

Anna Johnston and Jamie Kneen
Co-Chairs, Environmental Planning & Assessment Caucus
Canadian Environmental Network
ajohnston@wcel.org jamie@miningwatch.ca

August 28, 2017

Submission on the Government of Canada's Environmental and Regulatory Reviews Discussion Paper

Dear Sirs/Mesdames,

We are writing on behalf of the Environmental Planning & Assessment (EPA) Caucus of the Réseau Canadian Environmental Network (RCEN). Since 1988 the Caucus has worked independently as well as engaging with the Agency (and its predecessor, FEARO) to improve environmental assessment (EA) law, regulations, policies, and practices; to provide guidance to federal departments; and to facilitate meaningful public participation in EA policy development and individual EAs. We have members from environmental and public interest organizations throughout Canada.

We write to provide recommendations and reflections, based on our collective expertise and experience in public participation processes, in response to the Government of Canada's Environmental and Regulatory Reviews Discussion Paper released June 2017 (the Discussion Paper). They consist of briefing notes written by various Caucus members and allies, and submitted to the government during this review, and accompany our "Reactions to and comments on the Environmental and Regulatory Reviews Discussion Paper" dated August 28, 2017, uploaded separately.

This is not a comprehensive or complete package, as it addresses only some elements of the EA process in depth. In many respects our submissions to the Expert Panel, and to CEAA in response to the Expert Panel's report (also uploaded separately), represent a more thorough treatment of the issues, with the present papers adding valuable depth in specific areas.

We wish to note the lack of reflection in the Discussion Paper or elsewhere of how the government has considered and applied the recommendations of the Expert Panel appointed to review federal EA processes, or the numerous submissions and comments made by the public, non-profit organizations, Indigenous peoples, industry, provinces and territories, and other participants during the review, in the Discussion Paper. Demonstrating how comments have been considered and applied is a cornerstone of meaningful public participation, and was an important feature of the Expert Panel's report [Building Common Ground: A New Vision for Impact Assessment in Canada](#). Many participants have devoted considerable time, energy and resources into participating in this review and deserve to know whether and how their input has been considered. We encourage you to provide a summary of how submissions and consultations on the Expert Panel's report were considered and applied in the Discussion Paper, and how submissions and consultations on the Discussion Paper will be applied in proposed legislation.

Sincerely,

Jamie Kneen and Anna Johnston
Co-Chairs, Environmental Planning and Assessment Caucus
Réseau Canadian Environmental Network

Attachments: Consensus Report of the RCEN EPA Caucus, May 26, 2017
 Caucus-Academic Submission on Discussion Paper (revised), August 28, 2017

Briefing note: Fulfilling the government's promise on environmental assessment reform

Anna Johnston, West Coast Environmental Law

ISSUE

The Environmental and Regulatory Reviews Discussion Paper (Discussion Paper) released June 2017 contains promising elements, but falls far short of the mark of what is required to regain public trust, robust oversight and thorough environmental assessments that are based on science, facts and evidence, and serve the public's interest. This brief outlines priority elements of the reforms required to satisfy the government's commitment to introduce new, fair environmental assessment processes that were absent from or undermined by the Discussion Paper. We look forward to working with you further on building an EA law that works for the environment, communities and the economy.

BACKGROUND

The government has committed to introducing new, fair environmental assessment processes through its 2015 election platform as well as Cabinet mandate letters. The Expert Panel appointed to review Canada's EA processes heard from thousands of Canadians, including representatives of hundreds of Indigenous and civil society groups. The Panel incorporated what it heard in its visionary report to the Minister of Environment and Climate Change. Despite the Panel's recommendations, the Discussion Paper merely proposes amendments to CEAA 2012 that fall far short of government's commitments.

RECOMMENDATIONS

To regain public trust, fulfil its commitment and enact an environmental assessment law that has a strong evidentiary basis, works for the public and the environment, and advances reconciliation and the implementation of UNDRIP, the following essential elements will need to be present

1. Sustainability-based assessment

Ensuring sustainability through EA goes beyond *considering* social, cultural and health effects along with environmental ones. It means ensuring that federal decisions will *substantively* maintain ecological integrity, meet our climate commitments and uphold UNDRIP, while contributing to high levels of human well-being. Thus, legislation needs to:

- **Establish sustainability as its core objective:** A main purpose of the Act should be to ensure that federal decisions promote the greatest number and most equitably distributed lasting net gains for the environment and human well-being.
- **Set out sustainability principles:** Principles that include respect for the interests of future generations are needed to provide clarity and direction to responsible authorities, decision-makers, industry, Indigenous groups and other jurisdictions, and the public.
- **Require consideration of alternatives:** "Alternatives" means both "alternatives to the project" and "alternative means of carrying out the project." The legislation must require consideration of alternative means, and allow for consideration of reasonable alternatives to the project.
- **Establish a sustainability test:** Decisions should be based on whether a project is the most likely to make the greatest lasting net gains to environmental and human well-being. It should be the principal determination of "public interest" for all projects, including those which are also subject to regulatory review under the *National Energy Board Act*.
- **Set out means of applying the test:** The legislation should set out sustainability-based decision-making criteria and trade off rules, enable the Minister to enact further criteria and rules in

regulations, and enable assessing bodies to develop assessment-specific criteria and rules. A second-best option would be to frame them as “factors to consider” in decision-making.

2. Governance, transparency and accountable decision-making

Maintaining a Cabinet decision-making process would significantly undermine the ability to achieve government’s goal of gaining public trust and getting resources to market. A Cabinet justification determination can undermine entire EA processes through Cabinet’s unfettered ability to override sound information and Indigenous and public concerns for any reason, including political considerations. Moreover, regulators and offshore boards do not have the public’s trust and a return to joint reviews – like the Enbridge Northern Gateway assessment – would be a step backward. At a minimum:

- **The Minister should be the highest level of decision-maker:** Avoid making Cabinet the EA decision-maker; decisions must be transparent and accountable, and apply the sustainability criteria and rules (or factors) described above.
- **Legislation should provide a right of appeal** of interim and final decisions.
- **The Agency should be sole responsible authority:** Regulators should only be involved in EA processes as experts and advisors, not as responsible authorities.
- **Substitution should not be an option:** Rather, the goal should be collaborative assessment among all jurisdictions (federal, provincial, Indigenous).

3. Legislated regional and strategic assessments

While the Discussion Paper mentions regional and strategic assessments, it does not discuss legislative requirements. At a minimum, legislation must:

- **Require SEAs of plans, policies and programs currently under the Cabinet Directive:** Legislation needs to require strategic environmental assessments of all federal policies, plans and programs; new or revised federal legislation, rules, regulations or guidance; and federal budgets. It should also set out different process streams, starting with notice and publication of findings for minor policies, plans and programs.
- **Include criteria for when regional and strategic assessments are triggered:** E.g., where a proposed undertaking is development inducing (e.g., a road or transmission line into a relatively undisturbed area).
- **Allow a person, government or EA panel to request an REA or SEA:** Legislation should establish criteria for when a trigger is met (e.g., a request by an impacted Indigenous group) and require the Minister to respond to requests in writing within a prescribed period.
- **Require consideration of alternative development scenarios:** We must move beyond the current ‘regional studies’ allowed under CEAA 2012 by requiring that REAs and SEAs include consideration of alternative development scenarios, selection of the preferred scenario and means of achieving it.
- **Tier REA, SEA, PEA and regulatory permitting:** It is essential that the outcomes of each tier of assessment informs the others. Legislation must include requirements to apply the outcomes of any other levels of assessment that have occurred, and apply the outcomes of all assessments to regulatory permitting.

4. Triggering, streaming and registration

A project list that only sets out classes of major projects (e.g., a metal mine above a certain threshold) will fail to cover too many projects that contribute direct and cumulative effects. Legislation must:

- **Require registration of all undertakings:** All projects and activities within federal jurisdiction should be registered in a central EA database in order to enable the tracking of potential direct and cumulative impacts.
- **Include triggers for when an EA is required:** E.g., when requested by an Indigenous group, the government is a proponent, the government funds a project, or a project requires federal authorization (e.g., under the *Fisheries Act*). If government is unwilling at this time to legislate triggers, legislation must at a minimum allow the enactment of regulations setting out triggers.
- **Provide for different assessment streams:** To make assessing smaller projects manageable, the legislation should allow for lesser assessment streams. These streams must continue to meet the core minimum standards and requirements of EA, but may have less onerous processes.

5. Legislated climate test

All project and strategic assessments must include a test ensuring that anticipated lifetime emissions and other effects would be consistent with timely Canadian progress towards meeting its climate change commitments. While outstanding questions remain on how to effectively assess climate, legislation should set out minimum requirements. They are:

- **To assess the upstream, direct, downstream and lifespan emissions and effects of a project:** Downstream effects may be more difficult to assess for some types of project; legislation may provide for consideration of downstream where feasible.
- **That a climate test asks whether a project will help or hinder progress towards domestic and international immediate and long-term climate obligations** applying the above information.

6. Co-governance with Indigenous peoples

The Discussion Paper falls short of requiring decision-makers to obtain the consent of Indigenous jurisdictions. To uphold UNDRIP and maximize progress towards reconciliation, legislation must:

- **Acknowledge and require the need to obtain the consent of Indigenous peoples**
- **Include mechanisms for establishing regional co-governance models with Indigenous and, if possible, provincial governments**
- **Provide flexibility in timelines:** Rather than legislated timelines, the legislation should allow authorities to collaboratively establish timelines on a case-by-case basis.

The Initial Phase of Project Assessment

A. John Sinclair, Justyna Laurie-Lean and Robert B. Gibson

Questions considered in this document:

- When should the formal assessment process of a project begin in a project's life?
- What are the essential elements and outcomes of Assessment Planning?
- What constitutes meaningful public engagement in Assessment Planning? and
- Whether and to what extent the acceptance of a Project Description or Assessment Planning should be affected by the degree to which the project proponent engaged with the Public and Indigenous peoples in Pre-Assessment Project Planning?

Note: Early engagement and planning are also needed in strategic and regional level assessments, but are not addressed in this document.

Context

The Expert Panel emphasized the importance of the assessment occurring early in a project's life, as do most guides on effective public engagement in IA, including the Canadian Environmental Assessment Agency's own *Public Participation Guide* available on the CEA Agency website. The Discussion Paper echoes these ideas. However, none of these documents pin-points when "early" is, or how to encourage early initiation. The documents also do not adequately specify what needs to occur at this stage.

Importantly, the Discussion Paper does not draw a clear distinction between pre-assessment project planning by a proponent and assessment planning led by the Agency. The former has traditionally taken place away from the public eye. The new or revised IA statute needs to be clear on when in a project's life the formal assessment process begins and what happens in the earliest assessment phase.

Statutory requirements

To ensure "early" initiation of the assessment process, and to clarify the expectations for this stage of assessment, the statute needs to:

- i. establish that the formal assessment of a project begins with the Agency's receipt from the project proponent of a Project Description that the Agency considers adequate, followed by the Agency issuing public notification of the commencement of Assessment Planning;
- ii. require that the basic Project Description and registration, which initiate the process for projects include only basic information on the project, such as its broadly anticipated character and size, and its proposed location. Unlike CEAA 2012, this basic description should come before specifics such as detailed final components, design and means of implementation have been decided;
- iii. provide opportunity for interested or affected jurisdictions, as well as organizations and individuals to play roles in the design of the assessment process. The IA Authority would lead this early process, including the development of
 - any cooperation plans with other jurisdictions (provincial, territorial and/or Indigenous), and
 - a public participation program for this phase of the process.

The goal of this early phase of the assessment is to bring about much more timely, effective and credible engagement of authorities, interests and expertise;

- iv. require that the IA Authority provide clear and accessible notice once a registration/description has been provided by the proponent. The notice would include

- basic information from the Project Description. The creation of a notification list of commonly interested organizations and people would assist with notice requirements;
- v. provide for the formation of a Planning Committee consisting of representatives of the Agency, and other cooperating authorities (provincial, territorial and/or Indigenous) to lead and design the assessment (as already happens in many Canadian jurisdictions), linked to a plan for meaningful broader public engagement;
 - vi. require that the IA Authority along with any Planning Committee formed, plus the proponent and interested public and relevant experts, work together to begin to determine the scope of the project and to develop the plan for assessment, with attention to
 - key components and issues,
 - alternative means for undertaking the project (and broader “alternatives to” in the case of a public sector project),
 - valued social and ecosystem components, and
 - potential areas of impact concern (e.g., species at risk) and cumulative effects,
 - priorities for achieving lasting positive effects, and
 - process needs for the next stages of assessment.
 This work can be informed by early planning carried out by the proponent;
 - vii. require identification of
 - law-based requirements that must be addressed, including any law-based decisions on strategic and regional undertakings subject to assessment;
 - the outcomes of any relevant regional or strategic studies that must be considered and
 - the findings from follow-up and monitoring of related project IA cases;
 - viii. provide opportunity for the identification, discussion and resolution of policy gaps needing attention before the assessment can be properly completed and any broad cumulative effects, alternatives and policy issues that would be beyond the capacities of the proponent to address.

Role of Pre-Assessment Project Planning

Proponents should be encouraged to engage the public meaningfully in their project planning prior to submission of a Project Description to the IA Authority. This proponent-initiated and led consultation cannot be a replacement for IA Authority-led consultation necessary to fulfill the requirements of early engagement in the assessment process as outlined above. However, the question remains how deliberate the encouragement should be, and whether the formal assessment process should recognize the adequacy of such engagement and the degree to which the public and Indigenous input received was incorporated in project planning. Options for encouragement or recognition that require discussion include:

- None: the proponent submits a Project Description and the assessment begins;
- Encouragement of meaningful early planning by the Agency: the proponent is rewarded through more focused Assessment Planning;
- Agency requirement and guidance to proponents for early planning:
 - Mandatory characterization of engagement in Project Description and refusal of Project Description if the Agency considers the engagement to have not met the requirements of its guidance;
 - Mandatory reporting of engagement efforts and results (including before project notice) in the submitted project assessment;
 - Adjustment to the length and breadth of the Early Assessment Planning phase based on adequacy of engagement and project design adjustment in pre-assessment project planning.

Peer Review in EA

Justina Ray (WCS Canada), August 24, 2017

The Environmental and Regulatory Reviews Discussion Paper places important emphasis on the need for “science, evidence and Indigenous knowledge...[to]...inform project planning, assessment and decision making, and be open, accessible and transparent” through legislative or programmatic reforms, including “Reinforcing rigour through peer reviews of science and evidence in the assessment phase”. This briefing note outlines key considerations for bolstering the peer review process under a new federal environmental assessment law.

What is peer review?

‘Peer review’ can be defined as “a review of technical or scientific merit by individuals with sufficient technical competence and no unresolved conflict of interest.” ‘Peers’ are “scientists or engineers who have qualifications and expertise equivalent to those of the researcher whose work they review” and who are “capable of making an independent judgment of the merits and relevance of the research.”¹ Reviews should be conducted by specialists in relevant fields who were not involved in producing the document(s) in question. The US federal government has been formally incorporating peer review into its processes for over two decades, including products for the National Environmental Policy Act (NEPA)².

What EA products should be subject to peer review?

Products generated through the impact assessment process that present and analyse evidence are candidates for review. These include, but are not limited to: 1) the assessment plan arising from early planning stages, including schedules of studies 2) reports of studies (e.g., literature reviews, “baseline studies”, etc.), 3) underlying scientific or technical products that support the Environmental Impact Statement (EIS), 4) the EIS, 5) relevant ancillary technical analyses not delivered by the proponent (e.g., by interveners), and 6) monitoring plans, frameworks and reports.

How is peer review conducted?

Peer reviewers typically evaluate the strengths and limitations of the overall product and the conclusions drawn by the authors. Factors that should be under scrutiny include: 1) validity of the research design, 2) quality of evidence collection procedures, 3) robustness of the methods employed, 4) appropriateness of the methods for the hypotheses being tested, 5) reasonableness of conclusions and judgments made from the available evidence, including exposing underlying assumptions, apparent biases in the work, and levels of risk and uncertainties associated with the conclusions.

The benefits of peer review for dealing with uncertainty

Careful arms-length review is one means of grappling with uncertainties that are inherent in EA, including gaps and/or weaknesses in the available evidence, the extent to which uncertainties are clearly acknowledged, identified, and characterized, the potential implications of such uncertainties for the conclusions, and whether more investigation is likely to help resolve these uncertainties.

Recruiting and engaging independent peer reviewers

¹ U.S. Gen. Accounting Office, GAO/RCED-99-99, Federal Research: Peer Review Practices At Federal Science Agencies Vary 3 (1999). <http://www.gao.gov/products/GAO/RCED-99-99>

² EPA Peer Review Handbook, 4th Edition: https://www.epa.gov/sites/production/files/2016-03/documents/epa_peer_review_handbook_4th_edition.pdf; Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies, 67 Fed. Reg. 8452, 8452-58 (Feb. 22, 2002)

There is much to be gained by formally integrating “outside” scientists (i.e. those external to the federal public service) into EA processes “*to create, test, and refine robust models for predicting ecological effects of development.*” These benefits include integrating advances in basic science that have major practical implications for EA, and ensuring that EA products and/or pertinent analyses stand to have value beyond the reviews themselves.

Given the time and expertise required, reviews from experts outside government must be solicited by the Agency rather than through passive public participation windows. The selection of appropriate reviewers who have the skills and experience to provide meaningful input is a critical step. Few individuals do not have some association or collaborations with industry, community groups, indigenous groups, environmental organizations and/or other interest groups and so transparency regarding the potential biases of external experts is paramount. It is the Agency’s responsibility to investigate any potential conflicts of interest and independence from the agency itself. Similar to journal editors, the Agency should keep a list of peer reviewers and their expertise with informal records of their willingness to participate and quality of reviews. Members of the Science Advisory Committee can recommend peer reviewers and participate in the formulation of relevant processes to engage them. Compensation for time of peer reviewers external to government through contracting or stipends would provide better assurance that adequate time and energy will be devoted to the review.

Strengthening in-government peer review capacity

The realities of successfully engaging outside reviewers are sobering, particularly for regulatory review processes where there are currently few incentives for scientists (particularly in academia) to participate from a career-enhancing perspective. Even with journal peer review processes where there are more direct benefits in this respect, refusal rates can be high, with lack of time being the main reason. Even when reviewers agree to participate they may not be able to provide the quality peer review in the timeline that is needed.

In addition to external peer reviews, peer reviewers should also be sought from individuals within the federal service with expertise but who are not involved directly in the generation of EA products. This requires agencies to commit to increases in capacity from today’s levels and to ensure that relevant government experts are afforded adequate time within their workplans and job descriptions to conduct such reviews. In addition, agencies must make and keep a strong commitment to improving their knowledge base on a range of issues relevant to EA over time, and to update decisions when significant new information becomes available.

Legislation

The new EA legislation should mandate that EA decisions be based on best available evidence, including scientific knowledge, community knowledge and Indigenous knowledge. All evidence gathered must be carefully weighed based on the source, any concerns about bias or credibility, the methods used, whether its conclusions are supported or contradicted by other sources and any other factors set out in regulations. The insertion of this language will ensure: 1) that the conduct and decisions of EA are based *on “facts, science, and evidence”* as per the federal government mandate, and 2) clarifies that evidence comes from a wide range of inputs that are appropriately weighted with respect to credibility and impartiality of sources, accompanied by a clear appreciation of how these compliment and conflict with one another as well as the limits to available information and ensuing gaps and uncertainties. Some explicit language in the Act regarding the commitment to evidence-based decision making should promote rigorous peer review of EA

³ L.A. Greig & P.N. Duinker (2011) A proposal for further strengthening science in environmental impact assessment in Canada, *Impact Assessment and Project Appraisal*, 29:2, 159-165, DOI: 10.3152/146155111X12913679730557.

products. Guidelines can then be developed to establish clear expectations regarding the evidentiary basis for the conduct of the assessment.

Policy and implementation considerations

- *Learning from other systems:* Given the lengthy history and relatively common use of regulatory peer review in the US, there have been multiple critiques and recommendations for improvement (particularly with respect to the Endangered Species Act), as well as guidelines and standards (listed below) that can be instructive in federal IA.
- *Transparency of review:* Transparency of the review process is critical to help ensure its functionality. To this end, the Agency should make available to the public the written charge to the peer reviewers, the peer reviewers' names, the peer reviewers' report(s), and the response to the peer reviewers' report(s). This is relevant for external and internal peer reviewers alike.
- *Relevant expertise:* There are some fundamental differences between regulatory peer reviews and peer reviews of scientific research (e.g., for scientific journals and publications, grant funding decisions, etc.). Peer review in an IA context would be addressing how scientific information and knowledge is applied to draw conclusions about normative policy decisions, whereas scientific research reviews would focus on whether a research hypothesis is confirmed by data. IA peer reviews will be most helpful if reviewers possess adequate knowledge of the undertaking in question as well as the policy environment.
- *When to engage peer review:* There are clear advantages to involving peer reviewers at early stages of information production to review study designs and plans prior to significant investments in time and resources. In the context of impact assessment, it is essential to conduct peer-review of the assessment work plan, which would occur at the early planning stage envisioned in the Discussion Paper. Discussing as early as possible the basic approach to an assessment will maximize the quality of work that can be achieved through the process, rather than having the credibility of the assessment studies and analyses be questioned in a confrontational fashion towards the end.

Key References

- Doremus, H. (2004). The Purposes, Effects, and Future of the Endangered Species Act's Best Available Science Mandate, 34 *Envl. L.* 397. <http://scholarship.law.berkeley.edu/facpubs/823>
- Doremus, H.. (2008). Scientific and Political Integrity in Environmental Policy, 86 *Tex. L. Rev.* 1601. <http://scholarship.law.berkeley.edu/facpubs/2001>
- Fein, I. (2011). Reassessing the Role of the National Research Council: Peer Review, Political Tool, or Science Court, 99 *Cal. L. Rev.* 465. <http://scholarship.law.berkeley.edu/californialawreview/vol99/iss2/7>
- Holdren Memo on Scientific Integrity (2010). <https://obamawhitehouse.archives.gov/administration/eop/ostp/library/scientificintegrity>
- Office of Management and Budget (2005) Final Information Quality Bulletin for Peer Review Federal Register / Vol. 70, No. 10 / Friday, January 14, 2005 / Notices. https://www.ers.usda.gov/media/Import/138535/peerreviewbulletin_1_.pdf
- Ruhl, JB & J. Salzman, (2006) In Defense of Regulatory Peer Review, 84 *WASH. U. L. REV.* 1, 7.
- Tarlock, A.D. (2005)., Science, Judgment, and Controversy in Natural Resource Regulation, (with H. Doremus), 26 *Pub. Land & Resources L. Rev.* 1. http://scholarship.kentlaw.iit.edu/fac_schol/646
- Wymyslo, J. (2009). Legitimizing Peer Review in ESA Listing Decision, 33 *FALL ENVIRONS* 135.

Notes on ensuring a strong evidentiary basis for EA in the Discussion Paper

Justina Ray (WCS Canada), July 18, 2017

Whereas the original goals of the Liberal government law reform initiative, the Ministry mandate letters and the TOR for the EA expert panel all explicitly mentioned “robust, incorporate scientific evidence” as part of “new, fair processes”, the DP is more limiting in its treatment of science/evidence as part of a newly-worded objective to “regain public trust”. The DP places the greatest emphasis on accessibility and transparency of information/data and inclusion of indigenous knowledge. However, “timely, evidence-based decisions reflecting the best available science and Indigenous knowledge” is mentioned as one of 5 guiding principles, and there are scattered references in the document to enhancing the scientific rigour of assessments, validating information presented by the proponents, etc.

The points I would emphasize the most are:

- having a strong evidentiary basis to EA is fundamental to regaining public trust and establishing “new, fair” processes and a key underlying reason for the lack of such things in current practice and legislation in Canada; and
- there are many elements to a strong, evidentiary basis (which Canada fondly calls “based on facts, science, and evidence” (although not in the DP) and adequate attention needs to be paid to both ensuring that processes are deliberately designed to ensure adequate quality, rigorous testing (including monitoring), *and* transparent treatment of evidence/information that forms the basis of any assessments.

Essential elements include:

- Significantly strengthened Authority with bolstered in-house expertise and sufficient capacity to provide clear and consistent guidance, place greater evidence on cross-checks and validation of evidence, employ outside expertise where required, etc.;
- Early planning phase that sets the stage for the assessment, the leadership of the agency, and information collection, responsibilities and processes;
- Enhanced public participation, including sufficient funding for intervenors to engage qualified experts to test evidence;
- Regional and Strategic impact assessments to provide better guidance to project-level EAs, particularly as they relate to cumulative effects;
- Appointment of Joint Review Panels where required;
- Transparency in decision making and open data; and
- Comprehensive monitoring regime at appropriate scales with continuous oversight by the Assessment Authority.

Some notes on the four sections that deal with science/evidence in the DP:

1) Addressing Cumulative Effects:

The emphasis on cumulative effects in the DP is welcome, as is the acknowledgement that project assessments will be “challenged to deal to plan for and mitigate cumulative effects associated with a project in the absence of regional environmental assessments that consider all activities on the landscape or in a region.” This fact is becoming increasingly obvious, but there are no good models in Canada for how to effectively deal with this. My chief concern with the DP is that the treatment and assessment of CE will merely be there for guidance and not appropriately embedded in the legislation or regulations to make any difference.

Cumulative *effects* assessment will characterize the changes to the environment and other aspects that define sustainability, but more detail will be required to determine Canada's thinking (if it exists) on how *impacts*, or the consequences of the changes, will be assessed and incorporated into decision making. The mention of national frameworks is not so clear; the model of the PCF is not reassuring. Cumulative effects assessment and management frameworks have potential as the operational realization of regional assessments, but where these have been attempted in Canada (NWT and BC), but they have had mixed success. Their key difficulties have been in linking the strategic nature of these CEAMFs to regulatory decisions or operational guidance – they need to be elevated beyond an advisory role with no authority. It is notable that, similar to R/SEA, cumulative effects assessment is not mentioned at all in Proposed Program and Legislative Changes section of the DP, reinforcing my concern that any attention to CE is about guidance and won't be mandated in any meaningful way.

2) Early Engagement and Planning:

This stage is critical for setting the stage for robust consideration of evidence, science and IK, yet this aspect is not mentioned in the DP. Early planning should provide a forum for discussing potential impacts and designing studies, lining up reviewers, expert team, information sources, designing additional studies etc. In addition, the DP emphasizes that this phase would be proponent-led, which is problematic. If the proponent maintains its role in data gathering and writing the EA (although not the only player), the clear leadership of the agency must be established as early as possible as a means of leading the process and setting expectations. If the early phase is proponent-led, this will begin the whole process with the agency on its heels, and will be nothing different from business as usual.

3) Transparency and Public Participation:

The emphasis on transparency of information and accessibility is certainly welcome. My chief concern is that this is being emphasized in the DP over information quality. At least as much attention should be paid to the quality of information, rigour of review, etc. One can envision the preparation and accessibility of information overwhelming the process (tail wagging the dog), just the way these things tend to play out in a bureaucracy.

This section should include some words about public participation and interveners as a means of elevating the rigour of review of evidence (although funding of public participation is mentioned).

4) Science, Evidence and Indigenous Knowledge:

Three of four of the bullets re why “our current system can be improved” relate to transparency and accessibility of information with only one about quality of information, which is exclusively about inclusion of Indigenous knowledge.

“Reinforcing rigour through peer reviews of science and evidence in the assessment phase” is mentioned as a change but this needs to be further fleshed out and is not linked to an acknowledged deficiency of the current system. The word “rigour” is mentioned here only once in the DP.

The particular role of the agency, and the need for it to be strengthened (including regionally) is not mentioned here.

Scientific Advisory Committee

Justina Ray (WCS Canada), August 24, 2017

The Environmental and Regulatory Reviews Discussion Paper states the Government of Canada’s intention to establish “Advisory committees for Indigenous peoples, stakeholders and experts to provide advice to the Minister on issues related to impact assessments using reliable information in the formulation of its policies.” This briefing note outlines key considerations for the role and function of one of these required bodies, namely the ‘Science Advisory Committee’ (SAC) for the new impact assessment (IA) regime.

Purpose of the Science Advisory Committee (SAC)

Advisory bodies are commonly established (often enabled by legislation; see below) to provide government with a forum for consultation with interested parties and experts on aspects of strategic and technical implementation of a given law. Transparent and publicly available independent scientific⁴ expert advice would help strengthen the basis of Ministerial and Impact Assessment Agency/Authority (hereafter, “Agency”) decisions, ensure greater oversight and bolster public confidence in the federal IA regime.

Members of this standing committee would provide advice—independent of any institutional or employment affiliations—to the Minister of Environment and Climate Change and the Agency regarding the implementation and ongoing operations of new environmental impact legislation in accordance with the purposes and goals of the IA Act. The SAC would focus on specific issues that require specialized knowledge (see below) with a focus on knowledge and learning in relation to ongoing implementation of the law. Its advice would inform selected policies, regulations, guidance, and aspects of the practice of IA. The role of the SAC would be distinct from other advisory committees, most notably the Multi-Interest Advisory Committee (MIAC)⁵, which was formed at the beginning of the environmental and regulatory review process last year to “*inform potential regulatory, legislative, policy and guidance changes and implementation*” on matters related to impact assessment (IA). The MIAC will continue to be vital for the Minister and the Agency as an important source of input for the ongoing implementation of IA legislation. However, the key difference is that SAC members would be specifically mandated to provide advice as independent experts (i.e. leaving their institutional hats at the door), while the purposes of a renewed MIAC would include providing government with a range of interest-based perspectives informing recommended IA legislation, regulation and guidance.

Membership

The SAC would be composed of members from within and outside the federal government, appointed to reflect a range of relevant scientific knowledge, expertise, and experience in keeping with the broad evidentiary basis that will be required for project-level and regional/strategic impact assessments. Members should:

- Represent a diversity of knowledge and expertise in areas related to all aspects of sustainability (e.g., environmental, economic, social, cultural and health values), the interactions among these and multiple dimensions of the practice of impact assessment, with attention to diversity and regional representation and including Indigenous science;

⁴ “Scientific” should be broadly defined, i.e., “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” (Scientific Integrity Project, <http://scienceintegrity.ca/>) and should also include Indigenous scholars.

⁵ The MIAC’s predecessor was the Regulatory Advisory Committee (RAC), a multi-stakeholder committee first established in 1992 to advise the Minister on the regulations and guidelines needed to implement CEAA that met regularly until 2008.

- Be drawn from and represent a balanced composition of experts from the public and private sector; including academia, professional and/or civil society organizations, Indigenous communities and organizations, and government⁶;
- Possess demonstrable skills in critical thinking and information analysis grounded in practice and experience;
- Be able to assess heterogeneous bodies of information and offer opinions based on incomplete knowledge, operating comfortably in the face of considerable uncertainty and complexity;
- Be selected following a transparent recruitment process on the basis of established qualifications. The Minister would select the first group following a call for applications, after which SAC members would steward the application process, with appointments approved by the Minister, using COSEWIC as a model;
- Be subject to term limits (staggered among members) that ensure turnover and diversity of the committee;
- Be enabled to draw upon specific expertise from outside the SAC on a contractual basis when needed;
- Be limited in number to 12-15 sitting members; and
- Be governed by procedures outlined in a clear and comprehensive terms of reference, discussed and approved by the SAC at its first meeting.

IA Issues that Need SAC Analysis and Advice

The following are examples of particular areas or topics that would benefit as soon as possible from SAC advice to enhance ongoing implementation of the new IA law:

- Identifying undertakings that should be added to the project list;
- Identifying, based on information and their own knowledge and expertise, the need for regional and strategic-level IAs and to advise the Minister of Environment and Climate Change on the need for strategic and regional IAs and their scope;
- Guidelines and standards for cumulative effects assessment, including incorporation into project and/or regional/strategic assessments;
- Impartial criteria for developing and updating the project list as well as exceptions to the project list;
- Evidentiary standards (information quality) for various stages of IA;
- Maintaining a roster of independent scientists for peer review of IA studies, guidelines and other documents and recommending scientists to the Minister or Agency where required/requested/appropriate;
- Determining how consequential effects or thresholds will be defined and measured, which will be deemed important, and the relative weighting of direct, indirect, and cumulative effects, including those related to climate change;
- Methods to determine a project's GHG emissions and thresholds and targets for GHG emissions for a particular sector, industry or region to be made binding in project IA and how to include this as part of cumulative effects assessments;
- Methods and practice for interfacing with Indigenous knowledge and for ensuring such knowledge, where available, is incorporated in the various stages of an IA;
- Guidelines for addressing uncertainty in impact assessment and decision making;
- Processes for review and testing of evidence at various stages of IA;
- Design and evaluation of monitoring frameworks and methodologies;

⁶ With respect to non-government appointments, see SARA s 16(4) (re COSEWIC): “(4) The members are not, because of being a member, part of the public service of Canada.”

- Build expertise to determine the questions and issues that need to be addressed in any project-level IA that must be decided during early planning stages, including advice on standards for the required evidentiary basis;
- Reviewing and providing advice on specific project or regional and strategic IAs that are precedent setting or present particular challenges; and
- Providing additional advice and expertise to the Minister and the Agency as needed.

Legislation

Experience demonstrates that an enabling clause (“may establish”) in legislation renders an advisory body vulnerable to being abandoned or never being established at all, in contrast to mandated establishment of the body (e.g., “shall”).⁷ Therefore, it is important that the SAC have a legislative basis in order to ensure its continued efficacy.

Other aspects of the SAC that would be important to articulate in law, and not left to the terms of reference, include:

- *Qualifications of members*, e.g., relevant expertise (see above);
- *Independence*. Suggested language: “The members of XXX shall perform their functions in an independent manner, and not as representatives of their employers or of any other person or body” (Ontario *Endangered Species Act, 2007* s. 3(5), re Committee on the Status of Species at Risk in Ontario).
- *Functions*. This would be a high-level list of functions of the committee (see Mandate/Functions above);
- *Support*. Suggested language: “The Minister must provide [the SAC] with any professional, technical, secretarial, clerical and other assistance, and any facilities and supplies, that, in his or her opinion, are necessary to carry out its functions.” (Species At Risk Act, s. 20 re COSEWIC);
- *Response/Statement of Reasons*. A clause should be included that obliges the Minister to respond to specified SAC advice or recommendations within a specified timeframe in a transparent, public manner, including reasons for a course of action.

Additional Policy and Implementation Considerations

Experience demonstrates that enhancing the functionality of an expert advisory committee will involve several additional factors not mentioned above:

- A robust *conflict of interest policy* should be developed;
- A *committee chair* should be selected by SAC members to set the agenda for meetings, in consultation with the Agency;
- *Remuneration* of services in set amounts would be approved by the SAC and Agency, as well as guidelines for reimbursement of travel, accommodation and related expenses for meetings and other defined SAC-related business;
- *SAC reports* detailing the advice of the committee and communications to the Minister should be publicly available, to meet government objectives for transparency and support public confidence in the IA process (as emphasized in the Discussion Paper);
- Although committee deliberations must be confidential, a *website* should be maintained reporting on the activities of the SAC, schedule of meetings, topics, and a mechanism for receiving input on such topics from the general public;

⁷ For example, under the previous government, COSEWIC (mandated under SARA) continued to function, but both the Species at Risk Advisory Committee (SARAC) and The National Aboriginal Council on Species at Risk (NACOSAR) were disbanded. For CEEA 1992, RAC stopped meeting in 2009 and while CEEA 2012 contains a provision enabling the Minister to “establish research and advisory bodies in the area of environmental assessment” (s. 86), this did not take place.

- Processes should be established to clarify such matters as *confidentiality and protection of information*, how best to handle *government ATIP requests* and litigation-related “collection of document” requests from Justice Canada, etc.;
- It is essential that adequate *secretariat support* be provided to the SAC, including background research, writing, and logistical support, particularly because SAC members will all have day jobs and must be independent (precluding them from receiving salary support).
 - Terms of Reference should be established for the Secretariat so the respective roles of the committee and the secretariat, as well as the working relationship between the two, are clear.
 - Good relations and frequent communications between the committee chair and the senior secretariat staff will help ensure that the committee’s needs are being met.
 - Treasury Board policies (contracting policies, website requirements, etc.) can present significant challenges with budgetary and administrative burdens. Any Secretariat established should consider all options, including staff that are external to the federal government while being funded by it.

Statutory Climate Provisions

Karine Peloffy, with Bob Gibson, Meinhard Doelle and Anna Johnston

The following outlines statutory provisions to address climate mitigation in the new assessment process. The elements are based on an overall sustainability approach in line with next generation assessments. Most of the details regarding including climate considerations in EA processes can be provided for in regulations and policy guidance. The following aspects are those that should be specifically addressed in Statute.

1. The Statute should include the following triggering provisions:
 - a. The statute should have a petition process to require an assessment of projects not on the project list, and to add to the list. A similar list should be developed for strategic assessments, but the focus here is no the process for project assessments.
 - b. The statute should provide for a periodic review of the project list
 - c. For both a. and b. the Statute should establish clear criteria (either directly or through regulations) for when potential climate implications of proposed projects or undertakings should result in an assessment, either by adding projects to the project list or by requiring an assessment of projects not on the list. The following should be among the criteria that determine whether a petition will be successful and/or a project is added to the list:
 - i. Does the proposed project have the potential to hinder the decarbonization of the Canadian economy within a timeframe consistent with Canada's fair share under the Paris Agreement?
 - ii. Does the proposed project have the potential to hinder Canada's ability to meet its Nationally Determined Contribution (NDC) under the Paris Agreement?
2. The Statute should include language to generally require consideration of the following, and require the development of detailed standards in regulation or binding policy for the following:
 - a. Assessment of the life cycle GHG emissions from proposed projects,
 - b. Assessment of the indirect GHG emissions related to proposed projects that need to be included in the assessment
 - c. Multiple standards against which the project's impact on Canada's climate mitigation effort will be measured, such as:
 - i. Any relevant existing standards or targets at any level of government in Canada that are specific to the proposed project,
 - ii. Canada's NDC under the Paris Agreement, and
 - iii. The decarbonization of the Canadian economy within a timeframe consistent with Canada's fair share under the Paris Agreement.
3. The Statute should provide clarity on how a project's net contribution to climate mitigation fits into the sustainability criteria. It needs to clarify whether climate mitigation is a separate element of the sustainability criteria, part of a broader category of biophysical effects, or integrated into each of the sustainability criteria.
4. The Statute should establish trade off rules that clarify how a project's performance against the various standards set out in 2(c) feeds into project decision-making. The Statute should provide clarity as to what is a positive and negative net effect on climate mitigation. It also needs to set thresholds for levels of negative climate mitigation impacts that mean they cannot be traded off against benefits in other areas (significant negative climate mitigation impacts). Similarly, there need to be thresholds in other areas, such as biophysical and social impacts that prevent positive climate mitigation impacts from being traded of against unacceptable negative biophysical or social impacts (significant negative biophysical and social impacts).