved without rapidly reducing our current emission sources[18]. It is our view that CDR is not an alternative to emissions reductions. The vast majority of emissions reductions must be achieved by energy efficiency, by changing fuels and phasing out fossil fuels. More concerning is that forest CDRs are cited in the net zero pledges by the fossil fuel industry[19] as a solution to their own huge emissions and achieving net zero. In reality, their reliance on offsets promotes the scientific impossibility that natural removals can compensate for continued fossil emissions into the foreseeable future and distracts from the need for their own actions to reduce emissions and contribute to the global challenge of reducing our emissions to achieve our 1.5°C goals. The fossil fuel industry should not be allowed to use forest CDR to continue their high-emission operations.



Source: National Observer, Canada's National Inventory Reports

We need to improve the biodiversity and ecological integrity of our forests so they can become carbon sinks again **and** we need industry emission reductions and fossil fuel phase out:

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[16] One of Canada's biggest carbon sinks is circling the drain National Observer. Barry Saxifrage May 7th 2021 https://www.nationalobserver.com/2021/05/07/news/canada-carbon-sink-managed-forests-circling-drain last accessed October 18th, 2021

[17] "Forest harvesting and the carbon debt in boreal east-central Canada" by Dr Jay Lalcolm et alii https://link.springer.com/article/10.1007/s10584-020-02711-8

[18] SPECIAL REPORT on Global Warming of 1.5 ºC IPCC https://www.ipcc.ch/sr15/ last accessed Oct 22nd, 2021

[19] Big Oil's Net-Zero Plans Show the Hard Limits of Carbon Offsets Kate MacKenzie Mar 1st, 2021 https://www.bnnbloomberg.ca/big-oil-s-net-zero-plans-show-the-hard-limits-of-carbon-offsets-1.1570273 last accessed Oct 22nd, 2021

ecosystem removals must be in addition to decarbonization. There just isn't room or the time in our collective global effort to act on greenhouse gas emissions to rob Peter (our forests) to pay Paul (industrial emissions).

Recommendations:

- **Climate Test**: The Impact Assessment Act (IAA) requires federal authorities to consider whether a project hinders or contributes to the Government of Canada's ability to meet its commitments in respect to climate change such as the Paris Agreement. For this climate test to effectively drive Canada towards its Paris Commitments, Greenpeace recommends that offsets not be permitted to justify increased or ongoing emissions.
- **No forest CDR offsets**: It is Greenpeace's view that any offsets that enable companies to avoid decreasing their emissions will "hinder" the government's ability to reach our Paris Agreement objectives. As a result of Canada's forest becoming net emitters, there is no room in project carbon accounting for the use of forest CDRs. We need the limited additional carbon we can sequester in ecosystems to offset our past fossil fuel emissions, not tomorrow's emissions.
- **Emission Reductions first**: We cannot offset our way to zero emissions as achieving our necessary emission reductions will require rapid and deep decarbonization to near zero across all projects, sectors, and economies. It is critical that in decision-making processes such as the federal impact assessment process we enable low and zero carbon projects and avoid approving high carbon, business-as-usual, projects that we attempt to "mitigate" with imperfect solutions like forest CDR offsets.
- **A National Forest Carbon Renewal Action Plan**: Canada needs to create an action plan for reversing the current carbon trend in our forests and return our forests to being healthy and diverse ecosystems with an added benefit of improved CDR. In fact, this action is clearly necessary as part of Canada having a credible plan to meet its 2050 climate commitments. Such a plan would be rights-based in its approach and also advance the achievement of Canada's national target of protecting 30%[20] of the land by 2030 - forest protection being best for climate and biodiversity.
- Projects should be evaluated through a rights-based lense and how they advance the implementation of the **United Nations Declaration on the Right of indigenous Peoples** in Canada.

[20] https://www.canada.ca/en/services/environment/conservation/nature-legacy.html