

Methane Reduction under the Climate Change Leadership Plan

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The ELC releases its latest paper in the Climate Change Legal Roadmap series: Methane Reduction under the Climate Change Leadership Plan

This blog is part of the Environmental Law Centre's blog series exploring climate change law in Canada. This blog series provides updates on climate change law developments and includes insights from our related law reform research. This blog series is generously funded by the Alberta Law Foundation.



As part of its program on climate change, the ELC is publishing a series of reports – the **Climate Change Legal Roadmap** – outlining climate change actions taken in other jurisdictions and making recommendations for Alberta. To date, the ELC has published three reports in this series: [A Snapshot of Alberta's Climate Change Law & Policy](#), [Carbon Pricing Recommendations for Alberta: Lessons from the Latest Developments in WCI Jurisdictions](#), and [Climate Change Legal Roadmap: Oil Sands Emission Limit under the Climate Change Leadership Plan](#). We are pleased to announce publication of the latest report in this series: [Methane Reduction under the Climate Change Leadership Plan](#)

The Alberta Climate Leadership Plan (ACLP) focuses on four key areas for further development:

- implementing a new carbon price on greenhouse gas (GHG) pollution,
- phasing out coal-generated electricity and developing more renewable energy,
- legislating an oil sands emissions limit, and
- employing a new methane emission reduction plan.

Current provincial and federal approaches are focused on reducing methane emissions from the oil and gas sector. Our report provides an overview of these approaches, as well as, those taken in the US and in the UK. In addition to domestic regulation, Canada is involved in international efforts to reduce methane emissions and these efforts are reviewed in our report. Finally,

recommendations aimed at improving Alberta's approach to reducing methane emissions are presented in our report.

Report Highlights: Alberta

In Alberta, there are requirements relating to emissions from oil and gas activities in a variety of directives and informational letters issued by the Alberta Energy Regulator (AER). These include technical requirements for measuring and reporting emissions associated with wells, pipelines and facilities. The most relevant document is *Directive 60: Upstream Petroleum Industry Flaring, Incinerating, and Venting (Directive 60)*. Ultimately, the goal of *Directive 60* is the elimination of flaring, incineration and venting. *Directive 60* also sets the following industry-wide limit:

1. The Alberta solution gas flaring limit is 670 million cubic metres (106 m³) per year (50 per cent of the revised 1996 baseline of 1340 106 m³/year).
2. If solution gas flaring exceeds the 670 106 m³ limit in any year, the AER will impose reductions that will stipulate maximum solution gas flaring limits for individual operating sites based on analysis of the most current annual data so as to reduce flaring to less than 670 106 m³/year. For example, solution gas flaring could be limited to a maximum of 500 thousand (103) m³/year at any one site.

However, it does not impose prescriptive requirements for emissions reductions and does not include specific methane standards.

While *Directive 60* addresses emissions from active facilities, another key factor in reducing methane emissions from oil and gas activities is regulation of leaks from suspended, abandoned and orphan facilities (a.k.a. legacy sites). These terms refer to facilities that are inactive but have not yet been reclaimed as required by the *Environmental Protection and Enhancement Act*. While there established requirements for the suspension and abandonment, current requirements for leak monitoring are very limited.

The AER is currently working on a Climate Policy Assurance Program to develop a regulatory framework to implement the outcome of a 45% reduction in methane emissions from oil and gas operations by 2025. The first regulatory requirements to be developed will address the measurement, monitoring, and reporting of methane emissions; and fugitive emissions. Standards for new and existing facilities will be subsequently developed.

Report Highlights: Federal

The federal government (similarly to the Alberta government) has committed to reduce methane emissions in the oil and gas sector by 40-45% below 2012 levels by 2025. This will be done via regulations under the *Canadian Environmental Protection Act* that will address methane emissions from the upstream oil and gas industry, and from the petroleum and petrochemical sector.

Two draft regulations were introduced in late May 2017 and are anticipated to come into force on January 1, 2020 (with some provisions coming into force on January 1, 2023). The upstream oil and gas industry will be covered by the proposed *Regulations Respecting Reduction in the Release of Methane and Certain Volatile Organic Compounds (Upstream Oil and Gas Sector)*. The proposed *Regulations Respecting Reduction in the Release of Volatile Organic Compounds (Petroleum Sector)* will apply to the petroleum and petrochemical sector. Both regulations set requirements for leak detection and repair (LDAR) programs, preventative equipment, and record-keeping and reporting activities.

Our Recommendations

Both the federal and provincial governments should continue their steps to address the level of methane emissions from the oil and gas sector. The ELC recommends that the suite of legislation used to address these emissions include:

- There should be comprehensive LDAR requirements in place for the oil and gas sector. In this regard, the ELC supports legislated LDAR requirements.

However, assuming that the federal regulations under CEPA are implemented as proposed, the LDAR requirements will apply only to facilities that petroleum facilities and to upstream oil and gas facilities that produce or receive at least 60,000m³ of hydrogen gas in a year.

The ELC recommends that the LDAR requirements be applicable to all upstream oil and gas facilities. Further, the ELC recommends that in the event a leak is detected and repaired, a follow-up inspection be required as soon as possible and no later than 30 days after the repair.

- The NSPS (subpart OOOOa) in the US sets specific requirements for various sources of methane. This contrasts with the performance based approach taken in Alberta under *Directive 60*. The proposed federal regulations do have specific requirements for pumps, controllers and open pipes; however, these requirements do not apply to all upstream oil and gas facilities. The ELC recommends that the specific requirements apply to all facilities in the upstream oil and gas sector.
- The solution gas flaring limit as it appears in *Directive 60* is currently set at 670 million cubic metres (10⁶ m³) per year (50 per cent of the revised 1996 baseline of 1340 10⁶ m³/year). The ELC recommends revisiting this limit to determine whether additional reductions in

methane emissions are technological feasible thereby warranting a reduction in the solution gas flaring limit.

- Transparency and public access to information is a fundamental aspect of environmental regulation. In this regard, the ELC recommends that the data arising from monitoring and reporting required under the proposed regulations be publicly available and easily accessible. The same recommendation applies to data collected under provincial requirements.
- With respect to the implementation of the proposed federal regulations, the ELC is disappointed that the originally proposed timelines have been delayed by three years (implementation by 2018-2020 is now 2020-2023). The ELC recommends that the original timelines be reinstated to reflect the urgency of responding to our international climate change commitments and methane's high global warming potential.
- Alberta currently has a system for the use of emission offsets and credits under the *Specified Gas Emitters Regulation*^[1] (the "SGER") and includes methane. In the *Advisory Panel Report*, it is recommended that the SGER be replaced with a *Carbon Competiveness Regulation* ("CCR") in which a carbon price is applied to industrial emissions based on performance by similar facilities. The CCR regime is still under development and is expected to be in place by 2018. If this change does occur, the ELC recommends that methane remain part of the new regime.
- Recognizing that there are significant issues with legacy wells in Alberta, efforts to reduce methane emissions (as well as other VOCs) need to be included in the actions designed to address legacy wells.^[2]
- The ELC recommends that additional sources of methane, in addition to those in the oil and gas sector, be examined for potential regulation designed to reduce methane emissions.

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^[1] Alta. Reg. 139/2007.

^[2] This recommendation is also made in Environmental Defense Canada, *Canada's Methane Problem; Why strong regulations can reduce pollution, protect health, and save money* (April 2017) available at at 10.

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