

# Alberta Climate Change Office

## **The Oil Sands Advisory Group (“OSAG”) Recommendations on Implementation of the Oil Sands Emissions Limit Established by the Alberta Climate Leadership Plan (“ACLP”)**

Executive Summary

May 2017



## EXECUTIVE SUMMARY

The Oil Sands Advisory Group (OSAG) has provided consensus advice to implement the oil sands emissions limit. The advice includes early actions designed to encourage additional emissions reductions as well as additional actions in the event that emissions begin to approach the limit. These actions are intended to work in concert with the output based allocation system for carbon pricing and to encourage greenhouse gas efficiency so that aggregate emissions remain under the limit without limiting production. This executive summary condenses OSAG's advice without bias or evaluation, and any omissions are for the sake of brevity.

### Early Actions

OSAG's recommendations for early action focus on encouraging lower emission intensity production and building the necessary reporting and forecasting systems for compliance with the limit. These actions include:

- requirements for new facilities and expansions to use the Best Available Technology Economically Achievable (BATEA),
- submission of non-binding Greenhouse Gas Management Plans to assist with public accountability and transparency,
- preparation of a technology roadmap and costs of abatement technologies by innovation entities, and
- changes to resource recovery requirements to no longer require high emission intensity portions of a resource to be recovered.

OSAG also advised the government to establish the information systems needed to trigger reviews and a transition to more stringent actions if emissions approach the limit. This would involve annual forecasted and reported emissions and publishing of a 10 year forecast. Each of these systems would have accompanying standards to ensure consistent and credible information, including a standard to manage the variability between annual forecasted and reported emissions.

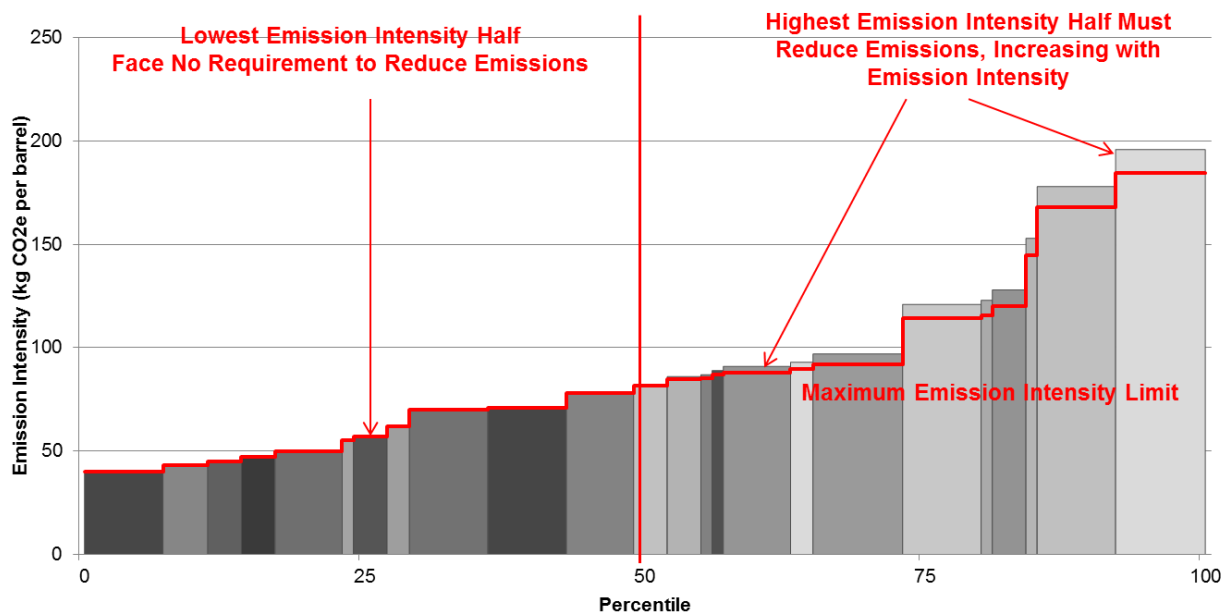
When annual oil sands emissions reach 80 megatonnes, this would trigger an evaluation of the innovation system and to draw attention to the impacts on new and existing facilities in advance of reaching the limit. If annual oil sands emissions reach 95 megatonnes, this would trigger an additional review to validate reporting and forecasting data, further evaluate the innovation system, and forewarn potentially affected facilities of the approaching compliance with the limit. Prior to approaching the

limit there would be no further actions to directly limit emissions beyond carbon pricing, and that there would be a presumed authorization for each facility's emissions.

### Triggers if Emissions Approach the Limit

If the 10 year forecast indicates that oil sands emissions are expected to exceed the 100 megatonne limit within 5 years, this would trigger more stringent actions to ensure compliance with the limit. An operational reserve of emission allowances would be established manage the variability that is inherent in emissions reporting and forecasting, acting as a buffer to prevent errors from causing an exceedance of the limit.

If the annual forecast indicates that oil sands emission are expected to exceed the 100 megatonne limit within the year, then the 50<sup>th</sup> to 100<sup>th</sup> percentile of highest emission intensity facilities would face a mandatory emission reduction requirement equivalent to the amount needed to stay below the limit. In addition, the Minister of Energy or Environment would also have the authority to suspend project approval of facilities that have not yet started construction. The 50<sup>th</sup> to 75<sup>th</sup> percentile would share one third of the reduction requirement and the 75<sup>th</sup> to 100<sup>th</sup> percentile would share two thirds of the reduction requirement. Facilities would only be authorized to emit their forecast emissions minus the reduction requirement. This figure below demonstrates how a mandatory emission reduction requirement could be distributed across the worst 50<sup>th</sup> percentile of emissions intensities.



Note: This graph does not use actual facility data; instead it is based on randomly generated emissions and production.

If facilities exceed the authorized amount, illustrated above as a maximum emission intensity limit, within an acceptable level of variability then the excess amount would be authorized from the operational reserve. If facilities exceed the authorized amount outside an acceptable level of variability then the excess amount would face a \$200 per tonne penalty that would scale with the provincial/national carbon price.

## **Exclusions**

OSAG advised the government to exclude emissions from primary, experimental, and enhanced recovery oil sands sites, which were discretionary exclusions under the *Oil Sands Emissions Limit Act* that could be granted under subsequent regulations. OSAG also advised that the electricity cogeneration exclusion be based on the emission intensity of a benchmark power plant, similar to the approach under the current Specified Gas Emitters Regulation. This will ensure that oil sands operators who chose to generate their own electricity are treated equitably with those who import electricity from the grid. OSAG did not develop further advice on how to exclude emissions from new upgrading.