Consensus Report of the RCEN EPA Caucus in Response to the Report of the Expert Panel Reviewing Federal Environmental Assessment Processes, *Building Common Ground: A New Vision for Impact Assessment in Canada*

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1. Sustainability Assessment

Sustainability assessment embraces a range of processes that all have as their broad aim to integrate sustainability concepts into decision making and make more transparent the information/data on which those decisions are made. Over 500 of the submissions to the Expert Panel (The Panel) spoke about the importance of incorporating a sustainability approach into any reformed assessment process. The Panel responded by recommending that a sustainability approach be adopted and by mentioning aspects of this overarching approach at many points in their report. This is congruent with the Caucus' recommendations and the Caucus strongly supports it.

Our discussion here of next steps needed to implement this approach to IA rests on the following assumptions:

- Sustainability-based purposes will be adopted in the new federal law (i.e., a basic aim to seek positive contributions to sustainability while avoiding significant adverse effects).

- The scope of assessment will cover five sustainability "pillars" as recommended by the Expert Panel (environmental, health, social, cultural, and economic)[1] recognizing the interdependence and interactions of these sustainability considerations.

- Because sustainability is at the core, the scope will cover inter-generational as well as intra-generational effects and emphasize prospects for lasting wellbeing.

- Generally applicable sustainability-based criteria will be needed to clarify obligations and expectations for evaluations and decision making in assessments with this purpose and scope.
    - The criteria will be provided in the statute, and/or in regulations provided for in the statute.
    - The generic criteria for evaluations and decision making will need to be accompanied by criteria for guiding decision making on proposed trade-offs.

- While the criteria and trade-off guidance are meant for general application in evaluations and decision making (including initial scoping and other early planning), they are best suited to comparative assessment of alternatives.[2]

- Further specification of these criteria will be required for particular applications (eg. for assessments of project undertakings and regional and strategic undertakings to which the law applies). That is because the characteristics of the case and context always affect the nature of the most relevant issues, options, vulnerabilities, opportunities and priorities. Also, proponents and other participants in individual assessments will need more specific guidance than generic Canada-wide criteria can provide.

[1] Expert Panel for the Review of Federal Environmental Assessment Processes, *Building Common Ground: A New Vision for Impact Assessment in Canada* (Canada: MECC, 2017), p.4.

[2] The nature and range of alternatives reasonably open to consideration by proponents and others in an assessment will depend on various factors including the capacities of the proponent and the character of the undertaking (project, regional or strategic).

Sustainability purposes, scope (including the pillars) and criteria

The Caucus supports the Panel's proposal for the overall recognition of sustainability goals and the formal inclusion of the full range of environmental, social, economic, health and cultural considerations as part of a shift from environmental to sustainability assessments. Crucial specifics for legislation include the following:

The statute must

- establish that the purpose of assessment is to meet the needs of future generations and to ensure that approved projects, plans, programs and policies contribute a net benefit to environmental, social, economic, health and cultural well-being, while avoiding adverse effects;
- require consideration of long- as well as nearer-term effects across the scope of the five pillars of sustainability in all assessments;
- reiterate commitment to respect for treaty and Indigenous rights;
- place explicit emphasis on the interdependencies of the five "pillars" and how they are linked by interactive effects and cross-pillar factors (such as needs for fair and capable democratic governance, imperatives for climate change mitigation and gender equity, etc.);
- set out (or provide for the establishment of) generic criteria based on the general requirements for progress towards sustainability, and associated trade-off rules;
- require comparative evaluation of the range of alternatives (including the null option) that can reasonably be addressed in the case;
- require government agencies to ensure attention is given to the big issues raised by individual undertakings (including through government generated guidance from assessed regional and strategic undertakings), including alignment with climate change mitigation commitments and adaptation needs, recognition of other cumulative effects, broad alternatives and consequential policy issues in the context of a sustainability approach to assessment;
- incorporate commitment to transparency and accountability in decision making throughout the process.

Explicit Basic Sustainability Assessment Framework

As outlined above, in order to be effective, sustainability-centred purposes and sustainability criteria need to be addressed in any new statute at two levels – a basic set of generic Canada-wide criteria captured in the legislation, and provision for case-specific criteria (expanding on the basic ones) to be developed to guide each individual strategic, regional, and project assessment.

The generic criteria incorporated in the law must:

- be broadly applicable
- be understandable
- cover all major factors affecting the sustainability effects of undertakings subject to assessment
- recognize the interactions among factors and effects
- respect uncertainties
- provide a useful basis for specification for particular case and context applications.

For practical implementation in project level assessments, we propose the following legislative provisions, recognizing that they may need some adjustment for regional and strategic assessments:

- An assessment under this Act shall be designed and implemented to inform a determination of whether activities as proposed make a net contribution to sustainability, and whether they can be adjusted in their design and implementation in a manner that ensures that they make a net contribution to sustainability.

    1. The first step in the analysis is to determine whether the activities being assessed are likely to make a net contribution to sustainability in all of the following categories:
        a. Ecosystems and human-environment relations
        b. Livelihoods and health
        c. Intra-generational equity
        d. Inter-generational equity
        e. Resources and efficiency
        f. Understanding, acting and governing
        g. Uncertainty
        h. Integration
    2. The assessment of contributions in the categories under subsection (1) shall be carried out in accordance with direction set out in regulation (see annex 1 below) and more detailed guidance issued by the Minister (or Impact Assessment Commission).
    3. The assessment of contributions in the categories under subsection (1) shall be informed by more detailed guidance issued by the Minister or Impact Assessment Commission on means of addressing key issues related to the criteria areas. [For example, with respect to gender equity, guidance will be needed on how to assess whether the proposed activities, in comparison with the alternatives, would enhance the protection of women's rights, reduce gender discrimination in the workplace and in the community, and enhance the equal distribution of economic and social costs and benefits.]
    4. In accordance with regulations and guidance referred to under subsection (2), the multi-interest planning committee in each assessment shall develop case-specific sustainability criteria in accordance with the generic criteria.
    5. In applying case-specific criteria that are consistent with this Act and the regulations and guidance issued under this Act, reasonable efforts shall be made in each assessment to compare the feasible alternatives (including the null option) relevant to the case and to design and adjust proposed activities to ensure net contributions under each category under subsection (1).

Case-specific sustainability criteria need to drive both the assessment process and the ultimate policy, plan, program, or project decision, since the generic criteria cannot provide the detail needed for every potential assessment situation. The Impact Assessment Commission will be responsible for determining whether the criteria specified for an individual assessment fully incorporate attention to the generic criteria in the law, and have been applied in good faith in the assessment.

The statute must:

- establish how these criteria are to be developed in individual cases. The Panel recommends and we support the establishment in statute of an early process planning stage and multi-interest planning committee in each case that would take the lead in criteria specification (See the

papers on Governance and Meaningful Public Participation re the establishment of multi-interest planning committees)

- require that effects related to each of the case-specified sustainability criteria and their interactions be considered. This should result in assessment specific questions (e.g., Are biophysical systems and their ecological integrity adequately protected throughout all phases of development, construction, operation, and decommissioning of the Project? Will the undertaking's effects contribute equitably to community and social well-being of all potentially affected people? Are the predicted effects (including risks and opportunities) compatible with their cultural integrity and aspirations?)
- include provisions requiring that the relevant authorities provide reasons for their decision based on the application of the sustainability criteria for all assessment decisions
- provide for development of guidance for proponents and other participants in assessments on how to develop case-specific criteria. That guidance should include information on how to specify the generic criteria in the statute to recognize the key sustainability-related considerations in the case and its context
- promote the development of guidance for the specification of criteria for identifiable sectors and regions and other common categories of undertakings.

Trade-offs

The Panel has made the important recommendation that trade-offs be described, explained and justified. We recommend that in any case where a proposed undertaking may not deliver positive contributions in every category, the Impact Assessment Commission would apply the trade-off rules set out in regulations (see Annex 1) to determine whether the proposed activities would make a net contribution to sustainability in spite of failing to make a contribution under one or more of the categories under subsection (1).

In this regard, the following must be considered:

- Does the proposed trade-off ensure maximum net gains;
- Has the proponent met the burden of proving the need for the trade-off;
- Have adequate efforts been made to avoid significant adverse effects;
- Would the trade-off displace any significant adverse effect to future generations;
- Is an explicit justification offered for the need for and details of the proposed trade-off; and,
- Is the trade-off decision made through an open and transparent process?

Annex 1: Proposed Regulatory Provisions

1) *The contribution to sustainability of activities being assessed under section x of the Canadian Impact Assessment Act shall be assessed based on the legislated sustainability criteria plus more detailed case-specific questions designed by the multi-interest planning committee and approved by the Commission. The case-specific criteria can be more detailed than the criteria set out in this section, but shall, at a minimum, consider the following questions:*

   a) *With respect to ecosystems and human-environment relations, would the proposed activities, in comparison with the alternatives, restore or enhance the lasting viability of biophysical systems and socio-ecological systems to maintain life-support services (such as those related to climate stability, flood attenuation, food, etc.)?*

   b) *With respect to livelihoods and health, would the proposed activities, in comparison with the alternatives, increase lasting opportunities for everyone to have the fundamentals for a decent, healthy life and rewarding livelihood?*

   c) *With respect to intra-generational equity, would the proposed activities, in comparison with the alternatives, enhance fairness in the distribution of benefits and costs, opportunities and risks of human endeavours, recognizing needs to reduce existing inequities (such as those related to gender, economic status, Indigenous heritage, etc.)?*

   d) *With respect to inter-generational equity, do the proposed activities in comparison with the alternatives favour options that are most likely to preserve or enhance the opportunities and capabilities of future generations to live sustainably?*

   e) *With respect to resources and efficiency, would the proposed activities, in comparison with the alternatives, reduce extractive damage and waste and cut overall material and energy use per unit of benefit to a level that is sustainable in the long run?*

   f) *With respect to understanding, acting and governing, would the proposed activities, in comparison with the alternatives, enhance sustainability-based understandings, opportunities and capacities for individuals and communities to participate meaningfully in collective deliberations and decision making?*

   g) *With respect to uncertainty, is the likelihood of surprises and the need for precautionary and adaptive approaches adequately understood and incorporated into the assessment?*

   h) *With respect to integration, have adequate efforts been made to meet all requirements for sustainability together as a set of interdependent parts, seeking mutually supportive benefits?*

2) *Where proposed activities may fail to make a contribution in one or more of the areas identified in subsection (1) of section x of the Act, the Impact Assessment Commission shall apply the following test to determine whether it is appropriate, under the circumstances, to trade off the negative contribution to sustainability in one or more areas against positive contributions in other areas. A trade-off shall be permitted only where the following conditions, elaborated, as appropriate, through guidance issued by the Minister, are met:*

   a) *The proposed trade-off delivers net progress towards meeting the requirements for sustainability; it seeks mutually reinforcing and lasting, cumulative and lasting contributions and demonstrably favours achievement of the most positive feasible overall result, while avoiding significant adverse effects.*

b) The proponent has met the burden of demonstrating that any proposed trade-off is justified as the best option for delivering mutually reinforcing and lasting cumulative contributions, achieving the most positive feasible overall result, and avoiding significant adverse effects.

c) No trade-off that involves a significant adverse effect on any sustainability requirement area is permitted unless the alternative is acceptance of an even more significant adverse effect. Specifically,

i) no compromise or trade-off is acceptable if it entails further decline or risk of decline in a major area of existing concern or if it endangers prospects for resolving problems identified as global, national and/or local priorities.

ii) no trade-off is acceptable if it deepens problems in any requirement area where further decline in the existing situation may imperil the long-term viability of the whole, even if compensations of other kinds, or in other places, are offered.

iii) no enhancement can be permitted as an acceptable trade-off against incomplete mitigation of significant adverse effects if stronger mitigation efforts are feasible.

d) No displacement of a significant adverse effect from the present to the future can be justified unless the alternative is displacement of a more significant negative effect from the present to the future.

e) All trade-offs must be accompanied by an explicit justification based on openly identified, context-specific priorities as well as the sustainability decision criteria and the general trade-off rules.

f) Proposed compromises and trade-offs must be addressed and justified through processes that include open and effective involvement of all stakeholders.

2. Jurisdictional Cooperation

The Expert Panel (the Panel) is clear in recognising and endorsing cooperative assessments involving all affected jurisdictions, indigenous communities and other key interests (such as environmental groups and local communities) in the design and implementation of an assessment as the preferred approach to jurisdictional cooperation. Over 600 of the submissions to the Panel made reference in some way to multi-jurisdictional assessment and the vast majority of these noted the need for cooperation and a one-project-one-assessment approach.

The Panel made two broad recommendations for achieving greater cooperation, the legislative implications of which we unpack below. It is important to note that in making these recommendations the Panel explicitly rejected the application of delegation, equivalency and separate parallel assessments, all of which they regard as unviable.

Expert Panel Recommendation 1
Co-operation to be the primary mechanism for co-ordination where multiple IA processes apply

The panel recommends cooperative arrangements among "all relevant jurisdictions" as the preferred method of jurisdictional cooperation. The panel notes existing and past cooperative agreements between the federal government and many provinces as evidence that this is possible, but clearly prefers a focus on cooperation on an assessment-by-assessment basis.

The panel is in favour of project-by-project cooperation, which actively involves all affected jurisdictions. It is clear that the success of joint review panels in the past was a significant driver for the Panel's approach, recognizing that the cooperation achieved in joint review panels has served to produce the most efficient, effective and fair assessments under the current and previous legislation. Literature on this topic in the Canadian context also supports the notion of project-by-project agreements as being the most viable approach.

We agree with the notion of jurisdictional cooperation and for it to be successful any new statute would have to:

- Clearly establish cooperation as the default and preferred method of multi-jurisdictional assessment;
- Design the overall approach to create incentives for all jurisdictions to prefer a cooperative approach and to be motivated to participate effectively and constructively. It is our view that this is best achieved through legislative direction to pursue cooperative assessments involving all affected jurisdictions, in combination with clarity that in the absence of a cooperative approach, the federal government will proceed with its own assessment in a manner that ensures it has the information it requires to make an informed decision about a policy's, plan's, program's, or project's contribution to sustainability.
- The legislation should encourage general cooperation agreements between the federal government and all interested jurisdictions that actively involve all affected jurisdictions in the assessment and retain the decision-making responsibility and authority of each participating jurisdiction.
- The power to enter into (presumably bilateral) general agreements should focus on establishing broad principles. These agreements can serve to focus individual assessment agreements and

identify opportunities for cooperation between the jurisdictions, but should not predetermine or limit the ability of the multi-interest project committee (MIPC) to reach agreement on a cooperative approach to any individual assessment.[3]

- The legislation should leave it to the MIPC to work out the best way to design (subject to approval by the commission) a cooperative approach for the specific assessment, as this will be the best way to ensure all jurisdictions interested in the assessment have the opportunity to contribute to a consensus position on the design and implementation of a cooperative assessment. The danger of not doing this is that general bilateral agreements will seek to predetermine the preferred arrangement between the federal government and a particular jurisdiction, rather than focus on general principles and support for working out the details of how to make a cooperative approach work within the MIPC. If this happens, these general bilateral agreements could undermine rather than support the goal of achieving consensus among all affected jurisdictions on the best way to ensure a cooperative approach to a specific assessment.
- The legislation should establish the MIPC as the main vehicle for implementing the proposed cooperative approach using a consensus based approach. The job of the MIPC would be to design the cooperative assessment process for a specific project, strategic or regional assessment. The basic idea is that for any assessment, each jurisdiction contributes to the collective understanding of the policy's, plan's, program's, or project's contribution to sustainability. The plan, program or project, specific cooperation agreement (which the report suggests can take different forms) would be developed by the MIPC early in the process. The process designed by the MIPC is subject to approval by the commission.
- Any new statute must establish the role and mandate of the MIPC to undertake these tasks and in reaching agreements must also require that MIPCs use any direction provided to implement meaningful participation in their processes. Key among these issues is the representation of other interests on the committee.
- The role of the commission will be to ensure the process designed by the MIPC meets the federal standard set out in law. For instance, the legislation needs to be clear that cooperation means working together throughout the process
- In case the MIPC fails to design a suitable process in line with federal legislation by consensus, the Commission decides on the appropriate process for the assessment.
- The MIPC negotiates the coordination agreement, but the Commission makes the final decision based on whether the result represents the consensus of the members of the committee, and whether the resulting process meets the legal requirement and the spirit of the federal legislation.
- The Agency initiates the process by establishing the MIPC, then the MIPC takes over by leading the negotiations, and the commission has the final say.
- The legislation should include carrots and sticks to encourage cooperative assessments, including resources and clarity that the alternative to cooperative assessments is a full federal assessment to inform federal decisions.
- There is a need for cooperation to continue throughout the process including follow-up and monitoring when different jurisdictions have different responsibilities. We think there is value in

[3] We use the term "project committee" here, as this is the term used by the Expert Panel. We note, however, that the same type of committee should be struck for regional and strategic impact assessment processes, and it is our expectation that regional and strategic processes will generally follow the same process steps as outlined for projects, unless otherwise noted.

having the MIPC continue post project decision and carry out this function, perhaps with some change in composition as appropriate, but with as much continuity as possible, and with representation from project regulators on the MIPC after project approval. Until and unless the project is approved, regulators should serve on the expert committee, not the MIPC.

Expert Panel Recommendation 2
Substitution to be available on the condition that the highest standard of IA would apply

The retention of the substitution option is unfortunate, as it is clearly inferior to a cooperative approach. The cooperative approach, if effectively implemented, can be as efficient as a substituted process, with significant effectiveness and fairness gains due to the active engagement of decision makers and experts from all interested jurisdictions. Our views opposed to any substitution are captured in the Caucus submission to the Expert Panel.

3. Regional and Strategic Assessments

The Caucus supports the Panel's recommendation that IA legislation require the use of strategic and regional IAs to guide project IA. This document outlines a more detailed set of recommendations regarding each of these two processes, followed by explanations for our positions.

EPA Caucus Recommendations: Regional Impact Assessment (RIA)

We support two of three of the Panel recommendations on regional impact assessments, namely **the Panel's recommendations**

- "that IA legislation require the IA authority to develop and maintain a schedule of regions that would require a regional IA and to conduct those regional IAs" and
- "that a regional IA establish future scenarios, thresholds and objectives to be used in project IA and federal decisions".

We note, however, the Panel's suggestion that RIAs that are not conducted on federal lands or marine areas, or where there is not provincial cooperation, should not assess alternative development scenarios. We recommend that all RIAs assess alternative development scenarios, as this is an essential component of a robust process and the federal government can do so and remain squarely within its jurisdiction (see below).

Building on this foundation, we further recommend:

- that the Expert Advisory Committee (see Caucus briefing on Governance)
  - identify priority regions in Canada where RIAs would be of particular value; and
  - recommend to the Minister a schedule for their implementation;
- that the legislation require a written response by the Minister to RIA recommendations by the Expert Advisory Committee, or a request by the public, another jurisdiction (including Indigenous authorities), Indigenous peoples and stakeholders;
- that the legislation require the Minister, based on the advice of the Expert Advisory Committee, to set a priority list of RIAs to be conducted, and a minimum number that must be initiated each year;
- that RIA be initiated based on legislative criteria, and the Minister shall publish reasons for decision whether to initiate the RIA (see Caucus briefing on Triggering);
- that federal IA include strong incentives to other jurisdictions to carry out cooperative regional assessments with the federal government to ensure this information is available for project IA; and
- that the participation of other jurisdictions in cooperative regional assessments include:
  - federal financial assistance is provided to a participating province(s);
  - the conduct of a cooperative RIA assists jurisdictions in developing a joint vision of a sustainable future for the region, where affected provinces, affected municipalities and indigenous communities and governments choose their own paths to sustainability, to be implemented through their own planning processes;

- clarity in the law that the federal government will conduct its own RIA regardless of other jurisdictions' participation; and
- clear legislated timelines for arranging a coordinated assessment with affected jurisdictions, and if cooperation fails to produce results within the legislated timelines, the regional assessment proceeds without some or all of the other jurisdictions.
- legislated provisions for the involvement of the public in the development of any list or criteria for the designation of RIA or SIA, as well as mandatory and adequate participant assistance (see Caucus briefing on Meaningful Public Participation).

In keeping with the above advice, **we recommend against one of the Panel's recommendations** regarding what should require a regional impact assessment, namely that "IA legislation require regional IAs where cumulative impacts may occur or already exist on federal lands or marine areas, or where there are potential consequential cumulative impacts to matters of federal interest". **We recommend instead** that:

- The Act must express
  - the federal government's clear authority to gather information and conduct public and Indigenous engagement in order to inform, *inter alia*, future project decisions,
  - the federal government's preference for cooperative assessments,
  - its commitment to carry out its own comprehensive regional or strategic assessment if other jurisdictions are not willing to participate or cooperate, and
  - mechanisms to ensure RIA outcomes are tiered with strategic and project IAs and regulatory permitting.

EPA Caucus Recommendations: Strategic Impact Assessment (SIA)

We support the Panel's three recommendations

- that legislation require that the IA authority conduct a strategic IA when a new or existing federal policy, plan or program would have consequential implications for federal project or regional IA
- that strategic IA define how to implement a policy, plan or program in project and regional IA, and
- that Canada lead a federal strategic IA on the *Pan-Canadian Framework on Clean Growth and Climate Change* in order to provide direction on how to implement the *Framework* and related initiatives in future federal project and regional IAs (see Caucus briefing on Climate).

We further recommend:

- that federal plans, policies and programs currently under the Cabinet Directive be brought under the purview of the IA legislation (see Caucus briefing on Triggering);
- that the law provide criteria and triggers for "proactive" strategic assessments, for example where a new industry sector or activity is identified (see Caucus briefing on Triggering);
- that the Expert Advisory Committee subject to the determination of the IA Commission, or the IA Commission on its own initiative, determine whether a proactive SIA is warranted;
- that a project subject to an IA must meet the parameters of a relevant RIA or SIA that has already been conducted;

- that the new law require or encourage the conduct of a fresh SIA where, during a project IA, a policy gap is identified, and/or a policy, plan or program is found to be outdated
- that the Expert Advisory Committee or, in the absence of Committee consensus, the IA Agency or Commission, shall determine whether an SIA is required in such circumstances
- that legislative criteria be developed as to whether project IAs affected by the gap ought to be delayed during the conduct of the strategic IA
- that the IA Agency or Commission determine, based on the criteria, whether the criteria are met and the RIA or SIA be updated, and whether the project IA ought to be delayed while the RIA or SIA is being updated

Important Definitions

RIAs and SIAs are decision-support tools and participatory processes that address sustainability at a regional scale. RIAs can provide a framework for the finer-scale consideration of individual projects and land-use planning decisions.

Regional assessments would be undertaken to consider all impacts, benefits, risks and uncertainties of existing human activities within a defined geographic region. Additionally, an RIA considers a range of plausible scenarios of future human activities in the region and quantifies cumulative impacts for these, thereby providing a sense of the range of possibilities for what might happen in the future and how much stress these would place on selected indicators (e.g., valued ecosystem components or VECs) of sustainability.

A *strategic assessment* would also have study area boundaries (either national, regional or local in scale). The important difference compared to RIAs is that the subject matter scope of SIA is limited to a particular issue, policy, program or strategy, or industry sector (e.g., energy, mining, transportation, etc.). Some have referred to strategic assessment at a regional scale as regional strategic assessment.

Both RIA and SIA processes gather information and draw conclusions about VECs and the impacts different human activities have on the VECs, and both **tend to avoid final conclusions about which activities should be allowed**. **However**, in situations where the subject matter of the SIA is squarely within the exclusive jurisdiction of the federal government, **firm policy decisions based on the results of an SIA are quite conceivable**.

It is important to consider how RIAs and SIAs differ from planning (e.g., land use planning). A land-use planning process will generally define zones that classify the type of development allowed on a parcel of land and develop a plan that establishes where and how land uses occur within a particular area. Regional and strategic assessments, on the other hand, will focus on evaluating the implications for sustainability of various future scenarios (including the compatibility of various human activities and their effect on the resilience of ecosystems and VECs). Of course, participating jurisdictions with planning jurisdictions would also benefit from the results of RIAs for their planning processes, but this would not be the role of the federal government outside federal lands and marine areas.

General remarks about the Expert Panel Report pertaining to RIA and SIA

The Expert Panel heard that federal IA processes should be integrated and tiered, starting at the regional and strategic levels, with results then informing project level IA. It largely agreed with testimony it heard from across the country that regional and strategic IA should be legislated, anticipatory and commonplace. The Panel stressed that regional IA should provide clarity on thresholds and objectives on matters of federal interest in a region to inform and streamline project IA, given the fact that matters of sustainability to date, including cumulative impacts, have not been properly assessed or addressed at the project scale.

The Panel heard the concerns about the inadequacy of the *Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals* (the *Cabinet Directive*), and that strategic assessments could be used to address broad policy issues such as the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), cumulative effects, and climate change.

The Panel's endorsement of a tiered approach in which RIA and SIA are conducted with the goal of improving the efficiency, effectiveness and fairness of project IA and decision-making, especially with respect to cumulative effects assessment as well as comparative assessment of alternative regional future scenarios, is encouraging. The Panel highlights that the best way to achieve sustainability for current and future generations is for regional IA to take place prior to developments in a region. This allows the regional IA process to be proactive rather than reactive.

Although the core concepts of RIA and SIA as well as why they are needed in IA legislation are ably described by the Panel, there are some significant shortcomings in the report, including:

- **Lack of explicit definitions** of the two processes and how they differ from other processes, such as planning;
- Recommendation that RIAs should be cooperative in nature, but offering **no concrete suggestions on how to incentivize such cooperation**.
- **Failure to clearly establish**
  - **the importance and role of broadly-scoped regional assessments** beyond federal lands and marine areas,
  - how such RIAs can be **implemented with or without provincial cooperation**, and
  - the **importance of RIA and SIA beyond federal land and marine areas to federal decision making at the project level**.
- Proposing an SIA process that is designed to clarify how existing federal policies, plans, and program may affect projects, but **not recognizing the urgent need for proactive SIAs that serve to fill policy gaps**, particularly gaps that become apparent during project assessments. SIAs can also serve to keep completed RIAs current.

The Panel seems to envision limited circumstances under which RIAs would take place beyond federal lands and marine waters, taking an overly cautious approach to federal jurisdiction to carry out comprehensive regional assessments. **While federal jurisdiction may limit the ability of the federal government to make project *decisions* based on the results of regional and strategic assessment processes, there are no such limits on gathering information to properly prepare for project assessments, assessing the information gathered, and engaging the public**. To the extent that the federal government has jurisdiction (e.g., fish, navigation and Indigenous peoples), RIAs outside of federal lands and marine areas where there is no provincial cooperation should also guide federal decision-making.

Whether and how the results of a regional or strategic assessment will establish federal jurisdiction at the project level cannot be determined in an information vacuum. Rather, this determination needs to be informed by the results of regional and strategic assessments. The report is disappointing in not emphasizing the important role and opportunity of broadly-scoped RIAs beyond federal land and marine areas to improving project IA, and the **clear federal jurisdiction to carry out such assessments**.

The proposed approach for federal SIA is likewise incomplete and surprisingly so, given the long history of inconsistent and poor implementation of non-legislated SEA processes (e.g., the *Cabinet Directive*). Outside the *Cabinet Directive*, SIA in Canada has been applied rarely, on an *ad hoc* basis, and outcomes are inconsistent and dependent on assessment experiences, jurisdictions, and frameworks.

A clear articulation of how the results of RIAs and SIAs are to feed into federal policy and into federal project decisions will be critical for the new Act, as the failure to establish appropriate links between these higher tiers and subsequent decision making has been one of the shortcomings of *ad hoc* regional and strategic assessment processes.

Explanation of EPA Caucus Recommendations on Regional Impact Assessment

We support the last two of the Panel recommendations on regional assessments, i.e., that "IA legislation require the IA authority to develop and maintain a schedule of regions that would require a regional IA and to conduct those regional IAs" and that "a regional IA establish future scenarios, thresholds and objectives to be used in project IA and federal decisions". In our governance structure, we envision an Expert Advisory Committee playing the role of **identifying priority regions in Canada where regional assessments would be of particular value and recommending to the Minister a schedule for their implementation**. We recommend that there be a legislative requirement to set a priority list for each (regional and strategic).

The Panel recommendation on when an RIA might occur under federal legislation is woefully inadequate. We stress that **1) the triggers for RIA would have to be considerably broadened and strengthened** in contrast to the unduly constrained vision of the Panel reflected in its first recommendation (see Caucus briefing on Triggering), **2) incentives for provincial/territorial cooperation would need to be strengthened**, and **3) provisions be made for** circumstances under which the **federal government will undertake RIAs in priority areas** when provinces/territories are unwilling to cooperate. We will discuss each in turn.

1) *Triggers for RIA*: the federal government must be able to carry out a RIA outside federal lands in an identified region (e.g., watersheds, airsheds, and where cumulative impacts affect Indigenous Peoples and their rights). Where cooperation is not achieved, but there is significant development pressure for human activities subject to federal decision making, broadly scoped RIAs should proceed. In short, priorities and scope should be driven by need, not based primarily on unwarranted jurisdictional concerns over the information gathering, public engagement, and assessment elements of RIAs.

A key objective of next-generation IA legislation is that it must adequately address cumulative impacts (a concern heard by the Panel across the country). The Expert Panel's limited vision for triggering an RIA is inadequate for achieving this objective. While the report makes much of the need for cumulative impacts to be assessed at the regional scale to better enable cumulative effects assessment at the project level, it does not explain how this will practically take place. There are many regions of the country south of 60^{o} N where a comprehensive regional assessment would be highly beneficial, given

high interest in new or intensified natural resource development. Yet, RIAs are not likely to take place if the federal legislation adopts the Panel's recommendation with respect to the narrow set of circumstances by which RIA should be required.

2) *Stronger incentives for other jurisdictions to participate.* We recommend that federal IA legislation provide strong incentives to other jurisdictions to carry out cooperative regional assessments with the federal government to ensure this information is available for project IA. This stands to be particularly effectively if the role of the federal government is to ensure a rigorous approach to the analysis, and it is clear that it is up to provinces, affected municipalities and indigenous communities and governments to choose their own path to sustainability and implement the results of this exercise through their own planning process. In other words, the federal government sees its role as ensuring that the relevant issues are considered, that the analysis is rigorous, and that the paths under consideration are sustainable, but federal government decisions only concern future project decisions for projects that affect areas of federal responsibility. The benefit to provinces and other jurisdictions is that those decisions will be informed by their vision for the future of the regions studied.

On incentivizing cooperation among jurisdictions to do regional assessments, we recommend the following:

- Federal financial assistance to participating province(s);
- The development of a joint vision of a sustainable future for the region that will benefit provinces and other jurisdictions because RIA results will be informed by their vision for the future of the regions studied;
- The understanding that the federal government will do their own RIA if there is no willingness by provinces and other jurisdictions to conduct a cooperative RIA where one is needed; and
- A clear articulation of federal jurisdiction (i.e., information gathering engagement and assessment to inform future project decisions) is key for federal-only RIAs and SIAs. This justification needs to be reflected in the design of the federal-only assessment.

A critical motivator is for the federal government to clearly communicate its preference for cooperation along with its clearly-stated commitment to carry out its own comprehensive regional or strategic assessment if other jurisdictions are not willing to cooperate. In the case where provinces are not interested or cooperative, the federal government needs to have the power to conduct its own comprehensive regional and strategic assessments. It needs to exercise this power based on priority needs for future federal project decisions. Key to this is establishing that the priorities for RIAs are based on where there is development pressure that will likely require federal project decisions in the future. This contrasts with the Panel's recommended approach of setting priorities based on where it is easiest for the federal government to do its own regional assessments. Once the right priorities are established, there needs to be a clear process to try to arrange a coordinated assessment with affected jurisdictions with clear timelines. If cooperation fails to produce results within the legislated timelines, the regional assessment proceeds without some or all of the other jurisdictions.

Explanation of EPA Caucus Recommendations on Strategic Impact Assessment

The Panel offers three SIA-related recommendations in its report. It recommends that SIA will be used to link existing and new federal policies, plans and programs to project IA. Essentially, the goal is to help those engaged in project IA to understand the implications of existing and new federal policies, plans,

and programs for project assessment, and to ensure project decisions are in sync with existing federal policies, plans and programs. This is helpful and the Panel's recommendation that Canada lead a federal strategic IA on the *Pan-Canadian Framework on Clean Growth and Climate Change* in order to provide direction on how to implement this Framework and related initiatives in future federal projects and regional IAs is an excellent example of how SIA can be applied in this manner (see Climate discussion paper). We support this recommendation, as it would require addressing specific federal (as well as provincial and territorial) policies between project IA and the federal framework.

An essential recommendation that is missing relates to more proactive strategic assessments, which the Panel does not consider. In addition to "new and existing" policies, plans and programs (covered by the Panel's first SIA recommendation, which envisions a reactive approach), strategic assessments offer the potential to fill policy gaps and update outdated policies, plans and programs. These gaps often emerge during the course of project assessments. For example, a project assessment may bring to the attention of government decision makers a new type of industry. Fracking, LNG, aquaculture, and offshore energy projects are all examples of new industries that have come along since the introduction of project EA as a decision-making tool. All these new sectors would have benefitted from a strategic level assessment to aid decision makers in their efforts to adjust their planning and regulatory processes accordingly, and to develop some general guidance for project decision makers faced with deciding whether, where, and under what conditions to allow these new types of activities to proceed.

In order to set up legislation to encourage proactive strategic assessments, we would need an "off-ramp" from project assessments, whereby gaps in federal policies, plans and programs that impair the ability to do good project assessments can be identified and submitted to an SEA. We need to think about who decides whether an SEA is warranted (a question for the governance section of our submission). We also need to consider what happens to the project assessment. Our suggestion is that there not be a legislative requirement that the project assessment be put on hold until the strategic assessment is completed, but this could be left to the IA Agency or Commission to decide based on the circumstances and perhaps appropriate legislative criteria.

Our proposal is that the basic choice at the project level is that the project assessment either has to operate within the parameters of existing regional and strategic assessments, or it has to use the off-ramp to try to initiate a new or updated SIA or RIA (if a determination is made that the existing regional or strategic assessment is outdated or otherwise not workable). The process should provide for a decision on this by the IA Agency or Commission in the absence of consensus on this point at the multi-interest assessment committee. If there is an existing RIA and SIA and the IA Agency or Commission decides that the regional or strategic assessment is fine as is, project assessment has to operate within its parameters; otherwise, a new or updated regional or strategic assessment is triggered, in which case the project assessment should not be as constrained by the regional or strategic assessment, but can't completely ignore it, i.e., has to justify going outside.

In addition to the off-ramp from project assessments, someone (either the IA Agency, Commission or the Expert Advisory Committee) has to make recommendations for proactive strategic assessments. The value of this is that if you can identify the gaps before a project is proposed, then you can avoid the problem of what you do with the project that is in the middle of a project assessment. New industry sectors would be a good example of subjects suitable for proactive strategic assessments.

4. Triggering of Project, Regional, and Strategic Impact Assessments

Introduction

The following sets out the consensus response of the RCEN EPA Caucus to the Final Report of the Expert Panel for the Review of Environmental Assessment Processes in relation to triggering and scoping of project, regional, and strategic impact assessments.

Triggering Project Impact Assessments

The Expert Panel recommended three categories of triggers for project assessments. First, the Expert Panel recommended a Project List trigger. Unlike the Designated Project List for CEAA 2012, the recommended Project List would include "only projects that are likely to adversely impact matters of federal interest that are consequential for present and future generations." Two other triggers for projects not included on the Project List would be provided: statutory criteria would be established to require IA of "projects that have the potential to impact present and future generations in a way that is consequential"; and a petition process would allow assessments to be initiated for projects that are not otherwise captured, based on a legal test with no discretion. We discuss all three below.

Project List Triggers

The Caucus supports a Project List, established by regulation, that would set out categories of projects that would automatically trigger an impact assessment. However, the Expert Panel's suggested threshold of undertakings deemed to 'adversely affect matters of federal interest in a way that is consequential for present and future generations" should be modified to "undertakings that may have an adverse impact on the environment or sustainability and may involve a matter of federal interest."

The term "federal interest" would be defined broadly to include, but not be limited to, matters that affect Canada's international obligations, Indigenous rights/title/lands, federal regulatory approvals, the use or disposition of federal lands, activities or projects carried out by or funded by a federal department, agency, or Crown corporation, that are linked to a federal Strategic Impact Assessment, or that fall within the geographic region of a federal Regional Impact Assessment. The term "project" would be defined broadly to include physical activities and undertakings, including those identified in a federal Strategic Impact Assessment or that fall within the geographic region of a federal Regional Impact Assessment.

The Caucus recommends that the following categories of projects be specifically included on the Project List:

- Projects that propose to emit more than x tonnes of greenhouse gas emissions annually (level to be determined)
- Projects to be carried out in a National Park, National Wildlife Area or other federal terrestrial or marine protected area unless excluded from assessment by regulation.

The Caucus recommends that a defined process to include/delete project categories from the Project List be included in a new IA law. The process should include establishment of an Expert Advisory Committee (see also Governance paper) to make recommendations to the Minister of Environment and Climate Change for changes to the Project List. Proposed changes could be suggested by the Minister,

the IA Agency, or anyone else; the Expert Advisory Committee would be required to document its evaluation of all proposals, and to present its recommendations to the Minister within a defined period of time, or present its documented considerations if it cannot reach consensus. The Minister would be required to respond to these recommendations within a legislated timeframe, and to give reasons for her decisions to accept or deny the Expert Committee's recommendations.

Statutory Criteria Trigger

The Expert Panel's idea for a "statutory criteria" trigger is unclear, although perhaps it is intended as a variant of the decision-making triggers employed in CEAA 1992. The Caucus recommends against this approach given the difficulty in describing statutory criteria that are (a) clearly defined, (b) have a minimal level of relevance to ecological or sustainability criteria, and (c) do not themselves require some level of assessment in order to be determined.

The Caucus recommends that decision-based triggers similar to those proposed by the Caucus in our December 2016 submission be employed. They are as follows:

- *Projects requiring a federal regulatory decision:* Assessments would be required prior to federal regulatory decisions under key statutes important to protecting the environment such as the *Fisheries Act*, *Navigation Protection Act, Species at Risk Act* and *Migratory Birds Convention Act.* This list of statutory and regulatory triggers could be much shorter than the Law List regulations under CEAA 1992. All applications for authorizations, permits under statutes such as the *Fisheries Act* for projects not subject to mandatory IA at minimum should be registered federally; the IA law should provide for bump-up to IA, at an appropriate level of effort (or assessment stream) through exercise of government authority, or the petition or request process. A separate paper discusses proposals for streaming.

- *Projects receiving federal funding:* Assessments would be required for major federal financial investments in undertakings that may adversely affect the environment. Strategic impact assessments with guarantees of public engagement, transparency, and accountability could be used to assess the impacts of infrastructure programs that provide federal funding to a wide variety of undertakings.

- *Projects requiring a disposition of federal land:* Few environmental assessments were triggered by CEAA 1992's land disposition trigger partly because of the difficulty in determining whether or not any given land disposition was undertaken for the purposes of enabling a project to be carried out. An assessment under a next-generation law should be required prior to the disposition of an interest in federal land, regardless of the purpose.

- *Projects with a federal proponent:* If a federal department or a Crown corporation proposes a development or activity for its own use (e.g., building a new headquarters in a wetland), that undertaking should be required to be assessed. Smaller projects and activities proposed by a federal department or Crown corporation could be addressed in other ways, including through a sustainable development strategy, assuming guarantees of transparency, accountability, and public participation, but bigger undertakings should be assessed under the next-generation law.

Petition and Referral Trigger

The Expert Panel's recommendation for a request or petition process to trigger an impact assessment is very positive; however, the request/petition process should require the Minister to publicly respond, with reasons, within prescribed timeframes, and provide for a right of appeal for applicants.

The next-generation law should provide that a federal assessment is required as a matter of law for any proposed project or activity referred for assessment to the Minister of Environment and Climate Change by an Indigenous community or government unless the Minister publicly issues a determination, with reasons, and within a specified time following that referral, that such an assessment is demonstrably not in the public interest.

Further, the Minister should be required to refer for assessment any undertaking whose greenhouse gas emissions are likely to be inconsistent with the achievement of Canada's domestic or international greenhouse gas emissions reduction targets or that is likely to induce significant additional industrial development in a given region.

Triggering Strategic Impact Assessments

The Caucus recommended that strategic IAs be initiated for federal policies, programs, and plans "where cumulative effects are significant," "where significant development is foreseeable," or "where there are significant socio-economic or health concerns." The Caucus further recommended that SIAs of proposed policies, programs or plans currently subject to the Cabinet Directive be required as a matter of law under the new IA legislation.

The Expert Panel recommends that "IA legislation require that the IA authority conduct a strategic IA when a new or existing federal policy, plan or program would have consequential implications for federal project or regional IA" (p.83)

However, the sustainability impact of the policies themselves is left to the existing Cabinet Directive. The Caucus further finds this proposal to be inadequate in terms of meeting the standards that the Expert Panel itself set out for transparency and public participation, an independent, credible, and rigorous process, and the application of a sustainability test. We reiterate our recommendation that proposed policies, programs or plans currently subject to the Cabinet Directive be required by law to undergo SIA.

A more comprehensive application of SIA hinges on changes to the governance structure proposed by the Expert Panel, specifically in terms of decision-making authority; these are discussed in our paper on governance structure. (At the same time, the outputs of SIA are likely to be less prescriptive and specific than for project level IA, and follow-up monitoring, compliance, and enforcement will likewise be at a higher level, looking at how SIA conclusions are implemented through different agencies and even jurisdictions.)

In addition to the criteria outlined above, there needs to be a mechanism to initiate SIAs where gaps are identified through the execution and follow-up of project IAs or conceivably, regional IAs; or where requested by government agencies or any interested party through the Expert Advisory Committee, as described above for project IA, except that the Privy Council Office might be a more appropriate authority for the Committee to report to in this case. The Expert Advisory Committee could recommend a list of federal policies, program or plans that should be subject to strategic IA; there should also be a dedicated fund to finance these listed strategic IAs.

Triggering Regional Impact Assessments

The Caucus recommended that regional IAs be triggered "where cumulative effects are significant," "where significant development is foreseeable," or "where there are significant socio-economic or health concerns."

The Expert Panel has advanced only the recommendation relating to cumulative effects, and that only in an unnecessarily and unhelpfully restricted context: "Regional IA should be required in two cases: 1. On federal lands or marine areas with the potential for cumulative impacts. 2. Outside of federal lands or marine areas where there is potential for, or existing cumulative impacts, on many federal interests." (pp.79-80) The recommended framework for regional assessments on federal lands or marine areas, or where there is provincial cooperation is extended to include alternative regional scenarios, but without much specificity as to how they would be triggered and undertaken.

While direct federal decision-making authority is certainly limited in a regional setting, there is no such limit to the scope of the federal government's information-gathering and analysis powers, and imposing artificial limits essentially discards the possibility of undertaking a cooperative regional assessment with provincial and Indigenous authorities, with shared implementation and follow-up, including guidance for the execution of project IAs. This is further discussed in the Regional and Strategic Assessments paper.

Expanding on our earlier recommendations, the Caucus recommends that IA legislation include the following triggers:

- When cumulative effects in a region are significant or otherwise hindering progress towards sustainability, or are affecting or likely to affect Indigenous Peoples and their rights;
- When the Minister is aware of interest in, or plans for, new or intensified natural resource development, or significant development pressure with the potential to impact progress towards sustainability objectives is identified in a region, and federal decision making in respect of projects will be required in the future; and
- When the Minister is aware of significant socioeconomic or health concerns that may be linked to development in a region.

In addition, the Caucus recommends that the next-generation law authorize the proposed Expert Advisory Committee to recommend to the Minister that specific regional or strategic IAs be conducted. As with strategic IA, there needs to be a clear process for initiating regional IAs based on stakeholder concern and feedback from individual project IAs. As well, we suggest that that the expert advisory committee be authorized to develop a list of regional IAs (e.g., Bay of Fundy, Ring of Fire) that should be convened by the federal government in cooperation with other governments and indigenous communities. The next-generation law should also establish a dedicated fund to finance these listed regional IAs.

5. Governance

Reflections

The Expert Panel report's recommendations on the governance structure of project IA (PIA) is largely workable and many align directly or closely with the Caucus' recommendations to the Expert Panel. The report does not provide the same level of detail on the structure of regional (RIA) and strategic assessment (SIA); however, many of the governance structures and processes are cross-applicable. For IA to work, some alterations to the Panel's recommendations will be necessary, as well as appropriate implementation details.

In particular, we support the Panel's recommendation that there be a Planning Phase during the review, and generally agree with the purpose and processes during this phase. However, while the recommendation for one independent entity (IA Commission) to conduct and review IAs aligns with the Caucus submission for one Assessment Authority, the Panel vests too much oversight responsibility in the IA Commission (in particular, responsibility for all stages of the EA from early planning through to decision-making, quality assurance, ombudsperson, and conducting and determining the adequacy of consultation).

We also strongly urge against the Panel's recommendations that appeals go to Cabinet. Appeals should go to an independent tribunal, and the legislation should set out a right of appeals for process and final decisions. Finally, the legislation should clearly enable the appointment of review panels not just to resolve issues of non-consensus, but also at the outset of IAs where appropriate.

Who conducts Indigenous consultations and decides on the adequacy of the consultation requires further thought. The Expert Panel's recommendations are contradictory and likely to result in conflict.

We agree that the conduct of most assessments should be by assessment teams managed by a government body (the EA Agency), with a couple of caveats: first, to ensure that assessments fit the size and magnitude of projects, the legislation may want to contemplate allowing proponents of more minor projects to conduct the assessment. Also, we note that SIAs currently governed by the Cabinet Directive may in some cases need to be conducted by the proponent department/agency/ministry.

Summary Recommendations

We recommend that the core elements of the assessment process be delivered through two institutions: 1) an impact assessment agency (Agency), supported by regional offices and responsible to the Minister of Environment and Climate Change (MECC); and 2) an arms-length commission (Commission) comprised of commissioners appointed for their expertise, including Indigenous commissioners.

Dividing the responsibility for IA between these two institutions comprises the key difference between our proposal and the EA Expert Panel. The Agency would be responsible for such matters as advising on policy, conducting assessments and providing secretariat support, whereas the Commission would provide oversight of the entire process and make interim and final decisions on project assessments (in collaboration with other authorities and after meaningful public participation), and can act as a review panel for SEA and REA. For the sake of credibility, accountability and transparency, there should be a clear separation between the Agency and the Commission.

There needs to be an appeals tribunal, which should facilitate government-to-government negotiations, undertake dispute resolution and hear appeals. It could perform under all federal environmental laws.

In addition to the two core bodies, we envision permanent and ad-hoc assessment-specific bodies or committees to support the Agency and Commission. The two permanent committees would be a Multi-Interest Advisory Committee and a resurrected Canadian Environmental Assessment Research Council, including an Expert Advisory Committee.

The individual assessment-specific bodies would be multi-interest planning committees (MIPC), government assessment committees, project implementation committees, assessment teams and review panels.

Core Institutions

In this section, we describe the functions of the core institutions in project assessments. We envision them playing important roles in REAs and SEAs, but for the purposes of this brief we focus our recommendations at the project level.

IA Agency

The Agency would report to the Minister of Environment and Climate Change Canada (MECCC) and function through a head office and regional offices. It would be the main driver of the planning phase, as well as conduct of assessment phase. It would also function as advisor to the MECCC on the development of regulations, policy and guidance. It would be responsible for maintaining the public registry, and for the follow-up activities described in our post-assessment recommendations (e.g., tracking compliance with conditions, etc.).

At the outset, for collaborative assessments the Agency would provide secretariat support to facilitate multijurisdictional collaboration. Once a collaboration agreement is in place, it would make recommendations to the Commission regarding the appointment of the MIPC and government committee, assessment terms of reference (including the studies to be conducted), and appointment of the assessment team to conduct the assessment. It would review the assessment (EIS) for completeness, and upon determining that the EIS is complete, it would submit the EIS to the Commission (or review panel if governments agreed that a review panel is preferable).

Throughout all stages the Agency would seek the consensus of the MIPC. Where there is MIPC consensus, the Agency's recommendations would be the consensus of the MIPC. Where consensus cannot be reached, the Agency would inform the Commission of all areas of non-consensus. It would also engage the public, Indigenous peoples and stakeholders at each stage of the process as per our recommendations on public participation, and demonstrate to the public, Commission and any other relevant jurisdictions the results of its engagement and MIPC consensus-building.

It may continue to provide secretariat support on government-to-government collaboration after the completion of the conduct of assessment phase.

IA Commission

The Commission would consist of commissioners appointed for their expertise, and would include commissioners with indigenous perspectives. It would be the decision-making body for process and final decisions, and at every stage it would a) seek the consensus of the MIPC; b) conduct meaningful public

participation according to our recommendations in our public participation brief; and c) collaborate with the other involved jurisdictions with the goal of seeking consensus.

Before the assessment, the Commission would collaborate with other jurisdictions on collaboration agreements.

Process decisions would include terms of reference, appointment of the committees and assessment team, identification of project-specific sustainability criteria, the public engagement plan, timelines, and participant funding. Upon receipt of the EIS from the Agency, it would review the EIS, request any further information it determines necessary to make a decision, and produce an assessment report of its analysis and findings. Throughout all stages it would collaborate with any relevant jurisdictions and meaningfully engage the public and Indigenous peoples. We envision this stage as a continuation of the iterative evolution of the project description and EIS, in order for the proposed project or activity (or plan, policy or program) to be able to maximize net benefits and minimize risks, uncertainties and harms.

Where EA reviews go to review panels, the Commission would provide secretariat support to the Panel.

It is important that decision-making be done by the Commission in order to ensure that decisions best consider and follow decision-making criteria and trade-off rules. However, the legislation needs to also allow for Ministerial-level decision-making both in order to ensure democratic accountability and to enable nation-to-nation collaborations in all circumstances. Therefore, we recommend that the Commission make the decision, but that the Minister have the power to override the decision. Under this model, decision-making could happen two ways:

1. The Commission, in collaboration with the other involved jurisdictions, following a public comment period and (ideally) following the consensus of the MIPC, issues a draft decision statement that would include conditions of approval. It sends that draft decision to the Minister for approval. The Minister then reviews and approves, rejects or amends the Commission's decision, following consultations with her provincial and Indigenous colleagues. Circumstances where it would be appropriate for the Minister to alter or reject a draft decision would be upon the request of an Indigenous authority. Subject to the Minister's approval, the Commission would issue a final decision statement, along with the EA Certificate setting out the binding conditions of approval.
2. The Commission follows the same process as above, but resulting in a final decision with conditions. The Minister would then have the power to override the decision with the consensus of the relevant provincial and Indigenous authorities.

Environmental Tribunal

Among other things, the Tribunal would help achieve consensus on decisions through facilitating government-to-government negotiations and providing alternative dispute resolution in cases of non-consensus. It would also hear appeals of interim (process) and final decisions, and undertake quality assurance of the EA regime.

Minister

In scenario 1 above, the Minister would review and approve, reject or amend draft decisions. If she does not approve draft decisions, or modifies conditions of approval, she must give clear, detailed and public reasons for her decision consistent with the purposes of the law. The decision and reasons must be

posted on the registry. The legislation should state that a decision to not approve draft decisions or conditions is reviewable on a standard of correctness.

In scenario 2, the Minister would have the power to override decisions if, in collaboration with the relevant provincial and Indigenous jurisdictions. An override may be reversing a decision, or adding or amending conditions of approval. If she overrides a decision, she must issue detailed reasons for decision that are consistent with the purposes of the law.

Committees and other Bodies

1. Standing bodies

Multi-Interest Advisory Committee

This committee would be appointed by and report to the MECCC. It would be comprised of equal membership from Indigenous, industry and environmental groups. It would function much like the former RAC and current MIAC, providing a forum for consensus-building among different interest groups and discussion about areas of potential or existing non-consensus; provide advice to the Minister and Agency; and assist in legislative, regulatory or policy review.

IA Research Council and Expert Advisory Committee

As noted in our brief on evidence-based decision-making and Indigenous knowledge, we recommend the resurrection of the Canadian Environmental Assessment Research Council (CEARC) "to investigate and explore the scientific, technical and procedural aspects of environmental assessment (EA), and to find ways to improve its effectiveness." The CEARC would include an Expert Advisory Committee. As described in our submissions to the Panel, this Committee would be comprised of scientific, Indigenous and IA experts. Its main purpose would be to provide non-interest, expert advice to the Minister, Agency and Commission, for example when PIAs, RIAs and SIAs should be conducted, the scope of assessments, adding projects to a project list or triggers to regulations, appointment of review panel members or commissioners, etc. For the full suite of roles it could serve, please see our December submissions.

2. Project-specific bodies

Multi-Interest Planning Committee

We support this recommendation by the Panel. Assessment committees should be comprised of key members of interest groups, such as the community and environmental groups, local governments, Indigenous groups (to facilitate engagement, not replace nation-to-nation collaboration) and potentially the proponent. It would serve as a deeper consultation body to help achieve broad consensus on interim and final decisions, such as project-specific sustainability criteria, the public engagement plan, timelines, and participant funding.

Government Assessment Committee

We also support this recommendation of the panel, and believe its composition would be representatives of relevant federal departments, as well as regulators, including the NEB and CNSC. Among other things, it would provide advice to the Agency and/or Commission throughout all stages of the assessment and its members would be responsible for ensuring streamlining between the IA and regulatory processes in the case of approvals.

Project Implementation Committee

For approved projects where appropriate (e.g., for larger projects), we recommend a merger of appropriate members of the assessment and government committees to form a project implementation committee.[4] These committees could be responsible for many aspects of post-assessment monitoring and tracking, including reviewing monitoring programs and management plans, tracking compliance with conditions, and reporting post-assessment information back to the Agency.

Review Panels

We recommend the continuation of the power to appoint review panels to assist with multijurisdictional collaboration and provide additional oversight of controversial or complex assessments. Review panels should report and make recommendations to the Commission. Review panels should also be used for RIAs and many SIAs. Decisions to go to a review panel should be made in the planning phase of the review.

Tables 1 and 2 below set out in detail the Caucus and Panel's recommendations on institutional bodies and processes, notes on areas of divergence and convergence, and implementation recommendations.

Appendix: Comparison of Caucus and Panel Recommendation on Structure and Governance

Table 1: Caucus and Panel Recommended Bodies

Caucus Recommendation	Panel Recommendation	Notes
Assessment Authority To appoint Assessment Councils (see below), review EAs, provide secretariat support to governments, engage the public and Indigenous peoples, implement follow-up and support the Minister in development of regulations and policy.	**Impact Assessment Commission** An independent body comprised of a Chairperson and Commissioners (see below) responsible for: all process steps, including final decision-making; quality assurance and audits; administering public funding; facilitating public engagement and functioning as a public advocate; conducting Indigenous consultation and determining the adequacy of that consultation; developing policies and procedures for the conduct of IA; liaising with proponents; managing information; monitoring and enforcement; maintaining a public registry; providing dispute resolution.	There is considerable similarity between the two bodies: independence from government; conduct and review of assessment; public and Indigenous engagement. Divergence occurs in the considerable more powers granted to the IAC: conduct of consultation and determination of its adequacy; decision-making; development of policies and procedures; provision of dispute resolution. These additional powers create concern over accountability and trustworthiness.
No recommendation	**Chairperson and Commissioners** Of the Commission. Some Commissioners	The Caucus submission did not go into the composition of the

[4] Inspired by the Independent Environmental Monitoring Agency appointed to review Dominion Diamond Ekati Corporation's environmental reports and management plans for the EKATI Diamond Mine: http://www.monitoringagency.net/.

Caucus Recommendation	Panel Recommendation	Notes
	would be appointed full-time for a fixed term while others would be appointed on an as-required basis from regional rosters. Must meaningfully include Indigenous appointees on recommendation by Indigenous groups. Commissioners would lead processes and provide dispute resolution.	Authority.
Some similarity with **Independent Tribunal** (see below)	**Ombudsperson** Within IA Commission and reportable to Commissioner (but independent of Commission staff and management), to receive and investigate complaints about IAs, issue recommendations and report to the public on how recommendations have been taken into account.	An ombudsperson would not be necessary if the Independent Tribunal were established. Also, an ombudsperson or similar role should be independent of the Commission, not housed within it.
Co-governance boards To serve functions of Assessment Authority	No recommendation	Co-governance boards could assist with N2N relationships, as well as the conduct, review, periodic updates, and management of RIAs and SIAs.
Review Panels For more complex or controversial assessments	**Review Panels** Comprised of Indigenous and regional representatives, to support multijurisdictional cooperation and deal with areas of non-consensus.	While the EP report does not explicitly recommend the use of Review Panels for complex or controversial IAs, nothing in it can be construed as recommending against their use, either. It is uncertain whether review panels would facilitate consensus-building.
Assessment Councils Comprised of government, Indigenous and outside experts appointed on a case-by-case basis to conduct PEAs, REAs, and SEAs by request of a minister.	**Assessment Teams** Comprised of experts, to take into account the studies conducted and prepare Impact Statements. Studies would be done by **Project Committees** and **Government Expert Committees** (see below)	It is unclear why the conducting of studies and preparing Impact Statements functions are done by separate committees/teams.
No recommendation	**Project Committees** Comprised of interested parties such as representatives of government,	Project Committees are similar to Working Groups used in many jurisdictions to help build

Caucus Recommendation	Panel Recommendation	Notes
	Indigenous groups, NGOs and community orgs, the proponent and members of the public, to conduct IA studies and provide ongoing engagement through all stages of IAs.	consensus and heighten the quality of data and input.
No recommendation	**Government Expert Committees** Comprised of government experts on relevant subject matters, to conduct IA studies and inform all stages of IAs.	
Expert Advisory Committee Comprised of leading scientific and Indigenous experts to provide strategic and expert guidance to the Minister, e.g., on when REA is required. Could also provide advice and guidance to the Authority.	No recommendation	An Expert Committee could provide helpful non-interest based information and recommendations to the Minister and Assessment Authority/Council.
Multi-Interest Advisory Committee[5] A permanent body to provide opportunities for multi-interest consensus-building, and provide regulatory and policy advice to the Minister.	No recommendation	The RAC, and now the Multi-Interest Advisory Committee, is an important forum for building consensus and providing advice to the Minister.
Independent Tribunal For G2G dispute resolution, to hear appeals, to conduct investigations and audits, and make binding orders on any party (including Crown).	**Governor in Council** To hear appeals of IA Commission's decisions (appeals to be limited by some measure of standing). Would be required to provide full reasons for decision, including justification of trade-offs and application of sustainability criteria.	It is highly unlikely that the government or legislative drafters would be willing to fetter the GOC's discretion, creating a real risk that a final decision by it could take into consideration opaque or undisclosed political decisions. Also, it has proven difficult to review Cabinet decisions, meaning that a GOC decision on appeal would likely be final (non-reviewable). While it is important to retain some political accountability and discretion, this function should not be conflated with the need for a transparent and independent appeals body.

[5] A MIAC was not recommended in the Caucus submission; however, consensus on the value of a MIAC (or RAC) is almost certain, and explicit recognition of it will be helpful in distinguishing between the different functions and roles of the various recommended bodies.

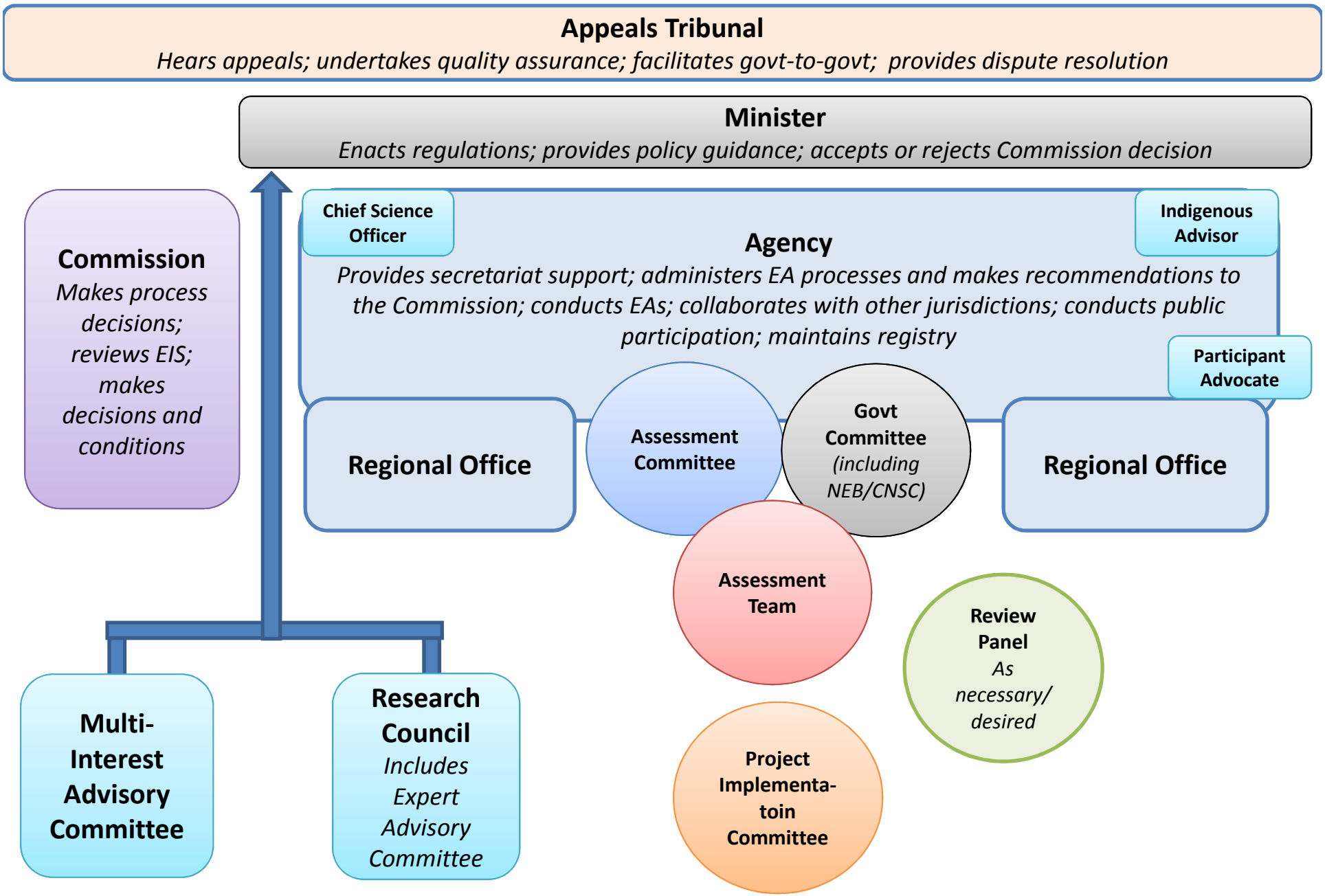
Table 2: Caucus and Panel Recommended Processes Steps and Elements

Caucus Recommendation	Panel Recommendation	Notes
Early Engagement Mandatory involvement of the public in the initial scoping stage and during the development of the EA terms of reference. Development of terms of reference by Assessment Authority with Ministerial approval (in collaboration with other jurisdictions).	**Planning Phase** Includes provision of notice; establishment of Project Committee and Government Expert Committee; and coordination with other jurisdictions through a Conduct of Assessment Agreement that: • Identifies project, components and alternatives • Identifies potential issues for each alternative • Identifies valued components • Establishes sustainability criteria • Identifies required studies and who would conduct those studies • Lists Indigenous groups potentially impacted • Outlines integration of procedural and legislative requirements of other jurisdictions, including how joint review panels should be conducted • Details IA timing and cost estimates Indigenous peoples prepare consultation plans and plans for gathering Indigenous knowledge. Public participation plans finalized with public engagement. Public participation and Indigenous consultation occur in this phase. Agreement is finalized by IA Authority/Commission.	In addition to engagement with Indigenous and provincial governments, the process for developing the draft Conduct of Assessment Agreement should reflect best practices in meaningful engagement of (a) Indigenous title and knowledge holders and Indigenous community members and (b) stakeholders and the public (see models discussed above). This process should allow for identification of values and valued components at local as well as regional/territorial scales. The Expert Panel recommended two committees, namely: (1) a "project committee" consisting of various orders of government, community groups, non-governmental organizations and so on; and (2) a "government expert committee" consisting of relevant experts identified by federal, provincial and Indigenous governments. These committees could be part of the input contemplated above. However, Indigenous peoples' constitutionally-protected title and rights (including treaty rights) will have unique implications for determining values and valued components, thus requiring a distinct engagement process involving Indigenous peoples during the planning phase to identify these values and valued components. This need would not be fully addressed through the project committee model proposed by the Expert Panel.

Caucus Recommendation	Panel Recommendation	Notes
Conduct of Assessment For PEAs, REAs and policies, plans and programs currently governed by the Cabinet Directive, by external and internal (government) experts (Assessment Councils). For SEAs currently governed by the Cabinet Directive, by the relevant federal department/agency. Management of contracts with external experts. Charge project proponents a fee for the conduct of the assessment. Review of IAs by Assessment Authority, Review Panel or Co-Governance Board.	**Study Phase** Assessment Team provides draft Impact Statement to Commission. Commission releases IS for review by Project Committee and Government Expert Committee. Commission consults public and Indigenous peoples on IS. Commission consultation and accommodation on Aboriginal and treaty rights and interest. Assessment Team finalizes IS. Commission convenes meeting of Project Committee and Government Expert Committee to identify areas of areas of consensus and non-consensus.	
Decision-Making Decision-makers receive recommendations from reviewing bodies, with final decisions made by all relevant jurisdictions. Decisions at all levels feed back to earlier stages in the process (e.g., Terms of Reference and review) to ensure that a cycle of learning is developed for subsequent EA processes and that decisions from higher-tier REA and SEA filter down to PEA.	**Decision Phase** Where there is consensus on all important issues, Commissioner issues a Decision Statement setting out the terms of consensus. For areas of non-consensus, a review panel holds hearing on all issues of non-consensus, makes a conclusion on each issue, and makes a decision on overall net benefit of the project for present and future generations, taking into account all information on each pillar of sustainability (i.e., issues a Decision Statement). For approvals, Decision Statements would outline all conditions that can be enforced by the Commission. For conditions outside federal jurisdiction, a contract can be entered into with proponents outlining conditions of approval. Decision statements to be time-limited.	The EP Report is not clear on whether consensus refers to consensus among participating jurisdictions, or among interested parties and committees.
A clear right of appeal in the legislation for both process (interim) and final decisions.	A right of appeal to Cabinet. Appeals to be evidence-based, supported by reasons related to the five pillars of sustainability,	

Caucus Recommendation	Panel Recommendation	Notes
	prompt and publicly available.	
Expert Advisory Committee provision of strategic advice and assistance on all levels of EA, including when regional and strategic EAs should be conducted.	No recommendation	
Provision of policy and regulatory advice to Minister by Expert Advisory Committee.	Creation of policy and guidance by IA Commission.	

Figure 1: Institutional Federal Mechanisms for Tiered and Collaborative Assessment


Appeals Tribunal
Hears appeals; undertakes quality assurance; facilitates govt-to-govt; provides dispute resolution
Minister
Enacts regulations; provides policy guidance; accepts or rejects Commission decision
Commission
Makes process decisions; reviews EIS; makes decisions and conditions
Chief Science Officer
Indigenous Advisor
Agency
Provides secretariat support; administers EA processes and makes recommendations to the Commission; conducts EAs; collaborates with other jurisdictions; conducts public participation; maintains registry
Participant Advocate
Regional Office
Assessment Committee
Govt Committee (including NEB/CNSC)
Regional Office
Assessment Team
Review Panel
As necessary/ desired
Project Implementa-toin Committee
Multi-Interest Advisory Committee
Research Council
Includes Expert Advisory Committee

6. Evidence-based Impact Assessment, including Indigenous Knowledge

A major aspect of the Expert Panel's mandate, explicitly linked to the objective of regaining public trust, was to "provide recommendations on how to ensure environmental decisions are based on science, fact and evidence". Accordingly, the Panel placed significant emphasis on "science, facts and evidence" in its report as essential underpinnings of a well-functioning IA process, stressing that "the quality of science contributes to public trust in the process and credible outcomes" (p. 4).

The Panel noted at the same time that "Evidence comes in many forms and includes Indigenous knowledge and community knowledge", and that the new sustainability-based IA framework would demand multiple types of inputs to support outcomes within the five pillars. "Evidence-based Impact Assessment" is the last of five chapters of *Section 2 – Developing the Vision*; Indigenous knowledge is first discussed in the second chapter devoted to Indigenous Considerations and then again brought into the Evidence-based Impact assessment chapter.

We generally support nine of the Panel recommendations related to 'evidence-based impact assessment', with some further considerations for each. In addition, while we understand the intent behind the proposal to integrate Indigenous knowledge, we caution that one Panel recommendation as worded is at odds with other recommendations of the Panel and feedback received from Indigenous individuals and representative organizations, and offer a tenth (revised) recommendation.

Definitions

By bringing together "science" (defined by the Panel only as "various western scientific processes") and indigenous knowledge in a single chapter, the Panel acknowledges the broad evidentiary basis that will be required for sustainability assessment. It will be important for the new legislation to define these and related terms.

For example, we would support a broad definition of 'science': the body of knowledge resulting from experiments, systematic observations, statistical data collection and analysis, theory and modelling, and including information from a range of fields in the physical and biological sciences, social sciences, health sciences and engineering[6]. This is in keeping with IA as considerably more than a merely technical evaluation that requires a wide variety of inputs supporting decision-making.

A useful articulation of 'evidence-based' practice that would fit well within the IA sustainability framework would be that it is "about making decisions through the conscientious, explicit and judicious use of the best available evidence from multiple sources to increase the likelihood of a favourable outcome by:

- Translating a practical issue or problem into an answerable question
- Systematically searching and retrieving the evidence
- Critically judging the trustworthiness and relevance of the evidence
- Weighing and pulling together the evidence
- Incorporating the evidence in the decision-making process

[6] From the Scientific Integrity Project: http://www.zoology.ubc.ca/~otto/SIP2015/documents/SIP_Statement_of_Principles.pdf

- Evaluating the outcome of the decision taken".[7]

Finally, we acknowledge the Panel's observation that Indigenous knowledge "is a living entity that is inseparable from the people who hold it" and that it encompasses "[t]raditional ecological knowledge" as well as "Indigenous laws and governance" (p. 33).

However, further engagement with Indigenous knowledge holders is required to determine:

- whether legislation should define 'Indigenous knowledge'; and
- if so, how 'indigenous knowledge' should be defined.[8]

Overall Remarks

We are encouraged by the strong emphasis the Panel places on considerations for how to best ensure IA processes and decisions are strongly based on available evidence, including Indigenous and community knowledge. The Panel's firm position on this issue was in response to repeated calls in submissions from the public for assessment processes to be based on "unbiased, adequate, accessible and complete information about impacts, issues, concerns and processes" (p.14).

The Panel's recommendations acknowledge the heavy reliance on scientific input and/or expertise at virtually every stage of the IA process. The Panel states that expectations for the relative strength and role of evidence (science and knowledge) at all stages of the IA process should be explicit within the language in the IA legislation, similar to the federal *Species At Risk Act*.

The Panel also calls for the deliberate integration into the process of external scientists to provide technical expertise, the need for transparency in decision making, especially with respect to how available evidence has been considered and weighted, and the imperative of making information (e.g., baseline and monitoring data) from IAs available in public databases.

The Panel clearly heard about the steadily diminishing capacity of the Canadian Environmental Assessment Agency, most notably in the regions, and stressed the need to rebuild capacity in the context of their recommendations for a new governance structure to implement their vision for evidence-based IA. Accordingly, the report stresses the need for a "comprehensive review of federal expert research initiatives, standards and guidance to support IA" (p. 43).

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7 Dawes, M., Summerskill, W., Glasziou, P., Cartabellotta, A., Martin, J., Hopayian, K., Porzsolt, F., Burls, A., Osborne, J. (2005). Sicily statement on evidence-based practice. BMC Medical Education, Vol. 5 (1)

8 In trying to better understand the distinctive role of Indigenous knowledge in decision making, Trudeau Scholar Aaron Mills shares his understanding that

> *For me the critical insight is that indigenous knowledge is embedded in particular relationships with everything that is "the land" - earth, spirits, elders, stories, animals, community members, etc. Because it's embedded, it cannot readily be abstracted or generalized from the context it lives within.*
>
> Mills shares his understanding of what counts as knowledge by noting that for Indigenous persons, "the rational" is relational, and as such we are being rational when we engage with body, heart, spirit and mind: our full selves. For the west "the rational" means a much narrower range of experience, limited to thought ("rationalism") and direct observational experience ("empiricism"). Dreams, ceremonies, direct communication from what the West thinks of as "nature" or as "supernatural" are not reducible to these two acceptable categories and hence are rendered as mere belief. They don't count.
>
> Mills also observes that Indigenous knowledge does not work in the same way as we conceive of Western knowledge. "[T]he West has an expectation that indigenous knowledge is capable of being extracted from its relational contexts and articulated in general terms (e.g., as explicit rules) in a report." He cautions against abstracting "away from context" and underscores the importance of opening up space for the consideration of indigenous knowledge on its own terms.

We would go one step further, and highlight the importance of an expressed commitment by the Federal Government to invest significantly in federal science and Indigenous knowledge capacity to enable robust leadership of IA processes, including training. This is in keeping with the federal government's commitment to implement the Calls to Action in the Truth and Reconciliation Report ("TRC") Report and specifically Call to Action #50 which states:

> *In keeping with the United Nations Declaration on the Rights of Indigenous Peoples, we call upon the federal government, in collaboration with Aboriginal organizations, to fund the establishment of Indigenous law institutes for the development, use, and understanding of Indigenous laws and access to justice in accordance with the unique cultures of Aboriginal peoples in Canada.*

In the absence of this investment, many of the central issues that prevail today surrounding lack of public trust in IA will fail to be addressed.

In this regard, we agree with the Panel's contention that "The government should view this increased cost as the re-investment needed to restore capacity and deliver a trusted federal IA process. This increased cost should also be weighed against the cost to Canada of doing nothing" (p. 74).

Missing elements or inconsistencies in the Report

Three key aspects of science and Indigenous knowledge receive inadequate or inconsistent consideration by the Panel. All aspects represent challenges that will be aggravated in a shift towards sustainability assessment if not explicitly addressed in new IA legislation and processes.

1) Scientific uncertainty and limits to evidence

The Panel does not adequately confront the reality of scientific uncertainty associated with the development of IA materials and decision making. Most references to uncertainty in the report are limited to that associated with IA process and outcomes.

In our experience, insufficient evidence and uncertainty of scientific conclusions are more the rule than the exception, particularly given the necessary emphasis on prediction and the need to draw conclusions based on limited information gathered within constrained time frames.

By the time a project IA reaches the final stage, a decision maker is confronted with compounded uncertainty that stems from various stages of the process. Impact statements often fail to disclose the full breadth of uncertainty of information, analysis, and conclusions, and data gaps, and often portray overconfidence in predictions that is not sufficiently substantiated.

2) Relevance of Information

The Panel report refers frequently to the volume of complex information in IA material, commenting on how this creates a barrier to effective participation in the process. Not much is said by the Panel, however, on how to ensure that the information provided for decision makers is maximally relevant to the key questions governing IA decision making. The potential broad scope of evidence in a

sustainability framework underscores the need for the information to be relevant to the context and to the decisions at hand.

3) Inconsistent Treatment of Indigenous Knowledge

The Panel notes that Indigenous knowledge is misunderstood and marginalized in current assessment processes (p. 33) with Indigenous laws excluded (p. 29) and ecological knowledge often segregated in a separate appendix (p. 33-4).

At times, the Panel appears to acknowledge Indigenous knowledge is a value system that "should be considered **in parallel** to western knowledge or science" (p. 33 emphasis added) with provision made for "**distinctive** customs", traditions, laws and aspirations. (p. 29 emphasis added) At other times, the Panel speaks to the **integration** (p. 4, 34, 42 and 44) or **braiding together** (p. 44) of western and Indigenous knowledge systems.

While we understand the Panel's call to respect and value both sources equally, we are concerned that the emphasis on the term 'integration' may be misconstrued as subordination. We also are concerned that the term 'integration' may be viewed as forcing Indigenous legal orders and knowledge to *integrate* or *fit within* Western laws and systems of knowledge.

EPA Caucus Recommendations on Evidence-based IA, including Indigenous knowledge:

Before discussing our recommendations, it is worth exploring what are the required elements of rigorous science and how the new legislation should address these. Focused on non-governance solutions, our recommendations (which build on those of the Panel), can be cross-walked against the essential underpinnings of evidence and knowledge-based IA from this table.

Required element of rigorous science and knowledge-based IA	How to address in IA legislation and policy:
Targeted evidence-gathering in a robust design with testable predictions	Selection of appropriate indicators for the 5 pillars, careful planning to inform design of studies with focus on relevant information for the IA in question (planning phase)
Review, scrutiny and testing of the evidence	Robust peer review and public participation
Learning and adaptive management	Tracking and assess the effectiveness of mitigation measures or the accuracy of impact predictions, learn from, open information
Honesty, integrity, and objectivity	Uphold and enhance culture of scientific integrity, enhance scientific capacity, rigorous review processes, invest in training
Recognition of uncertainty and risk	Explicit guidance on how to report and interpret uncertainty; acknowledge and embrace uncertainty and report to decision makers
Decision that transparently considers and weighs available evidence	Enhance transparency in communication of decisions, make data available
Evaluating and testing IA predictions	Develop robust monitoring framework and open data

The Panel makes a series of recommendations, many of which we welcome. Implementation of most will require significant attention to detail or additional considerations. **Nine recommendations in particular offered by the Panel serve a solid foundation from which to build**. Note that most issues related to governance and monitoring can be found in separate EPA Caucus briefings.

1) "The Panel recommends that IA legislation require that all phases of IA use and integrate the best available scientific information and methods" (p.43)

Additional considerations:

- The "best available scientific information and methods" must include all available evidence to support the five pillars of sustainability, with "science" broadly defined as "the body of knowledge resulting from experiments, systematic observations, statistical data collection and analysis, theory and modelling, and including information from a range of fields in the physical and biological sciences, social sciences, health sciences and engineering";
- The Panel's recommended consensus-based planning phase is of critical importance. In particular, the planning phase must lead to clear expectations for the materials that are ultimately developed for the assessment, including standards for the scientific quality of materials, with the objectives of relevance and probative value; and
- Explicit guidance on how to report and interpret uncertainty and risk must be provided to those responsible for gathering all evidence, for the purpose of the Impact Statement (IS) and for all other information gathering and reporting purposes. Clarity and transparency about the character and extent of the uncertainties must be maintained throughout the process, including at decision stages.

Notes:

A move to a sustainability assessment will require explicit attention to the different kinds of inputs that will be required as evidence for the various sustainability pillars. This recommendation speaks to the crucial role of the Panel's recommended planning phase, which should generate consensus-based guidelines on expectations of scientific quality of materials that must be developed to ensure delivery of the most meaningful and relevant information for decisions.

Guidelines should go beyond listing the components of an EIS, but should provide clearly articulated expectations regarding quantity and quality of information that is expected. In addition, those gathering evidence and responsible for the EIS must be provided explicit guidance on what to do and how to report and interpret uncertainty and risk within the context of the multiple facets of information gathering and reporting.

2) "The Panel recommends that IA legislation require the development of a central, consolidated and publicly available federal government database to house all baseline and monitoring data collected for IA purposes" (p.44)

Additional Considerations

- More details will need to be provided to maximize the utility of this database. This should involve the establishment and maintenance of an easily accessed, well-organized and searchable

electronic library (or linked set of libraries) of environmental assessment case materials, including baseline and monitoring data, documentation of impact predictions and monitoring findings, records of decisions and justifications, and related case law.

- It may be advisable to integrate this database with other federal environmental databases, including from other ministries. In any case, attention should be devoted to arriving at a solution whereby IA decisions can benefit from information associated with Fisheries Act authorizations, notifications, monitoring, etc.

Notes

Following through on this recommendation will be key to the development of next-generation IA. If properly implemented, the result will be marked improvements in scientific integrity of IA processes, chiefly by enriching baseline information, facilitating learning, and enabling transparency.

Information, experience, and ongoing monitoring data from previously-assessed projects, including review panel materials, will allow lessons learned and facilitate true adaptive management. It will facilitate cooperative multi-project monitoring conducted at appropriate scales. Such a move stands to strengthen the evidentiary basis of mitigation options that primarily exist today as un-replicated and unverified experiments.

Implementing this recommendation will require careful review of the considerable body of work that has been devoted to the development of open access standards and processes.[9]

3) **"The Panel recommends that IA legislation provide any IA authority with power to compel expertise from federal scientists and to retain external scientists to provide technical expertise as required"** (p.45)

Additional Considerations

- The purpose of the Panel's recommendation that the IA authority have the power to solicit engagement by external scientists (e.g., from academic and non-government institutions) includes the need to fill gaps in knowledge and experience without undue bureaucratic hurdles.
- We recommend elsewhere (see "Public Participation" discussion paper) the provision of enhanced participant funding that allows meaningful and in-depth public intervenor engagement with other participating expertise. This will better enable testing of the evidentiary basis for conclusions in IA materials and studies.

Notes

The Agency must be able to easily call upon external expertise (e.g., from academic and non-government institutions) to fill gaps in knowledge and experience without undue bureaucratic hurdles. Enhanced public participation, including sufficient funding for intervenors to engage qualified experts for the testing of evidence, will also be important.

4) **"The Panel recommends that any IA authority have the statutory authority to verify the [scientific accuracy and] adequacy of IA studies across all pillars of sustainability"** (p.45)

[9] Concepts of Openness and Open Access. UNESCO 2015: http://unesdoc.unesco.org/images/002/002322/232207E.pdf

Additional Considerations

- Project committees need to include or have access to appropriate government experts who can participate fully and provide guidance and leadership where needed;
- Re-building and augmenting regional capacity and training of federal staff, commission and panel members involved in IA will be necessary.

Notes

This and the previous recommendation are linked to the need to re-build the capacity of the central Agency for IA implementation, particularly for providing technical guidance and to lead robust reviews of evidence and conclusion in IA materials. In-house scientific capacity will need to be substantially augmented as it relates to all pillars of sustainability, bringing in new expertise not traditionally held at the CEA Agency.

Region-specific expertise will also be important. The new or revitalized Agency will need to have sufficient capacity available within the federal government to populate project-level technical committees, whose members can respond in a nimble manner.

5) "The Panel recommends that IA decisions reference the key supporting evidence they rely upon, including the criteria and trade-offs used to achieve sustainability outcomes" (p.47)

Additional Considerations

- These criteria and associated procedures (e.g., trade-off rules) should be developed with the objectives of 1) providing clear policy direction at the outset of the decision, 2) contending with uncertainty, and 3) ensuring transparency. Such clarity will be vital for guiding IA decisions and incentivize decision making based on the information and analysis considered during IA reviews.

6) "Because all IA decisions must be evidence-based, the Commission must have a Chief Science Officer to head the Science and Knowledge function" (p.53)

Additional Considerations

- We recommend that other measures be taken to ensure and uphold the scientific quality and integrity of the process and to support the fundamental cultural shift that will be required to realize next generation assessment.
- Among such recommended measures is the re-establishment of the Canadian Environmental Assessment Research Council (CEARC). Further engagement with Knowledge Holders may be required to identify how if at all they may want to be involved in this function.

Notes

The Panel recommends that the legislated Chief Science Officer position "would have the authority and duty to verify the adequacy of studies used in the assessment, as well as the Impact Statement … [and] would be responsible for issuing a certificate of independent validation for each IA. The purpose of these measures is to safeguard the use of the best science in assessment processes" (p. 53). We fully

support this added role specific to the Agency, which will help develop the culture and practice of scientific integrity in IA processes.

In addition, we recommend the resurrection of the Canadian Environmental Assessment Research Council (CEARC), which was "established in January 1984 to investigate and explore the scientific, technical and procedural aspects of environmental assessment (EA), and to find ways to improve its effectiveness. CEARC seeks and encourages new ideas and research directed at clarifying the concept and improving the practice and efficiency of the assessment environmental and related impacts of projects, programmes or policies undertaken for economic or social development."[10]

7) "The Panel recommends that Indigenous Peoples be included in decision-making at all stages of IA, in accordance with their own laws and customs" (p.30)

Additional Considerations

- Consideration should be given to reference the need to enable this decision-making within Indigenous people's own spaces
- A link should be made to the TRC Report's Call to Action # 50 (see above).

Notes

Indigenous laws are recognized by the Panel as part of Indigenous knowledge (p 33). This recommendation accepts the critical point that Indigenous laws and decision-making processes must be acknowledged and respected in environmental decision making. It assists in addressing the historic and ongoing failure to respect the knowledge and laws of Indigenous individuals and representative organizations as equal to Western knowledge and laws.

Where this recommendation may fall short is in failing to require that decision-making be conducted within Indigenous people's own spaces, however it does not appear to preclude that from occurring.

8) "The Panel recommends that any IA authority increase its capacity to meaningfully engage with and respect Indigenous Peoples, by improving knowledge of Indigenous Peoples and their rights, history and culture" (p.32)

Additional Considerations

- The Minister may have an opportunity to take this recommendation further and require that the improvement of knowledge called for must occur in Indigenous people's own spaces, requiring that any IA authority must come to Indigenous peoples to engage in this learning. Proper protocols must be followed.

Notes

[10] Foreword (pp. iii) to a publication by Francois Bregha, Jamie Benidickson, Don Gamble, Tom Shillington and Ed Weick entitled "The Integration of Environmental Considerations into Government Policy", a report prepared for the Canadian Environmental Assessment Research Council by the Rawson Academy of Aquatic Science, Minister of Supply and Services Canada 1990.

We welcome the Panel's acknowledgement that non-indigenous decision-makers lack a fully-informed foundation for considering the insights of indigenous peoples.

Specifically, the Expert Panel found that "It is evident that capacity deficits in government IA practitioners hinder Indigenous engagement in assessment. A priority should be placed on ensuring that federal bodies and departments involved in IA better understand Indigenous Peoples, culture, history and IA-related issues. A fully informed foundation is required so that Indigenous Groups' time and efforts within a given IA process can then be applied to the specific issues at hand rather than building background knowledge for government. This foundational learning should be based on real-life interactions with Indigenous Groups. The role of Indigenous Groups as the experts on matters which affect their rights and communities must be clearly acknowledged and respected." (p.31)

The Minister may have an opportunity to take this recommendation further and require that the improvement of knowledge called for must occur in Indigenous people's own spaces, requiring that any IA authority must come to Indigenous peoples to engage in this learning. Proper protocols must be followed.

9) "The Panel recommends that IA legislation confirm Indigenous ownership of Indigenous knowledge and include provisions to protect Indigenous knowledge from/against its unauthorized use, disclosure or release" (p 34)

This is a positive recommendation that speaks for itself. Further engagement with Indigenous Knowledge Holders may be required to identify appropriate provisions relating to the 'ownership' of Indigenous knowledge.

Concerns related to 'integration' of Indigenous knowledge

While understanding the underlying intention, we have caution with regard to the Panel's recommendation that "IA legislation require that Indigenous knowledge be integrated into all phases of IA, in collaboration with, and with the permission and oversight of, Indigenous Groups" (p. 34).

While there is ongoing emphasis on *integrating* traditional knowledge with western science in the Panel's report, we caution the Federal Government against the use of this language as it is contrary to 'nation to nation' relationships. Indigenous worldviews and legal orders are separate and distinct from western science and laws and must be recognizes as such within IA.

The emphasis on *integrating* traditional knowledge and western science is problematic as it is impossible given their fundamental differences. Even when there are efforts to develop IAs from both Western and Indigenous worldviews and to give weight to both Western and Indigenous knowledge, when "push comes to shove", Western world views and knowledge tend to prevail (Manitoba CEC Keeyask 2014).[11]

Indigenous scholars from the University of Victoria are grappling with the challenge of making appropriate space for Indigenous worldviews and knowledge in modern decision making while respect

11 In these hearings, it has been maintained that the Cree worldview is equal to Western science. The indigenous people did have a governance structure that was unlike the western model and if the Europeans recognised it, it was dismissed, much the same way the indigenous worldview is dismissed today. REPORT ON PUBLIC HEARING, Keeyask Generation Project April 2014, p. 161

each worldview as distinct but equal.[12] They emphasize the importance of considering the relationship between Indigenous laws and Western laws rather than forcing Indigenous laws to "fit" within Western legal systems.

Nowhere are these asymmetries of power more obvious than in federal assessments involving Indigenous people, particularly in regions without modern land claim agreements. One approach that is emerging internationally that considers the challenge of "integrating" knowledge (which we would argue is rarely happening and where it is, is poorly done), is the "Multiple Evidence Base" approach. This approach recognizes and acknowledges the incommensurability of diverse knowledge systems and the often-asymmetric power relationships arising when connecting different branches of science with locally-based knowledge systems.

Complimentary, validation of knowledge within rather than across knowledge systems, and joint assessments of knowledge contributions are key aspects of the approach currently being promoted by institutions such as the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) and the Convention on Biological Diversity (CBD) that also acknowledge the importance of indigenous and local knowledge and explicitly support a diversity of knowledge systems in order to inform sustainability (of biodiversity and ecosystem services) and better decision-making.

We encourage additional engagement with Knowledge Holders to ensure that the path forward in environmental decision making can be identified on a nation to nation basis by Indigenous and Western nations.

We suggest that the recommendation be reworded in the following fashion:

10) IA legislation require that the relationship between Indigenous knowledge and Western knowledge be honoured in all phases of IA, in collaboration with, and with the permission and oversight of, Indigenous peoples.

12 Aaron Mills "The Lifeworlds of Law: On Revitalizing Indigenous Legal Orders Today" (2016) 61:4 McGill LJ 847; Aimée Craft, *Breathing Life into the Stone Fort Treaty: An Anishinaabe Understanding of Treaty One* (2013) Purich Publishing.

7. Post Impact Assessment Compliance and Follow-up – From Expert Panel Recommendations to Action

The EPA Caucus recommends adopting the Expert Panel's approaches, but also pushing further in terms of accountability and learning post-assessment. The Expert Panel approach is encouraging insofar as it engages clear powers to amend and revoke authorizations for non-compliance and identifies compliance officers who will also monitor and initiate processes to implement and review adaptive management.

In particular, the Expert Panel recognized that relying on the principles of adaptive management requires clear regulatory accountability to ensure that any operational and design changes that are implemented to respond to changing circumstances not only meet IA authorization conditions, but are also linked back to IA predictions – and if needed, can trigger processes to identify and authorize appropriate changes to IA authorization conditions.

In addition, there needs to be explicit recognition of the role of federal regulatory agencies, where their regulatory duties should be integrated with IA-related efforts in compliance, enforcement, monitoring, and follow-up, including implementing and reviewing adaptive management. The extent to which it is appropriate for regulators to assume the role of IA compliance may vary and should be considered in the IA process itself.

Another core aspect of the Expert Panel report that is supported by the EPA Caucus is a non-formal review and complaint mechanism embodied in the ombudsman. This, however, should be augmented by formal external (third party) review (or appeal) and quality assurance process which will focus on ensuring there is ongoing learning in the EI process. Procedural guarantees of evaluation of impact assessment are required to ensure the integrity of the IA process and trust in the system.

To this end the EPA Caucus reiterates its support for:

1. Clear codified public engagement and appeal mechanisms around compliance and follow up;
2. Codified reporting requirements for IA related conditions which require federal and provincial action;
3. Codified remedies for failed commitments made by proponents;
4. Codified funding mechanisms to support Indigenous and community based monitoring; and
5. Codified integration of regional EA and planning in federal impact assessment.

The EPA Caucus does fundamentally depart from the Expert Panel's recommended approach on regional impact assessment. Regional IA should use a sustainability framework (as endorsed elsewhere by the Expert Panel) to inform federal decision-making on any regional plans, policies, or programs – *as well as subsequent project IA* – and should not be inappropriately limited to the assessment of cumulative effects on federal interests. Regional IA should integrate sustainability criteria and be reviewable.

A core trust issue in the current system is that there is limited accountability to the commitments, predictions, and conditions made during IA processes. To overcome this lack of trust there must be a codified opportunity for interested citizens to participate in monitoring follow up obligations and to trigger regulatory responses, including injunctive relief.

Clear disclosure and review obligations must also be codified to minimize claims of confidentiality around monitoring data related to public resources. Both authorization conditions and the registry system must maximize disclosure of monitoring and compliance information.

Table 3: Summary of Caucus and Expert Panel recommendations regarding compliance and enforcement, monitoring, and follow-up

	RCEN-EPAC	EP	note
Transparency: Registry - monitoring data	Covers all monitoring	Transparency is key. "baseline and monitoring data should be standardized and made publicly available" p.44.	Clarify scope of monitoring (to include all jurisdictional matters)
Monitoring and reporting of authorization conditions	Assessment authority (with powers of others to provide oversight)	Compliance and enforcement officers (p.54)	Role of officers needs to be expanded; role of regulatory agencies needs to be clearly identified
Maintaining registry	Assessment authority	GoC – through IA authority	General alignment
Tracking and reporting timelines	By regulation (including timelines)	"promptly available" Annual report on general compliance	Annual reporting is a backstop, but other investigation opportunities or "triggers" are needed
Tracking predictions and obligations	Authority with public right to comment on tracking Tracking approach may change	Compliance and enforcement officers (p.54) monitoring and follow up programs and identify amendments needs and adaptive management	Greater autonomy for officers in expert panel recommendations, but with fewer clear obligations to feed back into adaptive management and learning
Evaluation	RA or Authority may undertake prescribed or triggered reviews Appeal of RA evaluation is available	Compliance and enforcement officers (p.54) but not formalized Indigenous based and community based monitoring	Process for evaluation and review of conditions/monitoring is vague and centralized in designated officers.
Who can trigger for measures where apparent non-compliance	Individuals RAs EA agency	Officer or designated enforcement (with equivalency provision) (p.72) Suggests public could be involved in reporting alleged violations, whistleblower protection and independent oversight (monitoring groups) (p.72)	Scope of public enforcement triggers is limited. Autonomy of officers and designated enforcers is relied upon
Triggering amendments to conditions and standards	Agency driven with options for public and RAs to trigger reviews	Commission-driven	Public and other triggers for amendments/reviews are important

	RCEN-EPAC	EP	note
			as backup to adaptive management
Process for amendment of conditions	Allowed for public triggered review	Process should be inclusive to allow for comments (p.68)	There needs to be an identified window for public (or anyone's) concerns to be taken up and determination made on whether they warrant initiating a review or amendment process.
Reporting on non-compliance	RA reports on triggered compliance investigations	Annual reporting	Again, annual reporting is a good backstop, but reporting should be live or as close to it as possible.
How are conditions determined? Condition linked to RA authorizations	Deemed conditions on proponents and RAs	If there is consensus, then "decision statement" from multi-interest project committee, or by review panel where non-consensus Assessment team = experts-plus "statement" appealable to cabinet	Panel approach allows for co-operative assessment Significant discretion is inherent where there is non-consensus. ***(See "Governance" paper for details)***
"extra-jurisdictional" conditions	Focus on reporting on conditions	Jurisdictional sign off on conditions (with timelines) Or Compliance agreement with proponent (p.64)	Panel presented expanded approach that should be adopted.
Stand-alone EA conditions	Contemplates both RA related conditions and EA related conditions	IA authority would have oversight	Aligned
Nature of conditions	Not dealt with other than contemplating standalone EA conditions	Focus on "outcome based" conditions (p.68)	"Outcome" based conditions pose challenges in terms of timeliness and accountability (dispute around "actual" outcome"). Process-based conditions are more readily implemented but need to be backed up by outcome-based conditions.
Remedies		Designated enforcement	
Proponent	Orders, fines, prosecutions,	Scalable and escalating penalties	Aligned

		RCEN-EPAC	EP	note
		amendments	Provide many tools	
	RA /Department	Reports, reasons, and response	--	Panel does not mention Authority compliance or review.
	Provincial agency	Public reports	Jurisdictional sign off on conditions (with timelines)	Substitution criteria (p.25) do not mention compliance issues. Jurisdictional "sign off" offers some potential
Learning		QA by agency in conjunction with RA and Authority	No clear feedback loop. Relies on internal learning and ombudsman recommendations	Formal review and third party oversight is required.
EA lapsing		Prescribed EA lapse	--	Not adequately dealt with.
Monitoring methodology		Consistent and integrated	Consistent and integrated	Aligned
Adapting to new standards and adaptive management		System was set out as iterative and evolving	Conditions subject to review and amendments (Commission)	Panel approach is primarily lacking in third party triggers or "forcing" of adaptive management (i.e. centralized)

8. Meaningful Public Participation

The Expert Panel (the Panel) clearly recognizes the important role of meaningful public participation in ensuring the legitimacy of any impact assessment process. Their report highlights the need for early involvement, for the process to be open to all members of the public, and for meaningful engagement throughout the process. It stresses the need for transparency throughout the process, including analysis and decision-making, and the need for public access to information beyond what has been provided in the past, such as baseline data from previous assessments and monitoring results after project approval. The Panel's focus on collaboration and consensus is encouraging, as it provides opportunities for mutual learning and meaningful engagement. Finally, the Panel acknowledges that

> Current practices in Canada situate public participation in federal EA in the "Inform" and "Consult" categories. Current engagement practices, while varied, lean toward information dissemination rather than mutual learning and inclusive dialogue, and information gathering rather than clear integration of this information into project design or approval requirements.[13]

To correct these shortcomings in how the public participates in Impact Assessment (IA), the Panel makes three recommendations. Each of these needs to be unpacked to understand how it can be specified in legislated language to reflect the ideas captured in the Panel report, the input that the Panel received and the extensive literature on public participation in IA. In considering the necessary reforms for meaningful participation and the involvement of Indigenous people, attention needs to be paid to the "Layers of Engagement" recommended by MIAC, indicating that engagement occurs Nation to Nation, Government-to-Government, to reach accommodation and to involve individuals. This document begins the consideration of the layer related to involving individuals.

Expert Panel Recommendation 1
***The Panel recommends that IA legislation require that IA provide early and ongoing public participation opportunities that are open to all. Results of public participation should have the potential to impact decisions*.**[14]

Early and ongoing participation, as well as having the potential for participation to impact decisions, are key principles of meaningful engagement that the Panel has recognized.

- The first step to achieving these and other principles of meaningful participation suggested by the Multi-Interest Advisory Committee (MIAC) (Box 1) will be to enshrine them in the purposes and objectives sections of the law and/or in other appropriate parts of the Act.
- The promotion of respectful and meaningful dialogue is at the core of implementing the principles and should also be reflected in the objectives section of the law. Respectful includes responding to the public when they have participated in terms of how the information they provided has been used.
- The legislation must establish that IA processes are open to all interested parties that want to participate. Open to all means that there is no room in the new law for a bias towards those directly affected by a project or undertaking.

[13] *Building Common Ground*, at 38.
[14] *Building Common Ground*, at 4 and 39.

Codifying these will create a framework for the overall public participation system established in the new IA regime. At a minimum, meaningful participation needs to be defined in the statute and include early, ongoing engagement and the potential to impact decision-making.

Specific aspects of the principles will, of course, also require their own detailed legislative provisions that establish positive legal obligations (e.g., notice, formal hearing provisions). Such provisions will be vital to creating realistic prospects for achieving meaningful participation.

The new statute must also:

- Include provisions for the involvement of the public in the development of projects lists and the development of any list or criteria for the designation of regional and strategic assessments, as well as other means of determining the application of the Act. Action in this regard should specifically recognize the Panel's recommendation 'that federal IA should begin with a legislated Planning Phase that ... occurs early ... before design elements are finalized.[15]
- Provide direction regarding what constitutes early participation. The Panel has made suggestions in this regard, including “prior to large time and financial investments being made” and “before any benchmark decision is made”.[16] “Early” requires a mandatory statutory foundation in the provision of opportunities for public involvement, including deliberative forums, at what is commonly referred to as the ‘scoping stage’ of project IA.
- Establish that the IA Authority cannot engage with a proponent until it provides appropriate public notice and directly to interested parties. In fact, any federal regulatory who has contact with a project proponent would ideally apply the same principle and ask the proponent to contact the IA Authority at the first point of contact. This would serve to encourage proponents to initiate the IA process early in the planning stages of their proposed projects.
- Contain a requirement for any proponent of a project that requires an IA to notify the IA Authority, who will then post notice as required under the Act. At this stage, all that would be required of the proponent is a very basic project description that provides information on the type of project and proposed location. In the case of SEA and REA, early notice would also be provided by the IA Authority. The notice would include basic information on the policy, plan, program or region for which the IA will be undertaken. Additional work is needed to ensure proponents are sufficiently motivated to inform the IA Authority early.

Once notice has been given, the formal early planning phase recommended by the Panel would be initiated. This should involve a Multi-Interest Planning Committee (MIPC). The interests represented will include public interests and potentially multiple authorities (including Indigenous). The committee will participate in setting the assessment agenda, establishing a sustainability framework and scope (including criteria and alternatives), and assigning study responsibilities. It will also be essential at this stage to initiate the development of a public involvement program. The type and character of the MIPC will not be the same for each stream of assessment in the case of project IA, or for each tier of assessment (RIA/SIA/PIA). In the case of project IA, we recommend the proponent be an *ex-officio* member of the MIPC.

- Statutory provisions are needed that require opportunities for public participation, including deliberative forums, throughout any IA process and particularly including follow-up and

[15] *Building Common Ground, at 19.*
[16] *Building Common Ground, at 39.*

monitoring on a scale appropriate to the circumstances. Full transparency in decision processes will be a critical pre-condition.

The Panel acknowledges some of the issues that have occurred with participation, such as a lack of focus on two-way dialogue and placing too much emphasis on "more formal, adversarial and intimidating processes than is needed". The new statute needs to recognize and strongly encourage informal opportunities for participation that involve two-way dialogue and discussion. Achieving this also will need:

- A legislated system for mediation and other forms of alternative dispute resolution (ADR) to help participants work together to achieve mutually acceptable and collaborative solutions when they need some assistance to come to consensus, as the Panel suggests. Strong provisions are needed in legislation so that the full array of ADR's benefits can be realized.
- The establishment of an option for a public hearing that is smaller and less formal than the panel hearings currently mandated and practiced under CEAA 2012. This would include public meetings, structured roundtables, sharing circles or similar forums for non-adversarial discussion. This should also be considered in the context of increasing demands for the recognition of indigenous knowledge systems from Elders and Knowledge Keepers. The formality of current hearings has largely eliminated opportunities to discuss issues and solve problems during the hearing itself, as the Panel noted.
- Provisions for hearings, when necessary, that follow the model that has been used under CEAA and clearly move away from those undertaken by the NEB and CNSC. The CEAA model is far less adversarial and much more accommodating of public participation. The Panel has suggested the NEB and CNSC approaches to hearings are particularly inappropriate. In particular, hearings should be designed to effectively engage those who are interested in participating. Formal cross examination should be limited to technical experts, and legal representation should be the exception where the need is clearly demonstrated, not the norm.
- The design of culturally appropriate participatory processes. This could be achieved in part through the work of the MIPC at the start of each IA in designing a public participation program and the development of a more standard protocol for such processes developed by indigenous representatives.
- Requirement to strike an MIPC once notice of an SIA, RIA or PIA has been given, if appropriate to the circumstances (i.e., some assessments may not require an MIPC). The success of the overall approach proposed by the panel rests in part on the MIPC, and the ability to start the MIPC's planning process much earlier that EA's have generally commenced under CEAA. We feel that the MIPC is key to helping to solve a host of issues, including coordination. A central role of this committee will be the development of a program for public participation, and while the program should remain iterative, it is critical that the public play a role in its early development. An appropriate level of involvement of Indigenous and non-government organizations as members of the MIPC will be an important, if complex, design issue. Provision for this should be made when referring to the MIPC in the Act. A particularly challenging design and implementation issue will be the selection of non-governmental members of the MIPC, and their status on the MIPC. The role of the proponent on the MIPC also needs to be clearly set out in legislation.
- Mandating that the IA Authority engage with stakeholders, rights holders, and public interest organizations to develop ongoing IA education and training programs to prepare and

implement public participation plans. The regulations must make clear the responsibility of the IA Authority to participate, thereby not leaving it to proponents to carry out participation plans. A critical aspect of the work of the IA Authority will be helping individuals and groups navigate the assessment process by having a one-window approach to answering questions, helping people apply for funding, etc.

The Panel underscored a host of capacity issues that impact meaningful participation, such as inaccessible information, lack of access to expertise and short timeframes. Greatly improved access to information (see below) and expertise are critical to capacity enhancement. Other areas such as learning and enhancing literacy of assessment processes need to be recognized in regulation with the establishment of education and training programs that go beyond a basic introduction to the IA process and that are made widely accessible.

Capacity development will require the enactment of regulation and guidance documents that list and describe collaborative techniques available for use in IA and which support their implementation. A short list of such techniques includes advisory committees, consensus conferences, participatory open houses, mediation, sharing circles and workshops.

Discretion, to the extent that it is required for the functioning of legislative provisions for meaningful participation, should be bounded by a set of legislative principles against which specific decisions can be measured to ensure the appropriate exercise of such discretion. Such principles should include transparency in the decisions taken, reasons for key decisions based on the purposes and criteria of IA set in legislation, inclusive approaches to decision making, culturally sensitive and appropriate approaches, and recognition of the capacity and resources of participants.

Expert Panel Recommendation 2
The Panel recommends that the participant funding program for IA be commensurate with the costs associated with meaningful participation in all phases of IA, including monitoring and follow-up.[17]

Implementation of this recommendation will necessitate at a minimum:

- A legislated requirement that the IA Authority establish mandatory and adequate participant assistance for major and complex proposals for regional, strategic and project assessment processes. Assistance should be discretionary for smaller proposals. In the case of project IA, the distinction could be implemented through a set of project assessment streams that are divided into large, medium and small-scale projects. The legislation should be clear that funding is available for stakeholders, rights-holders, and public interest intervenors to provide them with the opportunity to hire outside expertise and otherwise be prepared to engage effectively in deliberative forums.
- An open process for applying for funding, established through regulation.
- A participant assistance regulation that sets out the types of assessments to which the program applies, procedures for applying for assistance, decision criteria and similar operational essentials. The regulation should also establish the types of assistance typically needed, including hiring subject matter experts, hiring legal counsel, participating in the activities of the MIPC, organizing community meetings, participating in ADR, hearings, etc.

[17] *Building Common Ground*, at 40.

Regulatory provisions are needed to establish who will pay for the participatory programs undertaken during the assessment and throughout the life of an undertaking, including monitoring and decommissioning. The establishment of a participant funding program does not mean everyone gets funding.

As the panel clearly states, meaningful involvement requires capacity development. Ways and means of enhancing capacity need to be established in regulation and policy.

Expert Panel Recommendation 3
The Panel recommends that IA legislation require that IA information be easily accessible, and permanently and publicly available.[18]

Implementation of this recommendation will necessitate at a minimum:

- Provision for mandatory timely information sharing via a complete and accessible public registry for all Canadian assessment information. The IA Authority should be mandated to develop an easily accessed, well-organized and searchable electronic library (or linked set of libraries) of IA case materials, including documentation of impact predictions and monitoring findings, records of decisions and justifications, and associated cases in law where that information and knowledge can be shared.

By making this available to all, such a resource could be used by parties to inform deliberative involvement and ultimately improve future assessments and decisions over time. The provision should authorize consultations with other Canadian assessment jurisdictions to consolidate information in a national registry.

Lastly, in considering the legislative implications of the Panel's recommendations, the input they received and the literature, these suggested reforms apply to all tiers of IA recommended by the Panel, including strategic, regional and project IA, and to all associated stages from discussion of the need for and alternatives to the undertaking, through to the monitoring, follow-up and decommissioning stages. Meaningful participation needs to be operational at all tiers of assessment and in the ongoing review of the IA law, regulations and policies. A key element of effective implementation and continuous improvement will be a regular review of the new legislative provisions and the establishment of effective mechanisms for encouraging public involvement in this review, such as the establishment of a multi-interest advisory committee providing advice to the IA Authority and Minister.

[18] *Building Common Ground*, at 4 and 43.

Box 1 – MIAC Principles for Meaningful Participation

- Participation begins early in the decision process, is meaningful, and builds public confidence;
- Public input can influence or change the outcome/project being considered;
- Opportunities for public comment are open to all interested parties, are varied, flexible, include openings for face to face discussions and involve the public in the actual design of an appropriate participation program;
- Formal processes of engagement, such as hearings and various fora of dispute resolution, are specified and principles of natural justice and procedural fairness are considered in formal processes;
- Adequate and appropriate notice is provided;
- Ready access to the information and the decisions at hand is available and in local languages spoken, read and understood in the area;
- Participant assistance and capacity building is available for informed dialogue and discussion;
- Participation programs are learning oriented to ensure outcomes for all participants, governments, and proponents;
- Programs recognize the knowledge and acumen of the public; and
- Processes need to be fair and open in order for the public to be able to accept a decision.

9. Learning-oriented Impact Assessment

The Expert Panel (the Panel) recognizes the importance of learning about and through impact assessment by linking learning to many of the key components of IA throughout their report. They support, for example the MIAC recommendation regarding the purpose of IA:

> The two core purposes of federal EA law and associated processes are: to strengthen progress towards sustainability, including through positive contributions to lasting socio-economic and biophysical wellbeing, while avoiding and mitigating adverse environmental effects; and to enhance the capability, credibility and learning outcomes of EA-related deliberations and decision making.

Like some of the input it received, the Panel links mutual learning to effective and efficient participation and establishes participation as a "learning process". It also establishes the importance of learning to quality assurance and underscores the importance of "interactive learning processes" as a part of follow-up and monitoring. While the Panel does not make specific recommendations regarding learning, it does provide direction for any new statute that needs to be specified in legislative language to ensure this direction is captured. We consider four areas below.

1. Public Participation

The Panel recognizes the need to "foster a culture of learning so that assessments become more effective and efficient over time". The panel notes further that "mutual learning and inclusive dialogue" are essential ingredients for this culture. It also clearly underscored the importance of participant funding (see Meaningful Public Participation) to the generation of knowledge, building of capacity and effective and efficient IA processes. To achieve these ends and capture the potential for learning through participatory programs, the new assessment legislation will need to:

- Establish that contributing to mutual learning is a responsibility for all assessment participants – assessment authorities and related agencies, proponents and participants. All must participate actively and constructively;
- Detail in regulation all relevant responsibilities, including providing opportunities for, and facilitation of, deliberative multi-stakeholder collaboration using the full range of methods in the participation toolbox – including opportunities such as scenario building and visioning, increased attention to alternate dispute resolution and increased advocacy for sustainability assessment by public interest interveners (i.e., implement the legislative recommendations in relation to Meaningful Public Participation);
- Implement a fair and clear process for all assessment types (SIA, RIA and PIA) and streams of PIA (see section on Meaning Public Participation). The Panel noted in particular the importance of supporting learning through public participation "outside project-specific contexts" to develop positive feedback cycles to other IA tiers.
- Ensure strong linkages between improving the provisions, opportunities and support for public participation in project impact assessment, on the one hand, and monitoring and review, on the other; and,
- Build into the review process the time necessary for reflection on the implementation of other worldviews and processes in decision-making.

2. Knowledge Development

The Panel recognizes that impact assessment must place a heavy reliance on knowledge/"evidence" inputs of various kinds throughout almost all stages of the process. These inputs are critical to learning and understanding the voracity of the outcome decisions of any impact assessment process. The Panel recognized that these inputs will come from a variety of sources including traditional Indigenous and non-Indigenous sources, and western science.

To reflect a learning orientation to generating knowledge, next-generation assessment law must:

- Require that knowledge/evidence inputs be gathered from diverse sources before decisions are made;
- Specifically recognize traditional and local knowledge as legitimate sources of information that must be taken into consideration;
- Guarantee that time is spent learning about community values and priorities through processes that are effective for this learning;
- Recognize that western science needs to be treated as just one source of knowledge/evidence, that the undertaking of science not just follow previously established templates, and that it involve both government and non-government scientists;
- Require that knowledge/evidence must be freely shared among all parties (see Meaningful Participation), explained in a way that can be understood by those involved and that mechanisms are available to build capacity to help people to understand when they do not;
- Establish ways to test and analyze the knowledge generated through fair and open processes; and,
- Allow opportunities to learn about Indigenous worldviews and laws – ascertaining how to learn about these is an example of taking the concept of nation to nation relationships seriously.

3. Monitoring of Effects

The Panel recognized that the monitoring phase "also helps ensure that the IA process is an iterative learning process. Without tracking and assessing the effectiveness of mitigation measures or the accuracy of impact predictions, it is impossible to learn from past successes and mistakes in order to improve future project design, predictions and decision-making." We agree with this sentiment and suggest that monitoring programs, when done well, offer a critical opportunity for mutual learning beyond the assessment process, one that will significantly enhance the efficiency and effectiveness of the assessment process over time.

To ensure a learning orientation, EA monitoring programs must:

- Require mandatory public reporting, through the new registry, of monitoring observations of effects, and comparisons with effects predictions overseen by the federal Chief Science Officer;
- Report through the new public registry by RAs on the effectiveness of responses to emerging problems and opportunities;
- Require the establishment of an easily accessed, well-organized and searchable electronic library (or linked set of libraries) of environmental assessment case materials, including documentation of impact predictions and monitoring findings, records of decisions and

justifications, and associated cases in law; and

- Require the involvement of the public in the design, implementation and delivery of monitoring programs (See Meaningful Public Participation).

4. Regime Evolution

The Panel also recognized the need for administrative bodies to monitor application of IA processes for successes and limitations, including strengths and deficiencies of impact predictions, aboriginal and public engagement, trade-off avoidance, compliance and effects monitoring and effectiveness of multi-jurisdictional activities in order to ensure learning from the outcomes of these results in modified IA processes as needed. The Panel notes that any IA Agency "would require strong quality assurance programs, as well as audit functions covering both cost control and process. The role of the quality assurance program would be to assess the quality of IAs conducted by the Commission and to ensure that continuous learning and improvement takes place within the organization. Cross-cutting issues would be studied, such as the accuracy of predictions of certain impacts, the effectiveness of mitigation measures and the implementation and effectiveness of follow-up programs. Program analyses would be publicly available."

To achieve this, the new IA statute should include specific provisions for the ongoing assessment of quality assurance to ensure meaningful regime evolution through continuous improvement. This would be accomplished through:

- Providing the IA Authority with the power to consider all of the regime evolution issues noted above, with advice from other bodies as required;
- Establishing appropriate legislative requirements for federal authorities and proponents so that the IA Authority can do its work;
- Creating a feedback and improvement mechanism so that mistakes are not repeated;
- Compelling federal authorities to comply with any improvements identified by the IA Authority as a result of its follow up and quality assurance efforts;
- Requiring the public reporting requirements of decisions, predictions, mitigation, follow-up, monitoring compliance, enforcement actions, and analyses data in a fashion that is easy to understand and interpret by the IA Authority through the new national registry (see Meaningful Participation), and;
- Requiring formal review of the legislation after 5 years.

10. Climate Change

Executive Summary – Recommendations

The Caucus makes the following recommendations:

1. The government should initiate an ad hoc climate SIA as soon as possible so as to provide "appropriate direction to the project level on how to ensure individual projects contribute to the transition of the Canadian economy in line with our international commitments and national policies including the Pan-Canadian Framework on Climate Change. This process will have to work out how Canada's international obligations and commitments can be effectively translated into sound analysis and decision making at the project level. Part of the challenge will be to decide how to allocate Canada's mitigation commitments, and how to incorporate the Paris Agreement's recognition that Canada's current commitments are a floor, not a ceiling, into the assessment of long-term projects with significant emissions".[19]

2. Triggering for project assessments should be designed to ensure that all activities that are not likely to have a transformational benefit and assist in the transition to GHG emission neutrality are automatically assessed before project decisions are made. Potential inconsistency with keeping on an identified pathway to compliance with international commitments would qualify as sufficient grounds for federal triggering.

3. A climate sustainability definition and principles should be enshrined in EA legislation.

The following provides elaboration and essential details on the preceding recommendations.

1. Strategic Impact Assessment on how to consider climate change in project and regional IA

a. The Panel's View

We support the Panel's recommendation "that Canada lead a federal strategic IA or similar co-operative and collaborative mechanism on the Pan-Canadian Framework on Clean Growth and Climate Change [the 'Framework'] to provide direction on how to implement this Framework and related initiatives in future federal project and regional IAs."[20] This recommendation endorses recommendations made by the EPA Caucus and by the Multi-Interest Advisory Committee (MIAC) to the effect that climate is a prime candidate for strategic level assessment. Due to the pan-Canadian nature of the climate challenge, this strategic IA should ideally be collaborative rather than solely federal. However, in the absence of interest from other jurisdictions, the federal government should proceed on its own with a strategic assessment on how to implement the Pan-Canadian framework in light of Canada's commitment under the Paris Agreement.

The Panel highlights that the climate Strategic Impact Assessment (SIA) should lead to the determination of a consistent approach for evaluating a project's contributions to climate change with regard to:

[19] Meinhard Doelle and John Sinclair, *EA Expert Panel Report: Reflections on Canada's Proposed Next Generation Assessment Process*.
[20] Expert Panel Report on EA reform *Building Common Ground,* page 7.

- the methods used to determine a project's GHG emissions;
- the means of ensuring that Indigenous knowledge is appropriately taken into account;
- the ways to assess impacts on Aboriginal and treaty rights caused by a project's interaction with climate change;
- the means of evaluating impacts on carbon sinks;
- the ways to take into account the five sustainability pillars;
- the ways to manage uncertainties;
- the ways to identify acceptable mitigation, including compensation measures such as offsets;
- the criteria for the determination of a project's contribution to sustainability with respect to climate change impacts; and
- thresholds and targets for GHG emissions for a particular sector, industry or region, that could possibly be made binding in project IA to ensure new developments align with Canada's commitments.[21]

The term "urgent" is used only three times in the report; in each case, it used with reference to the need "for clarity and consistency on how to consider climate change in project and regional IA" (pp.7, 84, 85). Further, of the 72 comments on this section of the report on the LetsTalkEA web-site, all but two were supportive of this recommendation; many asked the government to go further than the Panel has suggested. We endorse the Panel's recommendation for an urgent SIA on the Pan-Canadian Climate Framework, and have some preliminary thoughts on its design and implementation.

This recommendation is now echoed in the NEB Modernization Expert Report released May 15, 2017. It highlights the deep contradiction between energy extraction and climate policy with which the NEB has had to grapple, and calls for resolution at the strategic level. The NEB report suggests that a "Climate test for upstream and downstream activities (including consideration of any relevant emissions targets or caps"[22] should be part of a national interest determination. How to conduct such a test remains to be specified and should be resolved through a climate SIA as proposed by the EA Expert Panel, which would be a more robust process than the political national interest determination proposed by the NEB Expert Panel.

b. EPA Caucus Recommendation on the SIA mandate and process

Both the Pan-Canadian Framework on Clean Growth and Climate Change and the Mid-Century Long-Term Low-Greenhouse Gas Development Strategy[23] released in December 2016 aim to bring about a future for Canada that is radically different from today, one that is much more consistent with the concept of sustainability. The Framework is an historical step in the fight against climate change in this country, the first concrete agreement among federal and provincial jurisdiction to start this transition to GHG neutrality. However, in and of itself, the Pan-Canadian Framework will not allow Canada to reach its Nationally Determined Contribution (NDC) commitments, let alone ensure Canada does its fair share toward the collective goals of the Paris Agreement. The SIA is a necessary step towards the

[21] Expert Panel Report on EA reform – *Building Common Ground,* pages 83-84.
[22] Expert Panel Report on NEB Modernization, *Forward, Together,* page 22.
[23] Environment and Climate Change Canada, *Canada's Mid-Century Long-Term Low-Greenhouse Gas Development Strategy*, 2016.

implementation of the Framework, and for preparing Canada to fulfil its broader commitments under the Paris Agreement. The SIA would focus on implications of the Framework for project IAs in light of Canada's Paris commitments so as to provide policy clarity for project assessments. It would not revisit the commitments under the Framework, but it would seek to ensure that it is implemented with respect to new projects in a manner that allows Canada to meet its commitments under the Paris Agreement.

Here is a non-exhaustive list of questions raised by the Pan-Canadian Framework which would benefit from strategic guidance in order for the Framework to become a true gateway to future projects that will put the country on the right track to fulfilling its climate commitments:

- How will the information generated by Canada's Adaptation Platform and the centre for climate services feed into the assessments of projects' vulnerability to future climate change and ensure resilience?[24]
- How will the Infrastructure Bank prioritize funding projects that are climate friendly and "minimize investments into assets that could become stranded and maximize cumulative emission reductions"?[25]
- How will the carbon pricing mechanism affect the financial viability of projects covered by the regime or which rely on products covered by the regime, acknowledging increased stringency over time?[26]
- How will we address the 44 MT CO_2eq emissions above the 2030 target of 523 MT CO_2eq /year for which there are no mitigation pathways?[27]
- How can project assessments maximize uptake of new low-emission technologies? [28]
- How do we ensure new projects allow Canada to meet its commitment to increase its emission reduction commitments over time, and to reach GHG neutrality in a timeframe consistent with its capacity and responsibility, and consistent with its commitment to do its fair share to keep global average temperature well below 2 degrees Celsius (2ºC) while making efforts to keep it within 1.5 degrees under the Paris Agreement?

The above questions all point in the direction of the necessity of an SIA of the Framework as a natural next step. This strategic assessment should not wait for the implementation of the new federal assessment Act, but rather be conducted on ad hoc basis now while the law reform effort continues and in order to feed into the law reform process and future project IAs. At the same time, law reform efforts should anticipate implementation of the results, for example through regulations to be passed under the new Act.

The broad purposes of the Framework SIA should be:

[24] *Pan-Canadian Framework on Clean Growth and Climate change: Canada's Plan to Address Climate Change and Grow the Economy,* ÎSBN: 978-0-660-07023 (Dec. 2016), pages 28-29
[25] *Pan-Canadian Framework on Clean Growth and Climate Change*, pages 7 and 17.
[26] *Pan-Canadian Framework on Clean Growth and Climate Change*, page 6
[27] *Pan-Canadian Framework on Clean Growth and Climate change: Canada's Plan to Address Climate Change and Grow the Economy,* ÎSBN: 978-0-660-07023 (Dec. 2016) at page 44
[28] *Pan-Canadian Framework on Clean Growth and Climate change: Canada's Plan to Address Climate Change and Grow the Economy,* ÎSBN: 978-0-660-07023 (Dec. 2016) at page 15

1. To ensure the implications of the proposed project for meeting the current NDC are understood.
2. To ensure the implications for the ability to increase ambition for mitigation achievements by 2030 as per the Paris Agreement are understood, recognizing that the current NDC is the floor rather than the ceiling of Canadian efforts on climate.[29]
3. To ensure the implications of proposed projects for the ability to reach carbon neutrality within a timeframe consistent with Canada's obligations under the Paris Agreement are understood.
4. To ensure the implications for national or other recognized carbon budgets are understood.
5. To ensure the net effect of the project on GHG emissions is properly considered in the sustainability assessment to enable a robust and transparent assessment of the project's contribution to sustainability that includes its contribution to the effort to reduce GHG emissions in Canada and globally.

A collaborative approach to the strategic IA may be achieved in several different ways. One such collaborative organizational structure can include establishing a multi-interest committee to design the process, using a consensus approach. This may be done through a subcommittee of the current Multi-Interest Advisory Committee (MIAC), and with a timeline imposed for the completion of the subcommittee's work. Another possibility would be to design the process and mandate collaboratively with provinces and Indigenous peoples. However, this option could be quite time-consuming. Whichever process is used to design the SIA, it cannot result in unreasonable delays or in weakening the mandate and process. Finally, a compromise between a uniquely collaborative and solely federal structure could be to establish a "federal only" SEA that invites provincial and Indigenous involvement in the selection of panel members, based on expertise.

Those conducting the SIA need to have adequate time and resources to ensure a credible and rigorous process and while there is urgency in getting this process underway, should be given the time necessary to conduct their work properly. The results obtained from the climate SIA should feed into regulations, guidance, and practice. Decisions concerning the content of the statute can be made while the strategic assessment is still underway. We envision this exercise not as a panCanadian tour of hearing sessions but as a process that welcomes input and generates discussions amongst varied experts and interests. Participants could be convened in part via video-conference or in Ottawa, in combination with opportunities to make written submissions.

Broadly, strategic processes for developing policy clarification and guidance for project EAs and other initiatives should be iterative, with regular reviews and updating. They will have to combine reasonable clarity and predictability of expectations with capacity to be flexible and adaptive to incorporate emerging knowledge, adjust to increasing ambitions under the Paris Agreement, and respond to learning from experience. Consideration should be given to developing dynamic thresholds that evolve over time. Whether part of this first SIA or one that would closely follow on the first, the following two issues would greatly benefit from SIA clarification.

1) Climate triggering of strategic, regional and project level assessments: We support the clarification proposed by the panel concerning the fact that the federal government has jurisdiction over GHGs of

[29] *Pan-Canadian Framework on Clean Growth and Climate Change*, at page 4

national significance and airshed effects crossing provincial and national boundaries. This clarified jurisdiction should be the basis for reviewing and expanding IA triggers to cover sectors not historically covered by federal IA processes such as agriculture, forestry and transportation where the aggregation of many "small" projects cumulatively result in GHGs of national significance. There is no jurisdictional problem arising from the federal government gathering information and conducting analyses with regard to a proposed project's GHG emissions. The federal government will need to determine how to act on climate-related assessment findings in project decision-making; the jurisdictional issue at the project decision stage will have to be determined once the project assessment is completed. However, the potential jurisdictional challenge at the project decision stage does not pose a problem for the strategic assessment, or for the information gathering and analysis stages of the project assessment. The categorization of GHGs as being of 'national significance' will be an important issue for the overall strategic assessment to consider using GHG emissions as a trigger for further, more specific strategic assessments (e.g., on infrastructure funding programmes), regional assessments (e.g., anticipating multiple undertakings with GHG emission implications), and project assessments.

2) Long term decarbonization pathways: The core notion of sustainability is its concern for future generations which cannot be neglected in favour of negotiating trade-offs among short- and medium-term effects. Nowhere is this more central than in considering climate change and its long-term effects and interactions with other sustainability pillars. An SIA on climate change should ensure the effective implementation of the Pan-Canadian framework while offering guidance to project assessment on how to consider a project's impact on Canada's efforts beyond the framework to satisfy Canada's commitment to do its fair share in keeping overall global warming to well below 2ºC, leaving open appropriate and realistic pathways to global decarbonization by the second part of this century and identifying implications for project planning and assessment. This will be especially important for major projects with lifetimes that extend beyond 2030 and have a structural impact on the transition.

2. Continuing Need to Integrate Climate into the New Assessment Process

We have to continue our efforts to properly integrate climate into the new assessment process, including at the following key points:

- how climate change affects triggering
- how climate change is built into generic and project specific sustainability criteria
- how climate change affects information gathering (i.e. life cycle project emissions, appropriate upstream and downstream emissions, with clarity and transparency about methodologies)
- how climate change feeds into the sustainability analysis; including the design of climate specific criteria that ensure synergies between climate adaptation and mitigation and between climate considerations and broader sustainability criteria
- how climate change feeds into project decision making
- how climate change is addressed through the post-decision making process, including monitoring, reporting, compliance, and consequences and responses (such as adaptive management, changes in terms and conditions, offset requirements) in case of failure to comply or underestimation of emissions during the assessment process.

The Caucus and environmental and Indigenous members of MIAC submitted relatively detailed guidance to begin answering those questions. Although the Panel "heard us", we believe it could have gone further in adopting appropriate project assessment considerations. In this regard, the Caucus

reiterates its recommendations from previous submissions to the Agency and the Expert Panel, many of which were picked up by the panel in "what [they] heard" (see comparative Table provided as Annex A). The SIA will offer an opportunity for a broader engagement of key sectors and interests to ensure that the Framework and the Paris Agreement are effectively implemented through the federal assessment process.

Most of the details on climate will likely be worked out in regulation but careful attention will have to be given in legislative drafting to ensure careful consideration of climate in all these steps.
The Caucus will keep reflecting on principles and concepts warranting legislative inclusion as the future assessment framework becomes more defined. The Caucus preliminarily recommends that at the very least, the legislation include a general provision, most likely in the interpretation section. We suggest the following "climate" definition:

> Climate and its consideration in assessments, includes climate targets and international commitments, as well as accounting for the cost and distribution of climate risks and impacts.

Table 4: Climate discussion in the December 2016 EPA Caucus Submission to the Expert Panel and the Expert Panel Report

This table compares excerpts from the December 2016 EPA Caucus Submission to the Expert Panel on environmental assessment (Theme 8, Climate) and excerpts relating to climate from the Expert Panel Report published in April 2017.

EPA caucus	Expert report
A Clear and Urgent Need for Policy Guidance	
Within Canada, climate change is already having disproportionate impacts on Indigenous peoples as well as rural, remote, northern, and poor communities.	The impacts of climate change are global. Climate change causes measurable environmental impacts which are disproportionately felt by people who live off the land, including Indigenous Groups. Without clear direction on how to address the contributions of projects to climate change, it will be difficult for Canada to meet its reduction targets. **- Expert panel**
Paris Agreement Efforts and commitments in Canada will need to be ramped up to address the requirements of justice, and regulatory regimes must leave room for adapting to emerging knowledge and increasing ambitions as required by the Agreement.	Some participants identified that EA processes should be used to promote broad public policy commitments, such as the protection of Aboriginal and treaty rights, and act on commitments to reconciliation and nation-to-nation relationships. Some participants also said that EA processes should be used to support Canadian fulfilling its commitments made under international agreements such as the Convention on Biodiversity, the Paris Agreement on greenhouse gas (GHG) emissions and the United Nations Declaration on the Rights of Indigenous Peoples. These participants thought the federal EA processes could be part of the toolkit available to the federal government to address its international commitments and obligations.

	However, many participants believed these broader public issues are difficult or even impossible to resolve in project reviews and result in significant delays. Many participants felt that national policies and commitments should be determined outside of a project-specific EA context. **- Expert panel**
Climate Considerations Should be Treated at the Strategic Level First	
Climate change mitigation policy and energy policy should be treated as prime and priority candidates for comprehensive Strategic Environmental Assessment (SEA).	A recurring theme was that there is a need to consider climate change impacts in IA in an appropriate and meaningful way. Participants noted difficulties with considering the cumulative impacts of climate change in project EA as they cannot easily be attributed to any single project. Participants spoke extensively about issues associated with the increased use of project EA to debate broader policy issues such as climate change. They noted that this lack of clarity in broad policy objectives leads to an increase in uncertainty, delay in the conduct of project EA and its outcomes, and a more adversarial process. Participants suggested that strategic as well as regional IA be conducted to better understand impacts of climate change in a region and to support the implementation of policies in project EA. **- What we heard** **Recommendation p.85:** IA should play a critical role in supporting Canada's efforts to address climate change. The current assessment process and interim principles take into account some aspects of climate change, but there is an urgent national need for clarity and consistency on how to consider climate change in project and regional IA. Many actions to address climate change fall under provincial jurisdiction. Canada has committed, through the Pan-Canadian Framework, to provide provinces and territories with the flexibility to design their own policies to meet emission-reduction targets. Because this Framework is not just federal, and because the subsequent policies, plans and programs resulting from the Framework will be varied across Canada and across industry sectors, governmental co-operation will be critical to effectively assess and manage a project's contribution to climate change. Within IA, there is a need for national consistency in how to assess climate change. Consistent criteria, modelling and methodology must be established to: • assess a project's contribution to climate change;

	• consider how climate change may impact the future environmental setting of a project; and • consider a project or region's long-term sustainability and resiliency in a changing environmental setting. The absence of national methods and criteria on climate issues means that individual project assessments remain the leading forum to debate broader climate policy issues not yet addressed by governments. However, the Panel believes that project IA is not the correct venue to debate broad policy issues. The new model of strategic IA proposed earlier in this Report would prove beneficial in determining a consistent approach for evaluating a project's contributions to climate change with regard to: • the methods to determine a project's GHG emissions; • the means of ensuring that Indigenous knowledge is appropriately taken into account; • the ways to assess impacts to Aboriginal and treaty rights caused by a project's interaction with climate change; • the means of evaluating impacts on carbon sinks; • the ways to take into account the five sustainability pillars; • the ways to manage uncertainties; • the ways to identify acceptable mitigation, including compensation measures such as offsets; and • the criteria for the determination of a project's contribution to sustainability with respect to climate change impacts. A strategic IA could establish thresholds and targets for GHG emissions for a particular sector, industry or region and would ensure that any new development aligns with Canada's commitments. These thresholds and targets could then be made binding in project IA. A strategic IA could also determine a consistent approach for considering the impacts of climate change on a project or region and assessing a project's or region's resiliency to changes to the environment as a result of climate change. **- Expert panel**
Climate change mitigation should be treated as a cumulative effects issue in both SEA and project EA**.**	There are also provisions that provide the Minister of the Environment and Climate Change with the authority to establish a committee to conduct a regional study to assess cumulative effects at a regional scale. **- Expert panel**

	Some project EAs have also considered the future effects of climate change in combination with a project's environmental effects as part of their cumulative effects assessments. **- Expert panel** In order to effectively assess and mitigate a project's overall impacts, it is also important to understand how those impacts may be worsened in a changing environment. For example, climate change impacts could affect the migration pattern of a caribou herd that an Indigenous Group hunts. If a project's effects include clearing land and fragmenting caribou habitat, it may not necessarily affect the sustainability of the caribou herd or the ability of the Indigenous Group to hunt that herd at the beginning of the project, but over time it could add significant cumulative risk when considered in combination with climate change impacts to the caribou. A strategic IA could prove useful in providing a consistent approach to assessing future climate change impacts to Aboriginal and treaty rights, valued components and the five pillars of sustainability. The guidance gained by this kind of IA should, for example, provide the necessary baseline information to effectively assess the cumulative impacts of a project in combination with the impacts of climate change. Although the proposed model of strategic IA is suitable to address federal implementation of the Pan-Canadian Framework, the Pan-Canadian nature of climate issues creates challenges for a solely federal strategic IA, and the Panel recognizes that more-detailed policies, programs or plans resulting from the Framework are still being developed. These challenges suggest that a unique Pan-Canadian IA mechanism is required to meet the urgent national need for clarity and consistency on how to consider climate change in project and regional IA to support Canada's policy and sustainability goals. **- Expert panel**
The relevant thresholds developed in policy should identify required steps towards elimination of GHG emissions.	This model of strategic IA would produce three outcomes: 1. Guidance and direction on all pillars of sustainability that are relevant to implementing the federal initiative for project and/or regional IA; 2. Within each applicable pillar, guidance and direction on the information or studies that are needed to address the federal initiative in project and/or regional IA; and 3. Guidance and direction on the objectives, criteria, thresholds, methods or protocols that must be

	addressed in project and/or regional IA. There should be Indigenous consultation and an opportunity for public participation. **- Expert panel**
Development of policy responses, including delineation and comparison of pathway needs and options, should not be pursued in silos.	Participants noted that Canada has made international commitments but does not have policies in place to support them, citing climate change as an example. Participants were concerned about the lack of strategic EAs, suggesting that strategic EA can address broad policy issues such as UNDRIP and climate change, and support equity, fairness, trust and legitimacy of assessment processes. They also noted the need for public debate and an understanding of the Canadian position on these strategic questions. **- Expert panel**
GHG emissions and climate goals should be used as proxy for climate effects.	
The rest of the analysis should be carried out in accordance with the sustainability approach under Theme 6, A Sustainability Approach to EA.	
	A strategic IA could also determine a consistent approach for considering the impacts of climate change on a project or region and assessing a project's or region's resiliency to changes to the environment as a result of climate change. **- Expert panel**
	Pan-Canadian Framework Many actions to address climate change fall under provincial jurisdiction. Canada has committed, through the Pan-Canadian Framework, to provide provinces and territories with the flexibility to design their own policies to meet emission-reduction targets. Because this Framework is not just federal, and because the subsequent policies, plans and programs resulting from the Framework will be varied across Canada and across industry sectors, governmental co-operation will be critical to effectively assess and manage a project's contribution to climate change. Within IA, there is a need for national consistency in how to assess climate change. Consistent criteria, modelling and methodology must be established to: • assess a project's contribution to climate change; • consider how climate change may impact the future environmental setting of a project; and • consider a project or region's long-term sustainability and resiliency in a changing environmental setting. Therefore, regarding climate change and IA, the Panel recommends that: • Canada lead a federal strategic IA or similar co-

	operative and collaborative mechanism on the Pan- Canadian Framework on Clean Growth and Climate Change to provide direction on how to implement this Framework and related initiatives in future federal project and regional IAs. Climate change is one of the biggest challenges of our time, and Canada has committed to take action to reduce its greenhouse gas (GHG) emissions by 30 per cent below 2005 levels before 2030. To achieve this objective, Canada's First Ministers developed a comprehensive plan, the Pan-Canadian Framework on Clean Growth and Climate Change (the "Pan-Canadian Framework"), which includes several initiatives to reduce emissions, build resilience to adapt to a changing climate, and accelerate innovation and adoption of clean technologies. IA should play a critical role in supporting Canada's efforts to address climate change. The current assessment process and interim principles take into account some aspects of climate change, but there is an urgent national need for clarity and consistency on how to consider climate change in project and regional IA. Many actions to address climate change fall under provincial jurisdiction. Canada has committed, through the Pan-Canadian Framework, to provide provinces and territories with the flexibility to design their own policies to meet emission-reduction targets. Because this Framework is not just federal, and because the subsequent policies, plans and programs resulting from the Framework will be varied across Canada and across industry sectors, governmental co-operation will be critical to effectively assess and manage a project's contribution to climate change. The Panel recommends that Canada lead a federal strategic IA or similar co-operative and collaborative mechanism on the Pan- Canadian Framework on Clean Growth and Climate Change to provide direction on how to implement this Framework and related initiatives in future federal project and regional IAs. Although the proposed model of strategic IA is suitable to address federal implementation of the Pan-Canadian Framework, the Pan-Canadian nature of climate issues creates challenges for a solely federal strategic IA, and the Panel recognizes that more-detailed policies, programs or plans resulting from the Framework are still being developed. These challenges

	suggest that a unique Pan-Canadian IA mechanism is required to meet the urgent national need for clarity and consistency on how to consider climate change in project and regional IA to support Canada's policy and sustainability goals. **- Expert panel**
Develop Pathways to Decarbonisation in Multiple Sectors	
Canada needs to develop pathways for meeting emissions reductions targets and ultimate decarbonisation by no later than 2050 before approving any new major carbon emitting projects, projects that would contribute cumulatively to carbon emissions, or projects that may hinder Canada's transition to GHG emission neutrality.	
These pathways should be developed through a credible, transparent strategic EA that includes meaningful public participation throughout and provides an authoritative guide for project planning and assessment. The pathways should provide a basis for EA evaluations and decisions that are consistent with pathway compliance and carbon budgets. Pathways should be updated regularly.	The guidance gained by this kind of IA should, for example, provide the necessary baseline information to effectively assess the cumulative impacts of a project in combination with the impacts of climate change. **- Expert panel**
To ensure appropriate guidance to project EAs, this process should: • Clarify the interim and final deadlines for greenhouse gas (GHG) neutrality in Canada arising from and in accordance with signing the Paris Agreement. • Set out the best current understanding of the preferred pathways (character and schedule of major transition steps) that would ensure meeting those deadlines and ultimate decarbonisation. • Specify, to the extent feasible, the implications of the deadlines and pathways for various areas of activity in the interest of providing forward guidance to proponents, review agencies and other EA participants about implications for project planning and assessment. • Establish federal, regional (i.e., provincial and territorial) and sectoral carbon budgets and plans.	IA should play a critical role in supporting Canada's efforts to address climate change. Current processes and interim principles take into account some aspects of climate change, but there is an urgent national need for clarity and consistency on how to consider climate change in project and regional IA. Criteria, modelling and methodology must be established to: (p.7 **"Regarding strategic IA, the Panel recommends that"**) • assess a project's contribution to climate change; • consider how climate change may impact the future environmental setting of a project; and • consider a project's or region's long-term sustainability and resiliency in a changing environmental setting. The Panel's recommended model for strategic IA would prove beneficial in determining a consistent approach for evaluating a project's contributions to climate change. Within IA, there is a need for national consistency in how to assess climate change. Consistent criteria, modelling and methodology must be established to: • assess a project's contribution to climate change; • consider how climate change may impact the future environmental setting of a project; and • consider a project or region's long-term sustainability and resiliency in a changing

	environmental setting. The absence of national methods and criteria on climate issues means that individual project assessments remain the leading forum to debate broader climate policy issues not yet addressed by governments. However, the Panel believes that project IA is not the correct venue to debate broad policy issues. The new model of strategic IA proposed earlier in this Report would prove beneficial in determining a consistent approach for evaluating a project's contributions to climate change with regard to: • the methods to determine a project's GHG emissions; • the means of ensuring that Indigenous knowledge is appropriately taken into account; • the ways to assess impacts to Aboriginal and treaty rights caused by a project's interaction with climate change; • the means of evaluating impacts on carbon sinks; • the ways to take into account the five sustainability pillars; • the ways to manage uncertainties; • the ways to identify acceptable mitigation, including compensation measures such as offsets; and • the criteria for the determination of a project's contribution to sustainability with respect to climate change impacts. **- Expert panel**
At a minimum, the federal government conduct project assessments so as to understand whether proposed projects affect Canada's ability to meet its international climate commitments and obligations.	Regional Environmental Assessment would be more appropriate for coordinating federal, provincial and local governments and other stakeholders in collectively addressing challenges such as climate change and cumulative effects and providing guidance for regional land-use planning with due consideration of regional and national interests. These processes could help to set the context for and guide specific development projects and their environmental assessments. **- Railway Association of Canada**
Develop an Additional Mandatory Federal EA Climate Trigger	
Triggering should be designed to ensure that all activities that are not likely to have a transformational benefit and assist in the transition to GHG emission neutrality are automatically assessed before project decisions are made.	Many participants emphasized the need to evaluate climate change in EA and said it should be a key factor in EA decisions. As shown in Graph 8, almost half of the respondents to the Choicebook felt that assessment processes should "completely" address Canada's climate change commitments. Some participants said that the way to do this would be by implementing a climate test or a climate change trigger because, while

	a single project may not emit a large amount of greenhouse gases (GHG), cumulatively it could impact climate change. Participants identified that the federal government should recognize the sensitivity of certain regions in Canada that are already being impacted by climate change. Many participants underlined there should be greater use of strategic and regional EA to address climate change as a policy issue. Further research and guidance related to considering climate change in EA is needed to ensure these considerations use science and evidence for decision-making in a consistent, clear and predictable manner. **- Expert panel**
A project list should be developed in each of the key sectors involved in the transition to GHG emission neutrality, including electricity, resource extraction, transportation, manufacturing, forestry, and agriculture. For each sector, a list of projects that warrant an assessment in light of their potential to hinder this transition should be developed. The list should be developed with a reverse onus approach, so that activities are listed unless they are demonstrated to be consistent with the transition without the need for an EA.	Existing initiatives of interest for IA cover a range of topics directly related to project IA, including wetlands, species at risk, climate change, fisheries, migratory birds, ocean protection, and sustainable development. Currently, these initiatives do not consistently address their relationship to IA. For example, Canada's Oceans Protection Plan, launched in November 2016 by Transport Canada, Fisheries and Oceans Canada, and Environment and Climate Change Canada, is a new plan with broad application. However, the plan does not make clear if or how it will apply to future federal IAs. A strategic IA should be conducted to generate guidance and direction for these types of initiatives to help implement their goals and objectives in project and regional IA. **- Expert panel**
SEA must identify what current and potential human activities have the potential to interfere with climate goals and what activities will help with the needed transition. For each sector (such as energy, transportation, agriculture and manufacturing) interim treatment of climate change requirements in an EA remains necessary. The considerations outlined in the next section should be taken into account in the interim, and form part of the ultimate design of project EAs.	These federal interests include, at a minimum, federal lands, federal funding and federal government as proponent, as well as: greenhouse gas emissions of national significance; **- Expert panel**
Climate Test Considerations for Project-Level Assessments	
A project should successfully pass each of these requirements before it can be said to have passed the 'Climate Test'. We recommend their consideration in regional as well as strategic level assessments. Three key questions: • Does the project fit within the carbon budget	There is a need to account and measure the effect of climate change in the short and long term. Some participants emphasized the need to develop methodologies that include quantitative assessment of potential project emissions. Others said the federal EA processes must take into consideration cumulative **carbon** emissions across projects, with some participants identifying that a good EA process should

of the sector? • Does the project keep us on identified pathways to GHG reduction targets and ultimate decarbonisation? • What are the social costs associated with climate impacts and how will they be mitigated or compensated, and traded-off in the broader sustainability test? • Is the project economically viable if the social cost of its life cycle GHG emissions is internalized?	look at all GHG emissions: upstream, direct and downstream. Others suggested California as a model for assessing upstream and downstream emissions. The federal government must develop a credible plan for managing GHG emissions, including decision-making. Participants identified that EA processes must operate within a national **carbon budget,** with the assessment of individual project emissions based on relative contribution to the national limit. In this regard, EA processes must consider if a project is the best use of the allotted megatonnes of carbon dioxide (CO_2). **- What we heard** The Supreme Court of Canada has long recognized that protection of our environment is a fundamental value of Canadian society and one of the major challenges of our time. There is no greater threat to our environment than that of climate change. Environmental assessments can and should serve as climate gatekeepers, where robust consideration of Canada's climate commitments are considered before, during, and after each project assessment. **- Ecojustice**
Defining the Climate Effects of a Project in Terms of Net GHG emissions	
The climate effects of a project should be defined in terms of net GHG emissions, which involves quantifying life cycle emissions over the entire lifespan of the project, including indirect upstream and downstream emissions as well as emissions it might displace. There should be clear scoping guidelines to ensure proponents are properly calculating their proposed projects' expected emissions to include full life cycle GHG emissions and a clear articulation of uncertainties associated with the analysis.	Currently, project environmental assessment (EA) is one of the key forums available to assess climate change impacts. This assessment is done by measuring a project's direct GHG emissions and by assessing the impacts of the environment, including impacts of climate change, on the project. In early 2016, an interim approach was introduced that required the assessment of upstream GHG emissions related to certain projects. Some project EAs have also considered the future effects of climate change in combination with a project's environmental effects as part of their cumulative effects assessments. **- Expert panel**
In August 2016, the CEQ issued final guidance on considering climate under NEPA, which states that climate analyses should include consideration of "connected actions – subject to reasonable limits based on feasibility and practicality", including activities "that have a reasonably close causal relationship to the Federal action, such as those that may occur as a predicate for a proposed agency action or as a consequence of a proposed agency action (including land clearing, access roads,	

extraction, transport, refining, processing, using the resource, disassembly, disposal, and reclamation)".[30]	
We recommend that project assessments in Canada adopt a similar approach to the causation inquiry into indirect emissions.[31] We further recommend that the legislative framework require that wherever reasonably feasible, the life cycle emissions of a proposed activity be included in all levels of assessments.	
Determining the Project's Contribution to National Reduction Targets and Overall Decarbonisation	
Project-specific sustainable decision-making criteria should include the requirement that a project should help Canada meet its climate goals and targets as well as ultimate decarbonisation, and trade-off rules should be designed so that a carbon-intensive proposal can't be justified in light of short-term economic gains if it leads to long-term loss.	
Ensuring Projects Have Positive Structural Impacts on Decarbonisation	
• Qualitative analysis should be conducted, by addressing questions about the political economy of an undertaking such as: • What are the project's implications for the transition towards decarbonisation? • Does the project contribute directly or indirectly to the carbon lock-in of the Canadian economy? • Does the project impede other current or future actions to avoid dangerous climate change? • Does the project contribute to social or political norms, risk reduction, or economies of scale for fossil-based infrastructure that further contribute to its lock-in (or other fuels' or technologies' lock-out)?	
Considering Alternatives and "Zero-option"	
EAs should be required to consider alternatives to the proposed project and a "no project option", as	

[30] Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews P.13-14

[31] The courts have rejected the three types of arguments against causation typically raised by industry Status Quo Argument : where agencies have asserted that the continued operation of the mine will not increase the rate at which coal is extracted and thus they will not increase combustion emissions, as compared with the status quo, see *Dine Citizens Against Ruining Our Env't* v. *United States Office of Surface Mining Reclamation & Enf't*, 82 F. Supp. 3d 1201, 1217 (D. Colo. 2015); S. Fork Band Council of W. Shoshone of Nevada v. U.S. Dep't of Interior, 588 F.3d 718, 725 (9th Cir. 2009); The "perfect substitute" argument posits that the extraction of fossil fuels will not actually cause an increase in consumption, because the same quantity of the fuel would be produced elsewhere and eventually transported and consumed, even if the agency did not approve the proposal at issue, see *High Country Conservation Advocates* v. *United States Forest Serv*., 52 F. Supp. 3d 1174, 1190 (D. Colo. 2014); "not our call" argument : there is not a "reasonably close causal relationship akin to proximate cause" between the extraction of the coal and emissions from downstream activities such as the combustion of the coal, because the agency lacks jurisdiction over those activities", see *Border Power Plant Working Grp*. v. *Dep't of Energy*, 260 F. Supp. 2d 997, 1017 (S.D. Cal. 2003).

described in Theme 7, Principles of Meaningful Public Participation in Environmental Assessment.	
Incorporating Climate Commitments & Social Cost of GHGs in Socio-Economic Analysis	
Climate change commitments and the social cost of GHGs should be incorporated in socio-economic analyses of projects.	
The social cost of GHGs such as carbon dioxide, methane, and nitrous oxide used by ECCC in the regulatory context should be used in the EA context as a proxy for climate loss and damage associated with a project's emissions.	
Assessing a Project's Resilience to Climate Actions and Impacts	
An undertaking's resilience to climate change impacts and mitigation actions should be included in the assessment	
Indigenous peoples and local communities have essential spatial, temporal, and historical knowledge that should be included when establishing baselines and assessing potential impacts based on past observations. Future climate change must be considered.	In order to effectively assess and mitigate a project's overall impacts, it is also important to understand how those impacts may be worsened in a changing environment. For example, climate change impacts could affect the migration pattern of a caribou herd that an Indigenous Group hunts. If a project's effects include clearing land and fragmenting caribou habitat, it may not necessarily affect the sustainability of the caribou herd or the ability of the Indigenous Group to hunt that herd at the beginning of the project, but over time it could add significant cumulative risk when considered in combination with climate change impacts to the caribou. A strategic IA could prove useful in providing a consistent approach to assessing future climate change impacts to Aboriginal and treaty rights, valued components and the five pillars of sustainability. **- Expert panel**
Projects' resilience to GHG mitigation action must be assessed to ensure the project does not rely on carbon-intensive fuels or technologies on a time horizon that goes beyond their planned or necessary phase out.	
Climate Considerations for Project Implementation/Follow-up	
A condition of approval of an undertaking should be that the proponent remains responsible and liable for all GHG emissions associated with their project, including setting aside financial security for their fair share of future climate impacts, and may be subject to additional future requirements to ensure that they contribute to Canada's commitments towards decarbonisation.	
Tying a Project's Obligations to Mitigate GHGs to Canada's Reduction Targets and the Paris Agreement	

Undertakings should be required to undergo stringent mitigation based on legislated emissions reduction targets (or in the interim, the Nationally Determined Contribution in the UNFCCC process).	
Requiring Security for Climate Damages	
Regulatory frameworks should require, as a condition of approval, that proponents of carbon-significant projects set aside financial security for their fair share of potential future climate impacts in Canada, using the social costs of GHGs established by the ECCC (or an equivalent social cost developed domestically).	
Overall Considerations for Inclusion of Best Available Climate Science	
The best available climate science should be used throughout EA processes by adopting best practices for fact-gathering and modelling. Specific attention should be given to the treatment of short-lived high global warming potential non-CO_2 GHGs as well as impacts on Canada's important carbon sinks.	Note: Panel recommends use of best available science in general.
Adopting Best Practices for Fact Gathering & Modelling	
Existing emissions targets should be assessed using an accounting system devised in consideration of national emissions, along with the expected emissions of projects that are currently undergoing EAs, and compared to national reduction targets.	
There needs to be complete transparency in modelling assumptions, data choices and uncertainties.	The Panel supports requests that new federal IA legislation provide access to existing data from ongoing and past projects. Such access could reduce uncertainty in mitigation measures, models and methods used in future IAs and project designs. Similarly, access to IA data would increase trust and transparency and would also support the characterization of baseline conditions for future IAs or other initiatives. Baseline data, as well as existing and future stressors and trends such as climate change, must be defined in the regional IA and used to identify sustainable thresholds for the valued components in the region agreed upon in the Planning Phase. **-Expert panel**
Where information is missing due to exorbitant costs or infeasibility, a summary of any credible scientific evidence and an analysis of theoretical approaches or research methods generally accepted in the scientific community should be provided, and reviewing bodies should be empowered to retain experts to provide missing information.	
Prioritizing Specific Sources and Types of Emissions	
It is crucial to use the most up to date global warming potential (GWP) of these non-CO_2 gases and their most	

relevant time frame when conducting assessments.[32]	
Specific attention must be given to accounting for future GHG emissions associated with land use, land use change and forestry. Emissions review methodology should account for the GHGs resulting from land use change and biogenic emissions.[33]	
	Other mentions
	The best way to address needs for climate change mitigation in EAs of individual undertakings is a major unresolved issue in Canada and a serious problem in EA application. In the absence of credibly developed, specific strategic guidance, conflicts arising at least in part from dissatisfaction with the handling of climate change concerns in individual project assessments have been an evident feature of several recent EAs and surrounding activities including court cases. **- Multi-Interest Advisory Committee**

[32] For example, up until very recently, Canada was using 25 as the GWP of methane, an outdated value since the release of the IPCC Fifth Assessment Report, which presented two values calculated both with and without the effect of climate-carbon feedbacks. Methane's 100-yr GWP is listed as either 28 (without climate-carbon feedbacks) or 34 (with climate-carbon feedbacks). principle would militate in favour of the higher value. Still, in most circumstances, it will be more relevant to use a shorter time frame GWP, in which case the 20-yr GWP of methane can be used (84 without climate-carbon feedback or 86 with climate-carbon feedback). IPCC WGI Fifth Assessment Report, Final report (7 June 2013) Table 8.7, p.58. Venting and fugitive emissions factors for methane for a variety of activities will also need to be updated.

[33] See for inspiration the methodology developed in California in order to assess the land use emissions related to oil production. Emissions include oxidized carbon emerging from disturbed soil, the carbon from oxidized biomass from the disturbance of biomass, and the loss of sequestration potential (since carbon sequestration from biomass is weak on cleared land). the *California Low Carbon Fuel Standard, Final Regulation Order* § 95489, Subchapter 10, Article 4, Subarticle 7; Hassan M. El-Houjeiri, Kourosh Vafi, James Duffy, Scott McNally, and Adam R. Brandt, *Oil Production Greenhouse Gas Emissions Estimator: OPGEE v1.1 Draft E: User guide & Technical documentation*, 2015; *California Low Carbon Fuel Standard, Final Regulation Order*, Table 8, pages 88 *et seq.;* Sonia Yeh, Sarah M. Jordann, Adam R. Brandt, Merritt R. Turetsky, Sabrina Spatari, et David W. Keith, *Land use greenhouse gas emissions from conventional oil production and oil sands*, Environmental Science & Technology 2010, 44, 8766–8772, available online.