Recommendations on Implementing the Oil Sands Emission Limit

By: Nigel Bankes


One of the planks of Alberta’s Climate Leadership Plan (CLP) is the adoption of a 100 Megatonne (Mt) cap on greenhouse gas emissions for the oil sands sector. The government introduced and passed the Oil Sands Emissions Limit Act, SA 2016 c. O-7.5 (OSELA) to give effect to this commitment. I commented on the Act as it was introduced as Bill 25 here. While OSELA provides the necessary legal authorization for the cap, many of the details still need to be worked out and then implemented through the regulation-making power in s 3 of OSELA (and see in particular s 3(h)). Recognizing the need for advice on this set of issues Minister Phillips established the Oil Sands Advisory Group (OSAG) in July 2016. The terms of reference are available here along with two mandate letters from Premier Notley here and here.

The first mandate letter (undated but issued some time after the proclamation of OSELA (December 14, 2016)) asked OSAG to provide advice on the following matters:

a) The list of facilities that should be subject to the emissions limit (so that there is clarity on monitoring and compliance with the Oil Sands Emissions Limit Act).
b) The mechanism OSAG believes will most effectively implement the emissions limit, based on an assessment of the following: i) The range of potential mechanisms that could be used (in a distinct or integrated manner) to implement the emissions limit; ii) The criteria that OSAG used to assess the relative merits of each of the potential mechanisms (i.e. what objectives should the design of the implementation mechanism seek to achieve); and iii) An assessment of the range of potential mechanisms against those criteria;
c) The manner in which the recommended mechanism could be implemented (e.g. through legislation, policy, regulation, etc.);
d) Any changes required to the current regulatory and operating environment that facilitate effective implementation of the emissions limit;
e) Any changes required to the current system of reviewing and approving applications for oil sands development to effectively implement the emissions limit; and
f) Any other advice OSAG believes important in terms of ensuring the emissions limit is effectively implemented in a manner that secures broad support from stakeholders.

The second mandate letter (again undated) focusses on technology and innovation and seeks the further advice of OSAG by June 30, 2017. This post focuses on OSAG’s recommendations in response to the first mandate letter.
The OSAG Report

The OSAG’s Recommendations (the OSAG Report) consist of an executive summary, a “recommended approach to implementing the emissions limit”, and then two appendices. Appendix A is a slightly more detailed (but less discursive) version of the “recommended approach” while Appendix B is a status report that the OSAG delivered to Minister Phillips on March 10, 2017. This post focuses on Appendix A given that it represents the most detailed version of OSAG’s recommendations (and it also has the convenience of being numbered by paragraph). The chief feature of Appendix B is that it discusses two options that OSAG considered as part of developing its “recommended approach”, these were: (1) a regulatory backstop approach and (2) a permission to emit approach. The OSAG Report informs (at 5) that the approach it ultimately recommended draws elements from each of these approaches.

The OSAG Report emphasises that the emissions limit should be seen in the context of the other planks of the CLP. These planks included the carbon levy and the Specified Gas Emitters Regulation, Alta Reg 139/207 (SGER) and the output based allocation system which is scheduled to replace SGER. This is an important point since it clarifies that oil sands facilities will have continuing obligations under the SGER and the successor output based scheme even though those same facilities may not have any substantive obligations under the proposed emissions limit rules unless and until total emissions approach “scarcity” levels or actually hit the limit. By the same token, owners of these facilities may still be able to access offset credits as a way of managing facility level obligations even though the use of these Alberta-grown offsets will not expand the cap (see further discussion of the possible role of international offsets below).

Until emissions scarcity is approached (i.e. the point at which total emissions approach 100 Mt), the OSAG Report proposes that the main obligations of oil sands emitters will be in the nature of reporting and forecasting. Thus, emitters will be required (at para 4) to provide annual forecasts (using a prescribed protocol) of GHG emissions for the following year. While an emitter will be required by the proposed regulations (the Oil Sands Emissions Limit Implementation Regulation (OSELIR)) to hold an authorization for its annual emissions, the OSAG Report does not contemplate that an emitter will be confined to its forecast emissions since the Report recommends (at para 6) that the regulator will be obliged to provide an authorization (or authorizations) to an emitter to cover any overage. But, as noted above, such an emitter may well have obligations to reduce its emissions under SGER or successor rules. In addition to the forecast, facilities will also have annual reporting requirements (but this will be the same as they have under SGER, SGER successor rules or the carbon levy rules (at para 4(d)).

The principal purpose of the forecasting information seems to be to aid the regulator in preparing on an annual basis a long term (at least ten years) Oil Sands Emissions Forecast. There seems to be a bit of an information mismatch here insofar as while the regulator is required to provide a ten year forecast, emitters need only provide a forecast for the ensuing year. No doubt the regulator will have access to additional sources of information and no doubt too the forecast will be less reliable the further out it extends, but some thought should be given to requiring emitters to provide more extended forecasts for each of their facilities.

The OSAG Report proposes that there will be some additional measures that must be undertaken and obligations assumed even before scarcity conditions and the emissions limit are reached.
Some such measures are to be put in place immediately, others will be triggered when emissions reach 80 Mt and others at 95 Mt. The overall goal of these measures in conjunction with other elements of the CLP is (at 1) “to deliver significant improvements in GHG efficiency in the oil sands, such that the likelihood of the emissions limit being reached is significantly diminished.” (emphasis added)

Effective Immediately

The report proposes that three steps be taken immediately. First, OSAG recommends that Alberta’s resource legislation and policies including the Oil Sands Conservation Act, RSA 2000, c. O-7 should be reviewed and amended (at para 12) “so as to change the framing from one of resource conservation to one of environmental and economic efficiency, with the effect of no longer compelling Operators to extract those parts of reservoirs with higher GHG intensity.” It will be interesting to see how such amendments might affect the relative balance between oil sands production and gas production in those areas of the resource characterized by gas-over-bitumen issues. Second, OSAG recommends mobilizing funds from Emissions Reduction Alberta to drive additional technological innovation in the oil sands sector. And finally, OSAG recommends creating a “regional carbon marginal abatement cost curve”. A GHG abatement cost curve “provides a quantitative basis for discussions about what actions would be most effective in delivering emissions reductions and what they might cost” (see McKinsey and Co, Pathways to a Law Carbon Economy, Version 2.0 (2010)).

While grouped under a different heading (at para 15), OSAG also recommends a review of the process for project approvals and renewals and extensions to require proponents to provide inter alia more information on GHG emissions and GHG management plans and to clarify requirements with respect to BATEA (best available technology economically achievable). Presumably this is also intended to be effective immediately.

Effective When Emissions Reach 80 Mt

When emissions reach 80 Mt, OSAG recommends (at para 13) adoption of two additional measures. First, OSAG recommends that the Annual Long Term forecast be subject to increased scrutiny and attention. Second, OSAG recommends that the regulator should be directed to prepare “a formal assessment of industry progress on developing and implementing carbon reduction technology to determine if there should be any change in focus or priorities for innovation and technology development in the oil sands sector.”

Effective When Emissions Reach 95 Mt

OSAG recommends four additional steps (at para 14) that should be taken when emissions reach 95 Mt. First, the regulator should be directed to review the variability standards (i.e. standards addressing the permissible variation between forecasts and actual). Second, the Annual Forecast produced by the regulator should start to draw to the attention of operators the impact of achieving the emissions limit for both existing and new operators. Third, the regulator should provide an evaluation of the broader global energy context within which the oil sands sector is operating. Fourth, the regulator should provide warnings to approved projects not under construction of the implications of reaching the emissions limit.
The Definition of Scarcity and What Happens When Scarcity is Triggered?

The OSAG Report defines (at para 2) “emissions scarcity” as existing in any calendar year where the Long Term Forecast “shows projected oil sands industry emissions exceeding the Emissions Limit [100Mt] at some point in the first five years of that forecast”. In my view the focus on the first five years largely defeats the purpose of engaging in a ten year forecasting exercise. If ten years is the optimal forecast period then a forecast that emissions might exceed the cap in any of the ten years should be a triggering event. Whether ten years is the optimal forecast would seem to depend on two variables: (1) the need to provide investors with appropriate information to inform their decisions, and (2) the need for a robust regulatory response. The two are related. My claim is simply that the shorter the period of notice the more sceptical I am of a robust regulatory response.

Regardless of the definition, when the condition of scarcity is satisfied the OSAG Report recommends (at para 8) that an approved project that is not yet under construction not be permitted to proceed to construction.

Measures to be Taken Where the Aggregate Annual Emissions Forecasts for that Year is Greater than 100 Mt

Where the aggregate annual emissions forecasts for that year is greater than 100 Mt the OSAG Report recommends (at para 9) that the regulator be required to reduce the annual authorizations of facilities with GHG intensities falling within the two worst performing quartiles (Q3 and Q4 quartiles) by an amount sufficient to remain within the limit. Facilities in the Q4 quartile will bear the burden of two thirds of that cutback and facilities in the Q3 quartile will bear one third. The notes to the OSAG Report indicate that the method for allocating the cutback (e.g. pro rata, sliding scale) will be determined during the regulation drafting process.

The OSAG Report envisages that the regulator will establish an “operational reserve” the size of which will be determined based upon the regulator’s experience of comparing facility emission forecasts with actual emissions. While the Report does not elaborate, presumably the creation of the Reserve will actually serve to trigger these cutbacks at an aggregate annual emissions forecast of less than 100 Mt, i.e. cutbacks will be triggered at 100 Mt minus X Mt where X represents the Operational Reserve. If this is not the intent (and para 11 dealing with the reserve is hardly a model of clarity) then I am at a loss to understand where the proposed reserve is coming from.

The Report also addresses the issue of penalties where a facility emits in excess of its authorization in a year when cutbacks are in effect. The Report contemplates that the regulator may shut the facility in (at para 18), that the emitter receive a significant penalty, and that payment of the penalty “does not bring a facility into compliance”. It is not entirely clear what this last phrase means (other than to emphasise that the penalty is not simply the cost of doing business) but it could conceivably require the emitter to turn in offsets (or a multiple of offsets) (presumably generated outside of the oil sands sector but within Alberta).
Other Matters

The above describes the main elements of OSAG’s consensus proposals. The Report does however address a number of matters including the conditions surrounding the consensus document, the meaning to be attributed to OSAG’s use of the term “regulator”, the possible use of internationally transferred mitigation options, the possible “future exemption of certain projects” and the perspectives of the different stakeholder groups represented on OSAG.

The Conditionality of the Consensus

The discussions within OSAG must have been tough given the interests that were represented and the publicly expressed positions of at least some members including Tzeporah Berman, one of the original OSAG co-chairs. It is perhaps therefore not surprising that the consensus is expressed to be subject to a number of understandings or conditions (which must also have been carefully negotiated) (at 2):

a) These are strategic level recommendations reflecting the level of detail necessary to have confidence the recommendations are robust and that there is a clear and common understanding of underlying intent. Implementation of these recommendations will, in many circumstances, require a greater level of detail in the regulation and policy required to make them operational. OSAG understands that once the government decides on how it wishes to implement the emissions limit, the GoA intends that OSAG will have an opportunity to review and comment upon the regulation and policy developed by the government in this regard (NOTE: As described later in these recommendations, OSAG believes there is value in engaging OSAG more proactively in the regulatory drafting process, versus simply consulting OSAG once a draft of the regulation and supporting policy has been completed by the legislative drafters).

b) The OSAG consensus is in relation to the overall package of recommendations that must work in concert with the overall ACLP and with other recommendations to follow from OSAG Task Team 2. Consensus may or may not exist with respect to different elements of the package on a stand-alone basis or if the government chooses to implement the emissions limit in a manner that is materially different than the substance of these recommendations. The government can expect a strong level of support if the emissions limit is implemented in a manner that is materially consistent with these recommendations. Where there are substantive departures the level of consensus support will depend on the nature of those departures.

c) OSAG understands that all final decisions on how the emissions limit is implemented rest with the government, and that OSAG does not have a special role in the GoA’s subsequent consultation process.

The Term “Regulator”

OSAG contemplates that the term “regulator” might refer to either the Alberta Energy Regulator as the primary regulator of oil sands operations, or to the ACCO (presumably the Alberta Climate Change Office) with its responsibilities for the implementation of the CLP.
The Possible Use of Internationally Transferred Mitigation Options

The term “internationally transferred mitigation options” is a generic reference to reduced GHG emissions attributable to offset projects and activities in other jurisdictions such as the offset activities authorized under the clean development mechanism of the Kyoto Protocol. If permitted in the context of the cap (Alberta-grown offsets are already permitted in the context of the SGER obligations of individual facilities but not for cap purposes), such offsets would blow the top off the cap – the 100 Mt would no longer be a hard cap. The report reveals, not surprisingly, that OSAG members expressed a “diversity of views” on the permissibility of international offsets. In the end the report punts this one down the road noting as follows (at 9):

… the potential use of offsets as a tool in implementing the emissions limit does not become relevant until the emissions limit is approached. … OSAG believes that a decision on whether, and if so how best, to incorporate the use of government purchased offsets as a tool in implementing the emissions limit is a decision best made by the Alberta government at the time the emissions limit is approached (i.e. if and when it becomes necessary to do so) with a consideration for the broader policy context at that time (e.g. international agreements, pan-Canadian agreements, Alberta’s climate goals at that time).

While it is true that offsets cannot be needed in the context of the cap until the conditions of scarcity are realized, the government’s policy position on whether the cap is soft or hard is important. In my view the whole purpose of the sector-specific cap was that it was intended to be hard—otherwise all that matters is Alberta’s overall reduction target (which is actually one of the gaps in the CLP). The hardness of the cap was our way of convincing the world that we were serious about GHG mitigation in the oil sands. Any communication that signals that the cap may be soft undermines the cap as a policy tool for improving market access for Alberta’s oil sands.

That said, there is a temporal mismatch between election cycles and our need for long term climate change policies and related energy policies. The reality is that subsequent governments will be able to revisit both the existence of a cap and the hardness of the cap just as they will be able to revisit the existence and scale of any carbon levy or even the decision to phase out coal generation. The OSAG recognizes this challenge in a short but significant section of the Report (at 11) entitled “… Durability across Election Cycles”. However, I think that OSAG does us a disservice to the extent that it expressly leaves the issue open. We have embarked on a journey to reduce the carbon intensity of our economy generally and the oil sands sector specifically. Most of the industry now believes that this was an important and necessary step and that the direction (if not the speed) is irreversible. That needs to be the key communication message going forward and the louder the better especially as Alberta’s political parties begin the process of articulating their policy positions in the run-up to the next election. Dithering, equivocation and attempted reversals will feed investment uncertainty and have long term costs.

Possible “Future Exemption of Certain Projects”

Immediately following the discussion of international offsets the OSAG Report contains the following arresting passage (at 10 and also at para 21):
OSAG recommends in the event the emissions limit is approached at some future date, and provided that Canada and Alberta are on track to meeting their 2050 GHG emissions reduction targets (where those targets have been established in a manner that enjoys broad based support), the emissions limit should be amended by the government at that time as necessary to ensure that production from any project that has an emissions intensity better than the competing barrel in the U.S. market (on a wells to tank basis) is not constrained.

This passage seems to go further than the discussion of international offsets in terms of softening the cap but it is subject to very important preconditions, one with respect to the carbon intensity of oil sands operations, but perhaps more importantly, one with respect to future overall reduction targets. However, it is not clear what targets the OSAG had in mind or the relative ambition of those targets—or indeed whether OSAG members had the same targets in mind (note the elliptical reference to targets “established in a manner that enjoys broad based support” which presumably means something other than “established by law”).

The Perspectives of the Different Stakeholder Groups Represented on OSAG

The OSAG process was a confidential process and OSAG members were required to execute confidentiality undertakings with respect to the specifics of the discussion and recommendations. At the same time, the Premier’s mandate letters suggested that members were also expected to engage with their respective sectors. The OSAG Report contains a discussion of “sector engagement” by OSAG members with their sectors (environmental, indigenous and industry). The chilling effect of the confidentiality undertakings seems to have had the most effect on environmental and indigenous members of OSAG since the Report contains a lengthy discussion of the fruits of industry engagement and very little from the environmental community and nothing from the indigenous community. Perhaps of most interest is the synopsis of the results of the engagement with the environmental community. The synopsis (at 11-12) references the importance of concluding the work on limits since this will allow the environmental community:

… to begin the discussion with government and industry about how Alberta and Canada can both meet our 2030 emissions commitments but also begin the rapid de-carbonization necessary after that to reach 80% emission reduction by 2050. In our view this will require significant reduction of the 100 MT emissions limit after 2030 so that the oil sands will be allocated a reasonable share of Canada’s emission budget. This is why engaging in the Pathways to 2050 analysis recommended by OSAG is important as it will send an important signal that Alberta intends a peak and decline in GHG emissions post 2030 while maintaining the ability to benefit from innovation and technology development.

This passage contains the only discussion in the entire Report of the question of what might be a fair or reasonable share of Canada’s permissible emissions to be allocated to the oil sands sector; it is the only discussion of the idea that the cap may be lowered or tightened rather than softened; and it expresses one view of what the 2050 target should be. It also hints that the consensus that the Report claims to have captured is perhaps paper thin!
Next Steps

The press release that accompanied the public release of the OSAG Report indicated that the government would engage in consultations on the content of the Report. The press release also indicated that some members of the OSAG were stepping down (or at least that they were being thanked for their work and no longer show on the OSAG website as “members” or even “past” or “sometime members”): Tzeporah Berman, Karen Mahon, Alison Ronson, Christa Seaman and Lloyd Visser. Finally the release also indicated that the province is actively recruiting new members with relevant expertise for phase three, which will focus on regional land based management and improving environmental performance.

What is Missing?

I have commented above on some of the OSAG recommendations but here are some additional observations which to some degree echo observations made in my original post on the Bill. First, with the exception of a brief mention in the part of the report dealing with comments of stakeholders there is no mention of reducing the cap below 100 Mt. Canada’s Paris commitment (our nationally determined commitment (NDC)) is to cut emissions by 30% below 2005 levels by 2030. This translates to an emissions target of 524 Mt. Canada’s target is one of the least ambitious of any developed country and the Paris Agreement commits us to re-examining the adequacy of our commitment. Consequently, within this broader national and international context we can expect to see increased pressure on Alberta to reassess the stringency of the 100 Mt cap. That should have merited some discussion in the report in order to assess how the group’s proposals could accommodate tightening the cap.

Second, the OSAG Report does not contain any discussion of possible mechanisms for trading shares of the cap. Under the proposed scheme, when scarcity conditions are reached (assuming that cap is a hard cap) an approved project (which I will call AP1) with a low emissions intensity profile (perhaps Q1) will not be able to proceed. Meantime, Q1 and Q2 projects will continue to produce at full capacity and Q3 and Q4 projects will also be able to continue to produce at some level below full capacity as aggregate emissions hit the (hard) cap. Under the proposed scheme there is no mechanism that would allow AP1 to buy out Q4 producers and acquire a share of the cap even though AP1 can produce more bitumen per tonne of emissions. Furthermore, it is not clear how AP1 will be ranked in terms of ultimately gaining permission to proceed assuming that some facilities cease producing either because of loss of reserves or because of the stringency of the carbon price facing Q4 producers under the output based allocation scheme, or because they are unprofitable in a constrained emissions scenario. Will AP1 be ranked on the basis of time of approval, or on the basis of emissions intensity, or on the basis of some other method of ranking all those projects with approvals?

And finally, one of the implications of backloading all of the compliance measures is that the oil sands approval system (but not of course the output based allocation system) will be carbon intensity neutral unless and until the cap is reached. True, there will be explicit warnings to new projects and especially for Q4 intensity facilities once emissions reach 95 Mt but such projects may still obtain regulatory approval. One can anticipate that if this happens the proponents of these projects will be lobbying mightily to have the government acquire international offsets to soften or indeed blow the cap. I am not sure we want to encourage that. Perhaps it might make
more sense at a certain point to require that new projects meet a certain emissions intensity level before they can be approved.


To subscribe to ABlawg by email or RSS feed, please go to http://ablawg.ca

Follow us on Twitter @ABlawg