



## **ENVIRONMENT IN THE COURTROOM II**Edited by Alastair R. Lucas & Allan E. Ingelson

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# Regulation and Enforcement of Oil Sands Emissions

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#### The Oil Sands

Oil sands activity is a major source of Canadian greenhouse gas (GHG) emissions, accounting for 12 percent of Canadian emissions.<sup>3</sup> These emissions have increased from 15 Mt in 1990 to 84 in 2018,<sup>4</sup> and remain significant.<sup>5</sup> Though the oil sands sector is centred in Alberta, it has national significance, comprising 97 percent of Canadian oil reserves that overall rank third globally.<sup>6</sup> There is little doubt that hydrocarbons, particularly oil, are a key element of the Canadian national economy.<sup>7</sup>

#### A Provincial Field

Though the 2018 federal climate change initiatives reviewed below are significant for oil sands GHG emissions reduction, it is the provinces, particularly Alberta, that will continue to be key oil sands emissions regulators. This is a consequence of provincial constitutional jurisdiction over property and civil rights, management and sale of public lands, and conservation and management of non-renewable natural resources within a province. A significant part of the oil sands picture extends beyond Alberta, including the sale of oil sands raw and upgraded bitumen in national and international markets. This is a matter primarily within federal trade and commerce jurisdiction. Pipelines to marine terminals that permit oil sands crude to reach international markets beyond North America are primarily within federal jurisdiction. Impacts of these pipelines on First Nations is also a federal responsibility. There is federal jurisdiction over marine tanker traffic under

the Sea Coast and Inland Fisheries power.<sup>14</sup> In 2018, several provinces judicially challenged federal jurisdiction to enact a national carbon tax, arguing that the federal taxation power is insufficient support and that this cannot be characterized as a matter of national concern within the "peace, order and good government" power.<sup>15</sup> The Ontario and Saskatchewan reference case challenges of the federal *Greenhouse Gas Pollution Pricing Act (GGPPA)* rejected by divided provincial appeal courts, was heard by the Supreme Court of Canada (SCC) on August 2020.<sup>16</sup> A similar challenge by Alberta was upheld by the Alberta Court of Appeal.<sup>17</sup> An SCC majority decided that the *GGPPA* can be characterized as addressing a national concern.<sup>18</sup>

#### Alberta Regulation and Enforcement

Alberta has a full suite of climate change legislation. This began almost two decades ago with the *Climate Change and Emissions Management Act*<sup>19</sup> and the *Specified Gas Emitters Regulation*.<sup>20</sup> The system was one of intensity-based emissions targets for large industrial emitters. Compliance alternatives were 1) investment to achieve compliance, 2) tendering purchased emissions credits, or 3) paying \$15 per ton into a climate fund. The latter was overwhelmingly the preferred option. Though this was general legislation, the major impact was felt by the oil and gas sector—particularly the oil sands. As overall emissions increased, fuelled by oil sands expansion, the lack of a hard emissions cap was heavily criticized.<sup>21</sup>

#### CARBON CAPTURE AND STORAGE

This led to provincial government review with a focus on mitigation, particularly carbon capture and storage. The showcase was an industry-government pilot carbon-capture-and-storage (CCS) program, including the Shell-led Quest Project designed to sequester approximately 35 percent of CO<sub>2</sub> emissions from the Scotford upgrader.<sup>22</sup> Provincial grant funding for CCS is authorized under the *Carbon Capture and Storage Funding Act.*<sup>23</sup> There has also been considerable industry-government work to reduce emissions in oil sands mining and processing, including management of tailings, an important GHG emission source.<sup>24</sup>

Under the Notley government in 2015, a panel review recommended an emissions management approach that centred on carbon pricing.<sup>25</sup> Concerning oil sands emissions, the panel said:

As a panel, we developed the following defining principles for the application of our proposed carbon pricing model to oil sands:

- 1. Greenhouse gas policy for oil sands must enable and reward innovation.
- 2. Greenhouse gas policy must recognize the trade exposure of the oil sands sector and design must prevent emissions leakage.
- 3. Greenhouse gas policy for oil sands must consider the current state of the industry and the long-run implications of policy choices today on economic activity within the province.
- 4. Greenhouse gas policy for oil sands must reward best-inclass emissions-intensity performance, regardless of the underlying factors which contribute to that performance.
- 5. Complementary policies should promote innovation and new technology development and deployment in Alberta to both lower emissions and lower production costs to maintain a globally carbon competitive oil sector in Alberta.<sup>26</sup>

The result was a carbon tax; along with a 100 Mt cap on overall oil sands GHG emissions, which in 2017 were 70 Mt.<sup>27</sup>

There has also been an attempt to address concerns of First Nations in the oil sands area, in part through the creation of the provincial Aboriginal Consultation Office.<sup>28</sup> Much of the focus here has been not on emissions reduction but on direct environmental and social impacts of oil sands projects. An example is the Fort Mackay First Nation's challenge to the Dover oil sands project located adjacent to the First Nation's Moose Lake Reserve. After obtaining Alberta Court of Appeal leave for its appeal of the Alberta Energy Regulator (AER)'s approval,<sup>29</sup> the First Nation reached an agreement with the proponent Brion Energy,<sup>30</sup> resulting in a community benefits package that included training, employment opportunities, and community services.

# REGULATION OF GREENHOUSE GAS EMISSIONS BY THE ALBERTA ENERGY REGULATOR AND ALBERTA ENVIRONMENT AND PARKS

#### Alberta Energy Regulator Oil Sands Facility Approvals

As noted, most of the oil sands operators complied with the *Climate Change and Emissions Management Act* by paying \$15 per ton of emissions. The AER and its predecessors, the Alberta Energy and Utilities Board (AEUB) and the Energy Resources Conservation Board (ERCB), resisted arguments by intervenors in facility approval proceedings that GHG emissions limits should be imposed as conditions of regulatory approvals. Its reasons for the decision provided no basis for approval conditions and did not address enforcement. In the 2004 TrueNorth Oil Sands Plant and Cogeneration application, for example, the applicant simply submitted that it was "committed to using leading technologies to minimize GHG emissions, including a low temperature extraction process, thickened tailings, heat recovery from process water, and cogeneration of electricity." The complete AEUB reasons section on GHGs was:

The Board endorses TrueNorth's commitment to using leading technologies to minimize GHG emissions. The Board believes that the issue of GHGs is best dealt with through initiatives and policies at the federal and provincial levels. The Board recommends that Alberta continue to implement measures that would achieve continuous improvement in emissions per unit of product.<sup>32</sup>

The board was even more laconic in its reason for approving a Petro-Canada upgrader application in 2009:

The Board is satisfied that [the applicant] will design the facility to be carbon capture ready and will implement measures to reduce GHGs and maximize energy efficiency. The Board notes that [Alberta Environment] is the responsible authority for GHG emissions management through the Climate Change and Emissions Management Act.<sup>33</sup>

The Joint AEUB/Canadian Environmental Assessment Agency Panel reviewing the Imperial Oil Kearl oil sands project application addressed GHG emissions by "support[ing] Alberta developing appropriate [Environmental

Protection and Enhancement Act] approval requirements to address [various air emissions control and monitoring matters including], GHG emission intensity targets."<sup>34</sup> In a judicial review of the decision brought by the Pembina Institute, the Federal Court set the decision aside and sent the matter back to the Joint Panel.<sup>35</sup> A major reason for the court's decision was the panel's failure to provide any rationale for its conclusion that GHG emissions from the project would be insignificant. Subsequently, the panel re-reviewed the GHG issue and reached the same conclusion, stating that it had to give Alberta's per-barrel intensity target approach "considerable weight."<sup>36</sup> It concluded that "there was very little evidence [that project GHG emissions] will result in significant environmental effects."<sup>37</sup> On this basis, the federal government fast tracked re-approval, issuing a new Fisheries Act authorization.<sup>38</sup>

#### Alberta Energy Regulator Methane Initiative

When the government of Alberta announced its Climate Leadership Plan in 2015, the AER was directed to develop requirements to reduce methane emissions from upstream oil and gas operations by 45 percent below 2014 levels by 2025. The AER constituted multi-stakeholder groups in collaboration with the Clean Air Strategic Alliance (CASA)<sup>39</sup> which included representatives from industry, non-governmental organizations (NGOs), and research bodies that provided input in this process. Specific requirements were developed and implemented through amendments to Directive 060: Upstream Petroleum Industry Flaring, Incinerating, and Venting,<sup>40</sup> and Directive 017: Measurement Requirements for Oil and Gas Operations.<sup>41</sup>

Directive o60 was originally based on CASA recommendations developed following AER stakeholder consultations. Subsequently, a CASA-coordinated study produced a revision of Directive o60 in 2006. The 2018 directive update that created more stringent standards is based on the review, public consultation, and extension of these earlier initiatives, including adoption of the previously developed methodology.<sup>42</sup> In May 2020, the federal and Alberta governments announced a methane emissions equivalency agreement<sup>43</sup> under which the Alberta methane regulations will operate in place of federal regulations.<sup>44</sup>

#### Alberta Energy Regulator Oil Sands Tailings Requirements

The AER has established requirements for tailings management that include progressive reclamation, environmental effects assessment, and regular

inspections and audits.<sup>45</sup> This will limit the extent of liquid tailings ponds that produce greater quantities of GHG emissions than dry tailings.

### THE ALBERTA CLIMATE LEADERSHIP PLAN AND IMPLEMENTING LEGISLATION: ALBERTA ENVIRONMENT AND PARKS

Alberta's 2015 Climate Leadership Plan<sup>46</sup> was the blueprint for a new system of GHG emission regulation that emphasizes carbon pricing. In part, it builds on the original *Climate Change and Emissions Management Act/Specified Gas Emitters Regulation* emissions intensity regime, replacing this with the *Carbon Competitiveness Incentive Regulation (CCIR)*.<sup>47</sup> However, it moved beyond the emissions intensity approach by establishing a carbon price for GHG emissions,<sup>48</sup> specifying an overall oil sands GHG emissions cap, and reducing methane emissions by 45 percent by 2025. Broader objectives include phasing out coal generated emissions by 2030 and developing more renewable energy.<sup>49</sup>

Implementation is through replacement of the *Specified Gas Emitters Regulation*, which created emissions intensity limits for particular facilities, including oil sands facilities, and a compliance system involving emissions credits, offsets, and fund payments. The *CCIR*<sup>50</sup> is described as an output-based allocation. According to the Alberta government,

An oil sands specific output-based allocation approach will replace the current approach. A \$30/tonne carbon price will be applied to oil sands facilities based on results already achieved by high performing facilities—to drive towards reduced emissions and carbon competitiveness, rather than rewarding past intensity levels.

A legislated emissions limit on the oil sands of a maximum of 100 MT in any year with provisions for cogeneration and new upgrading capacity. This limit will help drive technological progress and ensures Alberta's operators have the necessary time to develop and implement new technology..."<sup>51</sup>

As noted in the 2016–2017 Climate Leadership Plan Progress Report,<sup>52</sup> the oil sands sector accounted for approximately one-quarter of Alberta's annual emissions, emitting 68.6 Mt in 2015. To put this into perspective, the amount

of emissions from oil sands activities is higher than the total amount of emissions produced by British Columbia.<sup>53</sup>

The Climate Leadership Plan was abandoned by the Kenney government in 2019. This included repeal of the general provincial carbon tax statute, the *Climate Leadership Act*. A new Technology Innovation and Emissions Reduction (TIER) System replaced the *Carbon Competitive Incentive Regulation*.<sup>54</sup> These requirements apply to oil sands (and other) facilities that emitted 100,000 tonnes or more of GHGs in 2016 or any subsequent year. Benchmarking is facility specific, based on past performance not on best-inclass factors. Emissions must be reduced by 10 percent below benchmarks in 2020, with 1 percent reductions in subsequent years. Compliance options include direct emissions reduction, excess credits from compliant facilities, and payments into a TIER fund.

#### OIL SANDS EMISSIONS LIMIT ACT

The Oil Sands Emissions Limit Act<sup>55</sup> caps oil sands GHG emissions at a combined 100 Mt in any year. In 2017, combined emissions were approximately 70 Mt.

Oil sands emissions under the 100 Mt cap will be monitored. The methodology and formula for allocation of this cap space will be developed and presumably promulgated as regulations under the *Oil Sands Emissions Limit Act*. Meanwhile, GHG emissions from oil sands have been increasing at a consistent rate. Questions remain about the specific implications of the cap.<sup>56</sup> These include: how will emitters share the cap? Will these shares be assignable? How will the cap share of new emitters be determined? Will the 100 Mt limit be adjusted over time?

#### ALBERTA ENFORCEMENT AND COMPLIANCE

Enforcement of oil sands GHG emissions requirements and limits is carried out by the Alberta Environment and Parks under the TIER System<sup>57</sup> under a generic enforcement and compliance approach. The AER, which regulates methane emissions, relies on reporting requirements and on administrative monetary penalties under the *Administrative Penalty Regulation*.<sup>58</sup>

The AER has an *Integrated Compliance Assurance Framework*<sup>59</sup> that outlines a principled approach with an operational focus on investigation, verifying compliance, and enforcement. A list of relevant factors includes complaints, emergencies, operational history, potential adverse effects, and unique

circumstances. Tools include notices of noncompliance, warnings, administrative orders, fees, administrative penalties, and prosecution. A Compliance Dashboard provides updated information on enforcement activities.

On the industry side, Canada's Oil Sands Innovation Alliance (COSIA)<sup>60</sup> includes GHG programs to improve measurement, monitoring, and verification, and development and improvement of various technologies to reduce GHG emissions.

#### **Federal Role**

The federal *GGPPA* <sup>61</sup> sets baseline carbon prices and provides that it will apply in default to provinces that fail to enact equivalent carbon-pricing legislation. Saskatchewan and Ontario refused to comply and advocated for other provinces to refuse the application of this carbon tax. <sup>62</sup> In August 2018, Alberta also announced that it was "pulling out of the federal scheme," citing alleged federal failure to take environmental and First Nations consultation action sufficient to support federal approval of the Trans Mountain oil sands pipeline expansion project from Alberta to the British Columbia coast. <sup>63</sup> Another federal regulatory measure to limit emissions is the 2018 methane reduction regulations under the *Canadian Environmental Protection Act*. <sup>64</sup>

On another front, the North American Commission for Environmental Cooperation (CEC) accepted a citizen complaint concerning oil sands tailings ponds under the *North American Agreement on Environmental Cooperation*. The allegation is that Canada "failed to effectively enforce" provisions of the federal *Fisheries Act* concerning hydrocarbon leaching into fish habitat from oil sands tailings ponds. An investigation was carried out and a factual record prepared by the CEC secretariat. The factual record itself states that it "draws no conclusions regarding Canada's alleged failures to effectively enforce its environmental law, nor does it draw conclusions regarding the effectiveness of Canada's enforcement efforts."

#### FEDERAL-PROVINCIAL NEGOTIATIONS TO 2020

Federal–provincial negotiations concerning "equivalency agreements" under section 10 of the *Canadian Environmental Protection Act* to provide for equivalent provincial laws to operate in place of federal *GGPPA* carbon levy requirements continued from 2018 into 2020.<sup>71</sup> Meanwhile, the provincial constitutional challenges to the *GGPPA* eventually led to the SCC issuing a reference decision of their own.<sup>72</sup> In this decision, the SCC Majority found

that the *GGPPA* is constitutional and *intra vires* Parliament on the basis of the national concern doctrine.

#### Conclusion

Oil sands activity remains a significant and increasing source of Canadian and global GHG emissions. Though these emissions are subject to both federal and provincial regulation, Alberta continues to be the dominant regulator. Provincial requirements include a \$30 per tonne carbon price and an overall oil sands emissions cap administered by Alberta Environment and Parks. These measures raise questions and uncertainties as implementation continues. There have also been initiatives by the AER to tighten oil sands methane release requirements and to shift toward the deposit of dry tailings. Though the AER considers the impacts of GHG emissions in assessing new oil sands project applications, it has essentially relied on emissions limits under the general Alberta GHG emissions legislation that is now centred on the TIER system and the oil sands emissions cap.

Federal authority is exercised in oil sands project assessment through the *Fisheries Act*. More recently, the *GGPPA* aims at driving down GHG emissions from large emitters. This Act was conceived as a national backstop on carbon pricing, with provinces acting as primary regulators under equivalent legislation. After years of court challenges, in 2021, the SCC confirmed the validity of this approach.

#### NOTES

- 1 Professor Emeritus, Faculty of Law, University of Calgary.
- 2 Corporate Law Clerk, Lundin Mining Corp, Toronto.
- 3 Environment and Climate Change Canada, *National Inventory Report 1990–2018:*Greenhouse Gas Sources and Sinks in Canada, Part I (2020), online (pdf): <publications. gc.ca/collections/collection\_2020/eccc/En81-4-2018-1-eng.pdf> at 56.
- 4 Ibid
- 5 Pembina Institute, "The Real GHG Trend" (4 October 2017), online: <www.pembina.org/blog/real-ghg-trend-oilsands>.
- 6 Natural Resources Canada, "What Are the Oil Sands?" (28 July 2020), online: <www.nrcan.gc.ca/energy/oil-sands/18089>.
- 7 See Philip Cross, "A National Project: How Oil Sands Investment and Production Benefit Canada's Economy" (April 2021), online: Macdonald-Laurier Institute < www. macdonaldlaurier.ca/not-enough-canadians-know-how-important-the-oilsands-are-philip-cross-in-the-financial-post/>; Alberta Energy, "Oil Sands, Facts and Statistics", online: <www.alberta.ca/oil-sands-facts-and-statistics.aspx>.

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- 8 Constitution Act, 1867, s 92 (13).
- 9 Ibid, s 92(5).
- 10 Ibid, s 92A.
- 11 Ibid, s 91(2).
- 12 *Ibid*, s 92(10)(a).
- 13 Ibid, s 91(24).
- 14 Ibid, s 91(10).
- Stuart Thomson and Tyler Dawson, "Anti-carbon Tax Provinces Team Up to Argue for 'the Right Not to Cooperate' with Federal Climate Plan", National Post (2 August 2018), online: <nationalpost.com/news/politics/anti-carbon-tax-provinces-team-up-to-argue-for-the-right-not-to-cooperate-with-federal-climate-plan>.
- 16 Reference re Greenhouse Gas Pollution Pricing Act, 2019 SKCA 40; Reference Greenhouse Gas Pollution Pricing Act, 2019 ONCA 544.
- 17 Reference re Greenhouse Gas Pollution Pricing Act, 2020 ABCA 74.
- 18 References re Greenhouse Gas Pollution Pricing Act, 2021 SCC 11.
- 19 Climate Change and Emissions Management Act, SA 2003, c C-16.7, now Emissions Management and Climate Resilience Act, SA 2003 c E-7.8.
- 20 Specified Gas Emitters Regulation, Alta Reg 139/2007. Replaced on January 1, 2020 by the Technology Innovation and Emissions Reduction Regulation, Alta Reg 133/2019.
- 21 Taylor Gray E, "Canada: Alberta's GHG Emissions Control System: A Model for Others?" *Mondaq* (18 October 2012), online: <www.mondaq.com/canada/clean-air-pollution/202178/albertas-ghg-emissions-control-system-a-model-for-others>.
- According to Alberta Energy, "The Alberta Government has committed \$1.24 billion over 15 years to two commercial-scale carbon capture and storage projects. The two projects are moving forward to help reduce the CO2 emissions from the oil sands and fertilizer sectors. When both projects are completed, they will reduce Alberta's greenhouse gas emissions by 2.76 million tonnes each year" (accessed 29 June 2021), online: <www.alberta.ca/carbon-capture-and-storage.aspx#:~:text=Alberta%2ohas%2o committed%2o%241.24%2obillion,2.76%2omillion%2otonnes%2oeach%2oyear>.
- 23 Carbon Capture and Storage Funding Act, SA 2009 c C-2.5.
- 24 Commission for Environmental Cooperation, "Submission: Alberta Tailings Ponds II", SEM-17-001 (26 June 2017), online: <www.cec.org/sem-submissions/alberta-tailingsponds-ii>; CEC, "Alberta Tailings Ponds II: Factual Record regarding Submission SEM-17-001" (4 September 2020), online (pdf): Commission for Environmental Cooperation <www.cec.org/wp-content/uploads/wpallimport/files/17-1-ffr\_en.pdf>.
- 25 Climate Leadership, *Report to the Minister* (November 2015).
- 26 Ibid at 60.
- 27 Oil Sands Emissions Limit Act, SA 2016, c O-7.57 at 2(1).
- 28 Ministers of Energy and Environment and Sustainable Resource Development, Ministerial Order 105/2014 under the Responsible Energy Development Act, 31 October, 2014.
- 29 Fort McKay First Nation v Alberta Energy Regulator, 2013 ABCA 355.
- 30 Brion Energy, "Brion Energy Corporation and the community of Fort McKay reach agreement on Dover Commercial Project" (21 February 2014), online: <www.newswire. ca/news-releases/brion-energy-corporation-and-the-community-of-fort-mckay-reachagreement-on-dover-commercial-project-513791671.html>.

- 31 TrueNorth Energy Corporation Application to Construct and Operate an Oil Sands Mine and Cogeneration Plant in the Fort McMurray Area, 2002 AEUB 089 at 46.
- 32 Ibid at 47.
- 33 Petro-Canada Oil Sands Inc. Application to Construct and Operate an Oil Sands Upgrader in Sturgeon County, 2009 ABERCB 002 at 41.
- 34 Imperial Oil Resources Ventures Limited, Application for an Oil Sands Mine and Bitumen Processing Facility (Kearl Oil Sands Project) in the Fort McMurray Area, 2007 AEUB 013 [Kearl Report]. This was a decision of the Canadian Environmental Assessment Agency and Alberta Energy and Utilities Board (now AER), Kearl Oil Sands Project Joint Review Panel.
- 35 Pembina Institute for Appropriate Development v Canada (Attorney General), 2008 FC 302.
- 36 Impact Assessment Agency of Canada, "Archived—Joint Panel Report Kearl Oil Sands Project Addendum to EUB Decision 2007-013 Additional rationale for the joint review panel's conclusion on air emissions" (6 May 2008).
- 37 Ibid.
- 38 Sean Nixon & Melissa Gorrie, "Nothing (Significant) to See Here: The Kearl Cases and the Growing Mess in the Alberta Oil Sands" in William Tilleman and Alastair Lucas, Litigating Canada's Environment: Leading Canadian Environmental Cases by the Lawyers Involved (Toronto: Thomson Reuters, 2017) 283 at 302.
- 39 Alberta Energy Regulator, "Directive o60: Upstream Petroleum Industry Flaring, Incinerating, and Venting" (12 March 2018) at 103, Appendix Background to Directive o60.
- 40 *Ibid* at 10-13.
- 41 Alberta Energy Regulator (31 March 2016). Under review in August 2018, current version is May 2020.
- 42 Alberta Energy Regulator, "Directive 060: Directive 060: Upstream Petroleum Industry Flaring, Incinerating, and Venting" (21 April 2021), online (pdf): <static.aer.ca/prd/documents/directives/Directive060.pdf>.
- 43 Under s 10 of the Canadian Environmental Protection Act.
- 44 Janet French, "Alberta, Ottawa Reach Preliminary Deal on Methane Emissions Regulation", CBC (13 May 2020), online: <www.cbc.ca/news/canada/edmonton/alberta-ottawa-reach-preliminary-deal-on-methane-emissions-regulation-1.5568924>.
- 45 Alberta Energy Regulator, "Directive 085: Fluid Tailings Management for Oil Sands Mining Projects" (12 October 2017).
- 46 Osler, "Alberta's New Climate Change Leadership Plan" (23 November 2015), online: <www.osler.com/en/resources/regulations/2015/alberta-s-new-climate-change-leadership-plan>.
- 47 Alta Reg 255/2017.
- 48 Ministerial Order 58/2017 under the *Climate Change and Emissions Management Act*, RSA 2003C-16.7, establishing a \$30 per tonne price for 2018.
- 49 Supra note 46.
- 50 Alta Reg 255/2017.
- 51 Government of Alberta, "Capping Oil Sands Emissions" (accessed 12 July 2021), online: <a href="https://www.alberta.ca/climate-oilsands-emissions.aspx">www.alberta.ca/climate-oilsands-emissions.aspx</a>>.

- 52 Alberta Government, *Climate Leadership Plan Progress Report 2016–2017* (December 2017).
- 53 Government of Canada, "Greenhouse Gas Emissions" (15 April 2021), online: <www.canada.ca/en/environment-climate-change/services/environmental-indicators/greenhouse-gas-emissions.html>.
- 54 Alta Reg 255/2017.
- 55 SA 2016 c O-7.5.
- 56 Nigel Bankes, "Oil Sands Limit Legislation: A Real Commitment or Kicking It Down The Road?" *ABlawg* (3 November 2016), online: <ablawg.ca/2016/11/03/0il-sands-emission-limit-legislation-a-real-commitment-or-kicking-it-down-the-road/>; Brenda Heelan Powell, "Climate Change Legal Roadmap: Oil Sands Emission Limit Under the Climate Change Leadership Plan" (Edmonton: Environmental Law Centre, 2017).
- 57 Alta Reg 133/2019.
- 58 Alta Reg 140/2007; Methane Emission Reduction Regulations Alta Reg 244/2018.
- 59 Alberta Energy Regulator, February 2016.
- 60 COSIA, "We Aspire to Produce Oil with Lower Greenhouse Gas Emissions than Other Sources of Oil" (accessed 12 July 2021), online: <www.cosia.ca/initiatives/greenhouse-gases>.
- 61 Greenhouse Gas Pollution Pricing Act, SC 2018, c 12, s 186.
- 62 Janyce McGregor, "Alberta Joins Saskatchewan in Opposing Federal Carbon Tax Plan", CBC News (20 July 2018).
- 63 "Premier Rachel Notley Pulls Alberta Out of Federal Climate Plan over Trans Mountain Ruling", CBC News (30 August 2018).
- 64 Canadian Environmental Protection Act 1999, SC 1999 c 33; Regulations Respecting Reduction in the Release of Methane and Certain Volatile Organic Compounds (Upstream Oil and Gas Sector) SOR/2018-66.
- 65 Agreement between the United States, Canada and Mexico, 14–15 September 1993, Can TS No 3, 32 ILM 1480 [NAAEC].
- 66 Ibid art 14.
- 67 RSC 1985, c F-14, s 36(3).
- 68 NAAEC s 15(2).
- 69 CEC, supra note 24.
- 70 Ibid at 65.
- 71 E.g., Government of Canada, "Canada-Saskatchewan Equivalency Agreement Regarding Greenhouse Gas Emissions from Electricity Producers" (5 October 2019), online: <www.canada.ca/en/environment-climate-change/services/canadian-environmental-protection-act-registry/agreements/equivalency/canada-saskatchewan-greenhouse-gas-electricity-producers.html>.
- 72 References re Greenhouse Gas Pollution Pricing Act, 2021 SCC 11.