

September 12, 2019
Environment and Climate Change Canada
200 Sacre-Coeur, 2nd Floor
Gatineau, Quebec
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Re: Pembina Institute comments on the draft strategic assessment of climate change

To whom it may concern:

Thank you for the opportunity to provide written comments on the government's draft strategic assessment of climate change (SACC). We would like to stress the importance of this undertaking and urge the government to rethink its approach. The strategic assessment of climate change is essential to both the efficacy and credibility of the new impact assessment regime and to achieving Canada's climate obligations. In its current form, the SACC may lead to a more consistent assessment of climate change in project reviews but there is no evidence that it will lead to improved environmental outcomes or that it will ensure that individual projects are aligned with the Government of Canada's climate objectives.

One of the key improvements of the new environmental law regime enacted by the government in August 2019 is consideration of whether a project hinders or contributes to Canada's ability to achieve its international commitments with respect to climate change. This is a complex question that deserves careful scrutiny and robust recommendations to ensure that project assessment is in step with federal climate commitments. Moreover, as we seek to avoid the most catastrophic impacts of climate change, project assessments can be designed as a tool to incentivize low-carbon pathways and limit the lock-in of high-carbon trajectories. However, mobilizing the mitigation and transition potential of impact assessment will require a new strategic assessment of climate that adheres to the principles and spirit of the new impact assessment regime and embodies a commitment to deep emissions reductions for all new infrastructural and industrial activities.

To that end, our primary recommendation is that the government commit to a new strategic assessment of climate change that is independent, evidence-based, transparent, and inclusive. It should also include a broad enough mandate to allow careful examination of the difficult issues inherent in transitioning to a low-carbon economy. In addition to our primary recommendation, we have included 18 recommendations on the draft strategic assessment as well as higher-level comments aimed at improving the process.

There is considerable work needed to successfully implement the climate provisions in the new impact assessment regime and we look forward to continuing to work with the government to ensure that climate change is rigorously and thoughtfully integrated into all project reviews.

Sincerely,



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Pembina Institute comments on the draft strategic assessment of climate change

Purpose and scope

A strategic impact assessment is an assessment of a government policy, plan or program. The purpose is to determine how broader policy issues, such as the federal government’s climate policy, should be operationalized in individual project assessments. The intent is to consider strategic questions and provide clarity on how policies, plans, or programs will be applied in order to avoid ad hoc or inconsistent application of the law. This is necessary to provide predictability for all parties and to minimize conflict over individual projects. From a higher-level perspective, the strategic assessment of climate change is critical in determining how the government’s climate mandate should be taken up in individual project assessments and ensuring that the climate considerations included in the Impact Assessment Act and the Canadian Energy Regulator Act are operationalized.

For both pieces of legislation, the key strategic question to be asked is how to relate individual projects to Canada’s commitments with respect to climate change. In particular, both acts require consideration of “the extent to which the effects of the designated project hinder or contribute to the Government of Canada’s ability to meet its environmental obligations and its commitments in respect of climate change.. Thus, adhering to the legislation requires identifying 1) the obligations and commitments that projects will be assessed against and 2) what it means to “hinder or contribute to Canada’s ability to meet” these obligations and commitments.

Outcomes and Process

For the strategic assessment to be relevant and effective, it must lead to the following outcomes:

1. A set of principles for ensuring climate considerations in project assessment. For instance, principles should include 1) adhering to accepted standards of GHG accounting¹ and 2) thresholds/policies that are increasingly stringent over time to ensure Canada’s decarbonization pathway is in step with our commitments under the Paris Agreement.

¹ Two widely accepted standards are GHG Protocol (<https://ghgprotocol.org/standards/project-protocol>) and ISO 14064 (<https://www.iso.org/standard/38381.html>).

2. A framework to adjudicate individual projects, by sector or region, in light of the cumulative impact of GHG emissions and the commitment to keeping global warming to well below 2 degrees Celsius and to pursue efforts to limit warming to 1.5 degrees Celsius above pre-industrial levels.
3. An energy supply and demand scenario that models successful implementation of the Paris Agreement.
4. Predictability for industry via clear signals regarding the type and amount of development permissible within specific sectoral and/or regional thresholds.

To ensure the credibility of the process and outcomes we recommend that an independent, expert committee conduct the assessment. It is critical that the committee have broad terms of reference, expertise and empowerment to identify key questions and propose solutions regarding how to assess climate in project-level impact assessment. Moreover, the process should be designed according to the principles espoused in the Impact Assessment Act including inclusiveness, partnership with Indigenous Peoples, scientific integrity, transparency, and clear expectations for stakeholders. It is worth noting that a well-designed process may serve as a model to illustrate that robust, effective impact assessments can also be accomplished on reasonable timelines.

General comments

The draft strategic assessment falls short in a number of substantive areas. First, it fails at the primary task of linking federal climate policy to individual project assessments. It outlines information that must be provided in the assessment but it offers no indication of how that information will be used to adjudicate projects against Canada's obligations and commitments with respect to climate change. Moreover, the SACC does not include a decision-making framework or key measures (thresholds or scenarios) to provide substantive basis for adjudicating projects.

At the same time, it establishes policy positions (e.g. prohibiting the assessment of downstream GHG emissions) without providing the linkage to existing policy positions or evidence to support these additional policies. For example, there is no discussion of how the decision to not assess downstream emissions influences our ability to meet our climate change commitments or the rationale behind this decision. Thus, rather than providing clarity on how to assess whether a project "contributes or hinders" our ability to meet our climate objectives, it further obfuscates the key question with additional policies that are not linked to those objectives.

The preamble of the Impact Assessment Act states that the Government of Canada "is committed to using transparent processes that are built on early engagement and inclusive

participation and under which the best available scientific information and data and the Indigenous knowledge of the Indigenous peoples of Canada are taken into account in decision-making.” The draft strategic assessment of climate change is antithetical to the spirit of the new legislation. With no substantive engagement and no discussion of evidence, it raises doubt about the credibility of the new environmental law regime and the government’s sincerity in implementing it. We hope that the government takes this round of consultation as an opportunity to revise its approach such that the strategic assessment of climate change demonstrates a commitment to transparency, inclusiveness, and scientific integrity.

Recommendations

Despite the concerns outlined above, we have provided substantive comments on the draft SACC below. In addition to our primary recommendation of appointing an independent expert panel to conduct the strategic assessment, we have included 18 additional recommendations.

Calculation of direct emissions

Identifying a standard formula for assessing net GHG emissions is an improvement on the requirements under CEAA 2012. Under CEAA 2012, the methodology used for calculating emissions has been a point of contention. For instance, the direct emissions put forward by the proponent in the Frontier Oil Sands Mine did not consider emissions from fuel consumed on site or emissions from land use change. When these emissions are included, net emissions included 48 per cent more emissions than the proponent’s emission estimate, for a total of 6 Mt of net emissions.² An appropriately crafted standard, reviewed by the Impact Assessment Agency or the federal energy regulator, would help ensure a full accounting of emissions and reduce the burden of intervenors to argue for the full inclusion on GHG emissions.

However, subtracting domestic avoided emissions may lead to issues related to additionality (whether the emissions reductions would have occurred without the project), double counting emissions, and an inaccurate understanding of a project’s climate change impact. Subtracting avoided emissions may result in projects with high absolute emissions appearing to have relatively low or even negative emissions. This could then lead to missed opportunities for mitigation (including requirements to employ best available technologies and practices) and an overall misrepresentation of the emissions contribution of a project.

² Oil Sands Environmental Coalition, Submissions of the Oil Sands Environmental Coalition and Appendices to Written Submissions, Volume 1 (2018), 0133. <https://iaac-aeic.gc.ca/050/documents/p65505/125100E.pdf>

The requirement to address uncertainty in calculation is welcome as it provides an opportunity to interrogate assumptions and estimation methods ensuring the emissions attributed to a project are as accurate as possible.

Recommendations:

1. Do not subtract avoided domestic emissions from the calculation of net emissions. If “net” GHG emissions calculations continue to allow for the subtraction of avoided domestic emissions, another calculation of “gross” emissions will be necessary to ensure an accurate accounting of a project’s impact on climate change is possible.
2. The definition of acquired energy GHG emissions should encompass all fuels used on site including, but not limited to, hydrogen, electricity, natural gas, gasoline, and diesel.
3. The definition of transferred surplus energy GHG emissions should include hydrogen.
4. The definition of CO₂ captured and stored should include direct air capture projects and carbon capture utilization and storage (CCUS) to ensure it is inclusive of emerging technologies.

GHG threshold

The government has proposed a 500kt (0.5Mt) threshold for both direct and upstream emissions. Projects with direct annual emissions greater than or equal to 500kt of CO₂ equivalent will be required to provide additional information. Projects with annual upstream emissions greater than or equal to 500kt of CO₂ eq. will be required to provide details on upstream emissions.

However, beyond information provision, the purpose of the threshold is unclear. One implication could be that projects exceeding the threshold will have emissions that are deemed significant for purposes of the Impact Assessment Act. If this is the case, the threshold is set too high. Our analysis estimates that in Canada there are up to two new developments per year that exceed the threshold of 500kt.³ However, since not all high-carbon projects will be subject to the new impact assessment regime, a 500kt threshold for direct emissions will rarely be reached. As a result, the proposed threshold will have very little impact on ensuring that we are adequately planning for and mitigating the impact of the high-carbon infrastructure developed in the coming decades.

³ Dusyk, *Federal impact assessment of high-carbon projects: Recommendations for a GHG threshold for the project list* (Pembina Institute, 2019). <https://www.pembina.org/pub/federal-impact-assessment-high-carbon-projects>

Recommendations:

5. Reduce the threshold to 50kt with a scheduled decline to 25kt in 2030 and 5kt in 2040. This would provide a clear signal to industry that high carbon emissions will come under increased scrutiny in line with a path to deep decarbonization by mid-century.
6. Use the next iteration of the strategic assessment of climate change to consider and provide evidence on the utility of a GHG threshold for the project list.

Best available technology and best environmental practices

Use of best available technology and/or best available environmental practices for minimizing GHG emissions (measured against global standards) should be a minimum threshold for projects proceeding beyond the planning phase. The proposed requirement for a BAT/BEP determination for only the highest emissions projects is inconsistent with the goal of transitioning to low-carbon pathways. In an era that requires deep emissions reductions, no project should proceed without demonstrating that it is employing BAT/BEP with a commitment to continuous improvement over the life of the project. Moreover, projects should be required to prove compatibility with a pathway to decarbonization by demonstrating economic viability measured against scenarios that consider increasingly stringent climate policies.

Methodologically, it is important to require regular review and updating of best available technologies and best environmental practices to ensure standards remain up to date and aligned with the current status of technology. A registry of BAT/BEP should be created and maintained by federal authorities.

Recommendations:

7. Use of best available technology and/or best available environmental practices for minimizing GHG emissions (measured against global standards) should be a minimum threshold for projects approved under the Impact Assessment Act or the Canadian Energy Regulator Act.
8. The above requirement should be enforced through conditions placed on the project.
9. The federal government should adopt an approach aligned with the U.S. Environmental Protection Agency (EPA) whereby best available technologies and procedures are continuously tracked through facility approvals and amendments.⁴

⁴ The U.S. EPA's RBL Clearinghouse database provides up-to-date regulatory determinations of Best Available Control Technology (BACT) for numerous pollutants, including GHGs.[1] This ongoing assessment and publication

Downstream effects

The SACC indicates that downstream emissions will not be assessed for any project. For projects with net or upstream GHG emissions greater than or equal to 500kt, it will allow proponents to explain how projects will lower domestic or international emissions. The asymmetrical treatment of downstream effects (allowing consideration of downstream benefits while prohibiting consideration of downstream impacts) introduces clear bias into the assessment and risks the credibility of the GHG assessment. Boundaries for considering downstream effects must be consistent for benefits and impacts.

It is not acceptable to include carbon leakage considerations in a project's assessment. First, a basic standard for new projects should be competitiveness in decarbonizing world markets. New projects must demonstrate they remain competitive in scenarios where global warming is limited to well below 2 degrees Celsius. In addition, relief to high emitters is provided in federal and provincial governments' carbon pricing policies to avoid leakage that may result from a carbon pricing differential. Inclusion in project assessments risks duplicating accommodations for high-emitting projects and thus further incentivizes high-carbon trajectories.

Recommendations:

10. Do not allow asymmetrical treatment of downstream impacts and benefits. If reductions in international GHG emissions are considered, even qualitatively, then downstream emissions must be given an equivalent assessment.
11. Carbon leakage should not be a consideration in project assessment.

Economic viability in a decarbonized world

Aligning individual projects with broader decarbonization pathways requires assessment of the economic viability of the project in a world where global warming is limited to well below 2 degrees Celsius in line with the Paris Agreement. As of 2019, 185 states and the European Union have ratified or acceded to the Paris Agreement and are working to implement domestic plans. We believe there is reasonable certainty that domestic and global mid-century goals on climate will be achieved, and therefore there is sufficient justification to require assessment against these scenarios. In particular, a revised energy supply and demand scenario that assumes successful implementation of the Paris Agreement should be used to assess all energy infrastructure projects.

of BACT assists developers, regulators and the public understand and evaluate the industrial emissions controls available.

Recommendations:

12. Require the creation and update of a Paris-compliant energy supply and demand scenario.
13. Require that all energy infrastructure be assessed against the scenario to ensure economic viability over the life of the project and/or the feasibility of early decommissioning.

Climate Resilience

Mandatory assessment of climate resilience is an important and welcome addition. It should not be limited to biophysical impacts of climate change. The Impact Assessment Act requires an assessment of a project's economic impacts and benefits and this should be extended to include the financial risks of climate change. Profits may be lost due to damaged infrastructure or catastrophic events such as flooding or forest fires. Demand for products may be reduced due to domestic and international climate policies and changing global economics including fluctuations in commodity price. Finally, liability for clean-up needs to be considered given the potential for lost profitability and/or stranded assets.

Recommendations:

14. Require the inclusion of financial risks, particularly regarding lost profits, reduced demand, and liability for clean up in the mandatory assessment of climate resilience.

Carbon sinks

We fully support consideration of impacts on carbon sinks including direct project impacts and indirect impacts from land-use change. We urge the government to use the requirements of project assessment to advance knowledge. Currently, lifecycle assessment models used to assess indirect land-use change have not been sufficiently calibrated to the Canadian context. The impact assessment process provides an opportunity to fill these data gaps by requiring proponents to produce new studies that will allow for the assessment of project-related emissions resulting from both direct and indirect land-use change. Similarly, monitoring and compliance requirements should be used as an opportunity to better understand project-related and cumulative impacts of land-use change.

Recommendations:

15. Definitions of carbon sinks should explicitly include carbon reservoirs.

16. Use project assessments to advance knowledge of the GHG impacts from both direct and indirect land-use impacts and prohibit the exclusion of impacts due to the lack of available information.

Evidence

The draft SACC relies nearly exclusively on information provided by the proponent. We support the requirement that proponent data and analysis be reviewed by the Impact Assessment Agency or federal authorities. However, there is no requirement to utilize the best available scientific evidence or for findings to be independently verified by an independent third party. Credible assessment of GHG emissions and mitigation opportunities must be based on credible data and analysis. Moreover, data and analysis must be publicly available and permanently archived.

Recommendations:

17. Require use of measured emissions from existing facilities, independent third party assessments, or peer-reviewed data whenever possible. The precautionary principle should be considered in cases where no independent or verifiable data exists.
18. Ensure that all data, analysis, studies, and models are permanently archived and publicly accessible.