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Draft Strategic Assessment of Climate Change: Big Steps for Impact Assessment, Baby Steps for Climate Change

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Earlier this year, Environment and Climate Change Canada (ECCC) released draft guidance for the climate change related requirements in the new federal *Impact Assessment Act* (S.C. 2019, c. 28, s. 1) (IAA or the Act). While the future of this guidance was uncertain in recent months due to the federal election, as was the future of the entire new regime, the Act is now firmly in force and here to stay. No amendments are expected, as stated by the new federal environment minister. As part of implementing the regime, the new Impact Assessment Agency (the Agency) is now in the process of issuing detailed guidance explaining what information proponents should provide during the planning and assessment phases, including with respect to initial and detailed project descriptions, engagement with Indigenous communities, public participation, and climate change. The final climate change guidance, which ECCC has developed through what it calls a Strategic Assessment on Climate Change (SACC), is expected in early 2020.

This post focuses on the draft SACC. Specifically, I provide relevant background, explain the general threshold-based structure of the proposed regime, and then offer commentary on several key features and one missing piece. Overall, this draft guidance takes a significant step in the right direction by providing details and parameters that should be welcomed by project proponents and those interested in seeing clarity regarding quantification of greenhouse gasses (GHGs) in impact assessment. This is no small feat in the impact assessment realm where integration of climate change considerations has been a challenge for many years across the world. However, in several ways the guidance does not go far enough, particularly in terms of relating project-specific emissions analysis with what really matters: achieving Canada's climate change commitments and avoiding severe climate change-induced damage on a global scale. As the 25th Conference of the parties ("COP 25") to the United Nations Framework Convention on Climate Change draws to a close in Madrid, the world is watching. It is not too late for Canada to further clarify how emissions from major projects reviewed under the IAA will fit into the path toward achieving Canada's targets under the Paris Agreement and achieving the recently announced commitment to net zero carbon emissions by 2050, which has just been included in the mandate letter released today to the Minister of Environment and Climate Change.

Background

ECCC is in the final stages of completing the SACC that began in summer 2018. Last March, it released the terms of reference for the SACC. As I explained in an earlier post, the exercise has

been a "strategic assessment" in name only. In substance, it was actually a fairly typical guidance development process. Rather than seizing the strategic opportunity to take stock of GHG reduction measures across the country and set a path toward much needed and long absent policy coherence, the federal government adopted a very narrow approach that focused exclusively on generating guidance to be used in implementing the new Act. As I mentioned in my previous post, and as I explain again at the end of this post, this is a significant missed opportunity.

Setting aside that concern for the moment, which is arguably a bigger issue than the new impact assessment regime can address in isolation, a look at the draft guidance does reveal a significant step toward generating much needed clarity regarding what information project proponents must provide the Agency during the planning and assessment phases. As stated in the draft:

> The strategic assessment of climate change provides guidance on how federal impact assessments will consider a project's GHG emissions. More specifically, it provides guidance to proponents and others on the information requirements related to climate change that apply at key steps in the impact assessment process for the purpose of addressing public policy discussions beyond the scope of a single project assessment. It will also clarify how the Agency or lifecycle regulators, with support from expert federal authorities, will review and analyze this information. This will enable consistent, predictable, efficient and transparent consideration of climate change in the impact assessment process. (at 5)

While GHGs have been included in federal environmental assessments for years, including for example in the review of the Trans Mountain Pipeline Expansion Project (TMX), there was a chronic lack of clarity about what information was required and how the government would use that information in decision-making (see here for a discussion of this issue). The new IAA fills that void, or at least begins to do so, by setting out explicit requirements to consider climate change during the assessment (under s 22(1)(i)) and during final decision making (pursuant to s 63(e)), both of which require consideration of "the extent to which the effects of the designated project hinder or contribute to the Government of Canada's ability to meet its environmental obligations and its commitments in respect of climate change".

Predictably, however, this statutory language is rather vague. To flesh out what is actually required, the government engaged in this SACC process, which led to the draft guidance. And more is to come. As acknowledged in the draft, further technical guides will be published following the publication of the final SACC. All of this guidance is explicitly and formally linked to the statute through the *Information and Management of Time Limits Regulations*, SOR/2019-283, which requires project proponents to submit "[a]n estimate of any greenhouse gas emissions associated with the project" as part of the initial description of the designated project (Schedule 1, s 23), and as part of the detailed description of the designated project (Schedule 2, s 23).

Basic Structure and Requirements

The guidance will apply to all projects undergoing a federal impact assessment (i.e. projects included on the project list and projects designated by the Minister as requiring an assessment

pursuant to s 9 of the IAA), requiring that proponents quantify GHG emissions associated with the project. Proponents will be expected to provide an initial estimate in the initial project description submitted during the planning phase, and then more detailed updated information as part of the detailed project that will inform the assessment phase. For an example of the former, see this initial project description from the Gazdoq natural gas pipeline project, which is one of the first proceeding under the new Act.

The draft guidance provides details on what information must be submitted during the planning and assessment phases. Specific information required "will be determined on a case-by-case basis" (p 10), but the basic structure is as follows. First, during the planning phase a proponent must provide information about the project type, project purpose, "and an estimate of its GHG emissions, which should be calculated as net GHG emissions" (at 10). The formula for calculating these net emissions is set out on pages 6 and 7; it includes information regarding "direct emissions", "acquired energy emissions", "transferred surplus energy emissions", carbon captured and stored, and "avoided domestic emissions". Detailed discussion of each of these components is beyond the scope of this post; however, the parameters appear to provide reasonably comprehensive coverage. For example, "direct emissions" includes emissions from land clearing (including deforestation, and presumably including any changes to wetlands or peat bogs), mobile combustion (e.g. heavy machinery) and stationary combustion (e.g. boilers and burners).

Based on an initial estimate of a project's GHG emissions, information requirements then follow a threshold-based approach. Projects with estimated net GHG emissions below 500 kilotonnes (kt) CO^2e in any single year during construction, operation or decommissioning need only submit "basic information" on project GHG emissions (details set out in 5.1.1 of the draft guidance), as well as information regarding mitigation measures (5.2.1) and a project's climate resilience (5.3.1). However, if a project is expected to result in upstream emissions greater than 500 kt CO^2e per year, then the proponent must submit an "upstream GHG assessment" following the guidance set out in 5.1.3. If the project's estimated net GHG emissions are below 500 kt CO^2e but there are potential "impacts on carbon sinks", then the proponent must submit the basic information as well as "information on federal emission reduction efforts and global impacts" following guidance set out in 5.1.2. If a project's emissions are expected to exceed 500 kt CO^2e but the expected upstream emissions are expected to be below 500 kt CO^2e, then the proponent must submit the basic information, information on federal emission reduction efforts and global impacts, and a "Best Available Technologies/Best Environmental Practices (BAT/BEP) determination". Finally, in the most information-intensive contexts, if a project is expected to have net emissions greater than 500 kt CO^2e per year *and* upstream emissions greater than 500 kt CO^2e, the proponent must submit the basic information, information on federal emission reduction efforts and global impacts, an upstream GHG assessment and a BAT/BEP determination following the guidance set out in 5.2.2. These thresholds are set out in a reasonably helpful process chart on page 11 of the draft SACC.

While further technical guidance is forthcoming, the draft SACC provides relatively detailed descriptions of what information is required in the detailed project description to be submitted during the assessment phase. This is set out in Part 5 on pages 12 – 15. Several features stand out, which I discuss below.

Commentary

In offering these observations, I will begin at the detailed level and finish with comments regarding broader climate policy dimensions.

Offsets

The guidance opens the door to generation and use of "offset credits". While it is not surprising to see this inclusion, the role of offsets in emissions reduction regimes is notoriously complex and controversial, so it is reasonable to expect a significant amount of further rules and guidance coming from ECCC and the Agency in months or years to come. For now, it appears that the guidance is laying a foundation for projects to *generate* offsets by allowing proponents to calculate emission reductions or removals "generated from activities that are additional to what would have occurred in the absence of the project and are then issued by a Canadian (provincial, territorial or federal) regulatory offset regime" and "verified to a reasonable level of assurance by an accredited third-party verification body" (at 8). Presumably this would be most relevant in the context of a renewable energy project, for example. In terms of *using* offset credits, the guidance clarifies that any offset credits issued by ECCC under the *Greenhouse Gas Pollution Pricing Act* (S.C. 2018, c. 12, s. 186) or any provincial or territorial regime may only be used as part of a proponent's presentation of mitigation measures; such offsets are not to be included in the quantification of a project's net GHG emissions (at 8). For anyone engaged in international emissions trading work, this will trigger thoughts of long-standing concerns about monitoring, reporting and verification complexities that arise with offsets. While some jurisdictions, such as California, have made headway in this realm, much work remains. As such, it may be some time before this flexibility is actually available under the IAA. Stay tuned on this one as it appears that much still needs to be worked out.

Emissions Intensity

Proponents will be required to estimate the GHG emissions intensity of a project (3.1.3), which will be "used to compare the project to high-performing, energy-efficient projects of a similar type in Canada and internationally". As part of this process, proponents "should explain why the emissions intensity may be different" from comparators (5.2.1). It appears that this information will then be used by the Agency to compare the project's emissions intensity with similar projects, taking into account the specific circumstances of the project (5.4). Again, the details are relatively thin, so presumably a significant amount of further detail will be set out in forthcoming technical guidance regarding quantification of GHG emissions and best available technologies. While this type of information veers away from the pure megatonnes calculations required for the Agency and decision-makers to directly assess the extent to which the effects of the designated project hinder or contribute to the Government of Canada's ability to meet its climate change commitments, it is presumably included to introduce some relativity in the assessment process that may inform Agency analysis of mitigation measures and development of project approval conditions. It may also encourage proponents to incorporate better technologies where feasible.

Downstream Emissions

The guidance clarifies that downstream emissions will not be assessed (at i, 6). Downstream emissions are defined in the guidance as "emissions that may occur after the project, including emissions resulting from the end use of products made at a project" (at ii). While no further details or rationale are provided in the guidance, this is actually a significant assessment scoping choice. Keeping calculations of downstream emissions out of the assessment goes against the fundamental information gathering purpose of project-level assessment. Admittedly, downstream emissions would be difficult to calculate; however, it would have been reasonable to include this requirement in the guidance with a strong parallel requirement to explain methodological limitations and uncertainties (which is already required under 3.3 with respect to net and upstream emissions calculations). Carving this requirement out is even more surprising given that the guidance opens a peculiar backdoor to including downstream emissions but by another name – "displacement of high-emitting energy abroad" (5.1.2).

Displaced Emissions Internationally

With the exception of projects below all of the above-described thresholds, project proponents will have to provide "[i]nformation on federal emissions reduction efforts and global impacts" (5.1.2). There are domestic and international dimensions to this requirement. Domestically, the guidance sets a foundation for proponents to relate the project emissions to Canada's broader efforts to reduce GHG emissions. As explained by the guidance, this "could explain how the project would result in emission reductions in Canada by avoiding emissions from another source" (at 12). There is no information nor example, however, regarding how a high emitting project ought to portray this information, and, of course, these will be the most controversial examples.

Internationally, the guidance invites proponents to present "how a project could impact global GHG emissions" (at 12), specifically in terms of carbon leakage (where an activity moves to another country with less stringent emissions standards, leading to an increase in global emissions) and how a project may enable "displacement of high-emitting energy abroad with lower emitting energy produced in Canada" (at 12).

Inclusion of this in the guidance while excluding consideration of downstream emissions is surprising at best and deceptive at worst. Quite simply, a proponent would be unable to calculate this "displacement" without engaging in some level of downstream emissions calculations. For example, if a proponent of a liquid natural gas (LNG) export facility were to suggest that the project will result in displaced emissions elsewhere (as has been asserted, including in the political sphere), that proponent must calculate the emissions from combusting the product and compare that figure to emissions that would have come from burning a different fuel source (e.g. coal). This is an exercise in estimating downstream emissions, pure and simple.

What is perhaps most concerning about this part of the draft guidance is that it sets up the assessment to allow project proponents to emphasize a project's potential global emissions reduction benefits as part of the project's "displaced emissions" description, but does so while

not requiring comprehensive calculations of the global burden of the project's downstream emissions.

As ECCC and the Agency develop the more detailed guidance on these aspects of GHG calculations, it may be difficult to sustain this dissonance. One key aspect to watch for is how this downstream/displacement approach (as well as the offsets dimension) relates to the international rulebook that is being negotiated to implement Article 6 of the Paris Agreement. Article 6 is sometimes referred to as the "carbon markets" part of the Paris Agreement, and the emerging international rules will govern countries' use of several mechanisms available for the purposes of meeting Paris targets (e.g. emissions trading). An explicit aim of Article 6 is the "avoidance of double counting", whereby two countries try to claim the same emissions reduction as their own (for a good overview, see here).

In the new Canadian IAA context, subject to details emerging from the Conference of the Parties (COP) 25 negotiations, ECCC and the Agency will need to ensure that if product from a Canadian project (e.g. LNG) results in emissions reductions in a foreign country (i.e. "displaces emissions internationally") and that destination country claims those reductions for the purposes of achieving its own climate change commitments, then those same reductions must not be claimed by Canada for the purpose of achieving its own reductions. Put another way, from a Paris rules perspective it may ultimately be fine for a Canadian project proponent to point to expected global emissions reductions benefits in a narrative way for the purposes of securing project approval in the domestic realm. However, Canada may not then count those foreign emissions reductions as emissions reductions achieved by Canada, nor should a Canadian project proponent expect to obtain the monetary value for those emissions reductions other than through whatever premium is already priced in by the global energy market. And it must be noted that all of this may be moot, given the tenuous nature of the assertion that exported Canadian LNG will actually result in global emission reductions, as explained in this op-ed in the Globe and Mail this week, and in this analysis by the Ecofiscal Commission.

Review, Analysis and Decision-Making

The draft climate change guidance is particularly thin with respect to how all of the project information will be reviewed and analyzed by the Agency (5.4), and how the Governor in Council will then use the information in making a final decision as to whether the project is in the public interest (Part 6). This portion of the assessment is critically important because it is the primary venue for the federal government to meaningfully examine the extent to which the effects of the designated project hinder or contribute to Canada's ability to meet its climate change commitments. Several aspects of the draft guidance stand out.

First, it is at this stage that the Agency will "comment on and complement with analysis" how the project-specific GHG analysis relates to the federal, provincial and territorial climate policies that will apply to the project (at 16). This provides a basis for the Agency to, for example, factor in whether and how the project is subject to the federal GHG emissions reductions requirements under other schemes such as the federal carbon pricing regime or sector-based direct regulation. Taking Alberta as an example, a project or portions of a project may be covered by the new provincial *Technology Innovation and Emissions Reduction regulation* (Alta Reg 133/2019)

(which was recently found by the federal government to meet federal requirements under the *Greenhouse Gas Pollution Pricing Act*), or operations within the project might also be subject to the federal *Heavy-duty Vehicle and Engine Greenhouse Gas Emission Regulations guidance document* (SOR/2013-24). The draft IAA climate change guidance sets a foundation for the Agency to step back and assess how and to what extent a project's expected GHG emissions are otherwise regulated.

At a project-specific level, this is an opportunity for the Agency to assess whether there is coherence in the way different climate policies apply to the project, which will no doubt be welcome news for project proponents. From my perspective, this project-specific analysis is far from the bird's eye view assessment of all climate laws and policies that should have been undertaken through the SACC, but it at least provides a basis for this type of analysis on a project-by-project basis, which is better than nothing.

Second, according to the draft guidance, the Agency will take the information provided by the proponent and add its own "supplemental analysis" that relates the project-level GHG estimates to Canada's emissions targets and forecasts, such as the 2030 Paris commitment and the recently announced commitment to net zero carbon emissions by 2050. While this type of analysis sounds promising, and it is certainly central to implementing the explicit climate change requirements of the IAA, at the present stage the guidance seems to only articulate that a black box is being set up for the Agency. Again, presumably further guidance is forthcoming on this dimension. It will perhaps be included in the "Interim policy context: Public interest determination (Decision-making)" document for which there is a placeholder on the Agency's IAA policy and guidance webpage.

Third, the guidance indicates that the Governor in Council will take the project information and then relate it to Canada's climate change commitments:

> The information provided by project proponents pursuant to the guidance in this strategic assessment of climate change, together with the analysis of that information by the Agency or lifecycle regulators, will ensure that assessment decisions account for a project's likely climate change-related effects. Decision-makers will be provided with analysis, including but not limited to, the project's GHG emissions in the context of Canada's emissions targets and forecasts, such as Canada's 2030 emissions targets and Canada's Mid-Century Long-Term Low-Greenhouse Gas Development Strategy. (at 17)

Similar to the guidance's coverage of the Agency's analysis in this regard, the details here are thin. However, that is not entirely surprising nor unjustified given that the polycentric nature of public interest decision-making in this context requires significant latitude and is premised on democratic accountability at the ballot box. So, while this aspect of the guidance also appears to be setting up a black box within which the Governor in Council will deliberate and decide, this is to be expected. Further, any mystery that flows from this approach should be offset by the important new requirement in s 65 of the IAA for the Governor in Council to give "detailed reasons" with a final public interest determination. These reasons will have to explain how the Governor in Council considered climate change dimensions in reaching its decision. Admittedly, it will take some time for reasons to emerge for the benefit of understanding the final decision-

making approaches; however, in the nearer term, one can expect that further details will be included in the forthcoming "Interim policy context: Public interest determination (Decision-making)" document cited above. It is speculative, but one might anticipate that future Governor in Council reasons accompanying a high-emitting oil and gas project could look like this description from the federal government explaining how carbon pollution from the TMX project "is already accounted for in Canada's national emissions projections".

Missing Piece

While the draft guidance is a laudable step in the right direction, from my perspective there is one significant missing piece: contextualization. In conducting their above-described respective analyses, the Agency and Governor in Council need additional points of reference if they hope to actually engage in a meaningful analysis of a project's GHG emissions (i.e. the extent to which the effects of the project hinder or contribute to the Government of Canada's ability to meet its commitments in respect of climate change, as required by the Act). Under the approach put forward in the draft guidance, the assessment only requires relatively a basic quantitative totalling of GHG emissions associated with the project. To supplement this data, those relatively abstract megatonne figures need to be further contextualized in relation to useful metrics. Such metrics could be rooted in the broader quantitative picture, for example through reference to carbon budgets (likely linked to national, regional, or sectoral GHG emission reduction targets), decarbonisation pathways (including, for example, emission reduction milestones), and trade-offs (i.e. opportunity cost of allowing emissions by this project instead of something else). Or the metric could be damages-based, achieved by calculating the monetary cost of damage caused by the project's GHG emissions (most often expressed through the social cost of carbon – see this ECCC presentation for descriptions), and then integrating these dollar figures into a project's quantifiable monetary costs and benefits. Many of these options are explored in two recent papers, one by Dr. Meinhard Doelle and one by myself and Dr. Doelle, early drafts of which are available here and here.

Such dimensions were also examined in the "From Paris to Projects" final report released by Professor Robert Gibson *et al*. in early 2019. Anticipating future climate change guidance and regulations under the IAA, that report astutely stated the following:

> Perhaps even more than other regulations that are needed for the *Impact Assessment Act*, those for climate change will be complex, demanding and controversial as well as crucial. Moreover, as noted above, climate-related assessment regulations would need to be elaborated in considerable detail for informed and consistent application.
> …
> Development and application of needed climate guidance for assessments would need to be based on credibly developed overall analyses of what is needed to cover the gap between the Paris commitments and Canadian obligations addressed in the earlier parts of this report, and then clarify implications for assessment of particular undertakings. (at 186)

These statements remain true. To be sure, the SACC and resulting draft guidance represent a significant step forward in the impact assessment realm. Jurisdictions around the world have struggled with integrating climate change considerations into project-level assessment for many years, but Canada is now situated to lead the pack in terms of how to do it right. However, much of the work described in the Paris to Projects observation remains unfinished. Some of it, such as detailing how to quantify emissions and manage offsets and downstream dimensions, can still be done (and done well) through the further guidance being developed by ECCC and the Agency with input from stakeholders, rights-holders and experts. This too will represent significant steps forward in practical impact assessment terms. However, to date, there is little indication that the more fundamental work is even underway - i.e. developing an overall analysis that takes stock of current and future GHG reduction measures and relating it to the project-level sphere. This is the work that must be done for the IAA climate change provisions to contribute to anything beyond baby steps in actual GHG emissions reductions. Such a comprehensive approach is necessary if the new impact assessment regime is to assist Canada in meeting its emission reduction targets and in meaningfully combating climate change.

The year ahead holds promise in this regard, however. The federal government has committed to introducing "net-zero legislation" to support its 2050 net-zero emissions target (resembling similar commitments by New Zealand and by the United Kingdom), which, as mentioned above, is explicitly included in the mandate letter to the Minister of Environment and Climate Change released today –"setting legally-binding, five-year emissions-reduction milestones based on the advice of experts and consultations with Canadians". Canada is now poised to fulfilling the long-standing, long-uncompleted task of comprehensively taking stock of GHG reduction measures across the country and then charting the required (and, if we're honest, difficult) path forward. This will involve many law and policy levers, including, under the new IAA, project-by-project GHG emissions analyses that determine whether and how projects fit within Canada's emissions future. That would represent a big step forward for impact assessment *and* for the climate.

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