August 28, 2020

Climate Change in Federal Impact Assessment: An Early Look at Two Energy Projects

By: Niall Fink and David V. Wright

Documents Commented On: *Impact Assessment Act*, SC 2019, c 28 s 1; Environment and Climate Change Canada, Final *Strategic Assessment on Climate Change* (Gatineau: ECCC, 2020)

One year ago, the new *Impact Assessment Act*, SC 2019, c 28 s 1 (IAA) came into force. With project reviews now proceeding under the IAA, this is an opportune time to reflect on implementation of the new regime so far. This post focuses on one specific dimension: climate change. For the first time since the inception of federal environmental assessment, Canada's federal project-level assessment statute explicitly requires decision-makers to consider a project's effects on Canada's ability to meet its climate change commitments (ss 22(1)(i) and 63(e)). The year has seen this requirement fleshed out through guidance published in the form of the Strategic Assessment of Climate Change (SACC) (see commentary by Professor Wright). This post examines how the new regime's climate change requirements and guidance have been implemented in two major project-level assessments currently underway: the Suncor Base Mine Extension Project (Suncor Project) and the Gazoduq Project.

We examine the proponents' submissions and the Impact Assessment Agency of Canada's (the Agency) process, and identify areas of uncertainty and concern. Overall, we find that the Agency has given proponents significant latitude to sidestep information requirements in preliminary stages of the assessment process. We also find early signals that the impact statement phase will not fully address concerns regarding downstream emissions nor ambiguity in determining a project's impact on Canada's ability to reduce emissions. While much remains to be seen in subsequent assessment stages, these weaknesses risk that implementation of the IAA becomes yet another instance of the "implementation gap" that has plagued environmental law for decades (see this article by law professor Dan Farber).

The Projects

The Suncor and Gazoduq projects are two of the first major energy projects to proceed through the new IAA process. Accordingly, they represent the first application of the new requirements under the IAA and related draft and final climate change guidance.

The Suncor Project is a proposed 30,000-hectare open-pit mining operation near Fort McMurray, Alberta. The project would expand Suncor's existing Base Plant mine to sustain nearby upgrader facilities as mineable bitumen is depleted, producing up to 225,000 barrels of oil per day over an estimated 25-year lifespan. Given the operations phase is not expected to commence until 2030

(Suncor Detailed Project Description at 21), the time horizon for this project would extend into 2055.

The Gazoduq Project is a proposed 780-kilometre natural gas pipeline that would connect the TC Energy mainline with a proposed natural gas facility in Saguenay, Quebec. The proposed route would require approximately 740 km of new right-of-way and potentially impact 27 different Indigenous groups (Gazoduq Detailed Project Description at 42). During its operation phase, which the proponent estimates would begin in 2024 and last for up to 50 years, the pipeline would transport up to 51 million cubic metres of natural gas per day en route to overseas markets (Gazoduq Detailed Project Description at 33). The project is closely linked to the proposed Saguenay liquefaction facility and export terminal, and depends on completion of that project. The Saguenay facilities were proposed separately in 2015 under the IAA's predecessor, the *Canadian Environmental Assessment Act, 2012*, SC 2012, c 19, s 52 (CEAA 2012), and will continue to be assessed under the previous regime as per the IAA's transitional provisions (s 181).

As an oil sands mine expansion that increases the area of mining operations by 50% or more and a new interprovincial pipeline of more than 40 km, both the Suncor and Gazoduq projects are designated projects under the *Physical Activities Regulations*, SOR/2019-285 (Schedule 2, ss 25 and 41), and, as such, require a federal impact assessment under the IAA (s 7). It is worth noting that both of these projects would have also triggered an assessment under the previous regime, pursuant to similar provisions in the previous regulations (*Regulations Designating Physical Activities*, SOR/2012-147, ss 9 and 46).

At the time of writing, the Suncor Project is nearing the end of the planning phase. This is the first of five phases under the IAA regime (see the Agency's overview of the phased process here), and it culminates in a screening decision and terms of reference for the impact statement and impact assessment phases to follow (see discussion below).The Agency has now released its screening decision, requiring that the Suncor Project undergo a federal impact assessment. It has yet to determine whether the assessment will proceed as a standard Agency review or be referred to a review panel under section 36(1) of the IAA.

The Gazoduq Project is currently at the impact statement phase. As an assessment of a pipeline regulated by the Canada Energy Regulator (CER, formerly the National Energy Board), the IAA directs that it will proceed by review panel (IAA, s 43). Specifically, the Gazoduq Project will undergo what the Agency refers to as an "integrated impact assessment", combining the assessment processes of both the Agency and the CER into an integrated review panel (IAA, ss 47-48). Gazoduq is the first and currently the only project being reviewed under this particular process option.

Climate Change in the Planning Phase

The new IAA introduces additional information requirements for proponents during the planning phase, particularly with respect to climate change. Proponents must now submit two project descriptions: an initial project description and a detailed project description. The initial project description is a preliminary overview of the proposed project and its potential effects (IAA, s

10). The detailed project description (s 15) is a longer document that informs the Agency's screening decision and the Tailored Impact Statement Guidelines (see discussion below). A proponent must provide the detailed project description after fulfilling requirements of public participation (s 11) and consultation with other jurisdictions (s 12), and presumably the document should reflect input from these processes. The proponent must also specifically respond to an Agency-drafted summary of issues (ss 14-15). The detailed project description and response to summary of issues mark a departure from CEAA 2012, which required only a single project description before the assessment which was completed before the process was open to public comment (s 8).

Schedule 2 of the *Information and Management of Time Regulations*, SOR/2019-283 (the *Regulations*) sets out requirements for detailed project descriptions. It contains broad provisions for a physical description of the project (s 9), estimated production capacity (s 10), and description of any changes to the environment (s 20), which the Agency will use to estimate upstream greenhouse gas emissions and impact on carbon sinks (SACC, ss 3.2.2 and 4.1.2). With respect to climate change, the *Regulations* explicitly require "an estimate of any greenhouse gas emissions associated with the project" in the initial and detailed descriptions (Schedule 1, s 23; Schedule 2, s 23). These requirements have been fleshed out in the final SACC and will be further clarified in technical guides to come (a detailed review of the new guidance is available here).

Both Suncor and Gazoduq have submitted detailed project descriptions (available here and here). This post now turns to each project with a view to how the agency has applied the draft and final guidance, and the extent to which there are remaining areas of uncertainty or concern for future projects.

Suncor Project Description

Suncor's detailed project description, filed last month, contains the following statement on GHG emissions:

> An initial estimate of annual greenhouse gas emissions associated with the Project has been developed based on previously modelled estimates for other Suncor operations. The initial estimate is approximately three million tonnes of carbon dioxide equivalent annually over the life of the Project. (at 31).

This statement, a carbon copy of the initial project description (at 21), is the only specific information on GHG emissions or climate change implications in the entire 106-page document. While the statement qualifies as an estimate of GHG emissions associated with the project, as required by the *Regulations*, it falls well short of the level of detail and clarity outlined in the final SACC, which directs that:

> …the following information should be provided in initial and detailed Project Descriptions:
>
> - [an] estimate of the maximum annual net GHG emissions for each phase of the project, including a breakdown of each term of Equation 1; and

- the methodology, data, emission factors and assumptions used. (at 4.1.1).

Equation 1, referenced above, would require a proponent to separately estimate direct emissions, acquired energy emissions, carbon capture and storage (if applicable), avoided domestic emissions, and offset credits. Suncor's estimate does not indicate to what extent it includes or excludes any of these factors, nor whether the estimate includes emissions outside of the scope of the SACC formula, such as emissions from transporting or processing the extracted bitumen. It is important to note that the final SACC was not yet released when Suncor completed its detailed project description. But preliminary guidance, including a draft SACC, was available, and the detailed project description explicitly references the draft SACC as guidance on quantifying GHG emissions (at 12). While the final SACC differed from the draft version (see discussion here), almost all information discussed above was required under both (with the notable exception being that the draft was unclear on the extent to which the net GHG estimate could include offset credits).

It is also important to note that the SACC's information requirements for project descriptions are just guidance – i.e. not explicitly binding. In the present context, the only binding requirements are the bare-bones provisions in the IAA and the relatively vague one-line requirement in the regulations described above. The Agency, however, has authority to require revisions to a project description if it deems the description incomplete or lacking in detail (IAA, s 15(2)). It is surprising that the Agency did not exercise this discretion, even though it identified a need to clarify the scope, methodology, data, factors, and assumptions used in GHG estimates in the summary of issues (at 7). It seems that nearly all the information gathering with respect to GHG and climate change information will happen in the assessment phase, via the proponent's impact statement (see Suncor's response to the summary of issues in its Detailed Project Description at C-3).

This raises at least two concerns. First, it appears that the Agency has not required what the new regime actually calls for. It is disappointing to observe the Agency exercise its discretion in a manner that does not implement the intentions set out in the SACC. While proponents may not be able to estimate emissions with precision at this early stage, one would expect the Agency to push proponents to put forward best efforts in line with the guidance (even if draft guidance). Second, this shortage of information undermines the early public participation that is meant to take place in the planning phase. The planning phase supposedly represents an opportunity to engage in robust and open discourse about the methodologies, assumptions, and scope of emissions calculations, which will have a significant role in the proponent's ensuing impact statement and ultimately in decisions made under the new Act (ss 22(1)(p), 63(d)). The absence of these important preliminary estimates eliminates the basis for such engagement, participation and scrutiny during the planning phase. Given the prominence of climate change concerns in public discourse on oil sands development, as well as Suncor's emphasis on a "long term strategy of reducing absolute emissions" (Detailed Project Description at i) and recent evidence that GHG emissions from oil sands operations may be higher than previously assumed, one would expect GHG emissions to feature more prominently in the planning phase for this assessment.

It is too early to tell whether the incomplete nature of the estimates and discussion of GHG emissions represents the future approach of the Agency, or merely some growing pains as the Agency works to implement the new planning phase and associated timelines. It does at least appear to send a message that the Agency may not strictly require proponents to meet the terms set out in the draft and final SACC.

Gazoduq Project Description

Like the Suncor Project, Gazoduq's detailed project description contains GHG estimates that are light on details, raising the same questions discussed above (i.e. non-compliance with the requirements set out in the draft and final SACC). The detailed project description contains no estimate of emissions during the construction phase, no discussion of methodology or assumptions, and no clear calculation of net GHG emissions. Gazoduq does, however, acknowledge that "GHG emissions quantification work continues for the construction and operation phases (e.g., emissions from land clearing/land use change, biomass decay, etc.)", and that more information will be provided in its impact statement (at 57). The project description also provides figures for direct and acquired energy GHG emissions under two alternative scenarios for powering its compression stations, one involving hydro-electric-powered stations and the other gas-powered (at 57). In this respect, the detailed project description complies with the final SACC's guidance to demonstrate the GHG implications for alternative means of carrying out the project (s 4.1.3). Overall, however, as with Suncor, it appears that most of the information-gathering with respect to climate change will occur at the impact statement phase. Gazoduq's project description also illustrates a significant issue raised in recent ABlawg posts (here and here) regarding the SACC's invitation for proponents to "cherry pick" data on downstream emissions. The draft and final SACC are both clear that a proponent need not provide an estimate of a project's downstream emissions; yet, a proponent is able to discuss how a project could impact global GHG emissions, including by displacing high-emitting energy abroad (SACC, s 5.1.3). Gazoduq's project description emphasizes that the project will help foreign consumers transition from coal, fuel oil, and diesel (at 29 and 55). While compliant with the SACC's direction, the result is a project description that asserts a net reduction in global emissions without qualifying or empirically substantiating the claim. And this is in a context where such assertions are at the centre of an ongoing debate (see here and here). It is reassuring, however, that the proponent will be required to provide further information on this aspect during the impact statement phase (as discussed below).

Climate Change in the Impact Statement Phase

Much as they did under previous federal assessment regimes, decisions under the IAA depend heavily on information gathered through the proponent's impact statement. The required contents of an impact statement under the IAA process are outlined in a set of tailored impact statement guidelines (TISGs) specific to each individual project, which the Agency issues at the conclusion of the planning phase (s 14). The Suncor Project is expected to reach this stage soon, following a determination next month as to whether it will proceed by review panel or standard assessment by the Agency. At the time of writing, the Gazoduq Project is the only major energy project to have received TISGs under the new Act (available here), and the first view of what will be required.

The Gazoduq Project TISGs for the most part repeat (often verbatim) the final SACC's basic requirements for any impact statement under the new regime (TISGs at 78-79, 109-110, 122-123). These requirements have been covered in a previous post; however, two specific aspects of the TISGs warrant comment: how the project's downstream effects (i.e. potential emissions displacement) will be considered in the assessment; and a lack of clarity on how the project will be deemed to hinder or contribute to Canada meeting its climate change commitments, including its ability to reach net-zero by 2050.

Double Invitation to Discuss Displaced Downstream Emissions

As described above and in previous posts, the SACC excludes any requirement of downstream emissions analysis but does allow for a proponent to discuss displacing emissions abroad. In the Gazoduq context, this has now been integrated into the TISGs. The TISGs actually double-up to some extent by providing two bases for the proponent to describe this aspect. This first is within the above-described repeating of the SACC guidance (at 80). The second is within the "Need for the project" discussion: "The Impact Statement must provide… validation of the proponent's assumption that gas could replace more polluting energy sources" (at p 15). Need for the project is a mandatory consideration that has been resurrected (at s 22(1)(d) of the IAA) from CEAA 2012's predecessor, the original *Canadian Environmental Assessment Act*, SC 1992, c 37). Consideration of climate change under this head of analysis is new.

This requirement in the TISGs does not totally address the cherry picking concern noted above and does not make up for the exclusion of downstream emissions analyses; however, it does provide some assurance that proponents will have to substantiate any claims of displaced emissions abroad. The main thrust of the TISG's direction in this respect is for the proponent to establish whether there will continue to be demand for the project's natural gas in light of international energy market fluctuations, including potential reductions in demand for fossil fuel energy and possible decline of renewable energy prices (at 15). Such discussion will force proponents to address the assumptions and nuance that have been identified in debates on this topic, particularly with respect to whether the project's product will be consumed in a jurisdiction where it actually displaces high-emitting energy sources and does not displace cleaner energy sources in years to come. Such projections are tenuous at best, so it will be interesting to see how the proponent responds and then how the review panel assesses that information. At the least, having now asserted that its project will deliver a net emissions benefit globally, the proponent has set the table for a robust empirical analysis of this claim.

Impact on Canada's Efforts to Reduce GHG Emissions

For the most part with respect to how the project may impact Canada's efforts to reduce GHG emissions, the TISGs either restate or simply reference back to the SACC and the Agency's climate change policy context document. This is perhaps unsurprising, but it does mean that the concerning ambiguity described previous posts , and as discussed in this recent post by Anna Johnston at West Coast Environmental Law, remains and is not somehow counterbalanced through project-specific requirements in the TISG. Put another way, with these TISGs for a major energy project now in place, it is clear that together the IAA, regulations, guidance and

TISG do not add up to an adequately clear and comprehensive analytical framework for assessing the impact of a project's emissions on Canada's efforts to reduce GHG emissions. Some building blocks are there, but not a full structure.

One aspect where the TISGs do offer some additional detail is regarding what the Agency expects in a "credible plan that describes how the project will achieve zero net emissions by 2050" (at 110). Gazoduq's plan must include a list of GHG mitigation measures and technologies that could be implemented, as well as schedule for implementing them. Gazoduq will also be required to describe any offset credits it intends to purchase, and to specify what credits it intends to obtain internationally as opposed to domestically. A commitment to purchase these credits could then be enforced through the implementation schedule if it is imposed as a condition for the project's approval. This aspect of the TISGs is a welcome clarification of how the Agency intends to use and enforce a proponent's offset commitments.

Conclusions

One year after the coming into force of the IAA, the government has taken a number of substantial steps to implement the new regime. Regulations and guidance are in place, projects reviews are proceeding, and the new (or at least modestly revamped and rebranded) institutional components are functioning in the form of the Agency and the Canada Energy Regulator. However, a close look at implementation of the climate change dimensions of the new regime reveals reasons for concern. In the two examples we examined, the Agency has taken steps inconsistent with the new climate change guidance by allowing proponents to sidestep information requirements in the planning phase of the assessment. Additionally, the Gazoduq project example indicates that the Agency will not use the TISGs to address the concerning ambiguity in the analytical framework for determining a project's impact Canada's efforts to reduce GHG emissions. While these issues may just represent early implementation fumbling while guidance was being finalized, it is taking place in a context where the government has committed to restoring public confidence in the federal assessment regime. Applying the new "better rules" in an inconsistent, ambiguous or loose manner stands to undermine public confidence and regulatory certainty. It also risks setting IAA implementation on a track that further widens the gap between the lofty promises of environmental laws and achieving desired outcomes.

.

This post may be cited as: Niall Fink and David V. Wright, "Climate Change in Federal Impact Assessment: An Early Look at Two Energy Projects" (August 28, 2020), online: ABlawg, http://ablawg.ca/wp-content/uploads/2020/08/Blog_NF_DVW_IAA_SACC.pdf