

Good Governance in the Era of Low Carbon

Final submission to the Expert Panel on
National Energy Board Modernization

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March 2017

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Executive summary

Through its review of the National Energy Board (NEB) and of the federal environmental assessment (EA) regime, the Government of Canada has a tremendous opportunity to ensure the country's regulatory bodies are fully equipped to serve the public interest in a country transitioning to a low-carbon economy.

This report constitutes the Pembina Institute's final recommendations to the Expert Panel on NEB modernization. Our recommendations focus on the project review processes — including the NEB's existing role as the responsible authority for interprovincial pipeline and designated power line EAs — as well as the NEB's data production and modelling functions. We offer recommendations to improve the Government of Canada's ability to consider climate change in energy project evaluations and decisions, and to address concerns about the NEB's perceived lack of independence and approach to public, landowner and stakeholder engagement.

In order to modernize Canada's energy regulatory landscape to support its long-term climate and clean growth objectives, we recommend the following:

- That, as a key outcome of the NEB and EA reviews, the reformed EA body lead the EA of federal energy projects, with the NEB providing advice on the technical and economic viability of proposed projects.
- That the tests applied within the EA be replaced with a test of the proposed project's contribution to sustainability. Further, we recommend that such a test assess the incremental upstream and direct emissions generated by a proposed project, and the impact those emissions could have on Canada's ability to achieve its climate policy objectives.
- That the NEB produce scenarios for oil, gas, coal and zero-emitting electricity supply and demand under which successful international implementation of the Paris Agreement is achieved, including Canada's own mid-century decarbonization. These scenarios should constitute the reference case in the NEB's biennial *Energy Futures* publication, and should be a key input into project reviews at the NEB and the reformed EA body.
- That existing limitations on public participation at the NEB be removed and that a more robust program to support meaningful participation across the life cycle of project review and regulation be established.

We believe that an unbiased, forward-looking and evidence-based energy regulatory landscape is vital to Canada's long-term interests. Without this, the risk of disconnects between federal policy and planning objectives and one-off project decisions will remain.

To that end, the Institute's recommendations have been crafted to ensure federal agencies share responsibility in a way that capitalizes on their respective core competencies. We have also prioritized recommendations that ensure federal EA processes remain streamlined, that the law is applied consistently and predictably, and that result in project reviews and decision-making become more publicly accessible.

In our view, a modernized NEB would work in conjunction with a reformed EA body to conduct environmental assessments and life cycle regulation in a rigorous and transparent manner — without unnecessary delay and with an eye to protecting Canada's long-term public interest and sustainability. It will therefore be necessary for the NEB to explicitly recognize the link between energy and climate change, to evaluate the economic case for fossil fuel projects with a clear-eyed view of the Paris Agreement, and to work to advance reconciliation with Indigenous peoples.

The ultimate result of the ongoing review of federal EA processes will have significant bearing on our preferred solutions for NEB reform. It is imperative that the functions, mandates and roles of the EA body, the NEB, and other federal agencies be considered as part of a larger whole. Proposed modifications to these regimes should be examined side-by-side before final decisions are made in order to ensure best outcomes.

Our vision for a modernized National Energy Board

- Modern regulators should reflect the values of the society in which they operate.
- Modern regulators should support Canada's commitment to the Paris Agreement on climate change.
- Modern regulators should conduct their work in the spirit of reconciliation with Indigenous peoples.
- Modern regulators should be accessible to the public, make evidence-based decisions, and be free from bias.
- Modern regulators should aspire to be world-leading and to deploy predictable, rigorous and inclusive practices for natural resource and infrastructure management.

1. Introduction

Over the last decade, energy infrastructure proposals have become increasingly contentious across Canada. The evolving values of Canadians, the need for a global response to climate change, and the assertion of Indigenous rights and title over natural resource management have dramatically changed the landscape in which major resource projects are considered. These social, political and economic trends — coupled with a long-standing lack of adequate public forums for Canadians to engage with federal and provincial decision-makers on energy and climate — have resulted in individual project reviews becoming a proxy for sector and economy-level policy discussions.

Established in 1959, the NEB is presently not equipped to usher Canada into its next phase of low-carbon energy regulation — a phase many hope will be more transparent, inclusive and capable of supporting Canada’s long-term climate change objectives. Through its review of the National Energy Board Act and other legal instruments, like the Canadian Environmental Assessment Act, the Government of Canada has an important opportunity to ensure the country’s regulatory bodies and processes are equipped to review projects from a climate change perspective. At the same time, the review offers an opportunity to turn the corner on long-standing concerns, including public participation and nation-to-nation dialogue with Indigenous peoples.

The Pembina Institute has actively participated in the NEB modernization process. In fall 2016, we conducted 23 interviews with individuals with a wide range of expertise to gather ideas and understand the challenges presented by NEB modernization. We published a discussion paper¹ and participated in three engagement sessions with the Expert Panel leading the review (Saskatoon, Toronto, Edmonton). This report summarizes the findings of these activities and comprises our final recommendations to the Expert Panel on NEB modernization.

Our recommendations address two major issues:

1. The legislative landscape surrounding energy decision-making, including the National Energy Board Act and the Canadian Environmental Assessment Act, is not sufficiently equipped to guide energy development in a way that supports

¹ Pembina Institute, *Good governance in the era of low carbon: A vision for a modernized National Energy Board*. (2017). <http://www.pembina.org/pub/good-governance-era-of-low-carbon>

Canada’s commitment to the landmark global climate treaty, the Paris Agreement. This issue arises across the NEB’s present functions, from the production of data to its project decision-making.

2. Government failure to address systematic climate and energy policy questions, coupled with contentious project reviews, has eroded public trust and confidence in the NEB.² For many Canadians, concerns about the NEB’s independence and ability to meaningfully engage stakeholders are paramount. This situation is untenable and not in Canada’s long-term interest. For energy and resource development to work, Canadians must have confidence that their regulators are equipped to make decisions in the public interest and should trust the outcomes of these processes.

Given the interlinked nature of climate and energy decision-making with environmental planning tools such as EAs, our recommendations span both NEB modernization and the review of federal EA processes. Notwithstanding the range of concerns regarding the NEB’s role in safety, landowner relations, monitoring and other functions, our focus is largely on the project review processes and the NEB’s role in data production, energy scenario modelling, and forecasting.

“The NEB was conceived of and created at a time when there was never any reason to doubt the merits of fossil fuel production and infrastructure. That really must be at the core of this review: to recognize that that is no longer the case. Along these lines, there’s this idea that the NEB should only focus on the built infrastructure along pipelines, and that the other questions are beyond its power. That doesn’t stand up to scrutiny anymore. A future NEB that can face the challenges of the 21st century really needs to decarbonize its notion of energy.”

— Martin Olszynski, assistant professor, University of Calgary Faculty of Law

“People tend to view the economy, and the energy economy, as being static. But you can’t base the decision on a static view of the world: you will potentially come to the wrong result.”

— Jotham Peters, senior partner, Navius Research Ltd.

² See EKOS, *Confidence in National Energy Board* (2016), <https://assets.documentcloud.org/documents/2764857/024-16-Survey-Findings.pdf>

“Energy infrastructure projects are among those with the largest implications for Canada's ability to meet its GHG emission reduction commitments, and for the sustainability of Canada's economy and society. Such projects must be subject to meaningful and effective public review in terms of their GHG emission impacts and contributions to sustainability before they proceed. The post-2012 assessment and review processes for energy projects have failed to meet these needs.”

*— Mark Winfield, co-chair and professor, Sustainable Energy Initiative,
York University*

“Given that some of the most contentious major projects in Canada have been pipelines, that have engaged both the NEB and CEAA, it is imperative that the government consider the interaction between NEB modernization on federal environmental assessment and vice versa. Canadians need to have a clear understanding of how these regimes will operate going forward.”

— Karen Campbell, program director – climate change, Ecojustice

“A lot of our infrastructure is already 50, 60 or 70 years old and must be replaced anyway. Wouldn't it be nice if we were able to replace it with 21st or 22nd-century technology, instead of 19th or 20th-century technology?”

*— Tom Stanton, principal researcher (energy and environment),
The National Regulatory Research Institute*

Major energy projects and reconciliation with Canada's first peoples

Modern regulators must conduct their work in the spirit of reconciliation with Indigenous peoples and with a view to upholding the principles and obligations of the United Nations Declaration on the Rights of Indigenous Peoples. In particular, we call on the expert panels on NEB modernization and EA review to consider how their advice to ministers will support rapid implementation of the Truth and Reconciliation Commission of Canada's Calls to Action, including Action 92, which reads:

"We call upon the corporate sector in Canada to adopt the United Nations Declaration on the Rights of Indigenous Peoples as a reconciliation framework and to apply its principles, norms, and standards to corporate policy and core operational activities involving Indigenous peoples and their lands and resources. This would include, but not be limited to, the following:

- i. Commit to meaningful consultation, building respectful relationships, and obtaining the free, prior, and informed consent of Indigenous peoples before proceeding with economic development projects.*
- ii. Ensure that Aboriginal peoples have equitable access to jobs, training, and education opportunities in the corporate sector, and that Aboriginal communities gain long-term sustainable benefits from economic development projects.*
- iii. Provide education for management and staff on the history of Aboriginal peoples, including the history and legacy of residential schools, the United Nations Declaration on the Rights of Indigenous Peoples, Treaties and Aboriginal rights, Indigenous law, and Aboriginal-Crown relations. This will require skills based training in intercultural competency, conflict resolution, human rights, and anti-racism."*

Further, we call on the expert panels on NEB modernization and EA review to consider how their advice to ministers will support adherence to the UN Declaration on the Rights of Indigenous Peoples, Article 18 and Article 19:

— "Indigenous peoples have the right to participate in decision-making in matters which would affect their rights, through representatives chosen by themselves in accordance with their own procedures, as well as to maintain and develop their own indigenous decision-making institutions."

— "States shall consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free, prior and informed consent before adopting and implementing legislative or administrative measures that may affect them."

2. Recommendations

In order to maximize the public benefit from the Government of Canada's NEB modernization and EA review processes, the federal government should introduce new or significantly amended legislation that promotes sustainability, evidence-based decision-making, and the depoliticization of energy project reviews. We recommend the Government of Canada seek legislative solutions that (1) focus on leveraging strengths, expertise and core competencies at existing regulatory agencies, and (2) that result in a streamlined energy planning and project review landscape equipped to broadly consider the public interest, particularly as it relates to Canada's ability to achieve its 2030 and mid-century climate change objectives.

In order to achieve these ends, the Pembina Institute recommends that proposed energy projects under federal jurisdiction undergo a centralized project review process, led by the reformed federal EA body. The NEB should contribute analysis, data and energy expertise to this energy project review process, and should further retain its capacity and obligations around project compliance, enforcement, and decommissioning. This centralized project review process should test the technical and economic viability as well as the contribution to sustainability of a proposed project.

The diagram below illustrates the project review process as per our recommendations. In the sections that follow, we elaborate on these recommendations.

Proposed federal energy project review process and related policy landscape

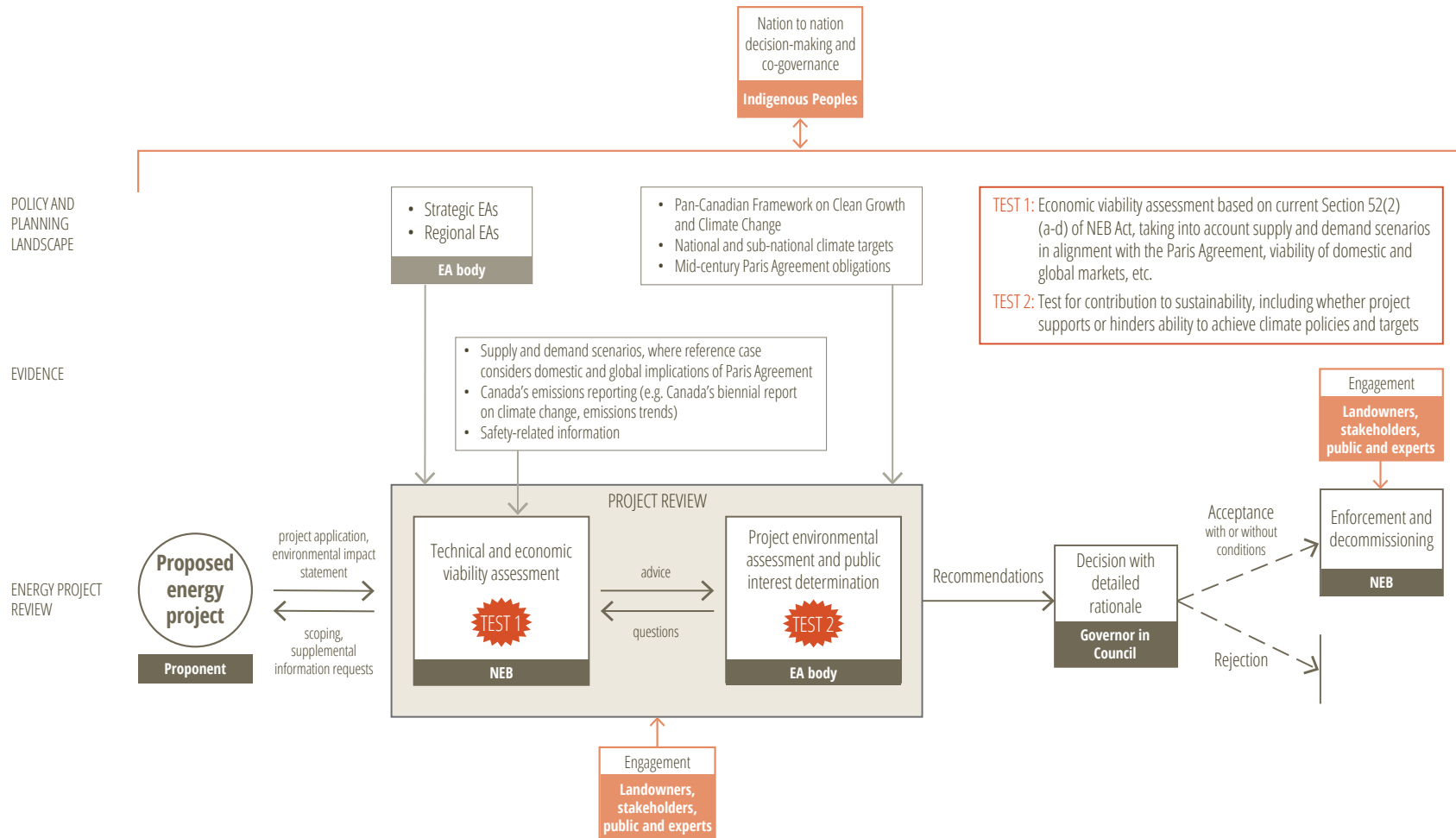


Figure 1. Pembina Institute proposed energy project review process and associated policy frameworks

2.1 Harnessing modernization to streamline Canada's energy project review process

A regulator plays a specific and important role within the energy development landscape. It is important to preface our recommendations in this section by highlighting that, as we heard from regulatory experts in our interviews, a regulator's structure alone does not determine its effectiveness and credibility – internal culture, knowledge and bias play at least as important of a role, and are even harder to change. However, changing the structure of a regulator can be used in conjunction with other reforms to achieve desired outcomes. One participant described this clearly:

“The bottom line is that it doesn't matter so much how the regulator is structured. A regulator can produce good or bad outcomes under different structures, and there is probably no single, best answer to how to structure an agency. However, it is important to think about economies of scale, information flows, and ways of ensuring a neutral assessment of scientific information. This can be done within different larger institutional structures, but only if the regulator has the appropriate controls in place. Maintaining neutrality can be a good reason for separating regulatory functions across different organizations, such as by charging one organization with investigating accidents or assessing risks, and another with creating or implementing rules to prevent accidents and reduce risks.”

— Cary Coglianese, director, Penn Program on Regulation, University of Pennsylvania School of Law

With that in mind, we present a number of recommendations pertaining to the structures in play across Canada's energy planning and project review landscape. In our view, credible modernization will entail modifications to the NEB's mandate, role and structure – and will have implications for the scope of the Canadian Environmental Assessment Act and the mandate of the reformed federal EA body.

We recommend Canada's existing energy project review regime be streamlined in the following ways:

1. That proposed energy projects under federal jurisdiction undergo a streamlined project review process **led by the reformed federal EA body**³ with technical contributions from the modernized NEB. Together, this review process should test the **technical and economic viability** and the **contribution to sustainability** of proposed projects. The National Energy Board Act should be amended to recognize the **direct link between Canada's climate objectives and its energy decisions** across the entirety of its functions.
2. Within this process, the modernized NEB should conduct a **technical and economic viability assessment** for the proposed project, based on Section 52(2) of the National Energy Board Act. As a key input into this technical and economic assessment, the NEB should produce energy supply and demand scenarios consistent with successful global implementation of the Paris Agreement and with Canada achieving its 2030 and mid-century climate objectives. These scenarios should be produced and made public under Part II of the National Energy Board Act and should be available to any party for submission as evidence in a project review. The technical and economic viability assessment should be provided to the EA body as a key piece of information within the project EA and public interest determination. The EA body could ask the NEB to provide additional technical analysis throughout the review process as new information becomes available.
3. Armed with the technical and economic assessment of a project, the EA body should conduct a project EA wherein the current test will be replaced with a **test for the contribution to sustainability** of the project. Among a wide range of considerations related to community planning, ecological sustainability and economic impacts, this sustainability test will consider the impact of the proposed project on Canada's ability to achieve its mid-century climate obligations, in line with the Paris Agreement, and any interim targets that support it.
4. To ensure public confidence in decision-making is maintained, we recommend that **decision-making criteria and trade-off rules** are established within the reformed Canadian Environmental Assessment Act, and that **detailed decision statements** be released publicly following the Government of Canada's final determination on a project.

³ Reformed according to 'next generation sustainability principles' and in line with the recommendations put forth to the EA review panel by the Environmental Planning and Assessment Caucus of the Canadian Environmental Network (<http://eareview-examenee.ca/view-submission/?id=1481741975.3944>) and others.

2.1.1 Federal EA body leads the project EA

The NEB currently applies two tests when reviewing proposed pipeline projects under its jurisdiction. It conducts a test of public convenience and necessity as outlined in Section 52(2) of the NEB Act.⁴ Simultaneously, it conducts a project EA. Although the test for the project EA is outlined in the Canadian Environmental Assessment Act, the NEB is the responsible authority for applying this test to interprovincial pipeline and designated power line projects.

Prior to 2010, a host of ministries and bodies were designated as responsible authorities for various types of project EAs. Following reforms introduced via bill C-9, the 2009 budget implementation statute, the Canadian Environmental Assessment Agency (CEAA) became the responsible authority for all comprehensive studies, with two exceptions: projects under the jurisdiction of the NEB, and projects under the jurisdiction of the Canadian Nuclear Safety Commission.⁵

We are recommending that this centralization effort be carried to its conclusion: that project EAs for energy projects under the jurisdiction of the NEB also be led by the federal EA body, with technical input from the NEB based on its core expertise on energy issues.

This recommendation has wide support across the Canadian environmental law and policy community, particularly from those who have participated in or closely watched project reviews and under the former and current EA regimes (i.e. CEAA, 1992 and CEAA, 2012). For example, the following comments were provided to the EA and NEB modernization expert panels:

One of the clear improvements from CEAA, 1992 to CEAA, 2012 was the centralization of EA responsibilities with the Canadian Environmental Assessment Agency. This resolved longstanding challenges associated with the previous CEAA, 1992 process with respect to coordination. In my view, this centralization should be made complete by transferring the National Energy Board's (NEB) and Canadian Nuclear Safety Commission's (CNSC) EA responsibilities as well. Time has not

⁴ In applying this test, the NEB must consider the following factors: the availability of commodities, economic feasibility, financial responsibility of the applicant, and "the public interest" (no definition of this provided in the Act). The NEB then provides recommendations to cabinet regarding the issuance of a certificate of public convenience and necessity.

⁵ Stephen Hazell, "How to get rid of pesky environmental laws in a minority Parliament," *Canadian Lawyer*, May 24, 2010. <http://www.canadianlawyermag.com/938/How-to-get-rid-of-pesky-environmental-laws-in-a-minority-Parliament.html>

permitted a systemic analysis of this issue, but anecdotally it does seem that EAs by both the NEB and the CNSC suffer from similar pathologies, including a tendency to conflate the scope of assessment with their regulatory mandates and to defer the assessment of some environmental effects to their own, largely internal, regulatory processes.⁶

The fact that the 2012 legal changes removed the role of the Agency in the conduct of a joint CEAA 2012/NEB Act review has proven problematic for many reasons relating to public trust, and the fact that the NEB's traditional expertise is energy regulation not environmental assessment. Environmental assessments of NEB-regulated projects should not be conducted by the NEB, but rather by the Agency (or the Agency's independent post-reform equivalent), whose primary mandate and expertise lies in environmental assessment.⁷

The existing CEAA has a greater degree of specialization, and therefore capacity, to consider the broad environmental and social impacts of proposed projects. Further, through the EA reform processes, it is expected that these aspects of Canada's EA regime will be further strengthened and improved upon. Meanwhile, the NEB has expertise related to the technical and economic aspects of energy infrastructure that must be incorporated into decision-making. A streamlined review process — one where the NEB provides a technical and economic assessment to the EA body, for consideration in its broader sustainability review — would allow each body to act in its best capacity, and in our view would result in improved decision-making and environmental outcomes. Many expert interviewees felt similarly:

“Above all, the CEAA that must be central, renewed and modernized — then you can add other mechanisms like the NEB. The NEB should have a technical function, but [it should not hold] the responsibility of conducting an integrated analysis of all of the dimensions.”

— Luc Ouimet, former commissioner of the BAPE (translated)

⁶ Martin Olszynski, “Avoiding the 'Tyranny of Small Decisions': A Canadian Environmental Assessment Regime for the 21st Century,” submission to the EA review panel, December 7, 2016, 9. <http://eareview-examenee.ca/view-submission/?id=1481128315.0823>

⁷ Ecojustice, submission to the NEB modernization expert panel, March 7, 2017, 2. <https://www.ecojustice.ca/wp-content/uploads/2017/03/Submission-to-NEB-Modernization-Panel-Final-.pdf>

“The consideration of environmental and social impact: this is what the [CEAA] does well and should continue to do. Citizens are interested in asking questions and intervening around these bigger societal issues. When it gets more technical, and especially since technical issues have extremely important repercussions on the options we can have, another group [such as the NEB] could go further with a more targeted approach.”

— Louise Roy, former vice president of the BAPE (translated)

However, some experts felt that one single responsible body, rather than multiple actors in a centralized review process, best serves the public interest:

“The NEB needs to be a full-service regulator — in other words, it needs to regulate projects within its mandate from start to abandonment and reclamation. It has been my observation that it’s cumbersome and ineffective if responsibilities are delegated amongst authorities. It can lead to finger-pointing and lack of accountability which is not in the public interest. If a single regulator doesn’t have the responsibility for holistic oversight, there are risks of unintended consequences and incomplete regulatory oversight.”

— Sheila Leggett, president, Tower Peak Consultants Ltd., former vice-chair of the National Energy Board

In our view, integrating the NEB’s technical and economic analysis into one coordinated review, led by a reformed EA body, could address concerns related to disjointed accountability while also ensuring consistent application of EA law and public participation.

2.1.2 The project EA tests for the project’s contribution to sustainability

Currently, federal project EAs test for whether a project will incur “significant and adverse environmental impacts” and whether those impacts are “justified in the circumstances.”⁸ The two components of this question are aimed at evaluating and protecting the public interest: one measures the extent to which proposed projects could result in harm to the environment, and the second wrestles with the extent to

⁸ Government of Canada, *Canadian Environmental Assessment Act, 2012*, c. 19, s. 52. <http://laws-lois.justice.gc.ca/eng/acts/C-15.21/>

which that harm may still result in benefits for Canada. Resources such as the NEB Filing Manual⁹ provide guidance to proponents on what information will be studied.

This approach focuses on making proposed projects less harmful, rather than seeking to maximize long-term benefits.¹⁰ In addition, due to the focus on individual projects and their incremental impacts, it has been difficult to control for cumulative effects.¹¹ Further, the legislation does not set out explicitly what constitutes the public interest — that is, what would justify certain adverse environmental impacts. This means that there is no substantive limit on permissible adverse impacts. As one participant explained:

“The reality is that most environmental laws contain no generally applicable substantive standard; rather, the legislation prohibits certain impacts in one breath while granting departments a discretionary power to authorize such impacts, often on an ad-hoc basis, in the next.”

— *Martin Olszynski, assistant professor, University of Calgary Faculty of Law*

We are recommending that the current project EA test as outlined under the Canadian Environmental Assessment Act, 2012 be replaced with a test for a project’s contribution to sustainability, which is, in our view, a stronger way to determine the public interest. For quality, consistency and predictability, the federal EA body should lead the application of this test for all proposals, including those presently under the jurisdiction of the NEB.

A sustainability test has been described by Gibson, Doelle and Sinclair in their work to develop a framework for “next generation” environmental assessments:¹²

In contrast to the prevailing focus on mitigating significant adverse effects, next generation environmental assessment would expect proposals to represent the best option for delivery of lasting wellbeing, preferably through multiple, mutually reinforcing and fairly distributed benefits, while also avoiding adverse effects... In

⁹ National Energy Board, “Filing Manual,” updated December 16, 2016. <https://www.neb-one.gc.ca/bts/ctrg/gnnb/flngmnl/index-eng.html>

¹⁰ Robert B. Gibson, Meinhard Doelle and A. John Sinclair, “Fulfilling the Promise: Basic Components of Next Generation Environmental Assessment,” *Journal of Environmental Law & Practice* 29 (2015), 253. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2670009

¹¹ Peter N. Duinker, L.A. Greig, “The impotence of cumulative effects assessment in Canada: ailments and ideas for redeployment,” *Environmental Management* 37 (2006), 153. <https://www.ncbi.nlm.nih.gov/pubmed/16362488>

¹² “Fulfilling the Promise: Basic Components of Next Generation Environmental Assessment,” 253.

contrast to the common notion that economic, ecological and social objectives are inherently in conflict...next generation environmental assessment would recognize that sustainability-enhancing economic, ecological and social objectives are interdependent.

In fact, a test for contribution to sustainability is an approach that some project review panels in Canada have chosen to employ, in part as a response to the lack of definition of the public interest in existing legislation. The final report from the joint review panel for the Lower Churchill Hydroelectric Generation Project provides an example:

The Panel offered concluding comments to help government decision makers with the task of determining whether the Project would make an overall contribution to sustainability. The Panel was guided by the following principle:

The effects, risks and uncertainties of the Project should be fairly distributed among affected communities, jurisdictions and generations, and the Project should result in net environmental, social and economic benefits.

When trying to determine if there would be net benefits, the Panel looked at the residual adverse effects and the predicted Project benefits separately for biophysical issues and socioeconomic issues. In other words, the Panel did not make the assumption that adverse biophysical effects could be automatically compensated by economic benefits.¹⁵ (emphasis in original text)

Importantly, a sustainability test would consider a project's impact on Canada's ability to achieve its national and sub-national climate objectives and the Paris Agreement, as we detail in Section 2.1.5.

Further details on proposed reforms to the EA process are presented in the submission from the Environmental Planning and Assessment Caucus of the Canadian Environmental Network EA expert panel.¹⁴ It is important to note that the sustainability test as proposed should occur not only within project EAs, but also as part of strategic and regional EAs. These tools are essential for setting Canada's broader energy and environmental planning landscape and thresholds, as we discuss further in Section 3.2.

¹⁵ Joint Review Panel on the Nalcor Energy Lower Churchill Hydroelectric Generation Project (2011), CEAA Reference No. 07-05-26178, xxxi. http://publications.gc.ca/collections/collection_2011/ec/En106-101-2011-eng.pdf

¹⁴ Canadian Environmental Network, Environmental Planning and Assessment Caucus, "Achieving a Next Generation of Environmental Assessment," submission to the EA review panel, December 14, 2016. <http://eareview-examenee.ca/view-submission/?id=1481741975.3944>

“What we’re talking about is a sustainability assessment rather than an environmental assessment. It changes the question from ‘what are the harms that this project will cause, and how do we mitigate them’ to a far more positive question, which is, ‘how does this project contribute to long-term sustainability’... whether it be in terms of climate change, air quality, water quality, or biodiversity.”

— Barry Robinson, barrister & solicitor, Ecojustice

2.1.3 Recognize the relationship between energy and climate

Although government institutions tend to address energy policy and climate policy separately, they are one and the same in today’s world. We cannot think about one without thinking about the other if we are to chart a successful course to long-term low-carbon competitiveness.

To that end, **we are recommending that the National Energy Board Act and Canadian Environmental Assessment Act be amended to recognize, in the preamble and all other relevant sections, the relationship between energy and climate in such a way to ensure its integration across the agencies’ various functions.** In particular, both Acts should recognize Canada’s GHG reduction targets and its obligations under the Paris Agreement, and the important role energy projects and related infrastructure could play in supporting these objectives. Such an action would also inform future legal interpretations of the Acts, particularly under future governments. As one participant explained:

“We need to take a step back and think about the energy/climate nexus generally. We need to establish that they are completely interlinked. How would you rewrite the NEB statute to take that into account? It starts in the preamble which establishes the premises on which the Act is based. A preamble can influence the interpretation of the Act, but can’t create obligations. You also need to integrate this idea into the statute and/or in the statement of the objectives of the Act...the philosophy above should run through entire Act.”

— Nigel Bankes, chair, natural resources law, University of Calgary Faculty of Law

Climate policy context in Canada

In December 2015, more than 190 nations adopted the Paris Agreement — a legally binding international agreement that aims to hold the increase in the global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels.¹⁵ Canada, for its part, has ratified the Paris Agreement and has launched a new national climate plan, the Pan-Canadian Framework on Clean Growth and Climate Change.

In March 2015, prior to the Paris conference, the Government of Canada submitted its Intended Nationally Determined Contribution (INDC) to the United Nations Framework Convention on Climate Change (UNFCCC).¹⁶ Canada's INDC commits the country to an economy-wide greenhouse gas reduction goal of 30% below 2005 levels by 2030. Canada also has an emissions reduction goal for 2020, under the Copenhagen Accord, of 17% below 2005 levels by 2020. Under the Paris Agreement, countries like Canada are expected to increase the ambition of these targets to match the stated goals of the Paris Agreement. In recognition of this, Canada has released a long-term low greenhouse gas development strategy¹⁷ but it has yet to link its mid-century goals to near-term policy or planning processes.

“Failure to achieve the Paris Agreement goal is truly unthinkable. Doing so would mean a significant chance of global ecosystem collapse, a crash of our food systems, and considerable harm and suffering for people around the planet. We have a narrow window to avoid that future, we must take it.”

— Adam Scott, Senior Campaigner (Canada), Oil Change International

¹⁵ UNFCCC, *Adoption Of The Paris Agreement*, FCCC/CP/2015/L.9/Rev.1, December 12, 2015. <https://unfccc.int/resource/docs/2015/cop21/eng/l09r01.pdf>

¹⁶ Government of Canada, *Canada's INDC Submission to the UNFCCC* (2015). <http://www4.unfccc.int/submissions/INDC/Published%20Documents/Canada/1/INDC%20-%20Canada%20-%20English.pdf>

¹⁷ Environment and Climate Change Canada, *Canada's Mid-Century Long-Term Low-Greenhouse Gas Development Strategy* (2016). http://unfccc.int/files/focus/long-term_strategies/application/pdf/canadas_mid-century_long-term_strategy.pdf

As to how Canada’s international and domestic climate commitments could be woven into the preamble, the Species at Risk Act provides an example. Its preamble reads as follows:

“Recognizing that...

Canadian wildlife species and ecosystems are also part of the world’s heritage and the Government of Canada has ratified the United Nations Convention on the Conservation of Biological Diversity,

providing legal protection for species at risk will complement existing legislation and will, in part, meet Canada’s commitments under that Convention...”¹⁸

2.1.4 The NEB continues to study the market case for the project

Currently, the NEB conducts a test of public convenience and necessity for proposed projects that must consider factors outlined in the NEB Act Section 52(2) — including the availability of commodities, the existence of markets, the economic feasibility and financial responsibility of the applicant, as well as “any public interest that may be affected.” In our view, these questions are an important part of an energy project review and should be studied by specialized experts such as those at the NEB.

We are thus recommending that the NEB maintain its role in conducting this test, which would be limited a technical and economic assessment aimed at providing analysis for use in EA body’s assessment of the project’s contribution to sustainability. Following its technical and economic viability assessment, the EA body would lead the project EA process. If new questions emerge through the project EA, the NEB would provide supplemental analysis as required. Following this, the EA body should balance all evidence and considerations — social, economic and environmental — and should determine the extent to which a proposed project is in the public interest.

¹⁸ Government of Canada, *Species at Risk Act*, c. 29. <http://laws-lois.justice.gc.ca/eng/acts/s-15.3/>

“There is an economic question to be studied, for example around the impact of a carbon price on the viability of a project. The NEB could contribute to answering that question. Its ability to think about: “is this project viable in a carbon-priced world?” would be an input into a larger process. But it shouldn’t be the decision-maker. There are very useful things the NEB can contribute through its technical and economic expertise, but it’s not an environmental regulator and poorly equipped to consider wider issues of sustainability.”

*— Mark Winfield, co-chair and professor, Sustainable Energy Initiative,
York University*

The viability of certain energy projects can vary, depending on climate and energy policies pursued in Canada and around the world. **In order to “climate-proof” energy project decision-making in Canada, we are recommending that the National Energy Board take on additional data production and dissemination work, and that the NEB Act explicitly require that domestic and global action on climate change be incorporated into the NEB’s reference case modelling analysis.** Further, we recommend that analysis of such scenarios discuss the implications for rates of resource production for different commodity types. It is important to note that, in our proposal, data and scenarios will have been produced and made public by the NEB under Part II of the National Energy Board Act. They will thus be available to any party for submission as evidence in a project review. Ensuring the link between these improved scenarios and the assessment of individual projects is critical. We elaborate on this in Section 2.3.

“The NEB isn’t playing the role that it should of providing information on the energy market in a clear or sufficiently productive manner. Even though it publishes [Energy Futures] every few years, it’s not the data centre that it could be...Energy data in Canada is problematic, and we don’t have a clear agency that plays the role of centralizing Canadian energy data.”

— Pierre-Olivier Pineau, professor, HÉC Montréal (translated)

Within the technical and economic viability assessment of a given project, the NEB should consider the implications of product price shocks (temporary and long-term), project cost overruns, and project development delays on a proposed project’s economic viability.

2.1.5 Climate is considered as part of core element of a project EA test for sustainability

Building on this fundamental connection between energy supply and demand and our climate change objectives, we recommend that, as an outcome of the EA review processes, **upstream and direct GHG emissions are assessed within project EAs and considered relative to Canada’s national and sub-national climate objectives. A “climate test” of this nature should be an explicit requirement within the improved Canadian Environmental Assessment Act, and should represent a fundamental component of the Act’s updated approach to sustainability.**

“Canada needs a climate test that ensures decisions made on energy projects are guided by climate science. Sound decision-making requires understanding, up front, if a project makes sense within the long-term decarbonization pathway required to meet our climate goals. Failure to do so implies either substantial capital risk, or worse — a failure to achieve climate safety. Energy projects are designed to last for decades — we must consider today if those projects will fit into a future where we achieve climate safety, or risk failure.”

— Adam Scott, senior campaigner (Canada), Oil Change International

As previously mentioned, current mechanisms to consider the incremental climate impacts of a project are inadequate, given that they do not result in analysis of Canada’s ability to achieve its national and subnational GHG emissions reduction targets. In our view, the ways in which the federal government assesses and considers the incremental climate impacts of a proposed project should not be discretionary — as is currently the case — since it is precisely the discretionary and narrow nature of this analysis that has prompted public backlash. Instead, project EAs, via the test for contribution to sustainability, should be retooled to take a broader (and more complete) view of what constitutes the public interest.

Academic work and submissions to the EA review panel have identified this need.

Bearing in mind the unprecedented challenge that climate change poses, the legislation should explicitly refer to climate change effects as a mandatory consideration in all EAs: this would include a project’s greenhouse gas emissions, but also climate change’s potential effects on the project and its environmental effects (e.g. would climate change be expected to mitigate or worsen the project’s

environmental effects?). Again, due to its unprecedented nature, this is not a matter that should be left to the discretion of those conducting EAs.¹⁹

EA is a critical tool to meeting Canada’s global commitments for a number of reasons. EA has become the main decision making tool for proposed major new activities, and is currently the main public forum for dialogue among proponents, government, and the public. It seems to offer the best hope of ensuring that proposed new activities are consistent with Canada’s long-term environmental, social and economic aspirations and commitments generally and those related to climate change specifically.²⁰

More specifically, we recommend that a climate test at the project EA stage evaluate the upstream and direct emissions from a proposed project, and present this analysis within the context of Canada’s national and sub-national climate objectives over time. A climate test would determine whether a proposed project would result in incremental upstream and direct emissions and if the project creates a path dependency that hinders or supports the achievement of Canada’s 2020, 2030 and mid-century emissions reductions goals under the Paris Agreement.²¹

The Government of Canada has already taken steps in this direction by the adoption of the January 2016 “five interim principles” — one of which requires ad-hoc assessment of upstream and direct GHG emissions as part of project reviews.²² This assessment sets the necessary foundation for a climate test, though in itself it is insufficient: bringing data to bear on the incremental climate impact of proposed projects is one piece of the puzzle, but it is essential this information be considered with the context of a sector or region’s ability to achieve its stated climate objectives.

“[Upstream emissions estimations] are really hard to do. There is so much uncertainty, the assumptions are hard to get right, and the process is not transparent. We may only end up discussing upstream emissions quantitatively, which is a recipe for imprecision...it probably does belong in the assessment, though.”

— Nic Rivers, associate professor, University of Ottawa

¹⁹ “Avoiding the 'Tyranny of Small Decisions',” 7.

²⁰ Meinhard Doelle, *Integrating Climate Change into EA: Thoughts on Federal Law Reform* (2016), 1. <https://ssrn.com/abstract=2854522>

²¹ Ibid.

²² Natural Resources Canada “Government of Canada Moves to Restore Trust in Environmental Assessment,” statement, January 27, 2017. <http://news.gc.ca/web/article-en.do?nid=1029999>

“There’s a risk in applying a climate test to individual projects as this approach would be very prescriptive. It could disadvantage some projects which might be viable in a carbon constrained future, and advantage some that might not be.”

— Jotham Peters, senior partner, Navius Research Ltd.

The cumulative effects of climate change are challenging to consider within the context of individual project reviews, because the impacts are global, intergenerational, and cumulative — and the damages borne by society cannot easily be traced back to individual projects.²³ Further, many of our expert participants underscored that, in their view, consideration of downstream emissions attributable to an individual project is difficult due to the complex and interrelated nature of the energy markets.

These concerns, while legitimate in our view, do not undermine the importance or feasibility of a robust analysis on emissions that occur within Canada — those upstream and direct to the proposed project. Nor does it affect the ability of the federal government to evaluate these emissions within the regional context (e.g. Alberta’s 100 Mt limit on oilsands emissions), sub-national (e.g. Quebec’s legislated emissions target for 2030 or the City of Vancouver’s Renewable City Strategy) or national objectives (e.g. Canada’s implementation of the Paris Agreement).

Further, after a project is approved, monitoring and reporting are essential. With respect to GHG emissions, this would include reporting obligations, compliance measures to ensure GHG emission limits are not exceeded, regulatory action to ensure continuous improvements, and regulatory oversight for offset requirements.

Regional and strategic EAs offer an opportunity to study and set goals for the energy system at a higher level than an individual project. We discuss this important opportunity further in Section 3.2.

2.1.6 Include more substantive reasoning in final decision statements

Since reforms in 2012 under Bill C-38, the NEB has not had the authority to make a final decision on proposed projects. Rather, the NEB provides a recommendation report that

²³ *Integrating Climate Change into EA.*

is received by the Governor in Council — a term to describe the prime minister and their cabinet²⁴ — who make the final decision.

Decisions on infrastructure will always have a values-based component. We heard this from many of our expert interviewees. For some, this reality means that it is appropriate for the final decision to lie with elected officials who can, in theory, be held accountable via the democratic process. Others were of the opinion that an independent regulator should be making that call in order to depoliticize the decision.

More importantly, we heard that, regardless of who makes the decisions, the public does not currently receive sufficient reasoning and justification to be able to scrutinize, or even understand, that decision. To ensure public confidence in decision-making is maintained, **we are recommending that provisions be in place so as to require that detailed decision statements be released publicly following the Government of Canada’s final determination on a project.** Many of our participants shared a similar view. It is important to note that the final decision is one crucial point, though by no means the only, at which nation-to-nation collaboration and decision-making must happen with Indigenous nations.

“The decision-maker must respond to the recommendation. If the decision-maker does not do this, it takes credibility away from the assessment done by the regulatory organization, and it also takes away credibility from the consultation that is done as part of the process. Politicians don’t necessarily like this, having to justify their decisions, but I think there is a trend in this direction.”

— Louise Roy, former vice president of the BAPE (translated)

“We could have more specific direction in the legislation with respect to adequate reasons. There is always a political decision at the end in terms of the balance of impacts and benefits — so the decision is probably better with cabinet. But it is reasonable to demand a degree of transparency and the clear articulation of reasons. This is a key part of helping people live with decisions. Not everyone is going to be happy, but ultimately we need to be able to hold them politically accountable.”

— Nigel Bankes, Chair, natural resources law, University of Calgary Faculty of Law

²⁴ Parliament of Canada, “Parliamentary Framework.”
http://www.parl.gc.ca/About/House/Compendium/web-content/c_g_parliamentaryframework-e.htm

Some of our expert interviewees expressed strong concerns about the final decision remaining with the Governor in Council, as opposed to returning to the regulator or another independent body. In the views of some, the reforms that shifted the responsibility for the final decision to the Governor in Council have served to politicize the decision-making process. There are also important concerns with respect to the current sharing of responsibility about how decisions and the review process will stand up in court if challenged. Notwithstanding the important legal questions raised by expert interviewees, our view remains that employing the Governor in Council for energy project decision-making ensures a democratic outcome for Canadians.

To guide the EA body in making recommendations and the decision-maker in applying the test for contribution to sustainability, **high-level sustainability criteria and rules for evaluating trade-offs should be established within the EA legislation.** A next-generation environmental assessment approach starts with the understanding that trade-offs between different aspects of sustainability should be minimized — rather, projects should seek to find innovative and creative options to enhance net benefits across economic, ecological and social factors. However, sustainability criteria and trade-off rules would provide guidance in situations where some act of balancing becomes necessary.²⁵

²⁵ “Fulfilling the Promise: Basic Components of Next Generation Environmental Assessment,” 256.

2.2 Improve and expand energy statistics, scenario modelling and forecasting

Forecasting the impacts of Canada’s transition away from fossil fuels will require analytical capacity at the NEB to consider how Canada’s energy systems might evolve into the future due to climate policies or shifting markets for high-carbon goods. The nature of our energy system will look very different as the global climate policy landscape evolves, as many participants explained:

“One thing that at times is lost in the discussion and the debate about the NEB is an acknowledgement that its role isn’t just pipelines, it’s also [designated] interprovincial power lines. The decarbonization modelling that is being done points to far more use of electricity in our energy system, with that electricity coming from zero-carbon sources, and far more interprovincial integration of our grids. In the future, the role of the NEB on power lines could be much more active relative to today.

— Dan Woynillowicz, policy director, Clean Energy Canada

We recommend that the NEB’s data production functions be modernized in the following ways:

5. That the NEB **improve and expand its role in producing energy data** and modelling. This would include producing more frequent and disaggregated energy statistics with regards to existing facilities and infrastructure, and producing climate-friendly energy supply and demand scenarios including within its *Energy Futures* reference case. It is important that these improved scenarios be used within the project review process.
6. That the NEB make efforts to **harmonize** energy statistics and modelling methodologies across federal, provincial and territorial agencies, and that this data be made more accessible, reliable and useful.

2.2.1 Conduct energy statistics, modelling, and supply and demand forecasting in a manner consistent with the Paris Agreement

In our proposed project review process, we have stated that the NEB’s technical and economic viability assessments should consider the viability of a proposed project in a world where domestic and international action is taken to reduce GHG emissions and address climate change. We have also stated that a sustainability test should be applied to proposed projects, which, among other important factors, would consider whether a project helps or hinders Canada’s ability to meet its medium- and long-term climate change objectives.

To do this, decision-makers need access to data and forecasting that do not exist in Canada today. Currently, the NEB’s modelling, for example through its biennial publication *Energy Futures*, does not consider scenarios in which Canada and the world take progressively more stringent action to limit global GHG emissions, in alignment with successful implementation of the Paris Agreement. We heard the following from our expert interviewees:

“In its work, the NEB has never taken into consideration the GHG reduction objectives of the Canadian government...This is a fundamental error, because it has biased the vision for Canada’s energy future...This is the main problem with respect to the energy data and analysis...They absolutely must look at a wide variety of scenarios, including ones where we achieve our GHG reduction targets.”

— Pierre-Olivier Pineau, professor, HÉC Montréal (translated)

One hundred and thirty-seven countries — covering more than 82% of global emissions²⁶ — have ratified the Paris Agreement, demonstrating a level of political consensus never before seen on climate issues. Having Canada’s supply and demand reference case not consider the implications of this agreement on Canada’s energy production, consumption and export provides decision-makers with inaccurate predictions, and is likely to result in decisions that do not align with successful implementation of the agreement.

As a result of the misalignment (and, in some cases, time lag) between Canada’s energy modelling and domestic and global shifts in climate policy, the NEB’s energy supply and

²⁶ Climate Analytics, “Paris Agreement Ratification Tracker.” <http://climateanalytics.org/hot-topics/ratification-tracker.html>

demand projections to 2040 are more optimistic on growth in Canada’s fossil fuel extraction sectors than those of our international peers. For example, as highlighted in the 2017 International Energy Agency (IEA) and International Renewable Energy Agency (IRENA) joint report, fossil fuel production and combustion must rapidly decline to achieve the temperature limits established in the Paris Agreement:

Total fossil fuel use in 2050 would be a third of today’s level but the use of coal would decline the most, while oil demand would be at 45% of today’s level — roughly equivalent to today’s oil production volume of OPEC. The world will not run out of fossil fuels, but it will stop using the most challenging resources that have high production costs, such as oil sands and Arctic oil. While natural gas can be a “bridge” to greater use of renewable energy, its role will be a short-lived one unless it is coupled with high levels of CCS. There is a risk of path dependency and future stranded assets if natural gas deployment expands significantly without long-term emissions reductions goals in mind.²⁷

In aggregate, these trends are depicted in Table 1.

Table 1. Global primary energy mix by fuel in the 66% 2°C Scenario

Fuel	Million tonnes of oil equivalent					Difference in 2050 ^a
	2014	2020	2030	2040	2050	
Coal	3,926	3,421	2,032	1,475	1,318	-68%
Oil	4,266	4,260	3,474	2,534	1,760	-63%
Gas	2,892	3,255	3,325	2,789	2,426	-50%
Nuclear	662	816	1,272	1,807	2,021	56%
Hydro	335	381	516	639	733	25%
Bioenergy ^b	1,421	1,574	2,038	2,543	2,928	48%
Other renewables	181	395	1,228	2,277	3,018	120%
Total	13,683	14,102	13,885	14,064	14,204	-26%
<i>Fossil fuel share</i>	<i>81%</i>	<i>78%</i>	<i>64%</i>	<i>48%</i>	<i>39%</i>	<i>-47%</i>
<i>Renewables share</i>	<i>14%</i>	<i>17%</i>	<i>27%</i>	<i>39%</i>	<i>47%</i>	<i>128%</i>
<i>Low-carbon share^c</i>	<i>19%</i>	<i>23%</i>	<i>39%</i>	<i>59%</i>	<i>70%</i>	<i>153%</i>

²⁷ International Energy Agency and International Renewable Energy Agency. *Perspectives for the Energy Transition: Investment Needs for a Low-Carbon Energy System* (2017), 122.

https://www.energiewende2017.com/wp-content/uploads/2017/03/Perspectives-for-the-Energy-Transition_WEB.pdf

Data source: International Energy Agency and International Renewable Energy Agency²⁸, adapted by authors

^a Percent change relative to 'New policies scenario'

^b Includes traditional and modern biomass use and bioenergy from waste

^c Includes nuclear, hydro, bioenergy, and other renewables and fossil fuel use with CCS

In contrast to this, the NEB predicts a faster pace and larger scale of production in Canada's oil and gas sector in its reference case (Table 2).

Table 2. *Energy Futures* reference case projections

	2015 (thousand m ³ /d)	Reference case projection (2040) (thousand m ³ /d)	Projected change 2015-2040
Crude oil production (including oilsands)	639	900	+41%
Oilsands production (mined+in situ)	402	691	+72%
Natural gas production	424,000	502,000	+18%

Source: National Energy Board²⁹, adapted by authors

The reference case projects a declining trend in natural gas production from 2016 to 2021, with LNG exports from the B.C. coast working to reverse this trend to 2040.

We acknowledge and appreciate recent attempts by the NEB to align its core energy production assumptions with firm climate policy commitments at the national and sub-national levels in Canada and internationally. Growing carbon constraint in other jurisdictions will likely lower the demand for hydrocarbons, affecting in return the economic viability of oil and gas production in Canada. However, we remain convinced that more work is required for the NEB's technical capacity on climate issues to catch up to that of peer institutions.

Recognizing that the NEB cannot and should not set government policy, our view is that it should ensure that Canada's energy infrastructure plans do not stymie the country's ability to implement policy and achieve climate commitments. To that end, **we are recommending that the NEB conduct additional energy statistics and modelling work, including conducting scenario and sensitivity analyses consistent with**

²⁸ Ibid., 57.

²⁹ National Energy Board, "Data Appendices," *Canada's Energy Future 2016: Update - Energy Supply and Demand Projections to 2040* (2016); Crude oil production, Natural gas production <https://apps.neb-one.gc.ca/fttrppndc4/dflt.aspx?GoCTemplateCulture=en-CA>

implementation of the Paris Agreement. In our view, this information is vital for decision-makers, researchers and other stakeholders.

Ensuring that the NEB’s improved scenarios are considered within the review of individual projects is crucial. In our proposal, data and scenarios will have been produced and made public by the NEB under Part II of the National Energy Board Act and will have to be brought forth by a party for submission as evidence in a project review, as is currently the case.

A more reliable way to ensure this link is to have an independent group of staff within the regulator who are mandated to participate in project review hearings to present and defend the regulator’s scenarios. While this is not how the NEB has functioned in the past, it is an approach used by the Federal Energy Regulatory Commission (FERC) in the United States. FERC trial staff participate in a hearing “as an impartial representative of the public interest.”³⁰

To advance the process of strengthening Canada’s energy statistics, scenario modelling and forecasting work, the Government of Canada could strike a bilateral relationship with the International Energy Agency on these topics, in the same way that countries such as China³¹ and Argentina³² have done. These efforts could be pursued in the lead-up to Canada’s upcoming G7 presidency in 2018, the same way that Argentina’s arrangement with the IEA will equip it to host the G20 in 2018.

2.2.2 Harmonize energy statistics and modelling methodologies across federal, provincial and territorial agencies

Beyond the production of more energy scenarios, **the data produced by the NEB in general need to be improved and coordinated in a variety of ways in order to be useful and reliable for researchers and other stakeholders.** There is an urgent need to establish a one-stop shop for reliable public energy and environment data in Canada.

³⁰ Federal Energy Regulatory Commission, “Administrative Litigation,” (2017).
<https://www.ferc.gov/legal/admin-lit.asp>

³¹ International Energy Agency, “IEA and China launch the process of establishing a joint energy centre in Beijing,” media release, March 30, 2016. <https://www.iea.org/newsroom/news/2016/march/iea-and-china-launch-the-process-of-establishing-a-joint-energy-centre-in-beijing.html>

³² International Energy Agency, “IEA and Argentina agree to cooperate on energy statistics,” media release, March 20, 2016. <http://www.iea.org/newsroom/news/2017/march/iea-and-argentina-agree-to-cooperate-on-energy-statistics.html>

This data should be as granular as possible, enabling broad employment and analysis across government and civil society.

Key improvements suggested by participants in our interviews were:

- Coordinate the production of energy- and pipeline-related data among those bodies that are currently responsible: NEB, Natural Resources Canada, Statistics Canada, Environment and Climate Change Canada, Transport Canada, the Transportation Safety Board, and provincial agencies. Align these datasets in terms of timing, units, and assumptions.
- Collect and produce demand-side energy information.
- Aggregate province-level data, particularly electricity data.
- Provide data in a format that is more accessible for researchers, and others, to use (for example, spreadsheet instead of PDF format) and make assumptions explicit.
- Note and comment on inconsistencies between NEB data and data published by other federal agencies, where applicable.
- Make new data available to the public in a timely manner, and update it on a regular (monthly) basis when possible, with the most recent data published being no more than three months old.
- Provide energy- and pipeline-related data in an open format that encourages public access and understanding.

In addition, given that intensity metrics are employed in many federal regulations,³³ there is also a need to produce and share data on the environmental performance of existing facilities and infrastructure.³⁴ The availability of open, public, granular data on the environmental and safety performance of existing infrastructure is a tool to ensure adherence to conditions established at the project approval stage.

Greater financial resources and inter-agency coordination will be needed to address these concerns.³⁵ Many participants referred to the U.S. Energy Information Agency

³³ In the power sector, for example, many federal and provincial regulations on air quality and greenhouse gas emissions impose thresholds expressed as a volume of emission per megawatt-hour for most fossil fuel based types of electricity generation.

³⁴ In the example of the power sector, the data should cover the electricity generation and associated emissions, such as greenhouse gases and criteria air contaminants, at the unit level and on a monthly basis as opposed to an annual figure for the provincial or facility aggregate.

³⁵ We understand that Natural Resources Canada has some working groups and initiatives in place as a starting point to address this issue.

(EIA) as the “gold standard” for energy data centres globally; the EIA already produces datasets similar to those mentioned above.

The example of the Energy Information Agency raises an interesting question around the value of assigning the responsibility for the production of data and scenarios to a new agency that would be completely separate from the regulator. Though this is not an approach that the Pembina Institute would oppose, we are not recommending this separation of functions as part of the NEB modernization process. Our proposal focuses on refining this capacity within the NEB so the expertise can contribute to project reviews, while having the EA body take a leadership role in the EA component.

However, because we heard about the value of creating a new energy data centre in Canada from many of our participants, we are sharing some of the thinking here:

“The data, public information and modelling function of the NEB needs to be hived off and it needs to be managed by another department or agency. Ideally there would be a new agency established. Institutionally, having the data function included at the NEB is going to increase the natural invitation to perceptions of bias.”

— Dan Woynillowicz, policy director, Clean Energy Canada

“[It’s important] that those producing the data can truly act as scientists who are working with the flexibility they need to produce the most independent data possible. This is very important because if not, the organization is playing the role of judge and those being judged at the same time.”

— Louise Roy, former vice president of the BAPE (translated)

“It could be interesting to use the modernization process to create a situation where the organization that approves projects is not responsible for monitoring them, but rather that it be an independent body. It’s not necessarily up to the NEB to play both the role of the US Federal Energy Regulatory Commission (FERC), with respect to pipeline analysis and approval, and of the EIA Pipeline and Hazardous Materials Safety Administration (PHMSA), with respect to monitoring pipelines’ safety, even if both roles need to be done somewhere.”

— Pierre-Olivier Pineau, Professor, HÉC Montréal (translated)

2.3 Establish an independent EA body that facilitates meaningful participation

The Pembina Institute recommends the following procedural improvements:

7. **The removal of the provisions in the Act that interveners be “directly affected by the project”**, the instatement of a participant funding program that enables full and meaningful participation in the review of energy projects for all stakeholders, and the facilitation of participant access to project information.
8. An emphasis on transparent, merit-based review panel appointments, particularly the need to **select individuals with a strong understanding of public consultation and Indigenous rights**.
9. A financial investment to develop **pools of independent subject experts** in Canada who can be called upon to provide independent expertise to review panels and interveners.

“In my view, looking at Canadian energy regulatory history, our society and government are best served with an independent energy regulator whose mandate and relationship with the government is clearly defined, transparently communicated and re-visited on a prescribed basis. To do otherwise is not serving our society, government or the regulator well.”

— Sheila Leggett, president, Tower Peak Consultants Ltd., former vice-chair of the National Energy Board

Many expert participants felt that the perceived lack of independence at the NEB is a key issue to be addressed through modernization.

In our proposal, we have proposed that the EA body lead the review of the project, with the NEB providing technical analysis on the economic viability. As such, the recommendations that follow pertain to the hearings process that would take place under the purview of the reformed EA body.

2.3.1 Facilitate meaningful stakeholder, landowner and public participation

Independence is linked to the ways in which the regulator/body facilitates participation and deals with the feedback received from the public and experts. Currently, the limitations on who can participate in project reviews are a barrier to the credibility and perception of independence of the regulator. Public and stakeholder input is a crucial component of developing the best energy projects in Canada and in holding the review process accountable. It is also clear that the current level and method of financial support offered to participants, particularly at the NEB but also at the CEAA, is vastly inadequate to support the meaningful intervention of stakeholders and the public, including review of the project application and cross-examination of evidence provided by the proponent.

Our participants shared similar perspectives. They also spoke about the difficulty of establishing criteria to filter participants:

“When we talk about a decision that must be made according to the public interest, it can’t just be those that can pay for a lawyer who can go to the NEB. If we’re talking about security, resource use and protection, there are testimonies that need to be heard... I’ve witnessed this multiple times: people arrive with their knowledge of the geographical area, and they ask a question that seriously puzzles the scientists. It’s a kind of evaluation that we can’t do without when we’re dealing with major projects... Who will be able to create an evaluation matrix, that will be widely supported, that will say who can and who can’t [participate]?”

— Louise Roy, former vice president of the BAPE (translated)

“The barriers to public participation need to go, full stop. If we’re really engaged in an evidence-based decision-making process, then intervenors need to be able to lead evidence. That’s the bottom line. And you have to have a dynamic where they can cross-examine the proponent’s evidence. From a quality of decision-making process question, you have to be able to have a proponent’s evidence challenged substantively. That means that the intervenors must be able to hire their own experts. You must have substantive participant funding which is somehow scaled to the size of the project.”

— Mark Winfield, co-chair and professor, Sustainable Energy Initiative,
York University

We are recommending the removal of the provisions that interveners be “directly affected by the project.” Moreover, we are recommending the instatement of a participant funding program that enables full and meaningful participation in the review of energy projects under federal jurisdiction for all stakeholders.

Several participants pointed to the former Intervener Funding Project Act under the Environmental Review Tribunal in Ontario as a model to examine when redesigning the participant funding program.³⁶ An interesting aspect of this model is that it provided a financial incentive for groups with similar interests to work together.

The regulator could also have more detailed guidelines on how to engage stakeholders and the public in order to provide greater certainty for both participants and review panel members. The Ontario Statutory Projects Procedures Act,³⁷ which applies to proceedings in Ontario tribunals including the Environmental Review Tribunal, is an interesting model to explore.

One hindrance to meaningful stakeholder participation is the sheer volume of information provided within an application: often, project applications and environmental impact statements are tens of thousands of pages long. This information overload is further exacerbated by a lack of upfront participant funding to allow landowners and other stakeholders to review and evaluate an application that affects their interests. Since participant funding is provided through reimbursement, the cost to review an application must be paid out of pocket by a participant with no certainty of having the costs fully reimbursed. Project applications and environmental impact statements are not only costly for participants to navigate, but are often poorly organized and difficult to navigate on the NEB’s website, presenting an additional barrier to participation. Compounding this problem, during a hearing, an intervenor’s lack of knowledge on one part of an application can be used to undermine the interests they represent. If all interveners are expected to be intimately familiar with all aspects of the application to be credible, and if we are to rely heavily on cross-examination for ensuring the quality of evidence, than funding must be provided proportionally to the level of effort demanded.

³⁶ See Canadian Environmental Law Association, “Going Back To The Future: How To Reset Federal Environmental Assessment Law,” preliminary submissions to the Expert Panel regarding the Canadian Environmental Assessment Act, 2012, November 7, 2016. http://eareview-examenee.ca/wp-content/uploads/uploaded_files/nov.8-14h00-cela-preliminary-submissions-to-the-expert...-2016.pdf

³⁷ Government of Ontario, *Statutory Powers Procedure Act*, R.S.O. 1990, c. S.22. <https://www.ontario.ca/laws/statute/90s22>

We have focused in this report on the funding and supports needed for stakeholders to participate in project review hearings, but meaningful participation is required throughout the project life cycle. We heard from participants that an untapped opportunity for participation is during the scoping stage, when the list of issues is being drafted. Stakeholder participation in setting the framework for the review could lessen conflict later in the process and provide much greater certainty for proponents.

Learning from the Alberta Energy Regulator experience

The test to determine standing at the Alberta Energy Regulator (AER) is even more stringent than that of the NEB. However, in our view, the AER has begun to recognize that the application of this test is exclusionary and results in public comments and concerns that could materially improve the AER's ability to assess projects being screening out.

One example of an improved approach to public participation is the AER's approach to developing final rules for *Directive 085: Fluid Tailings Management for Oil Sands Mining Projects*. Within its review of all fluid tailings management plans, the AER has initiated, for the first time, an "enhanced participation" process. Specifically, the AER included in the notice of application for each fluid tailings management plan a second opportunity for standing for any party that could "materially assist the AER in its review". This was included as a supplement to the AER's 'directly and adversely affected' participation test. Effectively, this has created a second category of standing for stakeholders.

The "materially assist" consideration aligns with the AER's "Request to Participate" provisions, contained within its Rules of Practice at Part II s.9(1). This provision allows a party who isn't directly and adversely affected to explain the nature of their interest in the matter and why they should be permitted to participate. The applicant must also include an explanation of how:

- i. The person's participation will materially assist the Regulator in deciding the matter that is the subject of the hearing;
- ii. The person has a tangible interest in the subject matter of the hearing;
- iii. The person's participation will not unnecessarily delay the hearing; and
- iv. The person will not repeat or duplicate evidence presented by other parties.³⁸

³⁸ Government of Alberta, *Responsible Energy Development Act – Alberta Energy Regulator Rules of Practice, Alberta Regulation 99/2013 with amendments up to and including Alberta Regulation 45/2014*, s. 9. http://www.qp.alberta.ca/documents/Regs/2013_099.pdf

2.3.2 Select independent review panel members with expertise in public engagement

We heard from our interview participants that the selection of review panel members (currently referred to as Board Members under the NEB) is a key area requiring review to ensure independence. **We recommend that governments making appointments recognize the importance of merit-based selections to the credibility of the agency and the review process. They need to be transparent about the criteria being used to select individuals. In particular, they need to ensure that review panel members have an expertise in public engagement and in the difficult act of balancing and integrating social, environmental and economic considerations as well as in Indigenous land rights.** In particular, to respond to the calls to action from the Truth and Reconciliation report, a co-governance model with Indigenous peoples would include mechanisms to facilitate co-appointment with Indigenous jurisdictions. Some of our participants, who have been review panel members in other regulators, described the importance of independence and expertise:

“There was, in the very early days of the Bureau des audiences publiques (BAPE), a willingness on the part of the Ministers to make the organization into one that was independent and to choose, as commissioners, people who were recognized for their ethical qualities and competency in public consultation... [A factor that also played a role was] the BAPE’s way of working on files and holding public consultations — there was a large openness to the public, and the commissioners had a helpful attitude toward the citizens who came to ask questions. This helpful attitude made it so that the organisation was perceived as being worthy of trust.”

— Louise Roy, former vice president of the BAPE (translated)

“As commissioners, you must have people who, yes, have technical expertise in a given area, but you won’t always be able to cover all of the areas of expertise required. Above all — and this is very important at the CEAA and NEB — they must be people who are competent in the ethics and art of public participation, and in the consideration of different dimensions.”

— Luc Ouimet, former commissioner of the BAPE (translated)

Review bodies can also offer ongoing training for their review panel members to help them stay abreast of new and emerging technologies and challenges, particularly with respect to climate.³⁹

2.3.3 Create pools of experts across subject areas who are available to assist the hearings panel and interveners

It is very difficult for participants and panels — even if they have sufficient funds — to access neutral experts in the field to support their interventions in a hearing. Because of the nature of the industry, it is difficult or impossible for consultants to take on work from participants if they wish to retain business opportunities within industry.

One approach to addressing this gap is to establish permanent centres of excellence at universities, with funding dedicated to maintaining pools of subject experts who can be called upon by participants and hearing panels alike to give independent input. **We recommend that this avenue be explored to support the development of subject experts in Canada.**

“There’s a problem of availability of experts. Often they’ll identify an expert that they want to use, they’ll contact them and find out that either they’re already contacted by the proponent, or there’s a conflict because they’ve done work for the proponent.”

— Barry Robinson, barrister & solicitor, Ecojustice

“There could also be agreements with universities...Governments could commit annual funding to these universities, and citizens could come to them for support [in their interventions in hearings]...It was difficult at the BAPE to find, even for the commission itself, credible, competent and neutral experts who would accept to come work for the commission.”

— Luc Ouimet, former commissioner of the BAPE (translated)

³⁹ For example, the Ontario Environmental Review Tribunal at one time offered ongoing in-house learning programs to members and staff on relevant administrative, environmental and planning law issues. See: Ontario Environmental Review Tribunal *Annual Report 2009-2010* (2010). <http://elto.gov.on.ca/wp-content/uploads/2015/03/2009-2010-Annual-Report.pdf>

3. The importance of a robust policy environment

3.1 Send strong market signals to high carbon projects

We recognize, as did many of our interview participants, that a regulator cannot and should not play the role of government in setting climate and energy policy. This speaks to the importance of implementing strong national and sub-national policy, and in particular, putting a price on carbon emissions. Economy-wide tools like carbon pricing can help to control for the types of energy projects that arrive at the regulator by changing the economic case for different types of infrastructure. The federal, provincial and territorial governments have taken strong actions in this direction in the past year, most notably with the announcement of a national carbon price benchmark within the Pan-Canadian Framework on Clean Growth and Climate Change.⁴⁰

“A broad-based policy (e.g., carbon price or other policies that offer greater flexibility) is almost always preferable to a highly prescriptive policy. Once a broad-based policy has been established, it would have the effect of screening out projects before they get there.”

— Jotham Peters, senior partner, Navius Research Ltd.

“How do you make the link to climate objectives? Through policy. For example, in Alberta there is now the 100 MT cap on emissions from the oilsands. This is an example of policy direction from the government that the regulator must take into account. In my view you can’t use individual project review processes to debate government policy.”

— Sheila Leggett, president, Tower Peak Consultants Ltd., former vice-chair of the National Energy Board

However, the level of ambition of Canada’s current climate policy landscape is not sufficient to meet our domestic targets for 2020 or 2030, nor our deeper mid-century commitments as part of the Paris Agreement. Federal, provincial and territorial

⁴⁰ Government of Canada, “The Pan-Canadian Framework on Clean Growth and Climate Change.” <https://www.canada.ca/en/services/environment/weather/climatechange/pan-canadian-framework.html>

governments have recognized this, and commitments have been made to ratchet up policy ambition over time.⁴¹ Outside of the NEB modernization process, we continue to encourage federal, provincial and territorial governments to ensure rapid and effective implementation of the Pan-Canadian Framework on Clean Growth and Climate Change, to link its ongoing policy process explicitly to Canada’s mid-century objectives, and to increase policy stringency with time.

Recent policy progress has moved Canada — and its national conversation about climate action — forward by a significant measure. However, it represents an initial step along a much longer journey to decarbonization. For this reason, testing the market case for energy projects and measuring their merit against longer-term policy objectives remains a crucial part of our recommendations.

3.2 Use strategic and regional EAs to establish thresholds and plans

Strategic and regional EAs are planning tools currently available to federal government agencies that are critically underused.

Through the Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals, the Government of Canada has called for government departments and agencies to conduct strategic EAs of a policy, plan or program proposal whenever the following two conditions are met: “(1) the proposal is submitted to an individual minister or Cabinet for approval; and (2) implementation of the proposal may result in important environmental effects, either positive or negative.”⁴² The government describes the rationale and benefits of such assessments as follows:

The environmental assessment of policy, plan and program proposals is referred to as strategic environmental assessment. It seeks to incorporate environmental considerations into the development of public policies and strategic decisions. Strategic environmental assessment also serves to strengthen accountability and provide greater public confidence that federal government decisions are being made in full awareness of the potential environmental impact.

⁴¹ Ibid, 45.

⁴² Government of Canada, “The Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals.” <https://www.canada.ca/en/environmental-assessment-agency/programs/strategic-environmental-assessment/cabinet-directive-environmental-assessment-policy-plan-program-proposals.html>

Through strategic environmental assessment, environmental considerations can be addressed at the earliest appropriate stage of planning, along with economic and social considerations.

By addressing potential environmental considerations when developing policy, plan and program proposals, departments and agencies will be better able to: (1) optimize positive environmental effects and minimize or mitigate negative environmental effects; (2) consider potential cumulative environmental effects; (3) implement the Federal Sustainable Development Strategy...⁴³

Despite this directive, as a report from the Commissioner for the Environment and Sustainable Development (CESD) has noted, there is no legislative requirement for strategic EAs at the federal level and this directive is not being applied or reported upon.⁴⁴

Environmental assessment is a planning, not regulatory, tool. But environmental assessment is much more than a regulatory box to be checked off by project proponents. For example, next generation environmental assessment laws in Canada can and should require higher level regional and strategic assessment and planning before project level assessments occur. We know from experience that done properly, this can increase regulatory efficiency and the certainty that industry desires, while ensuring principles of sustainability are upheld.

— Anna Johnston, staff counsel, West Coast Environmental Law

Strategic and regional EAs provide a forum for Canadian governments, Indigenous peoples and the public to study, discuss and use a sustainability-based approach to establish needs and goals for given industry sectors or geographical regions. They can be used to set baseline impact thresholds with respect to impacts on water, air, land, species, community health and well-being, etc. Used effectively, strategic and regional EAs can “ease the burden of these considerations on project-level assessments...and help avoid policy debates at the project level.”⁴⁵

⁴³ Ibid.

⁴⁴ Office of the Auditor General of Canada, *2015 Fall Reports of the Commissioner of the Environment and Sustainable Development*, Report 3—Departmental Progress in Implementing Sustainable Development Strategies. http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201601_03_e_41017.html

⁴⁵ West Coast Environmental Law, *Federal Environmental Assessment Reform Summit, Executive Summary*, (2016). http://wcel.org/sites/default/files/publications/WCEL_FedEnviroAssess_ExecSum%2Bapp_fnldigital.pdf

In his submission on the review of the federal EA process, Professor Martin Olszynski has described the role of these planning tools as follows:

Ideally, regional EAs would be the default — these would be carried out now throughout Canada to ensure that adequate baseline information has been gathered before the effects of climate change are such as to make such assessments meaningless. It should be noted that there are potentially significant efficiencies to be gained from conducting regional EAs, including reducing the need for each and every proponent to gather such baseline information. In addition, the carrying out of regional EA and the establishment of ambient thresholds for those aspects of the environment under federal jurisdiction such as air quality, water quality, and water quantity (flows) has the potential to bring considerable concreteness to the determination of significance, which could be measured in relation to those thresholds.⁴⁶

⁴⁶ “Avoiding the 'Tyranny of Small Decisions',” 9.

4. Navigating the evolving regulatory landscape

We commend the federal government not only for its efforts to modernize the NEB, but to review other federal environmental bodies and processes in order to ensure that all federal bodies with a responsibility for the environment are set up to meet the challenges of today’s world. In particular, we are closely watching the ongoing EA review processes,⁴⁷ and look forward to reviewing the Expert Panel report to Minister McKenna when it becomes available.

We support the work and submissions to the EA review panel from leading organizations including Ecojustice⁴⁸, West Coast Environmental Law⁴⁹ and the Environmental Planning and Assessment Caucus of the Canadian Environmental Network⁵⁰ — all of whom have articulated legislative pathways through which the Government of Canada can seize its once-in-a-generation opportunity to put Canada at the forefront of EA law. The recommendations we have set out in this report are intended to fit within the next generation sustainability model for an independent EA body that these groups and others have recommended. However, since it is not known at the time of writing the current submission what the Expert Panel on EA will recommend, we have devised recommendations for the NEB that we believe to be viable under a variety of scenarios with respect to the EA body.

It is imperative that the functions, mandates and roles of CEAA, the NEB, and other federal agencies be considered as part of a larger whole. Ultimately, the proposed modifications to these regimes must be examined side-by-side in order to ensure best outcomes. Because the results of the EA review will have a significant bearing on our preferred solutions for NEB reform, we look forward to reviewing and commenting the Expert Panel’s report and recommendations when they become available.

⁴⁷ Government of Canada, “Environmental Assessment Processes.” <https://www.canada.ca/en/services/environment/conservation/assessments/environmental-reviews/environmental-assessment-processes.html>

⁴⁸ Ecojustice, submission to the NEB modernization expert panel.

⁴⁹ Anna Johnson, “Twelve pillars of a “next generation” of Canadian environmental assessment,” *West Coast Environmental Law*, 25 August, 2016. <http://www.wcel.org/resources/environmental-law-alert/twelve-pillars-%E2%80%9Cnext-generation%E2%80%9D-canadian-environmental-assessment>

⁵⁰ “Achieving a Next Generation of Environmental Assessment.”

5. Conclusion

We appreciate the opportunity to participate meaningfully in the NEB Expert Panel process, and offer our sincere thanks to the panel and the NEB modernization secretariat for their diligent work throughout this process. We look forward to reviewing the Expert Panel's report to Minister Carr and engaging in follow-up discussions with the Government of Canada on how to ensure the modernization process ultimately delivers value to Canadians.

The following is a summary of the recommendations presented throughout this report.

We recommend Canada's existing energy project review regime be streamlined in the following ways:

1. That proposed energy projects under federal jurisdiction undergo a streamlined project review process **led by the reformed federal EA body**⁵¹ with technical contributions from the modernized NEB. Together, this review process should test the **technical and economic viability** and the **contribution to sustainability** of proposed projects. The National Energy Board Act should be amended to recognize the **direct link between Canada's climate objectives and its energy decisions** across the entirety of its functions.
2. Within this process, the modernized NEB should conduct a **technical and economic viability assessment** for the proposed project, based on Section 52(2) of the National Energy Board Act. As a key input into this technical and economic assessment, the NEB should produce energy supply and demand scenarios consistent with successful global implementation of the Paris Agreement and with Canada achieving its 2030 and mid-century climate objectives. These scenarios should be produced and made public under Part II of the National Energy Board Act and should be available to any party for submission as evidence in a project review. The technical and economic viability assessment should be provided to the EA body as a key piece of information within the project EA and public interest determination. The EA body could ask the NEB to provide

⁵¹ Reformed according to 'next generation sustainability principles' and in line with the recommendations put forth to the EA review panel by the Environmental Planning and Assessment Caucus of the Canadian Environmental Network (<http://eareview-examenee.ca/view-submission/?id=1481741975.3944>) and others.

additional technical analysis throughout the review process as new information becomes available.

3. Armed with the technical and economic assessment of a project, the EA body should conduct a project EA wherein the current test will be replaced with a **test for the contribution to sustainability** of the project. Among a wide range of considerations related to community planning, ecological sustainability and economic impacts, this sustainability test will consider the impact of the proposed project on Canada's ability to achieve its mid-century climate obligations, in line with the Paris Agreement, and any interim targets that support it.

4. To ensure public confidence in decision-making is maintained, we recommend that **decision-making criteria and trade-off rules** are established within the reformed Canadian Environmental Assessment Act, and that **detailed decision statements** be released publicly following the Government of Canada's final determination on a project.

We recommend that the NEB's data production functions be modernized in the following ways:

5. That the NEB **improve and expand its role in producing energy data** and modelling. This would include producing more frequent and disaggregated energy statistics with regards to existing facilities and infrastructure, and producing climate-friendly energy supply and demand scenarios including within its *Energy Futures* reference case. It is important that these improved scenarios be used within the project review process.

6. That the NEB make efforts to **harmonize** energy statistics and modelling methodologies across federal, provincial and territorial agencies, and that this data be made more accessible, reliable and useful.

We recommend the following procedural improvements:

7. **The removal of the provisions in the Act that interveners be "directly affected by the project"**, the instatement of a participant funding program that enables full and meaningful participation in the review of energy projects for all stakeholders, and the facilitation of participant access to project information.

8. An emphasis on transparent, merit-based review panel appointments, particularly the need to **select individuals with a strong understanding of public consultation and Indigenous rights**.

9. A financial investment to develop **pools of independent subject experts** in Canada who can be called upon to provide independent expertise to review panels and interveners.

Appendix A. Interview participants

The Pembina Institute is very grateful to our interview participants for offering their time and insight to this project. Their participation does not in any way represent an endorsement of any of the views presented in this report.

Name	Title and organization
Adam Scott	Senior Campaigner – Canada Oil Change International
Anna Johnston	Staff Counsel West Coast Environmental Law
Barry Robinson	Barrister & solicitor, Ecojustice
Cary Coglianese	Edward B. Shils Professor of Law and Professor of Political Science Director, Penn Program on Regulation University of Pennsylvania School of Law
Chris Severson-Baker	Former staff, Pembina Institute
Dan Woynillowicz	Policy Director Clean Energy Canada
Eugene Kung	Staff Counsel West Coast Environmental Law
Gaetan Caron	Executive fellow, University of Calgary School of Public Policy Former chair of the National Energy Board
Jotham Peters	Senior Partner Navius Research Ltd.
Karen Campbell	Program Director – Climate Ecojustice
Louise Roy	Former Vice President of the <i>Bureau d'audiences publiques sur environnement</i> Former president of the <i>Office de consultation de Montréal</i> Former panel member for the CEAA Panel on Nuclear Fuel Waste Management and Disposal Concept
Luc Ouimet	Business Manager, <i>Centre de consultation et de concertation</i> Founding member and Former President of the <i>Association québécoise pour l'évaluation des impacts</i> Former commissioner of the <i>Bureau des audiences publiques sur l'environnement</i>
Mark Winfield	Co-chair and professor Sustainable Energy Initiative, York University

Martin Olszynski	Assistant professor Natural Resources, Energy and Environmental Law research group University of Calgary Faculty of Law
Nic Rivers	Associate professor Canada Research Chair in Climate and Energy Policy University of Ottawa Graduate School of Public and International Affairs
Nigel Bankes	Professor Chair, Natural Resources Law University of Calgary Faculty of Law
Patrick DeRochie	Climate & Energy Program Manager Environmental Defence
Pierre-Olivier Pineau	Professor Chair, Energy Sector Management HEC Montreal
Richard Carlson	Senior Energy Policy Associate Mowat Energy, Mowat Centre
Richard Lindgren	Staff Counsel Canadian Environmental Law Association
Rodrigo Samayoa	Former Campaigner Leadnow
Sheila Leggett	President, Tower Peak Consultants Ltd. Former Vice-Chair of the National Energy Board
Tom Stanton	Principal Researcher (Energy and Environment) The National Regulatory Research Institute

We also thank Meinhard Doelle, Professor of Law and Associate Dean, Research at the Dalhousie University Schulich School of Law, and Teika Newton, Transition Initiative Kenora, for their helpful comments on successive drafts. Thanks also to many interview participants for their thoughtful feedback during review.

Appendix B. Responding to the Expert Panel's discussion questions

Below we have organized our core recommendations according to the discussion questions set out in the NEB modernization expert panel's discussion papers. We invite readers to refer to the text of this Final Report for expanded thoughts on each of the discussion questions.

Discussion Paper 1: National Energy Board Governance

Discussion Questions:

- 1. What are appropriate requirements for Board Members (particularly regarding composition, expertise, regional representation, and Indigenous representation)?**

We recommend that governments making appointments to review panels recognize the importance of merit-based selections to the credibility of the agency and the review process. They need to be transparent about the criteria being used to select individuals. In particular, they need to ensure that review panel members have an expertise in public engagement and in the difficult act of balancing and integrating social, environmental and economic considerations as well as in Indigenous land rights. Further, to respond to the calls to action from the Truth and Reconciliation report, a co-governance model with Indigenous peoples would include mechanisms to facilitate co-appointment with Indigenous jurisdictions.

- 2. Where should NEB Board Members be located and why?**

The provision requiring that permanent Board Members reside in Calgary should be removed.

- 3. Where should the NEB be located and why?**

We do not have a position on this question.

- 4. What are your views with respect to the Chair of the Board also being the NEB's CEO?**

e have proposed that the EA body lead the project reviews, with technical analysis on the economic viability provided by the NEB. Therefore proposal would result in the Chair of the Board no longer selecting Board members to preside over hearings. This eliminates the need for NEB CEO to play this dual role.

5. How should the Government of Canada provide the NEB with policy direction? What should be the role of the NEB in implementing Government policies and priorities?

A regulator cannot and should not play the role of government in setting climate and energy policy. This speaks to the importance of the government implementing strong national and sub-national policy and programs in line with our domestic and international commitments. The federal government and many of its provincial counterparts have taken strong actions in this direction in the past year.

Ensuring compliance with policies and plans already established through the democratic process is part of protecting the public interest. Recognizing that the NEB should not be setting policy, it absolutely should still be ensuring that Canada's energy infrastructure build-out does not stymie the country's climate commitments. Recent policy progress has moved Canada — and its national conversation about climate action — forward by a significant measure. However, it represents an initial step along a much longer journey to decarbonization. For this reason, testing the market case for energy projects and measuring their merit against longer-term policy objectives remains a crucial part of our recommendations.

6. What NEB decisions, recommendations or functions should be delegated to Board Members? To NEB staff?

Please refer to our concept diagram on page 8 of our report, which details our proposed sharing of responsibilities.

Discussion Paper 2: Mandate and Regulatory Framework

Discussion Questions:

1. What are your views on the NEB's existing mandate?

The NEB's mandate broadly spans three functions: data production, project reviews and operational monitoring. In our view, the NEB's existing mandate is insufficient for two main reasons: (1) the public interest, against which the NEB is mandated to assess projects in the NEB Act, is undefined; and (2) its mandate, as defined in the Act, fails to recognize the fundamental role of energy development in supporting or hindering the

implementation of other social or environmental objectives, including responding to climate change.

2. Are there any areas over which the NEB's mandate should be changed?

We are recommending some key modifications to the NEB's mandate. Please refer to our proposed project review process (on page 8 of our report) for an overview of our recommended modifications. Broadly, we are recommending an expanded role for the NEB in producing data and forecasts, a more limited role for the NEB in project reviews that focuses on technical and economic viability, and a similar role for the NEB in monitoring, albeit with improved practices.

In addition, we recommend that the NEB Act (and CEA Act) be amended to recognize, in the preamble and all other relevant sections, Canada's international and domestic commitments to address climate change, and the important role of energy infrastructure in upholding these commitments.

3. Are there emerging areas for which the NEB's mandate should be expanded? If so, what are they?

We are recommending that the NEB produce additional data and conduct additional scenario modelling and sensitivity analysis under its mandate to produce data (Part II of the NEB Act). Please see our responses to questions under Discussion Paper 3: Energy Information, Reports, and Advice for more details.

Discussion Paper 3: Energy Information, Reports, and Advice

Discussion Questions:

1. What energy information are you most interested in? Is there additional information that you would like to see collected and/or made publicly available by the NEB? How should the NEB engage the public to help determine priorities related to energy information and dissemination?

Among the energy information that we would like to see produced and disseminated by the NEB, the most important are energy supply and demand scenarios where Canada and the world successfully implement the Paris Agreement and where Canada achieves its domestic climate objectives.

The NEB's existing modelling does not consider scenarios in which Canada and the world take progressively more stringent action to limit GHG emissions, in alignment with the successful implementation of the Paris Agreement. However, it has taken steps to incorporate recent domestic climate policy commitments. However, more should be

done to ensure its longer-term scenarios consider the implications of mid-century climate goals (e.g as articulated in Canada's Mid-Century Long-Term Low GHG Strategy) on domestic and global supply and demand for fossil fuels. Data produced by the NEB is widely used for energy policy development and planning across the country, and it should reflect our climate commitments.

We believe there is reasonable certainty that these domestic and global mid-century goals will be achieved, and therefore that the NEB has sufficient justification to include these scenarios in its modelling. One hundred and thirty-two countries — covering more than 80% of global emissions — have ratified the Paris Agreement and are working to implement domestic plans (i.e Nationally Determined Contributions, or NDCs). Having Canada's supply and demand reference case out of step with this reality provides decision-makers with inaccurate predictions is likely to lead to flawed decision-making.

We acknowledge and appreciate recent attempts by the NEB to align its core energy production assumptions with firm climate policy commitments at the national and sub-national levels in Canada and internationally. However, we remain convinced that more work is required for the NEB's technical capacity on climate issues to catch up to that of peer institutions.

Once these supply and demand scenarios have been updated, we strongly recommend they be considered within the scope of a project review. These new projections could be submitted as evidence by the proponent or by intervenors. See Section 2.2.1 of our report for further discussion on this. In any case, ensuring these scenarios are employed in project reviews is critical.

Beyond the production of these energy scenarios, we have made several suggestions for strengthening and coordinating the data produced by the NEB. There is an urgent need to establish a one-stop shop in Canada for reliable public energy and environment data. Some of the key steps in this direction include:

- Coordinating the production of energy- and pipeline-related data among those bodies that are currently responsible: NEB, Natural Resources Canada, Statistics Canada, Environment and Climate Change Canada, Transport Canada, the Transportation Safety Board, and provincial agencies. Align these datasets in terms of timing, units, and assumptions.
- Collecting and produce demand-side energy information.
- Aggregating province-level data, particularly electricity data.

In addition, there is a strong need to produce and share data on the environmental performance of existing facilities and infrastructure. With respect to specific projects, providing open, public, granular data on environmental and safety performance is a key component of ensuring accountability to the conditions set out in the project approval and compliance with laws and regulations.

In order to implement the above, greater financial resources and inter-agency coordination will be needed.

2. What format would be most useful to you in accessing and using energy information (e.g., raw statistics, graphs and infographics, short and frequent reports, longer detailed reports)?

In general, energy- and pipeline-related data must be provided in a format that is as granular as possible, meaning that it can be disaggregated by users in order to enable research and analysis. It must be open to the public and provided in a timely manner. In addition, all assumptions, as well as any inconsistencies between NEB data and that published by other official agencies, should be noted clearly.

The NEB must consider the needs of its user groups (for example, the public, industry and researchers) separately when determining data formats. Notwithstanding the importance of visualizations for public understanding, these efforts should not overshadow the importance of providing raw data that can be manipulated, with useful units and clear explanations of assumptions and methods used to produce the data.

3. What are the other major data sources you rely on to meet your energy information data needs?

Currently, energy- and pipeline-related data is scattered between the NEB, Natural Resources Canada, Statistics Canada, Environment and Climate Change Canada, Transport Canada, the Transportation Safety Board, and many provincial agencies. We use many of these datasets in our work, and have determined that a major barrier to successful public consumption of energy data is that these datasets are not harmonized in terms of timing, units, or assumptions. In our view the NEB could play a leadership role to ensure this problem is overcome.

4. Does Canada need energy information to be coordinated by one entity? If so, what entity would best serve in this role?

It is acceptable that multiple entities collect and be the primary publishers of different kinds of energy data. However, this data should be harmonized and aggregated by a

“one-stop shop” for reliable, public energy and environment data in Canada. We think the NEB could play this role.

To respond to the needs of governments, researchers, industry and the public – and to catch Canada up to its peers in terms of energy information – the NEB could document current energy trends on an ongoing basis, could provide an interface for access to data from other federal and/or sub-national agencies.

5. Should the NEB have a role in GHG data collection given ECCC’s existing mandate to do this? If so, what should the NEB’s role be?

ECCC should retain the responsibility for collecting GHG data. Protocols on GHG accounting and reporting are rigid, and the ministry with this responsibility should manage this data. However, this does and should not preclude an outcome where the NEB aggregates this data and employs it in its own analysis.

The NEB's information mandate should remain largely focused on understanding the technical and economic underpinnings of the energy sector in Canada. However, this should involve incorporating climate-related costs and benefits in calculations, and further publishing its work couched within Canada’s broader emissions context. As such, the NEB should certainly be using and re-publishing GHG data from ECCC. As always, it is important that the NEB (and other users) respect the protocols associated with this data when using and manipulating it for analysis and modelling.

6. What GHG data and analysis should the NEB publish regardless of who collects the data?

Please see above.

Discussion Paper 4: Decision-Making Roles on Projects

Discussion Questions:

- 1. What principles should determine who should make the final decisions for the following projects and why:**
 - 1. Major international and interprovincial pipeline projects (i.e., greater than 40 km in length)?**
 - 2. Smaller international and interprovincial pipeline projects (i.e., 40 km in length or less)?**
 - 3. International and designated interprovincial power line projects?**
 - 4. Import and export licences?**

We do not have a position on these questions.

- 2. What is the role of government policy in guiding NEB oversight and decision-making?**
 - 1. As the lead Minister of the Crown, is there a role for the Minister of Natural Resources to clarify policy outcomes that are expected?**
 - 2. How should the NEB incorporate and reflect “whole of government” policy direction, such as the new Federal Sustainable Development Strategy for Canada and Canada’s Mid-Century Long-Term Low-Greenhouse Gas Development Strategy, when setting out hearing orders, lists of issues, and ultimately, recommended decisions and conditions?**

Please see our answer to Discussion Paper 3, Question 1 for further discussion on these points.

- 3. What are your views with respect to the role(s) of other parties in the final decision-making process, such as Indigenous groups, provinces/territories or municipalities?**
 - 1. Do you see an enhanced role for some or all of these parties? If so, please describe what these roles should be for each, with a short rationale for why.**

Modern regulators must conduct their work in the spirit of reconciliation with Indigenous peoples and with a view to upholding the principles and obligations of the United Nations Declaration on the Rights of Indigenous Peoples. This means establishing nation-to-nation relationships and co-governance structures across the entirety of the regulator’s function (data production, project review, monitoring and decommissioning) as well as at the policy-setting stage, for example in the process of conducting strategic and regional EAs.

We do not have a position on the role of subnational governments in the decision-making process.

- 4. What are your views with respect to the current three options available to the GIC when making its decision for pipelines greater than 40 km in length? What can be improved?**

We are recommending that provisions be in place to require the GIC to provide detailed reasons when the final decision is made. Before reforms in 2012 under Bill C-38, the NEB was required to produce detailed statements to accompany its decision, and a return to this standard is important in our view. To ensure public confidence in

decision-making is maintained, we recommend that decision-making criteria and trade-off rules are established within the reformed Canadian Environmental Assessment Act, and that detailed decision statements be released publicly following the Government of Canada's final determination on a project. See our report Section 2.1.6 for further discussion.

5. What are your views with regard to the legislated timelines for project reviews (i.e., 15 months for NEB recommendation and 3 months for a GIC decision)?

Setting predictable review timelines can support proponents in planning their projects. However, the current timelines are too short for most major projects. If legislated timelines exist, must be scaled to the project and there must be a possibility to extend the timeline if required.

6. What are your views with respect to NEB's discretion to hold hearings for export licences?

Regarding the regulation of exports, the NEB has the legislative authority, under the National Energy Board Act Part VI (Oil and Gas), to assess the environmental and social impacts of energy product exports. However, the requirements should be used more than to simply collect information (i.e. should be utilized to hold hearings for export licenses). Further, if the export of an energy product is found to have negative environmental and social impacts, information collected should be used to craft conditions or requirements for the proponent. Rules regarding this determination should transparent and objective, and should consider the cumulative impacts related to export activities.

7. In determining whether an export licence should be issued, what are your views with respect to NEB's obligation to only consider whether the exports would be a surplus to Canadian requirements (see footnote 7)?

We do not have a position on this question.

8. What are your views with regard to the land acquisition process and dispute resolution? What are your views with respect to the responsibility of the pipeline company to negotiate with landowners regarding the amount of compensation?

At present, the relationship between land agents (acting on behalf of the developer) and land owners is asymmetrical: while agents have guiding practices to ensure fairness of outcomes, they have much more information regarding compensation deals in the area, land values, and other issues related to the proposed development. This creates an

imbalance of power in the negotiation between land agent and landowner. Whether deliberate or not, an unfair land acquisition agreement will create animosity between a landowner and a developer. While some landowners may have ample resources to effectively negotiate, it is unlikely to be true across the board. Further, landowners must have the ability to identify and/or report land agents that do not operate fairly and ensure timely recourse for unfair practice.

It should remain the responsibility of the developer to negotiate compensation with landowners, but landowners need support to have their interests reflected in these negotiations. The NEB, on behalf of landowners, should provide this necessary support to promote effective, balanced negotiations between developers and landowners.

Discussion Paper 5: Determining the Canadian Public Interest

Discussion Questions:

1. What does the 'Canadian public interest' mean to you?

In our view, the public interest is synonymous with sustainability as defined by academics and practitioners forwarding the notion of “next generation” environmental assessments. As described by Gibson, Doelle and Sinclair:

“In contrast to the prevailing focus on mitigating significant adverse effects, next generation environmental assessment would expect proposals to represent the best option for delivery of lasting wellbeing, preferably through multiple, mutually reinforcing and fairly distributed benefits, while also avoiding adverse effects... In contrast to the common notion that economic, ecological and social objectives are inherently in conflict...next generation environmental assessment would recognize that sustainability-enhancing economic, ecological and social objectives are interdependent.”⁵²

2. What factors should be taken into account when determining whether a pipeline or power line project is in the 'public interest'?

We are recommending that the current project EA test as outlined under the Canadian Environmental Assessment Act, 2012 be replaced with a test for a project’s contribution to sustainability. This is an approach that some project review panels in Canada have chosen to employ, in part as a response to the lack of definition of the public interest in

⁵² Robert B. Gibson, Meinhard Doelle and A. John Sinclair, “Fulfilling the Promise: Basic Components of Next Generation Environmental Assessment,” *Journal of Environmental Law & Practice* 29 (2015), 253. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2670009

existing legislation. The final report from the joint review panel for the Lower Churchill Hydroelectric Generation Project provides an example (please see our report for a full reference to this decision).

Building on the fundamental connection between energy supply, demand and Canada's climate change objectives, we recommend that a climate test be applied as part of the determination of contribution to sustainability. A climate test would determine whether a proposed project would result in incremental upstream and direct emissions and if the project creates a path dependency which hinders or supports the achievement of Canada's 2020, 2030 and mid-century emissions reductions goals under the Paris Agreement. A climate test of this nature should be an explicit requirement within the improved Canadian Environmental Assessment Act, and should represent a fundamental component of the Act's updated approach to sustainability.

3. For factors that fall within the jurisdiction of provinces and territories, such as land use planning, should the federal government and agencies take these into account in their public interest determination? If so, how?

Yes: the federal government and agencies must respect sub-national policies that are in place with respect to land use planning and other climate / energy policy. This means that federal regulators should not endorse projects that would prevent successful compliance or implementation of subnational plans, programs or policies. For example, project reviews at the federal level could be assessed relative to Alberta's 100 Mt limit on oilsands emissions, Quebec's legislated emissions target for 2030, or the City of Vancouver's Renewable City Strategy.

Discussion Paper 6: Safety and Environmental Protection

Discussion Questions:

- 1. What are your views with respect to the existing compliance and enforcement tools available to the NEB for safety and environmental protection?**
 - a. What are your views as to adherence to these tools?**

These generally are the correct suite of tools necessary to provide safety and environmental protection.

- b. What are your views as to the current use of these tools to advance risk management and any barriers or remedies that would enhance safety?**

The use of these tools is generally too restricted. To ensure adherence to approval conditions requires that there is a real risk of financial penalty due to contravention of a rule. If this financial impact is not sufficiently high, or the chance of being caught contravening a condition is low, non-compliance becomes more likely. The NEB's risk management approach already means that some contraventions are likely to go undetected; it only ensures that the impacts of these contraventions are relatively low. It is important to note that although these impacts are deemed "low" by the NEB's risk management approach, the acceptability of this level of potential impact has not been developed with public input.

c. What are your views as to the safety and environmental performance reporting that is currently done and areas for improvement?

A lack of predictable and rigorous reporting on the compliance oversight deemed necessary by the NEB for each regulated company is a significant gap at present. This is critically important information for the public to have access to. Without providing reporting on the credibility and quality of regulated operators, the NEB is withholding information necessary for the public to make informed decisions about new developments or the safety of developments operating near them.

d. Can the process by which the NEB evaluates compliance and adherence to conditions be made more efficient? If so, how?

In our view the efficiency of these processes should not be the primary goal of the NEB. Instead, its primary goal should be providing assurance on compliance with approval conditions, legislation, and/or regulations. It will be possible for the NEB to achieve this goal in multiple ways, some for more or less cost to industry. This should be considered, and efficiencies should be pursued – but the primary goal should be to improve public assurance.

2. Are there additional initiatives the NEB could undertake to help promote a positive culture for safety and environmental protection?

We do not have a position on this question.

3. What are your views on monitoring committees?

We do not have a position on this question.

[Download Discussion Paper 7: Emergency Prevention, Preparedness And Response: Tools and Requirements](#)

Discussion Questions:

1. In your opinion, are the existing emergency preparedness and response tools and requirements sufficient? If not, what additional tools or requirements are needed?

The rules outlining the requirements for emergency preparedness and response provide some level of assurance. However, it is unclear what level of assurance the NEB ultimately provides, since assurance activities are determined based on the risk profile of each developer. In our view it is challenging to determine whether existing requirements are sufficient when the broader assurance process contains unknowns.

2. What are your views with respect to the absolute liability limits that should apply regardless of whether a pipeline release was the company's fault (particularly \$1 billion for major oil pipeline companies)?

Providing any limitation to the total liability applied to a company ultimately breaks the polluter-pay principle, and could put greater liabilities on governments (and therefore taxpayers) to manage. Because of this, limitation to corporate liabilities must be accompanied by a thorough public evaluation of the risks and rewards of such a decision – in particular the risk to government revenue if it is required to resolve some portion of the liability. Too often, governments have lessened private liabilities to spur development or investment, without full consideration of the long-lived impacts, responsibilities and costs to taxpayers that could accompany this choice.

3. In addition to information the NEB currently makes public about compliance and enforcement, is there additional information that should be made available over the lifecycle of a regulated project? If so, what?

Project environmental assessments are currently the primary form for the identification and resolution of project impacts. While project EAs are very useful in understanding the implications of a project before it is constructed, their usefulness ends shortly thereafter. To our knowledge there is currently no reporting required of an operating project to confirm whether an EA was accurate and if the project is adhering to development plans as originally presented. While this information should be compiled and presented by the EA body as the responsible authority for EAs, the NEB support via identifying where information can be accessed.

[Download Discussion Paper 8: Indigenous Engagement and Consultation](#)

We underscore that natural resource management and energy regulation are cornerstone issues of reconciliation between the federal government and Indigenous communities. Please see our response to Discussion Paper 4, Question 3.

Download Discussion Paper 9: The National Energy Board's Participant Funding Program

Discussion Questions:

1. What are your views on the NEB's Participant Funding Program?

The current level of financial support offered to participants, particularly at the NEB but also at the CEAA, is vastly inadequate to support the meaningful intervention of stakeholders and the public.

2. How could the participant funding process, administered by the NEB, be more efficient and effective in enabling public participation and Indigenous engagement in the hearing process?

We recommend the instatement of a participant funding program that facilitates meaningful and full participation in the review of energy projects under federal jurisdiction for all stakeholders. The former Intervenor Funding Project Act under the Environmental Review Tribunal in Ontario is a model to examine when redesigning the participant funding program. An interesting aspect of this model is that it provided an incentive for groups with similar interests to work together.

The regulator could also have more detailed guidelines on how to engage stakeholders and the public in order to provide greater certainty for both participants and review panel members. The Ontario Statutory Projects Procedures (SPP) Act, which applies to proceedings in Ontario tribunals including the Environmental Review Tribunal, is an interesting model to explore.

Download Discussion Paper 10: Public Participation

Discussion Questions:

1. What works well regarding public participation:

- a. Prior to the hearing process;**
- b. In NEB hearings (including the criteria outlined in section 55.2 of the NEB Act);**
- c. In the development of emergency response manuals/ plans and their transparency;**
- d. Outside the hearing process, including opportunities related to:**
 - i. The project life cycle;**
 - ii. Specific issues; and**
 - iii. Development of regulations.**

Please see the following response.

- 2. What could be improved regarding public participation:**
- a. Prior to the hearing process;**
 - b. In NEB hearings (including the criteria outlined in section 55.2 of the NEB Act);**
 - c. In the development of emergency response manuals/plans;**
 - d. Outside the hearing process, including opportunities related to:**
 - i. The project life cycle;**
 - ii. Specific issues; and**
 - iii. Development of regulations.**

Currently, the limitations on who can participate in project hearings are a barrier to the NEB's credibility and perception of independence. Public and stakeholder input is a crucial component of developing the best energy projects in Canada and in holding the review process accountable. We are recommending the removal of the provisions that interveners be "directly affected by the project."

There is a need to facilitate the involvement of independent experts in project hearings both as direct advisors to review panels and as experts that can be retained by interveners. One approach to addressing this gap is to establish permanent centres of excellence at universities, with funding dedicated to maintaining pools of subject experts who can be called upon by participants and hearing panels alike to give independent input.

3. What additional opportunities could be provided for the public and Indigenous peoples to provide input over the course of the entire lifecycle of NEB regulated facilities (i.e., from application to abandonment)?

The Canadian public needs a forum to participate in the development of overarching energy policy. Currently, bigger-picture issues related to climate and energy policy and plans have few venues for resolution. As a result, project reviews have become a proxy for high-level planning and policy concerns.

On the project review level, one opportunity to strengthen stakeholder involvement is to invite participation at the scoping stage, when the list of issues is being drafted. Stakeholder participation in setting the framework for the review could lessen conflict later in the process and provide much greater certainty for proponents.

On a higher level, strategic and regional EAs offer an incredible opportunity to establish a forum for Canadian governments, Indigenous peoples and the public to study, discuss

and use a sustainability-based approach to establish needs and goals for given industry sectors or geographical regions. They would occur in advance of the review of individual projects and can be used to set baseline impact thresholds with respect to impacts on water, air, land, species, community health and well-being, etc. Used effectively, strategic and regional EAs can reduce the information burden and/or public concern expressed at project-level assessments. Strategic and regional EAs are planning tools currently available to federal government agencies that are critically underused.

Once projects are in the operation stage, there are few opportunities for stakeholders to be involved. This is a major issue, since unforeseen issues will undoubtedly arise. A forum to review operating projects against their initial applications would provide this opportunity to resolve concerns and compare operating data to conditions set out in the project approval. Currently, these important assessments are generally not done.

Upholding the principles and obligations of the United Nations Declaration on the Rights of Indigenous Peoples means establishing nation-to-nation relationships and co-governance structures throughout the project stages mentioned above: strategic/regional EA, scoping, project review, operations, decommissioning and abandonment.

Download Discussion Paper 11: The Hearing Process

Discussion Questions:

- 1. In your view, what core principles and elements should be reflected in the hearing process?**

The hearing process, like the entirety of the decision-making process, should be based on principles of respect, openness and quality of information, and should be conducted with a view to understanding a project's potential contributions to sustainability.

- 2. Not all applications currently have to undergo a public hearing process. Which applications do you think should have a public hearing process?**

We do not have a position on this question.

- 3. What are your views with respect to the basic steps of the public hearing process? What are the areas that can be improved?**

One opportunity to strengthen stakeholder involvement is to invite participation at the scoping stage, when the list of issues is being drafted. Stakeholder participation in setting the framework for the review could lessen conflict later in the process and provide much greater certainty for proponents.

4. How could the NEB enable public participation in hearings in a less formal way?

The formal hearings are an important part of the project review process and have a role in a modernized energy project review landscape. It is important that sufficient funding to support parties' full participation (i.e reviewing project applications and cross-examining evidence) be provided. However, there are myriad opportunities to facilitate broader participation for members of the public wishing to participate in less intensive ways. For example, livestreaming the hearings, providing opportunities to submit comments, improved online platforms to facilitate easy access to project information, and drop-in centres with project information could all be considered.

Download Discussion Paper 12: Land Acquisition and Compensation

Please refer to our recent publication "Landowners' Guide to Oil and Gas Development"⁵⁵ for further analysis on these issues.

Discussion Questions:

1. How has having a pipeline or powerline on your land affected how you use your land?

We do not have a position on this question.

- 2. What are your views with respect to:**
- a. Land acquisition agreements, its required clauses and the NEB oversight?**
 - b. Compensation and dispute resolution processes and the private nature of agreements?**

While individuals should be permitted to reach their own land access agreements with developers, there is a need to ensure basic protections and consistent approaches.

c. Right of entry process and authority?

3. In your opinion, are the existing processes described in this discussion paper fair and sufficient? If not, what improvements could be made (e.g., additional tools for land acquisition, compensation and dispute resolution)?

⁵⁵ Kenyon, Duncan, Nikki Way. Landowners' Guide to Oil and Gas Development. The Pembina Institute, 2016 <https://www.pembina.org/pub/landowners>

The existing processes are biased towards developers and intentionally remove power from landowners in their negotiation of land access, land acquisition, and compensation.

4. Who should make the final decisions for land compensation disputes?

We do not have a position on this question.

5. What are your views regarding the process of determining whether to authorize right of entry?

This process generally favours developers. Developers have access to greater financial resources than landowners, and place less emphasis on non-financial impacts. In our experience, non-financial are often more important to landowners than financial ones. It can be difficult for a landowner's issue to be recognized as legitimate if there is a lack of financial impact, even if the social impact is high. This leads to an imbalance of power in negotiations for right of entry.

6. What are your views with respect to the company's right of entry without the landowner's consent if a company and a landowner are unable to negotiate an agreement?

If a disagreement relates to whether the land should be accessed at all, right of entry should not be granted. This represents a major breach of trust with the public, as well as a safety risk to anyone involved with developing a project.

7. Should there be a more consistent approach for companies to compensate landowners for access to their land (e.g., defined frequency of payment, opportunities for review)? Would policy or regulatory direction from the Government of Canada be helpful?

Yes, more consistent approaches to compensation will help ensure basic minimum standards are being met. While individuals should be permitted to reach their own land access agreements with developers, there is a need to ensure basic protections and consistent approaches are used. This provides better protection of all landowner interests, rather than only those landowners with the resources available for sophisticated negotiation.

Supporting greater fairness and consistency of compensation may help increase cooperation between landowners and resolve common issues among them.

Appendix C. Interview guide

The following interview guide was employed as part of the Pembina Institute’s research on “best-in-class regulators” and pathways through which the Government of Canada could modernize the National Energy Board. Interviews were conducted September 2016 to January 2017.

Modernizing the National Energy Board

Project background for interview participants

September 2016

Key details

Thank you for your participation in our interview-based research project to explore NEB modernization. In this document, you will find information on the project context and goals, the format for participation, and our specific research questions.

If you have any questions, please contact:

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Context

The National Energy Board (NEB) is an independent, quasi-judicial federal energy regulator in Canada. Its mandate is to regulate pipelines, energy development and trade in the “Canadian public interest.”¹ It has three major functions: adjudicating energy projects, providing oversight on energy infrastructure operation over project lifecycles, and producing and disseminating energy information for use by Canadians and Canadian institutions.

Much has changed since the NEB was established in 1959. Canada’s climate and energy ambitions have evolved dramatically over this period, and as such, the structure, scope, governance model and expertise of the Board merit review. To that end, the federal government has committed to “modernize” the NEB, a process led by an expert panel with a mandate to consult, research and advise Minister James Gordon Carr, federal Minister of Natural Resources. In its Terms of Reference² for the review process, the Government of Canada establishes the scope of the review as follows:

¹ Government of Canada, “National Energy Board – fact sheet” (2016). <https://www.neb-one.gc.ca/bts/whwr/nbfctsh-eng.html>

² Government of Canada, “National Energy Board (NEB) Modernization Expert Panel: Draft Terms of Reference” (2016). <https://www.canada.ca/en/services/environment/conservation/assessments/environmental-reviews/share-your-views/draft-terms-reference-neb.html>

Efforts to modernize the NEB will deal with a focused set of issues related to the Board's structure, role, and mandate pursuant to the NEB Act. Specifically, these efforts will aim to position the NEB as modern, efficient, and effective energy regulator and regain public trust.

The Panel will conduct consultations from September to December 2016 and submit a report to the Minister of Natural Resources by the end of January 2017.

Our project

The Pembina Institute has three decades of experience working with federal and provincial regulators, governments and civil society on questions of natural resource management. Through our federal program, we seek to design, advocate for, and support effective climate and energy policies that help ensure Canada lives up to its domestic and international climate obligations.

We believe that the NEB can and must become a world-class regulator prepared to serve the public interest in a world transitioning away from fossil fuels. In our view, modernizing the NEB is about good governance in the era of low carbon: applying best-available climate and environmental science to federal review of major fossil fuel projects, ensuring project economics are consistent with low-carbon pathways at home and abroad, and quantifying the climate risk associated with new projects to protect Canada's long-term public interest.

In the fall of 2016, we will be conducting interviews with diverse experts, including members of regulatory bodies in Canada and other jurisdictions, academics, and other thought leaders. The goals of these interviews will be to:

- Establish a deeper understanding of the current strengths and weaknesses of the Board's structure, role, and mandate.
- Document the structure, role and mandate of innovative energy regulators in other jurisdictions.
- Identify specific solutions for transforming the NEB into an enabler of policy and projects that are aligned with Canada's commitments to acting on climate change.

We will subsequently publish a report summarizing our findings and offering our view on a credible path forward for the NEB. **The report will be structured around three main pillars: responsiveness to the challenge of climate change, best practices in collecting and disseminating energy data, and stakeholder participation.** In the final section of this background, we present our general research questions for each of these subjects.

Participation

We are inviting you to participate in an interview with our researchers in order to contribute information and ideas to one or more of these subject areas. Interviews will be up to 45 minutes in length and in most cases will be conducted via phone or Skype.

It is our hope that you will be comfortable being listed as an interviewee in our work. For example, we may ask to cite your insights or examples directly in our paper; in this case, we will validate any citation and its surrounding context with you prior to publication. Further, we will respect your right of refusal should you prefer not to be cited in the paper. We are happy to accommodate any needs you have around confidentiality and will establish this with you at the beginning of our interview.

In addition to establishing the legitimacy of any interview citations prior to publication, we will also invite participants to provide peer review on our report in the month of November.

Research questions

Not all questions will apply to all participants.

- Overall, what is your vision for a modern energy regulator in today's world?
- What, in your view, are the key strengths and deficiencies in the NEB's structure, scope, governance model and/or expertise?
- To what extent, if any, should the NEB modernization process overlap with broader environmental goals, including on environmental assessment reform and/or mitigating climate change?

Responsiveness to the challenge of climate change

- How can the NEB apply best-available climate science to reviews of major infrastructure projects and ensure project economics are consistent with Canada's (and its provinces') climate change commitments?
- How do regulators in other jurisdictions link energy policy to project decisions? How could this be done in Canada through the NEB Act?
- What are the risks and potential benefits of considering energy policies that are not yet implemented in projections and project decisions?

Best practices in collecting and disseminating energy data

- What information should the NEB be producing, and in what format?
- Who provides independent energy data and GHG emissions tracking in other jurisdictions? Who is best placed to do this in Canada?
- What data and sources should be informing the NEB's domestic and international supply and demand projections?

Stakeholder participation

- How can the NEB provide accessible and meaningful opportunities for engagement with interested parties?
- In what type of engagement forums – and on what suite of issues – should the NEB seek to engage the public?
- Who (NEB, project proponents, etc.) should be responsible for ensuring all necessary experts and stakeholders are around the table?