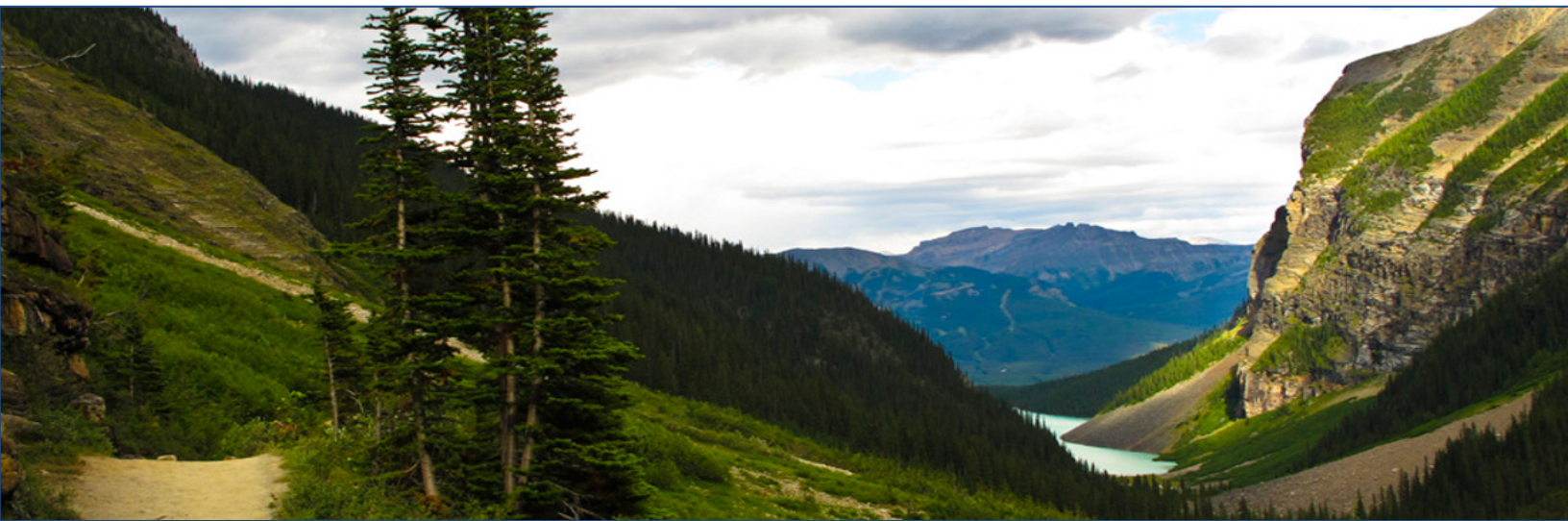


Climate Change Legal Roadmap: A Snapshot of Alberta's Climate Change Law & Policy



Prepared By
Brenda Heelan Powell
Staff Counsel
Environmental Law Centre (Alberta)
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Environmental Law Centre
410, 10115 – 100A Street
Edmonton, AB T5J 2W2

Telephone: (780) 424-5099
Fax: (780) 424-5133
Toll-free: 1-800-661-4238
Email: elc@elc.ab.ca

Website: www.elc.ab.ca

Blog: <http://environmentallawcentre.wordpress.com>

Facebook: <http://www.facebook.com/environmentallawcentre>

Twitter: https://twitter.com/ELC_Alberta

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I. Introduction

In late 2015, the Alberta Government released its *Climate Leadership Plan* (the “*Climate Leadership Plan*”) which is a policy document based upon the recommendations made in the *Climate Change Advisory Panel Report* (the “*Report*”).¹ The *Climate Leadership Plan* 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.

While the *Climate Leadership Plan* sets policy guidance for climate change legislative action in Alberta, it is a very high-level document. There is not a great amount of detail on the tools and mechanisms that will be used to achieve the policy goals set in the *Climate Leadership Plan*.

In response to this dearth of policy detail, the ELC will be publishing a series of reports – the **Climate Change Legal Roadmap** – outlining climate change actions taken in other jurisdictions and making recommendations for Alberta. This is the first report in the series and provides a snapshot of existing climate change law in Alberta as of **April 2016**. Subsequent reports in the series will address carbon pricing, coal phase-out, oil-sands emissions limits, and methane emissions reductions.

II. Constitutional Authority over Climate Change

In Canada, the authority of the federal and provincial governments to make laws is dictated by the *Constitution*.² Sections 91 and 92 of the constitution list the subject matters over which the federal and provincial governments have jurisdictional authority, respectively. Canada’s constitution does not grant one particular level of government exclusive authority to deal with

¹ The Alberta Climate Leadership Panel was established in mid-2015 for the purposes of providing advice to the Government of Alberta to inform the development of a comprehensive climate change strategy. The Panel engaged with Albertans, reviewed existing climate change policies, and provided advice to the Minister of Environment and Parks.

² *Constitution Act, 1867* (UK), 30 & 31 Vict., c. 3 (U.K.), reprinted in RSC 1985, App. II, No. 5.

the environment *per se*. Although the *Constitution* does not expressly assign legislative authority over the environment to either the federal or provincial governments, both levels of government have relevant authority making the environment a matter of overlapping and concurrent regulation. In addition to authority to make laws, both the federal and provincial governments have ownership over a variety of natural resources which confers a measure of control in environmental matters.

In relation to environmental matters, provinces have a dual role as legislators and owners of natural resources.³ By virtue of s. 92 of the *Constitution*,⁴ each province may make laws in relation to municipalities, property and civil rights in the province, local works and undertakings, and all matters of a merely local or private nature in the province. Given the broad legislative authority granted by the *Constitution* and the rights associated with resource ownership, provinces generally have good authority to deal with environmental matters within the province. The primary exceptions to this provincial authority are matters that affect fisheries or navigation, and intra-provincial pollution that moves across boundaries by air or water (as these matters are expressly granted to federal jurisdiction).⁵

Specifically with respect to climate change, several legal scholars have found that legislation addressing climate change fits comfortably within provincial authority.⁶ Provincial authority to act on climate change derives from its constitutional jurisdiction over property and civil rights in the province, local works and undertakings, and all matters of a merely local or private nature in the province.⁷ In these matters, the authority of each province is confined to action within its own boundaries. As stated by Bankes and Lucas:⁸

³ Alastair R. Lucas, 'Natural Resource and Environmental Management: A Jurisdictional Primer' in Donna Tingley, ed, *Environmental Protection and the Canadian Constitution: Proceedings of the Canadian Symposium on Jurisdiction and Responsibility for the Environment* (Edmonton: Environmental Law Centre, 1987).

⁴ *Supra*. note 2.

⁵ Judith Hanebury, "The Environment in the Current Constitution", (1992) 18:4 *Alternatives* 14.

⁶ Nigel D. Bankes and Alastair Lucas, "Kyoto, Constitutional Law and Alberta's Proposals" (2004) 42 *Alta. L. Rev.* 355; and Shi-Ling Hsu and Robin Elliot, "Regulatory Greenhouse Gases in Canada: Constitutional and Policy Developments" (2009) 54 *McGill L.J.* 463.

⁷ Nigel D. Bankes and Alastair Lucas, *supra*. note 6 at 374.

⁸ *Ibid.* at 375.

It is one thing for the provincial legislature to make a law to establish a program or institution explicitly intended to have effect at the national and international levels and to modify and displace federal initiatives – such a law is likely invalid. But it is another thing for provincial legislature to make a law that is addressed to the citizens and businesses in the province and that may affect international matters – such a law is likely valid.

Notwithstanding that provinces have legislative authority with respect to climate change, Hogg has concluded that a federal program aimed at lowering emissions across the country is within the power of the federal government as a matter of criminal law and the residual peace, order and good government power.⁹ As stated by Hogg:¹⁰

There is no doubt that mandatory reduction in greenhouse gas emissions would be upheld as an exercise of the criminal law power of Parliament. That is clear from *Hydro-Quebec*. The only question is whether the three additional means of compliance (emissions credits, offset credits, and contributions to a climate change technology fund) can also be upheld as exercises of the criminal law power. Each enables a regulated firm to meet its obligations without actually reducing its greenhouse gas emissions by the required amount. The rationale for including these alternate means of compliance in all three cases is the difficulty that some firms will have in achieving their required emissions reductions through in-house abatement. The effect in all three cases is a reduction in emissions, albeit not one that is made directly by the firm taking advantage of the additional means of compliance. The premise here, unusual in a criminal law, is that it is the overall reduction of emissions that is the main purpose of the law. A reduction anywhere is equally beneficial and serves the purpose of the law.

A valid use of criminal law power requires the imposition of a prohibition, penalties and a valid criminal purpose.¹¹ In the context of environmental regulation, a sophisticated administrative scheme qualifies as criminal law if it is backed up by prohibitions and penalties.¹²

In addition to its criminal law jurisdiction and residual POGG power, Hogg notes that the federal government has the power to levy a carbon tax.¹³ The only serious limitation on the federal

⁹ Peter W. Hogg, "Constitutional Authority over Greenhouse Gas Emissions" (2009)46.2 *Alberta Law Review* 507. This conclusion has been challenged by Alastair Lucas and Jenette Yearsley, "The Constitutionality of Federal Climate Change Legislation" (2011) 4(15) *University of Calgary School of Public Policy Research Papers* 1.

¹⁰ Peter W. Hogg, *ibid.* at 514.

¹¹ *Ibid.*

¹² *R. v Hydro-Québec*, [1997] 3 SCR 213.

¹³ *Supra.* note 9.

taxation power is that it cannot tax lands or property belonging to the province. This includes resources extracted by the province - but not private producers - from provincial Crown lands.

In the area of climate change, Hogg recommends that provinces and the federal government cooperate to avoid creating a confusing patchwork of overlapping regulations.¹⁴ In addition, he recommends that the provinces and the federal government should work together to ensure cap-and-trade schemes are harmonized (otherwise they will be unwieldy).¹⁵

Federal authority to regulate climate change using its criminal law power was directly considered in *Syncrude Canada Ltd v Attorney General of Canada*.¹⁶ In this case, a provision of the federal *Renewable Fuel Regulations* made pursuant to the *Canadian Environmental Protection Act, 1999* was subject to a constitutional challenge. This provision required that diesel fuel produced, imported or sold in Canada contain at least 2% renewable fuel.

In its challenge, Syncrude argued that the dominant purpose of the impugned provision was to regulate non-renewable resources and promote the economic benefits of protecting the environment and to create a demand for biofuels in the Canadian marketplace. In essence, Syncrude argued that the provision was not a constitutionally sound use of the federal criminal law power as any prohibition of harm was merely ancillary.

The Federal Court upheld the constitutionality of the impugned provision. In response to Syncrude's assertion that the production and consumption of petroleum fuels are not dangerous and do not pose a risk to human health or safety, the Court stated:

[paragraph 83] ... there is a real evil and a reasonable apprehension of harm in this case. The evil of global climate change and the apprehension of harm resulting from the enabling of climate change through the combustion of fossil fuels has been widely discussed and debated by leaders on the international stage. Contrary to Syncrude's submission, this is a real, measured evil, and the harm has been well documented.

¹⁴ *Ibid.*

¹⁵ *Ibid.*

¹⁶ *Syncrude Canada Ltd v Attorney General of Canada*, 2014 FC 776 (CanLii).

This decision reaffirms the view previously expressed by Canadian courts that protection of the environment is a valid criminal purpose. Further, this validity of purpose includes prohibitions and regulations aimed at GHG emissions.

In light of the fact that the Constitution does not expressly deal with climate change matters, consideration must be given to provincial and federal heads of power to determine relevant authority. Provinces may legislate on property and civil rights within the province, local works and undertakings, and all matters of a local or private nature in the province, all of which provide sufficient authority to regulate climate change matters. On the other hand, the federal government has authority to deal with climate change matters pursuant to its criminal law power, taxation power, and the residual peace, order and good government power. The result is that climate change is a matter of overlapping and concurrent legislative authority meaning both the federal and provincial government can make climate change laws. In addition to authority to make laws, both the federal and provincial governments have ownership over a variety of natural resources which may confer a measure of control over climate change matters.

III. Climate Change Law in Alberta

After years of inertia, the issue of climate change has become a matter of great attention both provincially and federally. While there have not been significant legislative changes recently, both the provincial and federal governments have indicated an intention to proceed with policy and legislative changes in the near future. The following provides a snapshot of provincial and federal climate change law and policy as of **April 2016**.

A. Provincial Law & Policy

i. Regulatory Framework under *Climate Change and Emissions Management Act*

In 2003, Alberta passed its primary piece of provincial legislation dealing with climate change, the *Climate Change and Emissions Management Act (CCEMA)*.¹⁷ The regime established by this legislation creates emission intensity limits for certain facilities, and creates a system for the use of emission offsets and credits.

Interestingly, the preamble of the *CCEMA* makes no direct reference to climate change nor does it reference the specified gases regulated by the Act as being greenhouse gases. Among other things, the preamble indicates that "management of emissions of carbon dioxide, methane and other specified gases will serve to protect the Alberta environment". The preamble also indicates the intention to establish clear emission reduction targets for specified gases and related objectives, frameworks, plans and measures.

Section 3 of the *CCEMA* sets the emission target for Alberta as a reduction of specified gas emissions relative to the gross domestic product in an amount that is equal to or less than 50% of 1990 levels by December 31, 2020. A "specified gas" covered by the *CCEMA* is "any gas that traps heat near the earth's surface and includes, without limitation, carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride" (section 1(g)).

In addition to setting emission targets, the *CCEMA* establishes the Climate Change and Emissions Management Fund which is aimed at reducing emissions of specified gases or improving provincial ability to adapt to climate change (section 10). Contributions may be made to this fund to obtain credits used to offset excessive emissions of specified gases.

Under the *CCEMA*, the Minister may enter into agreements with discrete sectors of the Alberta economy for the purposes of meeting emission targets (s.4). Matters that can be addressed in sectoral agreements include objectives, minimum energy efficiency levels for operations, and maximum levels of emissions of specified gases. As well, to meet emission targets, a system of

¹⁷ *Climate Change and Emissions Management Act*, S.A. 2003, c. C-16.7.

emission offsets, credits and sink rights may be established by regulation pursuant to the *CCEMA* (s.5).

The key regulation promulgated under the *CCEMA* is the *Specified Gas Emitters Regulation*¹⁸ (*SGER*). The *SGER* currently sets emission intensity limits for facilities releasing at least 100,000 tonnes of CO₂e.¹⁹ Emissions intensity is defined as "the quantity of specified gases released by a facility per unit of production from that facility" (s. 1(1)(h)). The *SGER* requires increasingly greater reductions in net emissions intensity (as compared to an emissions intensity baseline determined in accordance with Part 4 of the *SGER*) on an annual basis. The net emissions intensity is determined by subtracting emission offsets, fund credits and emission performance credits from total annual emissions.

In addition to setting emission intensity limits, the *SGER* establishes a system of emission offsets and credits. Under the *SGER*, an emission offset can be obtained by:

- a reduction in the release of specified gases (not including an emission performance credit);
- a geological sequestration of specified gases; or
- a capture of specified gases that are geologically sequestered.

In order to constitute an emission offset, these actions must meet the requirements of s.7 of the *SGER*. Essentially, s.7 requires that the action occur in Alberta after January 1, 2004 and not be otherwise required by law. In the case of the capture of specified gases, construction of the necessary infrastructure must have been initiated on or after January 1, 2012 and use of the infrastructure must have been initiated before December 31, 2017.

A person may obtain fund credits by contributing money to the Climate Change and Emissions Management Fund (s.8). The amount of money that must be contributed to the fund to obtain a

¹⁸ Alta. Reg. 129/2007. There are other regulations under the *CCEMA*, *Specified Gas Reporting Regulation*, Alta. Reg. 251/2004 and *Climate Change and Emissions Fund Administrations Regulation*, Alta. Reg. 120/2009.

¹⁹ Section 1(1)(d) of the *SGER* defines CO₂e as the 100 year time horizon global warming potential of a specified gas expressed in terms of equivalency to CO₂.

fund credit equal to a one tonne reduction in emissions is established by Ministerial Order.²⁰ The established carbon price is \$20 in 2016 and \$30 in 2017. A fund credit may not be used by more than one person and must be used for the year for which it was purchased. This means that if a credit is purchased before March 31, then applies to previous year's emissions; if purchased after March 31, then the credit applies to current year's emissions.

If the actual emissions intensity of a facility is less than the applicable net emissions intensity for the facility for the year, then emission performance credits may be issued (s.9). An emission performance credit may only be used once. It may be used at that facility for a subsequent year, or at another facility for that year or a subsequent year.

Aside from Alberta's specific legislation dealing with climate change, other existing provincial legislation may be relevant as it forms part of the regulatory landscape in which the *CCEMA* operates. Further, there is potential that existing legislation may be amended to support or implement climate change action. General environmental legislation in Alberta includes the *Environmental Protection and Enhancement Act*,²¹ the *Water Act*,²² the *Mines and Minerals Act*,²³ and the *Public Lands Act*.²⁴ Aside from Part 9 of the *Mines and Minerals Act* which enables CO₂ sequestration, none of these pieces of legislation expressly deal with climate change matters.

Given the impact of the oil and gas industry on climate change matters, numerous pieces of legislation regulating Alberta's fossil fuel resources may also be relevant.²⁵ Except for broad references to pollution control and environmental protection,²⁶ these pieces of legislation do not expressly reference GHG emissions or climate change. However, it is foreseeable that

²⁰ Alberta. *Ministerial Order*, 13/2015.

²¹ RSA 2000, c. E-12.

²² RSA 2000, c. W-3.

²³ RSA 2000, c. M-17.

²⁴ RSA 2000, c. P-40.

²⁵ Relevant legislation includes *Responsible Energy Development Act*, SA 2012, c. R-17.3; *Gas Resources Preservation Act*, RSA 2000, G-4; *Oil and Gas Conservation Act*, RSA 2000, O-6; *Oil Sands Conservation Act*, RSA 2000, O-7; *Coal Conservation Act*, RSA 2000, c. C-17; *Pipeline Act*, RSA 2000, c. P-15; and *Turner Valley Unit Operations Act*, RSA 2000, C. T-9.

²⁶ See the *Pipeline Act*, *supra*. note 25 at s. 4; the *Coal Conservation Act*, *supra*. note 25 at s. 4; and the *Responsible Development of Energy Act*, *supra*. note 25 at s. 2(1)(b).

amendments may be made to some of this legislation as a means to implement climate change action.

Also relevant, on the consumption side of fossil fuels, is the *Fuel Tax Act*.²⁷ Although it currently does not reference GHG emissions or climate change matters, this is a potential avenue for imposing a carbon tax or other climate change action.

Similarly, it is possible that Alberta's legislation regulating electricity may be amended to implement climate change action. The Alberta Utilities Commission (established by the *Alberta Utilities Commission Act*²⁸) regulates the generation, transmission, and distribution of electricity. The Alberta Utilities Commission is governed by several pieces of legislation,²⁹ none which explicitly reference GHG emissions or climate change.³⁰ However, it should be noted that the *Micro-Generation Regulation*³¹ allows Albertans to generate their own environmentally friendly electricity and receive credit for any excess electricity they contribute to the grid. This regulation may be relevant as a mechanism for decentralization of electrical generation that might accompany climate policy implementation.

Finally, in considering the concept of carbon sinks, several pieces of legislation may have relevance. These pieces of legislation include the *Forests Act*,³² the *Alberta Land Stewardship Act*,³³ and various pieces of parks and protected areas legislation.

ii. Alberta's Climate Leadership Plan

In late 2015, the Alberta Government released its *Climate Leadership Plan* (the "*Climate Leadership Plan*")³⁴ which is based upon the recommendations made in the *Climate Change*

²⁷ SA 2006, c. F-28.1.

²⁸ SA 2007, c. A-37.2.

²⁹ *Public Utilities Act*, RSA 2000, c. P-45; *Gas Utilities Act*, *Electric Utilities Act*, RSA 2000, c. G-5; *Hydro and Electric Energy Act*, RSA 2000, c. H-16; and *Pipeline Act*, *supra*. note 25.

³⁰ There are broad references to pollution control and environmental protection. See the *Pipeline Act*, *ibid.* at s. 4, the *Hydro and Electric Energy Act*, *ibid.* at s. 2 and the *Alberta Utilities Commission Act*, *ibid.* at s. 17.

³¹ *Micro-Generation Regulation*, Alta. Reg. 27/2008 promulgated under the *Electric Utilities Act*, *supra*. note 29.

³² RSA 2000, c. F-22.

³³ SA 2009, c. A-26.8.

Advisory Panel Report (the “*Report*”).³⁵ The *Climate Plan* focuses on four key areas for further development:

- implementing a new carbon price on 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.

Carbon pricing on emissions from fossil fuel combustion forms the "backbone of [the] proposed architecture".³⁶ The proposed carbon pricing approach in Alberta will consist of a modified *SGER* regime in combination with a carbon tax. In this regard, the Alberta Government will impose a carbon tax of \$20 per tonne starting in January 2017 which will thereafter increase to \$30 per tonne in January 2018.

The carbon tax will be imposed on purchases of all fossil fuels that produce GHG emissions when combusted, such as transportation and heating fuels.³⁷ Each fuel type will be taxed according to the amount of GHG emissions released when combusted.³⁸ The tax will not apply directly to consumer purchases of electricity. There are further exemptions from the carbon tax for natural gas produced and consumed on site, marked gasoline and diesel for farming purposes, biofuels, inter-jurisdictional flights, indigenous use, and fuel sold for export. Finally, large final emitters will be exempt from the carbon tax because they are already subject to carbon pricing imposed by the *SGER*. The precise details of the interaction between the carbon tax and the *SGER* will be announced later.

³⁴ Alberta. *Climate Leadership Plan* (2015), available at www.alberta.ca/climate-leadership-plan.cfm.

³⁵ Andrew Leach et al., *Climate Leadership: Report to Minister* (Edmonton, AB: Climate Leadership Panel, 2015).

³⁶ *Ibid.* at p.5.

³⁷ On the eve of this publication, the Alberta Government introduced *Bill 20: Climate Leadership Implementation Act* which creates the carbon tax (*Climate Leadership Act*), as well as establishing Energy Efficiency Alberta as a crown corporation to raise awareness of and promote energy efficiency (*Energy Efficiency Alberta Act*).

³⁸ Schedule 1 to the proposed *Climate Leadership Act* (contained in *Bill 20: Climate Leadership Implementation Act*) sets out the carbon tax rate for each fuel type. These rates are based on a carbon price of \$20 per tonne of emissions starting in January 2017 and thereafter increased to \$30 per tonne of emissions in January 2018.

The revenue derived from the carbon tax will be used for defined purposes that are designed to reduce GHG pollution. These include offsetting impacts on low and middle income households, supporting the transition needs of workers and communities, investing in complimentary policies designed to reduce emission intensity, and providing fiscal capacity for other government priorities including infrastructure.

Another key element of the *Climate Leadership Plan* is the phase-out of coal-fired electrical generation by 2030. The goal is to replace two-thirds of this electrical generation capacity with renewable energy and one-third with natural gas. In the meantime, coal-fired generators will be subject to the \$30 per tonne carbon tax on emissions above those created by Alberta's cleanest natural gas-fired plant producing the same amount of electricity.

The *Climate Leadership Plan* also includes a transition to performance-based standards and a legislated limit to oil-sands emissions. This means that the \$30 per tonne carbon tax will be applied to oil sands facilities based upon the results already achieved by high performing facilities. Further, an annual limit of 100 Mt from the oil-sands sector will be imposed by legislation.

Recognizing the significant climate change impact of methane, the *Climate Leadership Plan* seeks to reduce methane emissions from oil and gas operations by 45% by 2025. This will be achieved by applying new emissions design standards to new oil and gas operations. As well, action will be taken to address the emissions arising from venting and flaring, and fugitive emissions from existing facilities.

While the *Climate Leadership Plan* sets policy guidance for climate change action in Alberta, it is a very high-level document. There is not a great amount of detail on the tools and mechanisms that will be used to achieve the policy goals set in the *Climate Leadership Plan*.

B. Federal Law & Policy

i. Federal Regulation of Vehicle Emissions and Coal-Fired Electricity Generation

To date, federal climate change legislation has been implemented on a sectoral basis (rather than adopting a comprehensive approach to climate change). This sector based approach has been implemented via regulations under the *Canadian Environmental Protection Act, 1999*³⁹ that address vehicle emissions and coal-fired electricity generation emissions.

Vehicle emissions are governed by the *Heavy-duty Vehicle and Engine Greenhouse Gas Emission Regulations*⁴⁰ and the *Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations*.⁴¹ These regulations align Canadian vehicle GHG emission requirements with US standards for the transportation sector.

The purpose of the *Heavy-duty Vehicle and Engine Greenhouse Gas Emission Regulations* is to "reduce GHG emissions from heavy-duty vehicles and engines by establishing emission standards and test procedures that are aligned with the federal requirements of the United States".⁴² Similarly, the purpose of the *Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations* is to "reduce GHG emissions from passenger automobiles and light trucks by establishing emission standards and test procedures that are aligned with the federal requirements of the United States".⁴³ Both regulations set emission standards for nitrous oxide, methane, and carbon dioxide.

Carbon dioxide emissions from coal-fired electricity generation are governed by the *Reduction of Carbon Dioxide Emissions from Coal-fired Generation of Electricity Regulations*.⁴⁴ The stated purpose of the regulations are to "establish a regime for the reduction of carbon dioxide emissions that result from the production of electricity by means of thermal energy using coal as

³⁹ S.C. 1999, c. 33.

⁴⁰ SOR/2013-24.

⁴¹ SOR/2010-201.

⁴² *Supra.* note 40 at s. 2.

⁴³ *Supra.* note 41 at s. 2.

⁴⁴ SOR/2012-167.

a fuel".⁴⁵ The regulations set an emission-intensity limit of 420 tonnes of CO₂ emissions for each GWh of electricity produced (s. 3(1)). This emission-intensity limit applies to both new plants (commissioned after July 1, 2015) and old plants (a plant that has reached the end of its useful life but continues to produce electricity). The end of useful life is defined by the regulations based upon the date of commissioning of the plant (section 2(1)). Generally, a plant is considered to reach its end of useful life 50 years after commissioning. The effect of the regulations is to hold plants commissioned after July 1, 2015 to higher emission-intensity limits while existing plants are allowed to continue unabated until after their 50th year of operation.

ii. Other Federal Climate Change Initiatives⁴⁶

In addition to these sector-based GHG reduction approaches, there have been some federal efforts to support alternative technologies to mitigate GHG emissions. For example, the *Canada Foundation for Sustainable Development Technology Act*⁴⁷ establishes Sustainable Development Technology Canada which funds Canadian clean technology projects and coaches the companies as they bring these innovative technologies to market.

Another piece of legislation - the *Canada Emission Reduction Incentives Agency Act*⁴⁸ - established the Canada Emission Reduction Incentives Agency. Although this Agency never became operational, the legislation remains in force. The Agency was intended to provide incentives for the reduction of GHG emissions through the acquisition, on behalf of the federal government, of domestic and international emission reduction credits.⁴⁹

With the recent change in federal government, it appears a more proactive approach to addressing climate change is forthcoming. Canada greatly increased its presence on the world

⁴⁵ *Ibid.* at s. 1(1).

⁴⁶ Briefly in force was the *Kyoto Implementation Act* which was repealed upon Canada's withdrawal from the Kyoto Protocol in 2011. See Part II.C of this report.

⁴⁷ S.C. 2001, c. 23.

⁴⁸ S.C. 2005, c. 30, s.87.

⁴⁹ Archived Environment Canada webpage available at <https://www.tbs-sct.gc.ca/rpp/2006-2007/ec-ec/ec-ec03-eng.asp>.

stage at the Paris Conference of the Parties meeting in December 2015 (“Paris COP 21”).⁵⁰ The federal government met with the provinces and territories in March 2016 as follow-up to Paris COP 21. Furthermore, Canada, the US and Mexico have recently announced coordinated efforts to tackle climate change.

The *Vancouver Declaration on Clean Growth and Climate Change*⁵¹ arose from the First Ministers meeting held in March, 2016. This declaration is the first step in developing a pan-Canadian framework for clean growth and climate change, and consists of several commitments made by the First Ministers. Broadly, the commitments are to:

- increase the level of ambition to meet or exceed Canada's 2030 target of a 30% reduction below 2005 levels;
- promote clean economic growth to create jobs;
- deliver mitigation actions including carbon pricing mechanisms and clean technology;
- increase action on adaptation and climate resilience; and
- enhance cooperation.

In order to meet these commitments, the First Ministers agree to develop a pan-Canadian framework for clean growth and climate change to be implemented by early 2017. Several working groups have been established to achieve this objective. The stated intention is that the First Ministers will meet in Fall 2016 to finalize the pan-Canadian framework on clean growth and climate change, and review the progress toward a Canadian Energy Strategy.

In February 2016, Canada, the US and Mexico entered into a *Memorandum of Understanding concerning Climate Change and Energy Collaboration* (the "MOU").⁵² One of the purposes of

⁵⁰ The Paris COP 21 meeting occurred pursuant to the terms of the United Nations Framework Convention on Climate Change. This is discussed in Part II. C of this report.

⁵¹ *Vancouver Declaration on Clean Growth and Climate Change* (March 3, 2016) available on the Canadian Intergovernmental Conference Secretariat website at www.scics.gc.ca/english/conferences.asp?a=viewdocument&id=2401.

⁵² *Memorandum of Understanding among the Department of Energy of the United States of America and the Department of Natural Resources of Canada and the Ministry of Energy of the United Mexican States concerning Climate Change and Energy Collaboration* available at <https://www.nrcan.gc.ca/energy/international/nacei/18102>.

the MOU is to address climate change associated with the production, transmission and use of energy. Areas highlighted for collaboration include:

- sharing knowledge in the development of reliable, resilient and low-carbon electricity grids;
- modeling, deploying and accelerating innovation in clean energy technologies;
- exchanging information and promoting joint action to advance the deployment of carbon capture, use and storage;
- identifying potential trilateral activities to further climate change adaptation and resilience; and
- sharing best practices and seeking methods to reduce emissions from the oil and gas sector.

It is notable that the MOU does not impose any legally binding obligations on the parties.

On March 10, 2016, the US and Canada issued a *Joint Statement on Climate, Energy, and Arctic Leadership*.⁵³ The Joint Statement provides that the US and Canada will work together to implement the *Paris Agreement*.⁵⁴ Both countries express an intention to play a "leadership role internationally in the low carbon global economy". A key element of this statement was the agreement to take action to reduce methane emissions from the oil and gas sector by 40-45% below 2012 levels by 2025.

Other commitments made by the US and Canada under the joint statement include efforts to:

- facilitate integration of renewables on interconnected grids,
- align energy efficiency standards and expand shared labeling programs,
- accelerate clean energy and clean technology innovation,
- advance global efforts to accelerate clean energy, and

⁵³ Available at <https://www.whitehouse.gov/the-press-office/2016/03/10/us-canada-joint-statement-climate-energy-and-arctic-leadership>.

⁵⁴ The *Paris Agreement* is discussed in greater detail in Section III, C of this paper.

- develop a joint US-Canadian strategy for strengthening the security and resilience of the North American energy grid.

These combined efforts are designed to "strengthen North American energy security, phase out fossil fuel subsidies, accelerate clean energy development to address climate change and to foster sustainable energy development and economic growth".

C. International Law

Given the need for global action, there has been significant international effort to address GHG emissions and climate change. The current international regime is based upon the United Nations Framework Convention on Climate Change (the "UNFCCC")⁵⁵ which is an international treaty created in 1992 to facilitate global action on climate change.

While the UNFCCC does not set any binding limits on GHG emissions, it serves as a framework for international action on climate change. Since its inception in 1992, more specific agreements have been entered pursuant to the UNFCCC (such as the *Kyoto Protocol*,⁵⁶ the *Copenhagen Accord*⁵⁷ and the *Paris Agreement*⁵⁸). The ultimate objective of the UNFCCC and related legal instruments is the "stabilization of [GHG] concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system".⁵⁹ Key elements of the UNFCCC include a statement of principles,⁶⁰ a statement of commitments,⁶¹ and establishment of the Conference of the Parties.⁶²

⁵⁵ 1771 UNTS 107, S. Treaty Doc. No. 102-38; U.N. Doc. A/AC/237/18 (Part II)/Add. 1; 31 ILM 849 (1992).

⁵⁶ UN Doc FCCC/CP/1997/7/Add. 1, Dec. 10, 1997; 37 ILM 22 (1998). Available at <http://unfccc.int/resource/docs/convkp/kpeng.pdf>.

⁵⁷ UN Doc. FCCC/CP/2009/L.7, Dec. 18, 2009. Available at <http://unfccc.int/resource/docs/2009/cop15/eng/11a01.pdf>.

⁵⁸ UN Doc. FCCC/CP/2015/L/9, Dec. 12, 2015. Available at <http://unfccc.int/resources/docs/2015/cop21/eng/109r01.pdf>. For a good historical background on the *Paris Agreement*, see Daniel Bodansky, *The Paris Climate Change Agreement: A New Hope* (May 17, 2016) available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2773895.

⁵⁹ *Supra*. note 55 at Art. 2.

⁶⁰ *Ibid.* at Art. 3.

⁶¹ *Ibid.* at Art. 4.

⁶² *Ibid.* at Art. 7.

The guiding principles include the protection of the climate system for present and future sustainable development. Another guiding principle is that measures taken to combat climate change "should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade".⁶³

The distinction between developed and developing countries, and their differing responsibilities, capabilities and circumstances runs throughout the text of the UNFCCC. This is known as the principle of **common but differentiated** responsibilities and informs both the guiding principles and the commitments made under the UNFCCC.

Since developed and developing countries have differentiated responsibilities and capabilities, the UNFCCC provides that "the developed country Parties should take the lead in combating climate change and the adverse effects thereof". As well, as a matter of principle, the UNFCCC states that the specific needs and special circumstances of countries should be given full consideration. This is especially key for developing country parties that are particularly vulnerable to the adverse effects of climate change and for developed country parties that would have to bear a disproportionate burden under the UNFCCC.

All Parties under the UNFCCC have agreed to:

- provision of national inventories of anthropogenic emissions and removal by sinks of GHGs;
- formulation and implementation of programmes to mitigate climate change by addressing anthropogenic emissions and removals by sinks of GHGs;
- development of GHG mitigation (reduction or prevention) technologies;
- promotion of conservation and enhancement of sinks and reservoirs of GHGs;
- cooperation in preparing for adaptation to climate change impacts;
- consider climate change matters in relevant social, economic and environmental policies and actions;

⁶³ *Ibid.* at Art. 3(5).

- promotion and cooperation in scientific, technological, technical, socio-economic and other research, and in development of data archives related to the climate system;
- promotion and cooperation in the exchange of relevant scientific, technological, technical, socio-economic and legal information related to the climate system and climate change;
- promotion and cooperation in education, training and public awareness related to climate change; and
- communication of information specified in Article 12 to the Conference of the Parties.

Pursuant to the principle of common but differentiated responsibilities, additional commitments have been made by the developed country parties. These commitments include the adoption of national policies for limiting GHG emissions, and the protection and enhancement of GHG sinks and reservoirs. The ultimate objective of these commitments is for developed country parties to reach, individually or jointly, the 1990 levels of GHG emissions (Article 4(2)(b)).

The Conference of Parties (the "COP") is established as the supreme body of the UNFCCC. The COP performs several functions including examination of the obligations of the parties under the UNFCCC, promotion and facilitation of information exchange on measures adopted by the parties, and facilitation of the coordination of measures taken by two or more parties. As well, the COP promotes and guides the development and refinement of methodologies for preparing inventories of GHG emissions and for evaluating effectiveness of climate change mitigation measures.

A key function of the COP is to review the implementation of the UNFCCC and its related legal instruments by the parties and to assess the overall, cumulative effects of the climate change mitigation measures taken by the parties (especially with regard to environmental, economic and social effects). In this regard, the COP meets on an annual basis to further define and set obligations under the UNFCCC. To date, the most significant outputs from these annual meetings are the *Kyoto Protocol*, the *Copenhagen Accord*, and the *Paris Agreement*.

The *Kyoto Protocol*, signed in 1998, sets binding limits for reduction of specific GHG (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulphur hexafluoride).

Article 3(1) of the *Kyoto Protocol* provides that the signatories will reduce overall emissions of GHGs by at least 5% below 1990 levels in the commitment period of 2008 to 2012.

In order to achieve the objective of reduced GHG emissions, the signatories to the *Kyoto Protocol* agreed to implement policies and measures such as:

- enhancement of energy efficiency;
- protection and enhancement of sinks and reservoirs of GHGs;
- promotion of sustainable agriculture;
- research, promotion and development of renewable energy, carbon dioxide sequestration technologies;
- reduction of market imperfections, fiscal incentives, tax and duty exemptions and subsidies in GHG emitting sectors;
- encourage reforms in relevant sectors to promote policies and measures which limit or reduce emissions;
- measures to limit or reduce emissions of GHGs; and
- limitation or reduction of methane emissions through recovery and use in waste management, as well as in the production, transport and distribution of energy.

At the time of signing the *Kyoto Protocol*, Canada committed to reduce its GHG emissions by 6% below 1990 levels. Canada withdrew from its participation in the *Kyoto Protocol* at the end of 2011.⁶⁴ Canada was not on target to achieve its GHG reduction commitment which meant it would be subject to penalties imposed pursuant to the *Kyoto Protocol* (essentially, a requirement to purchase international credits to offset its inadequate GHG reduction).

The *Copenhagen Accord* was formulated in 2009. It provides additional targets for GHG reductions by the signatories with the objective of stabilizing GHG emissions. Under the *Copenhagen Accord*, Canada has committed to a 17% emissions reduction target by 2020 (using

⁶⁴ See Government of Canada website at <https://www.ec.gc.ca/Publications/default.asp?lang=En&n=EE4F06AE-1&xml=EE4F06AE-13EF-453B-B633-FCB3BAECEB4F&offset=3&toc=hide>

2005 as the base year). Further, Canada indicated that its emissions target is to be aligned with the US economy-wide emissions target to be enacted by legislation.

The most recent international action flowing from the UNFCCC is the *Paris Agreement* reached in late 2015. The *Paris Agreement* is meant to enhance the implementation of the UNFCCC by strengthening the global response to climate change, in the context of sustainable development and eradicating poverty by:⁶⁵

- holding the increase in the global average temperature to well below 2.0°C with efforts to limit the change to 1.5°C;
- increase the ability to adapt to adverse impacts of climate change and foster climate resilience and low GHG emissions development; and
- make finance flows consistent with a pathway to low GHG emissions and climate resilient development.

As part of the *Paris Agreement*, the parties agree to provide a Nationally Determined Contribution (NDC) every 5 years. A party may adjust its NDC at any time to enhance its level of ambition to reduce GHG emissions. Another significant aspect of the *Paris Agreement* is the commitment of developed country parties to provide financial assistance to developing country parties for GHG mitigation and climate change adaptation.

Even prior to the *Paris Agreement*, as part of its role in monitoring international climate change action, the COP had invited all parties to the UNFCCC to provide NDCs towards achieving the objective of the Convention.⁶⁶ The NDCs are provided "without prejudice to the legal nature of the contributions, in the context of adopting a protocol, another legal instrument or an agreed outcome with legal force under the Convention applicable to all Parties".⁶⁷ Canada submitted its most recent NDC in mid-2015 just prior to the COP 21 meeting in Paris, indicating its intention to achieve an economy-wide target to reduce GHG emissions by 30% below 2005 levels by

⁶⁵ *Supra.* note 58 at Art. 2.

⁶⁶ Decision 1/CP.19 made at COP 19 held in Warsaw in November 2013.

⁶⁷ Taken from the United Nations Framework Convention on Climate Change website at unfccc.int.

2030. This NDC was set by the previous Conservative federal government and has been adopted, without change, by the current Liberal government.

IV. A Path Forward

The Alberta government has begun to make initial progress in implementing the *Climate Leadership Plan* by implementing a new carbon price on GHG emissions. However, details on the interaction of the new carbon tax and the existing *SGER* regime are still forthcoming. In addition, details regarding the phase-out of coal-fired electricity, a legislated oil-sands emissions limit, and the methane emission reduction plan are still outstanding.

In addition to the matters expressly adopted in the *Climate Leadership Plan*, the *Climate Change Advisory Panel Report* discusses the importance of energy efficiency and energy-resilient communities and recommends that a provincial energy efficiency and community-based energy program be developed.⁶⁸ The ELC notes that, on the eve of this publication, the Alberta Government introduced *Bill 20: Climate Leadership Implementation Act* which includes the proposed *Energy Efficiency Alberta Act* establishing a Crown Corporation for the purposes of raising awareness and promoting energy efficiency in Alberta. While energy efficiency and community-based energy programs will not be canvassed in the ELC's Climate Change Legal Roadmap series of reports, the ELC is supportive of such programs.

While it will not be canvassed in the ELC's series of reports, as part of the path forward, the essential role of municipalities in these types of programs and other climate change actions should be acknowledged.⁶⁹ In Alberta, municipalities are governed by the *Municipal Government Act* (the "MGA").⁷⁰ Several changes to the *MGA* could be made to facilitate climate change action by municipalities. For example, implementation of local low-emission solutions focused on buildings could be facilitated by:

⁶⁸ *Supra*. note 34 at pp. 8-9.

⁶⁹ For further discussion, see our blog post *Climate Change Law Blog Series: Cities and Climate Change* available at <https://environmentallawcentre.wordpress.com/2016/03/02/climate-change-law-blog-series-cities-and-climate-change/>.

⁷⁰ RSA 2000, c. M-26.

- Amending the *MGA* to allow municipalities to impose minimum energy requirements and minimum renewable energy standards above and beyond those imposed by the building codes adopted in the *Safety Codes Act*.⁷¹ This would enable municipalities to set high standards for buildings within their borders, including retrofitting of existing, inefficient buildings.
- Expanding the revenue generation options available to municipalities under the *MGA* to enable the use of creative financing tools (such as loans repaid through property taxes or utility bills) to encourage adoption of more energy efficient or renewable energy technologies on a residential basis. Currently, municipalities are restricted as to whom they can loan money and as to the purposes for which taxes can be levied.

Other important local low-emission solutions include those focused on transportation (such as redesign of traffic flows and reconfiguring urban development) and the use of green spaces. Solutions such as these can be facilitated by expressly incorporating environmental protection and management into the *MGA* planning provisions, and by expressly allowing bylaws for environmental purposes.

Another key step on the path forward is the matter of climate change adaptation, which is not expressly addressed in the *Climate Leadership Plan*. Broadly, climate change adaptation is action designed to avoid, mitigate or manage the local impacts of climate change.⁷² There remains a need in Alberta to develop policy for the facilitation and implementation of climate change adaptation actions. While the topic of climate change adaptation is not a topic for discussion in the ELC's Climate Change Legal Roadmap series of reports, it is significant issue that warrants further consideration in Alberta.

While the *Climate Leadership Plan* sets policy guidance for climate change action in Alberta, it is a very high-level document with not a great amount of detail on the tools and mechanisms that

⁷¹ RSA 2000, c. S-1.

⁷² For a useful collection of climate change adaptation definitions, see <http://www.vcccar.org.au/climate-change-adaptation-definitions>.

will be used to achieve the policy goals. In response to this dearth of policy detail, the ELC will be publishing a series of reports – the **Climate Change Legal Roadmap** – outlining climate change legislative action taken in other jurisdictions and making recommendations for Alberta.