CLIMATE LAW IN CANADA: INTERNATIONAL LAW'S ROLE UNDER ENVIRONMENTAL FEDERALISM

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INTRODUCTION

The Intergovernmental Panel on Climate Change has recently stated that "[w]arming of the climate system is unequivocal" and that "many of the observed changes are unprecedented over decades to millennia."[1] With its Fifth Assessment Report, the IPCC confirms that human induced changes to the earth's climate system are likely to pose one of the most significant global policy challenges in the coming years.[2] For more than 20 years, most countries in the world, including Canada,[3] have participated in efforts to create an international legal regime that can address this challenge. The result has been the creation of two main international instruments, the UN's Framework Convention on Climate Change (FCCC) and its companion Kyoto Protocol.[4] Canada has been a party to both the FCCC and Kyoto Protocol. Although Canada withdrew from the latter in 2012, the country remains a party to the FCCC and is engaged in the process of negotiating a successor instrument to the Kyoto Protocol.[5]

The effectiveness of the international climate regime has been questioned and Canada's withdrawal from the Kyoto Protocol appears to vindicate concerns about the impact of the international regime. Although Canada did face criticism in

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[1] Intergovernmental Panel on Climate Change (IPCC), "Summary for Policy Makers" in Thomas F Stocker et al, eds, *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge, UK: Cambridge University Press, 2013) 3 at 4, online: IPCC <http://www.ipcc.ch/>. The full WG I report was approved Sept. 27, 2013 by the IPCC and the Summary for Policy Makers was approved and released online on Nov. 11, 2013.

[2] *Ibid*.

[3] For a summary of Canada's participation in the international climate regime, see UNFCCC <http://maindb.unfccc.int/public/country.pl?country=CA>.

[4] *United Nations Framework Convention on Climate Change*, 9 May 1992, 1771 UNTS 107, 31 ILM 849 [*FCCC*].

[5] Canada officially withdrew from the Kyoto Protocol as of December 15, 2012, having previously announced its intention to do so. See UNFCCC, "Status of Ratification of the Kyoto Protocol", online: UNFCCC <http://unfccc.int/kyoto_protocol/status_of_ratification/items/2613.php> for a list of Kyoto participants and dates of major actions under the protocol.

the international setting for its withdrawal from Kyoto and its failure to abide by its prior commitments, it faced no consequences under the international climate law regime.[6] However, international law can have important impacts beyond its formal legal reach and potential for direct sanctions to produce compliance.

Scholars have identified a variety of theories of international law, each suggesting mechanisms through which international law can influence state behaviour. International law is regarded by some as merely the outcome of state interests; states comply or not as it suits their interests. However, international law can still serve as a means to coordinate state policy and facilitate cooperative outcomes.[7] Others ascribe normative significance to international law; international law plays a role in "constructing" norms against which state behaviour can be measured and judged, inducing compliance.[8] Recent research has begun to uncover mechanisms through which international law can penetrate states domestically. While early work focused on networks of government actors and opinion-shaping elites, more recently the focus has shifted to the role of international law in more directly driving domestic public opinion.[9] International law can influence public perceptions of policy by providing information on choices made by other states, causing voters to shift their opinions and generating pressure on domestic governments.[10] The process of international treaty-making forces domestic governments to reveal their positions on issues; gaps between domestic policy and international law can induce domestic mobilization and public pressure.[11] The

[6] See e.g. Jane Matthews Glenn & José Otero, "Canada and the Kyoto Protocol: An Aesop Fable" in EJ Hollo et al, eds, *Climate Change and the Law* (Dordrecht: Springer, 2013) 489 at 490, 505 (criticism of Canada's general rejection of Kyoto obligations).

[7] See e.g. Jack Goldsmith & Eric Posner, *The Limits of International Law* (Oxford: Oxford University Press, 2005); Jack Goldsmith & Eric Posner, "Moral and Legal Rhetoric in International Relations: A Rational Choice Perspective" (2002) 31:1 J Legal Stud S115.

[8] See Oona Hathaway & Ariel Lavinbuk, "Rationalism and Revisionism in International Law", Book Review of *The Limits of International Law* by Jack Goldsmith & Eric Posner, (2006) 119:5 Harv L Rev 1404 at 1415 (traditional international legal scholars view that international law has moral and legal force that induces compliance), 1411 (discussing Constructivist theory, role of international law as normative influence). See also Jutta Brunnee & Stephen Toope, "International Law and Constructivism: Elements of an Interactional Theory of International Law" (2000) 39:1 Colum J Transnat'l L 19.

[9] For early work, see e.g. Anne-Marie Slaughter, "A Liberal Theory of International Law" (2000) 94 Am Soc'y Int'l L Proc 240; Harold Hongju Koh, "The 1998 Frankel Lecture: Bringing International Law Home" (1998) 35:3 Hous L Rev 623.

[10] See e.g. Katerina Linos, "Diffusion through Democracy" (2011) 55:3 Am J Pol Sc 678; Katerina Linos, *The Democratic Foundations of Policy Diffusion: How Health, Family, and Employment Laws Spread Across Countries* (Oxford: Oxford University Press, 2013). The effect results when voters become informed about the international commitments of other states, and is more likely for larger, more powerful and politically and culturally proximate states reported on by the media.

[11] See e.g. Beth Simmons, *Mobilizing for Human Rights: International Law in Domestic Politics* (Cambridge, UK: Cambridge University Press, 2009).

existence of international law and treaty obligations can exert an influence on individuals' evaluation of government policy choices.[12] Scholars have also begun to dismantle the state, recognizing that the impact of international law can vary depending on which domestic actors are "supplying" compliance.[13]

In this paper, I will argue that the influence of the international climate regime in Canada cannot be determined simply by the formal status of Canada's participation and obligations at international law. Consistent with the theory above, the impact of the international climate regime is more complex. In particular, the decentralized nature of Canada's domestic environmental competence under Canadian federalism leads to a diverse and uneven penetration of international climate law and its norms into our domestic environmental law. Provinces may lead where the federal government does not follow in incorporating international obligations into domestic law. A review of Federal and Provincial climate law and policy illustrates a number of means through which the international regime may be considered influential. In particular, the international regime's potential influence is apparent in enhanced transparency on climate change and governments' responses, a move toward accountability in the form of setting targets and timetables, coordinated and cooperative methods of attacking climate change, and through a shift toward climate change adaptation planning. While the review does not serve as a causal test of the influence of international climate law, it is suggestive of an important role for the international regime.

The broad-based, multilateral nature of the UN climate instruments lends normative force to the commitments contained in the agreements, making them a reference point for acceptable climate policy. In addition, the mechanisms developed under the international climate regime provide a natural coordination point for climate policy choices. Even without any direct formal legal obligations under the FCCC or Kyoto, provinces appear to be influenced by the international regime in setting their policies. Beyond this, international climate law also helps shape the normative assessment of the behaviour of governmental actors and exerts an influence on public opinion, both within Canada and in other jurisdictions, opening up an additional channel through which international climate law is domesticated. International climate law is an important influence on Canada's domestic climate

[12] See Adam Chilton, "The Influence of International Human Rights Agreements on Public Opinion: An Experimental Study" Chi J Int'l L [forthcoming] (causal effect showing that existence of prior treaty commitment influenced participants opinions of government behavior; violation of treaty promise evaluated more negatively).

[13] See Rachel Brewster & Adam Chilton, "Supplying Compliance: Why and When the United States Complies with WTO Rulings" Yale J Int'l L [forthcoming] (focusing on US setting, contrasting legislative, executive and judicial "supply-side" actors).

policy, and Canada's continued participation is vital to shaping the international regime as it evolves.

To develop these arguments in more depth, I will first briefly review the main components of the UN Framework Convention on Climate Change and the Kyoto Protocol to draw out the major normative and procedural aspects of these international instruments. I will then turn to a review of Canada's domestic climate policy to trace the influence of the international regime, considering actions at the federal, and provincial levels.

INTERNATIONAL CLIMATE LAW

1. The UN Framework Convention on Climate Change

The UN Framework Convention on Climate Change (FCCC) was one of a number of key multilateral environmental agreements originating at the Rio Conference in 1992.[14] As a framework convention, the FCCC was not intended to finalize the details of substantive international climate regulation, but rather to create a framework within which countries would work together to address the problem of global climate change. With its nearly universal membership, the FCCC continues to serve as the main coordination point for international action to address climate change. [15]

The FCCC stands as a powerful consensus recognition that anthropogenic climate change is a global threat and sets a shared normative goal to engage in collective action to mitigate the problem. The FCCC identifies climate change as "a common concern of humankind" [16] and establishes an objective to stabilize greenhouse gas concentrations and "prevent dangerous anthropogenic interference with the climate system."[17] While the FCCC leaves the specifics of this threshold to be determined, it does call for action within a timeframe that will "allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner."[18]

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[14]The other convention opened for signature at Rio was the *Convention on Biological Diversity*, 5 June 1992, 1760 UNTS 79, 31 ILM 818.

[15] Currently 194 States and 1 Regional Economic Unit are parties to the FCCC, see UNFCCC, "Status of Ratification of the Convention", online: UNFCCC <http://unfccc.int/essential_background/convention/status_of_ratification/items/2631.php>.

[16] *FCCC*, *supra* note 4, Preamble.

[17] *Ibid*, art 2.

[18] *Ibid.*

To achieve this goal the FCCC commits state parties to measures to mitigate climate change, focusing on anthropogenic emissions from sources and removals by sinks.[19] The principle of "common but differentiated responsibilities"[20] requires a more substantial commitment from developed country parties; their policies are to demonstrate that "developed countries are taking the lead" in changing the trend in emissions in line with the objective of the Convention.[21] While the FCCC's substantive mitigation obligation is highly qualified, even for developed countries, the norm is that all parties will endeavor to advance the objective of the Convention, by reducing emissions and enhancing sinks. All parties are also to develop measures to facilitate adaptation to climate change, cooperating to prepare for climate change.[22] In establishing these substantive goals, the FCCC explicitly promotes cooperation, and joint implementation of the Convention.[23]

A key aspect of the FCCC framework is state commitments to generate and share information. All parties agree to generate national inventories of their emissions and make them available to the Conference of the Parties (COP).[24] Parties similarly commit to formulating and publishing their mitigation programs.[25] Developed country parties have enhanced reporting commitments, periodically providing detailed information on their mitigation policies with corresponding projections of anthropogenic emissions – allowing the effectiveness of these parties' measures to be assessed.[26] The FCCC promotes cooperation in research related to climate change, including scientific, technological, and socio-economic research.[27]

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[19] *Ibid*, art 4(1).

[20] *Ibid*, art 3.

[21] *Ibid*, art 4(2)(a). The reported progress in emissions regulation under developed country parties' policies and measures is judged against "the aim of returning individually or jointly to their 1990 levels" (*ibid*, art 4(2)(b)).

[22] *Ibid*, art 4(1).

[23] See e.g. *FCCC*, *ibid*, art 4(2), which explicitly endorses joint implementation of developed country mitigation policy.

[24] *Ibid*, art 4(1). The requirement is for net emissions, including both an inventory of emissions by sources and also removals by sinks. The inventories are to be updated "periodically" and employ "comparable methodologies". Non-Annex I parties have more flexibility in their obligations, as they are qualified by their capacity to produce inventories and there is no fixed timetable for reports. For more detail on applicable guidelines and submitted reports for both Annex I and non-Annex I parties, see UNFCCC, "National Reports", online: UNFCCC <http://unfccc.int/national_reports/items/1408.php>.

[25] *FCCC*, *supra* note 4.

[26] *Ibid*, art 4(2).

[27] *Ibid*, art 4(1). Information is particularly targeted to understanding the climate system and climate change, and the consequences of response strategies. Parties are also required to provide support for international and intergovernmental research efforts under the FCCC (*ibid*, art 5).

Parties also agree to "[p]romote and cooperate in education, training and public awareness" related to climate change. [28] These FCCC measures promote more informed dialogue about climate change and help foster transparency and accountability of state parties in meeting their FCCC commitments.

Addressing the distributive effects of climate change and mitigation and adaptation efforts is another key prong of the FCCC. In addition to the principle of "common but differentiated" responsibilities, the FCCC incorporates financial and technological transfers to assist less developed and particularly vulnerable states with the costs of climate change.[29] The FCCC puts the onus on developed countries to facilitate developing country success in meeting the Convention objectives.[30]

2. The Kyoto Protocol to the UN Framework Convention

The FCCC sets out normative goals for climate change mitigation, but as a framework convention it lacks detailed standards for concrete commitments by parties. The Kyoto Protocol, adopted in December 1997, was designed to address this gap.[31]

The major innovation of the Kyoto Protocol was the adoption of quantified emissions limitation or reduction targets.[32] In keeping with the FCCC's emphasis on common but differentiated responsibilities, only the developed country Annex I parties to the FCCC faced binding emissions reductions under the Kyoto Protocol.[33] The Protocol incorporated country specific limitations / reductions, with an overall objective of reducing emissions by at least 5% from 1990 levels during the first

[28] *Ibid*, arts 4(1)(i), (6). The FCCC requires parties to promote public participation as part of carrying out their commitments, through development of education and public awareness, by providing access to information on climate change and its effects, by encouraging public participation in developing climate change strategies, and by training scientists and other technical and managerial experts.

[29] *Ibid*, arts 4(3)-4(5). Developed country parties are to provide funds to assist developing country parties with their compliance obligations, including technology transfer and "full incremental cost" (*ibid*, art 4(3)) financing. Developed countries are also to assist states particularly vulnerable with costs of adaptation.

[30] *Ibid*, art 4(7).

[31] The Protocol came into force in February 2005 and its first commitment period ran from 2008-2012. For general information on the Kyoto Protocol, and access to associated UN documents, see UNFCCC, "Kyoto Protocol", online: UNFCCC <http://unfccc.int/kyoto_protocol/items/2830.php>.

[32] *Kyoto Protocol to the United Nations Framework Convention on Climate Change*, 11 December 1997, 2303 UNTS 162, 37 ILM 22 [*Kyoto Protocol*], art 3.

[33] *Ibid*, art 3(1).

commitment period.[34] In December 2012, the Doha Amendment to the Kyoto Protocol introduced a new target for the second commitment period of an 18% reduction from 1990 levels.[35] The operative standard for the Protocol is thus the adoption of emissions reduction targets with associated timetables for developed country parties. While the Kyoto Protocol did not introduce any specific targets for developing countries, a feature that has become increasingly contentious, it reaffirms the commitments of all parties under the FCCC. Developing country parties thus reaffirm a conditional commitment to pursue measures to "mitigate climate change" and "facilitate adaptation."[36]

In addition to specifying targets and timetables, the Protocol requires Annex I parties to implement and elaborate "policies and measures" in relation to meeting their targets, providing a set of exemplars.[37] The Protocol specifically identifies and approves actions such as: increased energy efficiency; enhancement of sinks, including through forest policy; sustainable agricultural policy; research and development of new and renewable energy, including technology for carbon sequestration; elimination of "market imperfections" that are inconsistent with the Convention's objective and use of market measures; sectoral reforms that limit emissions, including a specific focus on the transport sector; and limitation of methane emissions from waste management and energy production and distribution.[38] A similar set of exemplars that extends to developing country programs is set out in the Protocol.[39]The protocol recognizes great flexibility in the means by which parties may pursue mitigation targets, but at the same time singles out particular strategies as legitimate policies.

A key aspect of Kyoto's stricter, quantifiable emissions limitations / reductions for its Annex B parties, was the incorporation of flexibility mechanisms

[34] The country specific quantified emissions reductions relative to the base year are found in Annex B to the Protocol. The countries with binding Kyoto commitments are often referred to as the Annex B parties to the Protocol.

[35] *Doha Amendment to the Kyoto Protocol*, 8 December 2012, C.N.718.2012.TREATIES-XXVII.7.c (not yet in force). The Doha Amendment was adopted by decision 1/CMP.8, at the eighth session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol. The second commitment period runs from 2013-2020.

[36] *Kyoto Protocol*, *supra* note 32, art 10.

[37] *Ibid*, art 2(1)(a).

[38] *Ibid*.

[39] *Ibid*, art 10. The programs for mitigation and adaptation that are specifically mentioned include: energy, transport and industry sectors, agriculture, forestry and waste management.

through which these might be met.[40] While parties are intended to primarily fulfill their obligations through domestic action, the Kyoto Protocol also allows joint implementation (JI),[41] emissions trading between Annex B parties,[42] and, via the clean development mechanism (CDM), transfers of emissions reductions to Annex B countries from investments in climate change mitigation in developing countries.[43] Together the flexibility mechanisms work to generate and support a carbon market. The flexibility mechanisms are intended to help reduce the costs of compliance with Kyoto targets, promote collective action to address climate change, and provide a means to incentivize climate change mitigation investment and capacity building in developing countries.

Both the incorporation of quantified emissions targets and timetables and flexibility mechanisms under Kyoto increased the need for verification and transparency in reporting. The Protocol thus builds on the reporting architecture of the FCCC. Annex I parties require national systems to estimate anthropogenic emissions and removals, with methodologies approved by the Meeting of the Parties to the Protocol, and consistent with the methodology of the IPCC.[44] Parties are to provide annual inventories of green house gasses, including data to evaluate compliance with the Protocol.[45] Periodic national communications are also required which include supplementary information to assess compliance with the Protocol.[46] Both inventories and national communications under the Protocol are subject to review by international teams of experts.[47] The Protocol also facilitates harmonized standards for the operation of its flexibility mechanisms.[48] The development of consistent standards is part of the effort to ensure transparency and verifiability in

[40] For discussion of details involved in implementing flexibility mechanisms under Kyoto, particularly the CDM, see e.g. Meinhard Doelle, "The Cat Came Back, or the Nine Lives of the Kyoto Protocol" (2006) 16:3 J Envtl L & Prac 261.

[41] *Supra* note 32, art 6.

[42] *Ibid*, art 17.

[43] *Ibid*, art 12.

[44] *Ibid*, art 5 (failure to use accepted methods can result in adjustments to country inventory figures under this article).

[45] *Ibid*, art 7(1).

[46] *Ibid*, art 7(2).

[47] *Ibid*, art 8.

[48] *Ibid*, arts 6(2),12(7), (17). The COP serving as the meeting of the Parties to the Protocol has elaborated guidelines for appropriate implementation of these mechanisms, see e.g. *Report of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol on its first session, held at Montreal from 28 November to 10 December 2005: Addendum: Part two: Action taken by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its first session*, UNFCCC, UN Doc FCCC/KP/CMP/2005/8/Add.2 (2006) [mimeo] for Decisions that provide guidelines for Articles 6, 7 and 17.

international climate action, and also helps facilitate the integration of national and regional instruments into the international climate regime.[49]

As with the FCCC, the Kyoto protocol also addresses adaptation and the need to support developing and vulnerable states through provision of financial resources and technology transfer.[50] An Adaptation Fund created under the Protocol provides funding for specific adaptation projects in developing country parties that are particularly vulnerable to climate change.[51]

Overall, the major innovation of Kyoto was to complement the FCCC's broad normative obligations with firm targets and timetables for emissions reductions by the developed country parties. This was to start parties along a path to effective collective international action to limit emissions, while continuing to place developed countries in the lead role. Kyoto's targets and timetables set specific benchmarks against which climate change progress could be measured, and the Protocol enhanced the transparency and rigour of reporting. Kyoto's flexibility mechanisms also provided coordinated international support for the use of market mechanisms to address climate change. However, it was clear from the outset that more would be needed , due to the absence of reduction commitments by major emitters including the US, China, and India.

3. Recent Developments in the International Climate Regime

Recent developments in the international climate regime reflect recognition of the "emissions gap" between global emissions and the level needed to achieve the FCCC objective.[52] Adaptation has taken on a higher profile and negotiation has shifted to development of a new "universal" instrument to address emissions.

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[49] For example the EU Emissions Trading System operates as a regional market mechanism integrated into the Kyoto framework.

[50] *Kyoto Protocol*, *supra* note 32, arts 10, 11. For more detailed discussion of adaptation obligations under the international climate regime, see e.g. Jonathan Verschuuren, "Legal Aspects of Climate Change Adaptation" in EJ Hollo et al, *supra* note 6, 257.

[51] For a general description and a gateway to documents related to the Adaptation Fund, see UNFCCC, "Adaptation Fund", online: UNFCCC <http://unfccc.int/cooperation_and_support/financial_mechanism/adaptation_fund/items/3659.php>. Initially the fund was financed by a share of proceeds from the CDM, for the second period additional funds will come from a share of the proceeds of JI project emissions transfers.

[52] See e.g. Alan Boyle, "Climate Change and International Law: A Post-Kyoto Perspective" (2012) 42:6 Envtl Pol'y & L 333 at 335.

In Copenhagen, at COP/15 parties to the FCCC/Kyoto hoped to close the emissions gap with an agreement on broader and deeper mitigation efforts. The talks were a failure in this regard, but did produce some important developments.[53] In the Copenhagen Accord, parties consolidated around the objective of reducing global emissions in order to limit the rise in average temperature to less than 2 degrees C.[54] Recognizing a more urgent need for action, the Copenhagen Accord calls for more precise FCCC-party mitigation targets and timetables. Annex I parties are to implement quantified economy-wide emissions targets for 2020, to be submitted to the FCCC secretariat and published.[55] Non-Annex I parties are to implement nationally appropriate mitigation actions, including those submitted to the secretariat.[56] A diverse set of quantified targets and mitigation actions has resulted, with many of the parties' pledges conditional on action by other countries. Annex I parties' pledges were largely in the form of percentage reductions in overall emissions relative to a base year.[57] The non-Annex I parties' NAMAs were highly varied; voluntary pledges included commitments to reduce the intensity of emissions per unit of GDP (China, India),[58] and to reduce emissions below projected "business as usual" (Brazil).[59] The Copenhagen Accord also had a corresponding emphasis on a process to monitor the methods by which countries' efforts were measured and verified, to increase the transparency and rigor of all pledges.[60] The Copenhagen

[53] See e.g. Meinhard Doelle, "The Copenhagen Climate Talks: The end of the Road for the UNFCC or a Step Forward in the Evolution of the Regime?" (2010) 2:2 Amsterdam Law Forum 71 [Doelle, "Copenhagen Step Forward"]; Meinhard Doelle, "The Legacy of the Climate Talks in Copenhagen: Hopenhagen or Brokenhagen?" (2010) 1 Carbon & Climate Law Review 86 [Doelle, "Hopenhagen"].

[54] "Copenhagen Accord" in *Report of the Conference of the Parties on its fifteenth session, held in Copenhagen from 7 to 19 December: Addendum: Part Two: Action taken by the Conference of the Parties at its fifteenth session*, UNFCCC, UN Doc FCCC/CP/2009/11/Add.1 (2010) [mimeo] 4. This target allows for a more precise implied level of GHG emissions worldwide, and correspondingly more precise targets for limiting country-specific emissions, particularly for major emitters, although these figures did not form part of the accord.

[55] *Ibid*. The submitted targets can be found in *Compilation of economy-wide emissions reduction targets to be implemented by Parties included in Annex I to the Convention: Revised note by the secretariat*, UNFCCC, UN Doc FCCC/SB/2011/INF.1/Rev.1 (2011) [mimeo] [*FCCC Annex I Targets*].

[56] The non-Annex I submissions can be found in *Compilation of information on nationally appropriate mitigation actions to be implemented by Parties not included in Annex I to the Convention: Note by the secretariat*, UNFCCC, UN Doc FCCC/AWGLCA/2011/INF.1 (2011) [mimeo] [*FCCC NAMAs*].

[57] For example, Canada pledged to reduce its emissions by 17% relative to a 2005 base year by 2020, to be aligned with the final economy-wide target for the US "enacted in legislation."

[58] *FCCC NAMAs*, *supra* note 56 at 11 (China), 26 (India). China's commitment is to "endeavor" (*ibid* at 11) to reduce its emissions intensity by 40-50% relative to a 2005 base year by 2020. It also pledged to increase the share of non-fossil fuels in energy consumption and to increase forest cover. India's similarly framed objective was to reduce intensity by 20-25% of a 2005 base by 2020, but agricultural emissions would be excluded from the calculations.

[59] *Ibid* at 8. Brazil specified a set of mitigation actions that it expected to reduce emissions 36.1-38.9% from its projected emissions in 2020.

[60] *Copenhagen Accord*, *supra* note 54 at paras 4 (Annex I parties – "[d]elivery" of emissions reductions and financing "will be measured, reported and verified" according to COP guidelines to ensure accounting

Accord also featured renewed emphasis on adaptation, including the need to assist developing and vulnerable states through funding, technology transfer and capacity building.[61] While Copenhagen was a disappointment, as it was hoped it would lead to successful negotiations on a Kyoto successor, it did signal a shift toward increased need for global action, incorporating more specific commitments for *all* parties.[62]

Parties have continued to work along these lines following on from Copenhagen. At COP/16 the parties adopted the Cancun Agreements, with a significant focus on adaptation. Parties agreed to establish an adaptation framework, assisting developing countries in particular with adaptation planning and implementation.[63] Parties continued to advance long-term financial support for developing country mitigation and adaptation through the Green Climate Fund, and through "Fast Start" financing.[64] A new "Technology Mechanism" was established to facilitate the development and transfer of technology to aid in mitigation and adaptation efforts, particularly by developing countries.[65]

At COP/17 the need for enhanced action on mitigation and the question of a successor to the Kyoto protocol took centre stage, resulting in the Durban Platform for Enhanced Action.[66] While a subset of the original Kyoto parties agreed to a second commitment period, the Durban Platform outlined a more general ambition to negotiate a protocol or other legal instrument applicable to all parties to come into effect for the period from 2020.[67] Motivating this development was a desire to strengthen the "multilateral, rules-based regime under the Convention" to achieve

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is "rigorous, robust and transparent"), 5 (Non-Annex I parties – mitigation actions "subject to domestic measurement, reporting and verification" but with results to be communicated through National Communications, with "provisions for international consultations and analysis" to review these. NAMAs receiving support from Annex I parties subject to their more rigorous reporting guidelines.)

[61] *Ibid* at paras 8, 3. The Accord committed developed country parties to the provision of additional financial support for 2010-2012 ("fast start" financing) and established a "Green Climate Fund" that would provide support to developing country parties (*ibid* at para 10).

[62] See e.g. Boyle, *supra* note 52 at 335 (discussing shift in focus away from common but differentiated responsibilities under Copenhagen Accord). See also Daniel Bodansky, "The Copenhagen Climate Change Conference: A Postmortem" (2010) 104:2 AJIL 230.

[63] *Report of the Conference of the Parties on its sixteenth session, held in Cancun from 29 November to 10 December 2010: Addendum: Part two: Action taken by the Conference of the Parties at its sixteenth session*, UNFCCC, UN Doc FCCC/CP/2010/7/Add.1 (2011) [mimeo] [*Cancun Agreements*] at 4-7.

[64] *Ibid* at 16-17.

[65] *Ibid* at 18-19.

[66] *Report of the Conference of the Parties on its seventeenth session, held in Durban from 28 November to 11 December, 2011: Addendum: Part Two: Action taken by the Conference of the Parties at its seventeenth session*, UNFCCC, UN Doc FCCC/CP/2011/9/Add.1 (2012) [mimeo] [*Durban Platform*].

[67] *Ibid* at 2.

"the widest possible cooperation by all countries" to effectively address the increasingly urgent emissions gap.[68] COP/17 called on all parties to enhance their mitigation efforts under their quantified economy-wide emissions targets or NAMAs, and worked to increase the transparency and reliability of reported progress.[69] Increased ambition and transparency of national actions is to set the stage for negotiations to advance the Durban platform.

The Durban platform has taken on increased importance as the parties to the FCCC move beyond the end of Kyoto's first commitment period in 2012. At COP/18 in Doha, parties established a timetable to finalize a new universal agreement in 2015, to take effect by 2020.[70] Countries have continued to work toward this objective at COP/19.[71] Parties have continued to consolidate work on enhanced mitigation, adaptation and reporting for all FCCC parties, as well as support for developing countries and vulnerable states.[72] The most recent development is establishment of a mechanism to provide compensation for loss and damage associated with extreme weather events and slow onset effects of climate change in the most vulnerable states.[73]

The international climate regime is approaching a critical point in its evolution and it is unclear exactly what form, if any, a new universal instrument will take in 2015. The regime has continued to provide normative recognition of the threat posed by climate change and the need for collective action to address it. Thus far developing countries remain expected to "take the lead" in mitigation efforts. However, there is increased emphasis on the need for action by *all* countries, and major developing country emitters including China and India now appear more willing to adopt measures to curb emissions. The international regime appears to be

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[68] *Ibid*.

[69] *Ibid* at 4-14.

[70] *Report of the Conference of the Parties on its eighteenth session, held in Doha from 26 November to 8 December 2012: Addendum: Part Two: Action taken by the Conference of the Parties at its eighteenth session*, UNFCCC, UN Doc FCCC/CP/2012/8/Add.1 (2013) [mimeo] [*Doha Decisions*].

[71] "Further advancing the Durban Platform" in *Report of the Conference of the Parties on its nineteenth session, held in Warsaw from 11 to 23 November 2013: Addendum: Part two: Action taken by the Conference of the Parties at its nineteenth session*, UNFCCC, UN Doc FCCC/CP/2013/10/Add.1 (2014) [mimeo] 3; see also United Nations Climate Change Secretariat, Press Release, "UN Climate Change Conference in Warsaw keeps governments on a track towards 2015 climate agreement" (23 November 2013) [*Warsaw COP/19 Press Release*] online: UNFCCC <http://unfccc.int>.

[72] Access to the most recent related decisions of COP/19 can be found at: http://unfccc.int/2860.php#decisions.

[73] See *Doha Decisions*, *supra* note 70 at 21-24 (decision to establish mechanism at COP/19); "Warsaw international mechanism for loss and damage associated with climate change impacts" in UNFCCC, *supra* note 71, 6.

evolving toward a model that incorporates mitigation targets and timetables for all parties. Corresponding work on measurement and reporting under the international regime will increase the reliability of these targets and evaluation of countries' progress in their implementation.[74] The international regime is likely to continue incorporating flexibility mechanisms to encourage cooperation, cost-effective mitigation, and to leverage developing country support for mitigation action in developing countries.[75] Although adaptation has always been a part of the international climate regime, it has taken on increased prominence, particularly in light of the growing emissions gap.

The international climate regime has attracted almost universal state participation. Its ongoing operation provides a broad-based consensus recognizing climate change as a global threat requiring global action. While the regime has yet to provide particularly effective outcomes in terms of climate change mitigation, it is establishing a normative obligation on states to take action. Through its processes for collecting and disseminating information about states' actions, the international regime helps promote transparency and accountability for state choices in the international context. While the internal legal mechanisms for enforcement are relatively weak, the same cannot necessarily be said for the pressure the climate regime may produce in a global political context.

CLIMATE LAW AND POLICY IN CANADA: THEME AND VARIATIONS ON INTERNATIONAL LAW

Canada has been involved in the international climate regime since its inception. Canada was one of the initial signatories to the UN FCCC as an Annex I party, and ratified the Convention in 1992.[76] Canada also was among the first group of signatories to the Kyoto Protocol in 1998, ratifying the Protocol in 2002, so was subject to international obligations under the Protocol during the time it was in force, until its withdrawal in December 2012.[77] However, the existence of obligations under international law does not answer the question of how the international climate regime has been domesticated in Canada.

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[74] See Doelle, "Hopenhagen", *supra* note 53 at 97-98 (discussing role of monitoring and verification, importance for effective post-Kyoto agreement).

[75] Parties to Kyoto have expressed concern that any new instrument continue support for emissions trading and other Kyoto flexibility mechanisms. Parties to the FCCC have reiterated support for continued use of market mechanisms to promote achievement of the Convention objectives, see e.g. *Doha Decisions*, *supra* note 70 at 8-10.

[76] For information on ratification status of countries under the UN FCCC, see UNFCCC "Status of Ratification of the Convention", online: UNFCCC <http://unfccc.int/essential_background/convention/status_of_ratification/items/2631.php>.

[77] For information on ratification status of countries under the Kyoto Protocol to the FCCC, see UNFCCC, "Status of Ratification of the Convention", *supra* note 5.

While Canadian law establishes the prerogative of the federal executive to undertake international obligations for Canada, their incorporation into Canada's domestic law is subject to the allocation of authority under the Division of Powers.[78] At times the Supreme Court has taken a generous approach to federal competence in the implementation of national environmental legislation.[79] The decision in *R v Crown Zellerbach Canada Ltd*[80] upheld the federal *Ocean Dumping Control Act*[81] despite its intrusion into provincial competence over internal marine waters, in part recognizing it as the fulfillment of Canada's obligations under the *London Dumping Convention*.[82] While the case remains a leading authority on the potential scope of federal power under its "peace, order and good government" jurisdiction, a vigorous dissent by Justice LaForest cautioned against recognizing a general federal power to legislate in relation to the environment.[83] This position was subsequently endorsed in *Friends of the Oldman River Society v Canada (Minister of Transport)*[84] which held that the environment was a "diffuse subject" that did not fit neatly within the existing division of powers. Both levels of government have potential jurisdiction in relation to "environmental" matters, depending on the alignment of the particular subject matter with the division of powers.

The obligations under international climate law for Canada involve a potentially large and varied set of actions, ranging from the raising and spending of money to meet financial obligations, to formulating domestic law and policy to achieve emissions mitigation, to measurement and reporting on emissions and mitigation. The set of policy actions in Article 2.1 of the Kyoto Protocol illustrate the

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[78] The foundational authority is the *Canada (AG) v Ontario (AG)*, [1937] A.C. 326, (*sub nom Reference Re Weekly Rest in Industrial Undertakings Act, Minimum Wages Act and Limitations of Hours of Work Act*) [1937] 1 WWR 299.

[79] In addition to *Crown Zellerbach*, *infra* note 80, the Court took a flexible approach to federal criminal law jurisdiction to uphold the toxic substance provisions under the *Canadian Environmental Protection Act*, RSC 1985, c 16 (4th Supp), despite their complex, regulatory features, in *R v Hydro Quebec*, [1997] 3 SCR 213, 151 DLR (4th) 32 [*Hydro Quebec* cited to SCR]. For discussion of the generous approach to federal environmental regulation and its contribution to national values, see e.g Jean Leclair, "The Supreme Court, the Environment, and the Construction of National Identity" (1998) 4 Rev Const Stud 372-378.

[80] [1988] 1 SCR 401, 49 DLR (4th) 161 [*Crown Zellerbach*, cited to SCR].

[81] SC 1974-75-76, c 55.

[82] *Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matters*, 29 December, 1972, 1046 UNTS 120, 11 ILM 1294.

[83] *Crown Zellerbach*, *supra* note 80 at paras 70-71.

[84] [1992] 1 SCR 3, 88 DLR (4th) 1 [*Friends of the Oldman*, cited to SCR].

reach of activity linked to climate change.[85] Like the environment, "climate change" is a multifaceted, diffuse subject that incorporates matters that can be assigned to various heads of jurisdiction under the Division of Powers. As a result, the incorporation of international climate law in Canada is a "joint production" of the federal and provincial governments. As will be seen below, governments have varied in their ambitions and response to climate change, with the result being an uneven penetration of international climate law and its norms in Canada.

1. Federal Climate Action

Canada's federal government has been equivocal in its enthusiasm for the international climate regime.[86] While initially a strong supporter of the FCCC and Kyoto, more recently the federal government has cooled on the international regime, taking the position that it is simply not in Canada's interests to adhere to its Kyoto commitment.[87] The current federal approach to the international regime reflects a rationalist, interest-based account of the influence of international law. Canada's participation and compliance are premised on the international regime imposing "meaningful and transparent" mitigation commitments on all major emitters, and on balancing environmental goals with economic priorities.[88] This approach, combined with Canada's Kyoto withdrawal, suggests that the power of the international climate regime is limited. However, even at the federal level, one can see the influence of the international climate regime.

Despite their pragmatic "irrationality", Canada has followed the prompts of the international climate regime in adopting quantified GHG mitigation targets and timetables. The federal executive bound Canada to an ambitious target at Kyoto.[89] The Kyoto target was likely unrealistic for Canada from the outset, but was in line with the proposed targets for other major Annex B parties[90] and perhaps was intended to signal Canada's cooperative potential more generally.[91] During the

[85] Recall that the list ranges from increased energy efficiency, transportation sector improvements, forest and agricultural policy, to market measures, and investments in research and new technology.

[86] See Glenn & Otero, *supra* note 6 at 489 (discussing variation in Federal government position on Kyoto).

[87] *Ibid* at 500.

[88] See Government of Canada, *Canada's Priorities at COP 19* [*COP 19 Prioritites*], online: Canada's Action on Climate Change <http://climatechange.gc.ca>.

[89] See e.g. Jeffrey Simpson, Mark Jaccard & Nic Rivers, *Hot Air: Meeting Canada's Climate Change Challenge* (Toronto: McClelland & Stewart, 2007) at 249-250 (Kyoto commitment based on moral voluntarism over rational analysis).

[90] See Glenn & Otero, *supra* note 6 at 495 (US 7%, EU 8% targets, compared with Canada's Kyoto pledge of 6%).

[91] See e.g. Goldsmith & Posner, *supra* note 7 at 122-124 (signaling reputation for cooperativeness).

period in which Canada was a party to Kyoto, the federal government adopted its Kyoto target and commitment period as the ostensible guide for its mitigation actions.[92] Despite ultimately rejecting Kyoto, the federal government has continued to adhere to the international regime's emerging norm of specifying a quantified economy-wide mitigation target, promising a 17% reduction in emissions relative to a 2005 base as part of its adoption of the Copenhagen Accord.[93] This goal was highly influenced by the U.S. target, incorporating explicit matching into the Copenhagen pledge itself. Federal adherence to the international regime norm of setting targets and timetables for mitigation reflects the need to signal cooperative behavior in the international setting, as well as a need to protect national interests through coordination. Behind the US alignment of Canada's policy were fears of possible US trade measures unless equivalent climate change mitigation actions were adopted.[94] The ability to influence developing country parties to adopt binding emissions restraints also depends on a demonstration of commitment by developed parties.[95] While Canada's record of attaining its targets is weak, the influence of the international climate regime is reflected in Canada's continued adoption of benchmarks.[96]

The influence of the international climate regime is also reflected in federal efforts to implement reporting obligations under the international climate regime, including preparation of national GHG inventory data, projected emissions, and National Communications.[97] The federal government has also produced various policy documents outlining plans for compliance with its international climate

[92] But see Glenn & Otero, *supra* note 6 at 498-504 (suggesting that while Kyoto target was early benchmark, since 2006 federal government has "avoided" Kyoto target, adopted other (more lenient) targets in its policy and regulations).

[93] See e.g. Environment Canada, *Canada's Emission Trends*, (Ottawa: Health Canada, 2013) [*Emissions Trends 2013*] at 1, online: Government of Canada Publications <http://publications.gc.ca>.

[94] See e.g. Dennis Mahoney, ed, *The Law of Climate Change in Canada*, loose-leaf (consulted on), (Toronto: Canada Law Book, 2013) [*Mahoney Reporter*], ch 4 at 54, 76-77.

[95] See e.g. Doelle, "Hopenhagen", *supra* note 53 at 95-96 (discussing link between developed, developing country mitigation pledges, inadequacy of both at Copenhagen relative to required global effort).

[96] See Jeffrey Simpson, "Ottawa denies its own emissions stats", *The Globe & Mail* (1 November 2013) A17 (noting Canada's repeated failure to meet announced targets, including likely failure to meet Copenhagen pledge).

[97] See Environment Canada, *Fifth National Communication on Climate Change: Actions to Meet Commitments Under the United Nations Framework Convention on Climate Change*, (Ottawa: Environment Canada, 2010) [*National Communication* 5] at 33-39, online: Government of Canada Publications <http://publications.gc.ca>, for discussion of institutional arrangements for preparation of Inventory, assigning primary responsibility to Environment Canada, under the *Canadian Environmental Protection Act, 1999*, SC 1999, c 33. This same information is repeated in the most recent update, Environment Canada, *Canada's Sixth National Report on Climate Change 2014*, (Ottawa: Environment Canada, 2013) [*National Communication* 6] at 42-46, online: Government of Canada Publications <http://publications.gc.ca>.

change obligations.[98] In combination with Canada's explicit adoption of targets and timetables for mitigation under the international regime, the federal government's reporting has increased the transparency of Canada's efforts. This combination has exposed Canada's lack of progress, creating an implementation gap that has fueled criticism in both the domestic and international context. The reported projections of oil industry contributions to Canada's GHG emissions and the implications for Canada's ability to meet mitigation obligations had led to international pressure from the US and the EU. In the US there are threats to block approval for the Keystone XL Pipeline, and in the EU a proposed fuel quality directive could impose a penalty on oil-sands fuel.[99] Domestically, recent polling data suggests emerging public concern over the federal government's failure to implement effective climate mitigation strategies.[100] Both developments are suggestive of a role for the international climate regime in influencing public opinion, producing political pressure for Canada to come up to the benchmarks it has committed to in the international regime.[101]

To date, the federal government's own efforts to implement domestic law and policy to further Canada's international climate mitigation goals have been restrained. In part this may be explained by the diverse nature of the activities that contribute to emissions levels, making it challenging to construct comprehensive federal regulation that would respect the Division of Powers.[102] This is not an entirely satisfactory explanation, as the federal government has eschewed the use of policy measures within its jurisdiction, such as a federal carbon tax.[103] However,

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[98] See e.g. Glenn and Otero, *supra* note 6 at 496-500 (discussing climate change plans adopted by federal government, role of opposition parties in establishing reporting architecture for government's implementation of Kyoto obligations).

[99] See Shawn McCarthy, "Oil sands production creates 'challenge' as emissions rise", *The Globe & Mail* (5 November 2013) B3.

[100] See Shawn McCarthy & Richard Blackwell, "Canadians want Harper government to take leadership role on climate change, poll says", *The Globe & Mail* (6 November 2013) online: The Globe and Mail <http://theglobeandmail.com> (climate change should be a top priority for federal government, majority give government poor marks for its performance, favour participation in international treaty regime).

[101] This effect tracks theories of international law's influence developed by Linos, *supra* note 10, Simmons, *supra* note 11.

[102] See e.g. Alastair Lucas & Jenette Yearsley, "The Constitutionality of Federal Climate Change Legislation" (2012) 23:3 J Envtl L & Prac 205, discussing proposed federal *2006 Clean Air Bill*, that would have set up a national cap for GHG emissions under the Canadian Environmental Protection Act, suggesting it would not have been constitutional. Note that other authors have suggested that federal powers such as criminal law (91(27)) or trade and commerce (91(2)) or POGG might support more general climate regulation, including cap and trade regulation of GHG, at the federal level, see e.g. Peter Hogg, "Constitutional Authority over Greenhouse Gas Emissions" (2009) 46:2 Alta L Rev 507; Stewart Elgie, "Kyoto, the Constitution, and Carbon Trading: Waking a Sleeping BNA Bear (or Two)" (2007) 13:1 Rev Const Stud 67; Philip Barton, "Economic Instruments & the Kyoto Protocol: Can Parliament Implement Emissions Trading without Provincial Co-operation?" (2002) 40:2 Alta L Rev 417.

[103] See e.g. Shi-Ling Hsu & Robin Elliot, "Regulating Greenhouse Gases in Canada: Constitutional and Policy Dimensions" (2009) 54:3 McGill LJ 463 at 489 (federal carbon tax constitutional); Thomas

proposing new environmental taxes has proven to be a risky political strategy at the federal level.[104] The federal government has instead targeted specific sectors, introducing command and control standards geared to achieving intensity-based targets for GHG emissions reductions.

The potential influence of international law can be seen in Canada's choice of sectoral policy initiatives. Canada's choice to regulate the transportation and electricity sector align with the Kyoto mitigation policy exemplars, lending normative support to these actions as legitimate mitigation efforts.[105] The role of the international regime as a prospective means of cross-country policy coordination is also discernible. Canada's sectoral initiatives are aligned with EPA efforts in the US.[106] Although the US has not ratified Kyoto, international climate law and science have helped mobilize public pressure for GHG regulations, particularly in California, the state leading the US sectoral GHG initiatives.[107]

The first set of federal regulations focus on the transportation sector, a significant contributor to Canada's overall emissions.[108] The federal government has put in place regulations imposing emissions standards for passenger cars and light trucks, for model years 2011-2016 (LDV 1).[109] It has published final versions of similar proposed regulations for model years 2017-2025 (LDV 2).[110] These regulations, aligned with US standards, impose increasingly stringent restrictions on

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Courchene, "Climate Change, Competitiveness and Environmental Federalism: The Case for a Carbon Tax" (Montreal: Institute for Research on Public Policy, 2008).

[104] Stephan Dion's "Green Shift" platform incorporating such a tax preceded the poor showing of the liberals in the 2008 election and his resignation as party leader.

[105] See *Kyoto Protocol*, *supra* note 32, art 2(1). Canada has pointed to its transportation and electricity sector regulations in its public communications on national mitigation actions, see e.g. "Facts on Canada's Climate Change Action" available at: http://www.climatechange.gc.ca/default.asp?lang=En&n=72F16A84-1 [*Fast Facts*].

[106] See *Mahoney Reporter*, *supra* note 94, ch 4 at 61-62.

[107] Ibid, ch 4 at 62 (California benchmark for transportation regulations), 59 (coordination with US EPA Stationary Source regulations re electricity sector GHG emissions). See also Courchene, *supra* note 103 at 3 (role of California in driving Canadian regulations). The EPA's regulation in both these sectors was initiated following a successful lawsuit brought by a group of 12 states and various environmental organizations, arguing that GHG emissions were "air pollutants" under the US Clean Air Act; see *Massachusetts v Environmental Protection Agency*, 549 US 497 (2007) [*Massachusetts v EPA*].

[108] See *Emissions Trends 2013*, *supra* note 93 at 21. In 2011 Transportation accounted for 170 Megatons (Mt) of Carbon equivalent emissions (CO2e) out of Canada's total emissions of 702 Mt.

[109] *Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations*, SOR/2010-201 [*LDV 1 Regs*].

[110] Regulations Amending the Passenger Automobile and Light Truck Greenhouse Gas Emissions Regulations, (2012) C Gaz I, 3263 [*LDV 2 Regs*].

emissions. They are projected to improve the fuel efficiency of passenger cars by 41% relative to 2010 models and by 37% for light trucks. The result will be an estimated reduction of emissions in Canada by 9-10 Mt up to 2016, with an additional reduction of 3 Mt by 2020.[111] Similar regulations have been introduced for heavy-duty vehicles, also aligned with US standards (HDV).[112] These regulations are projected to improve fuel efficiency and achieve a reduction in emissions of 19Mt.[113] These regulations are complemented by *Renewable Fuels Regulations* requiring a 5% renewable fuel content in gasoline and 2% renewable content in diesel fuel.[114] However, emissions for the transportation sector overall are still projected to increase by 2020 to a total of 176 Mt of CO2 equivalent emissions.[115]

The second set of regulations target the energy sector, also a significant contributor to Canada's overall emissions.[116] Here the federal government has introduced regulations for electricity production, imposing a cap on emissions intensity from coal fired plants, unless additional emissions are offset through viable carbon capture and storage.[117] These federal efforts also track US EPA regulations for GHG emissions in the electricity sector.[118] The regulations are to come into effect in 2015 and the objective is to "foster a permanent transition towards lower or non-emitting" means of energy production.[119] In combination with provincial policies, the estimated effect is to reduce emissions from coal fired plants by 41 Mt. This reduction is expected to be partially offset by increased emissions from natural gas fired plants, but overall emissions from electricity production should still drop by about 30 Mt by 2020.[120]

While the federal government has thus targeted two key sectors, both the effects and the scope of its mitigation initiatives are relatively modest. In both cases, the measures adopted by the federal regulation impose intensity-based measures to

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[111] See *Emissions Trends 2013*, *supra* note 93 at 22.

[112] Heavy Duty Vehicle and Engine Greenhouse Gas Regulations, (2012) C Gaz I, 920 [*HDV Regs*].

[113] *Ibid*, see "Regulatory Impact Analysis Statement" accompanying the regulations.

[114] See *National Communication 6*, *supra* note 97 at 58.

[115] *Emission Trends*, *supra* note 93 at 22.

[116] *Ibid* at 21. In 2011 the Energy sector (Oil and Gas and Electricity combined) accounted for 253 Mt CO2e emissions out of Canada's total emissions of 702 Mt.

[117] *Reduction of Carbon Dioxide Emissions from Coal-fired Generation of Electricity Regulations*, SOR/2012-167, ss 3(1) (limit), 9 (exemption for carbon capture & storage).

[118] See *Mahoney Reporter*, *supra* note 94, ch 4 at 59.

[119] *Emissions Trends 2013*, *supra* note 93 at 28.

[120] *Ibid* at 30.

curb emissions (e.g. cap on emissions per mile travelled / unit of energy production), rather than involving a fixed cap on emissions. The effect of the policies in terms of overall emissions thus remains uncertain. As yet, the federal government has not attempted to regulate the oil and gas sector, particularly oil sands production. This sector is expected to make the dominant contribution to Canada's projected emissions growth, wiping out any anticipated emissions reductions from the electricity sector.[121] The federal government has also not taken the lead to develop national mechanisms that would facilitate flexible implementation of Canada's international climate targets, such as an emissions trading system. Land Use, Land Use Change and Forestry actions will form a major component of Canada's projected emissions reductions in 2020.[122] While the federal government has been active in creating new national parks, particularly in the North, these are not the main contributors to projected LULUCF emissions reductions.[123] They are largely driven by sharp declines in forestry harvesting following the economic downturn in 2008.[124]

In addition to its sectoral regulations, the federal government has adopted "[s]trategic [i]nvestment" as a significant component of its mitigation strategy.[125] In line with guidance under the Kyoto Protocol, it has invested in programs to increase energy efficiency and develop sources of alternative energy production,[126] made substantial investments directed at developing viable carbon capture and storage (CCS) technology,[127] and through its "Sustainable Development Technology Canada" (STSC) program is supporting projects developing sustainable technologies.[128] These investments are in line with the guidance for mitigation

[121] *Ibid* at 25, Oil Sands production is expected to increase emissions by 67 Mt of CO2 by 2020.

[122] *Ibid* at 34, the LULUCF sector is expected to remove 28 Mt CO2e by 2020.

[123] Reference to Canada's creation of new parks features in its statement, *COP 19 Priorities*, *supra* note 88. For a list of National Parks and lands included in National Reserves (lands set aside to be converted into parks pending negotiation of outstanding aboriginal claims) by date, see Parks Canada, "Canada's National Parks & Reserves", online: Parks Canada <http://www.pc.gc.ca/eng/docs/v-g/nation/nation103.aspx>.

[124] *Emissions Trends 2013*, *supra* note 93 at 42.

[125] See *Fast Facts*, *supra* note 105; see also *National Communication 5*, *supra* note 97 at 45-49 discussing various federal investments and initiatives to 2010.

[126] See e.g. *National Communication 5*, *ibid* at 45, discussing ecoEnergy programs investing in a range of projects to increase energy efficiency and develop alternative energy supply. See also more concise discussion of these programs in *National Communication 6*, *supra* note 97 at 60-62. The energy efficiency investments were complemented with regulations under the *Energy Efficiency Act* to strengthen minimum energy performance standards for many products, such as household appliances, and requiring "EnerGuide" labeling to make energy requirements transparent, (*ibid* at 59).

[127] See *Fast Facts*, *supra* note 105, indicating that in the last 5 years the federal government has committed over $500 million to such initiatives.

[128] For a review of recent projects, see Sustainable Development Technology Canada, Media Release, "Backgrounder – Projects - $14 million in funding" (12 September 2013) online: SDTC

actions under the international regime. The substantial investments in CCS undoubtedly own much to the pressure for GHG emissions reduction generated by the international climate regime. In light of the looming contribution to Canada's overall emissions from oil sands development, technological change to reduce the impact from this sector is highly desirable, but it is unclear whether federal investments will produce results.

As with the international regime, until recently the primary focus of federal climate policy has been mitigation, rather than adaptation.[129] However, more recently policy has shifted toward addressing adaptation as climate science has become more certain and the effects of climate change more apparent. Investment is the primary climate adaptation policy; the federal government renewed funding for adaptation investments in 2011, allocating $148 million over 5 years.[130] This funding was directed at a range of projects, including support for climate change prediction and scenario development, funding for heat alert and response systems, assistance for fisheries aquatic climate adaptation research, and a suite of programs directed at promoting adaptation and resilience to climate change in Canada's Northern communities. The largest individual investment of $35 Million supported Natural Resources Canada's program directed at "Enhancing Competitiveness in a Changing Climate."[131] The federal government's adaptation investments appear to be primarily directed at achieving a better understanding of the likely impacts of climate change, and providing information so that provincial and municipal governments, and private actors can make informed decisions about adaptation. Its specific focus on Northern adaptation recognizes that this is a region where climate risks are particularly urgent. The increased focus on adaptation support, particularly for vulnerable Northern communities, is in line with the increased priority for adaptation under the international regime.

In addition to the impacts on domestic measures to address climate change, the international climate regime spurs action by the federal government to assist developing countries. Although the international regime offers flexible mechanisms to assist developing countries, financial support is the primary federal approach. The federal government has allocated funds for its Copenhagen commitments to provide

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<http://www.sdtc.ca>. Recent projects include research to develop cleaner processes for bitumen extraction, cleaner "scrubbers" for emissions management, a new technology for pesticide to reduce amounts and increase effectiveness, and a new technology to facilitate integration of small-scale electricity generation into the grid.

[129] See Mahoney Reporter, *supra* note 94 at 4-69.

[130] See Environment Canada, "Backgrounder – Canada's Ongoing Commitment to Climate Change Adaptation" (2013), online: Government of Canada <http://ec.gc.ca>. Its initial adaptation funding in 2007 was for $85.9 million over 4 years.

[131] *Ibid.*

additional financial support for developing and vulnerable countries to assist with mitigation and adaptation.[132] Through this funding, Canada supported projects including improved weather forecasting, support for agricultural resilience and food security, and development of protected areas to promote climate resilience in the most vulnerable countries.[133] Canada also provided funding to the FCCC Climate Technology Center Network (CTCN) established under the Cancun Agreements to support technology development and transfer, as well as working through multilateral organizations to spur private support.[134] The federal government has also supported the development of technology that can be shared with developing countries, and other parties.[135] While the federal government is resistant to the incorporation of distributive considerations into "common but differentiated" mitigation obligations for parties to the international climate regime, it is more receptive to providing adaptation support for developing countries.

The federal government's climate policy acknowledges Canada's obligations under international climate law and, to an extent, responds to these obligations. Canada meets its procedural obligations to generate and report on its GHG inventories, projected emissions, and provide the required national communications. This makes Canada's actions and progress in relation to its substantive international climate law commitments relatively transparent. Unfortunately, while the federal government has committed to clear targets and timetables to reduce emissions, its own actions to mitigate climate change are modest and their projected impact too weak. In its most recent National Communication, the federal government admits that reaching the Copenhagen pledge could be "challenging."[136] This is an understatement based on the information in the Communication, which projects Canada's 2020 emissions at 734 Mt, compared with its Copenhagen target of 612 Mt.[137] While Canada's emissions are determined by a combination of federal, provincial and private action, to date the concrete measures adopted by the federal government to advance the ultimate objective of the FCCC are ineffective. Canada is likely to renege on its current pledge under the international climate regime going into negotiations for a new instrument under the

[132] See National Communication 6, *supra* note 97 at 144-145, 148. See also, Government of Canada, *Canada's Fast Start Financing: Delivering on our Copenhagen Commitment* (2013), online: United Nations Framework Convention on Climate Change <https://unfccc.int/files/documentation/submissions_from_parties/application/pdf/cop_fsf_canada_2013_en.pdf> for a detailed discussion of the programs supported.

[133] *Ibid* at 4-6.

[134] See National Communication 6, *supra* note 97 at 151.

[135] *Ibid* at 159-160. Examples include models for forest sector carbon budgets, and infrastructure engineering vulnerability assessment.

[136] *Ibid* at 7.

[137] *Ibid* at 7-9.

Durban Platform. The federal government's weak implementation of its mitigation obligations is a significant contributing factor.

Canada has made some progress and in its Communication stresses that its measures (including those of the provinces) will result in a trajectory that sees 2020 emissions 128 Mt less than a business as usual scenario, and result in reductions in emissions intensity.[138] This measurement of progress tracks the approach taken by many developing countries under the international regime, and perhaps reflects a common concern with undertaking climate mitigation actions where the economic consequences are too severe.[139] The federal government's position at recent COPs has been that a "fair" new agreement is needed, that imposes binding restrictions on all major emitters, in order for Canada to undertake significant emissions reductions.[140] There is certainly an economic logic to holding back on costly national action when lack of commitment by other parties would make any emissions reductions futile. As noted earlier, Canada's substantive (non)compliance with its mitigation commitments reflects the view that international law is limited in the extent it can force countries to act contrary to their perceived interests. In Canada's case, the federal perception is that implementing Canada's short-term obligations is simply too costly. Canada's federal government has taken actions to fulfill other obligations under the international regime, including providing support for domestic and international adaptation, technology development and transfer, and provision of financial support. However, the approach to the key action of domestic mitigation is out of step with the norms of the international regime.

2. Provincial Climate Law & Policy

Canada's climate law and policy is determined through the combined efforts of the federal and provincial / territorial governments. Although they do not have any direct obligations under the international climate regime, Canada's provinces and territories have *all* taken steps to address the challenge of climate change. However, the extent to which these efforts reflect international climate law varies considerably. In this section, I will examine provincial law and policy in light of key aspects of the international regime to illustrate the diversity at this sub-national level.[141]

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[138] *Ibid* at 8.

[139] *Ibid* at 17, discussing importance of energy and natural resource industries in Canada's economy, role of Canada as net energy exporter.

[140] See COP 19 Priorities, *supra* note 88.

[141] The review of provincial / territorial law and policy will be selective; a comprehensive review of all climate law and policy at this level is beyond the scope of the paper.

As seen above, mitigation is a central obligation under both the FCCC and Kyoto Protocol, with the international climate regime moving toward quantified emission reductions targets and timetables, especially for developed participants. In general, the climate law and policy of Canada's provinces and territories incorporates this mitigation norm and the targets and timetables approach of the international regime.

All provinces have climate change emissions targets with associated timelines.[142] Several provinces have common emissions reduction targets, adopted as part of regional climate initiatives. British Columbia, Manitoba, Ontario and Quebec along with US states, including California, are members of the Western Climate Initiative which has a regional target of a 15% reduction below 2005 levels by 2020.[143] New Brunswick, Nova Scotia, P.E.I. and Newfoundland & Labrador are participants in the New England Governors / Eastern Canadian Premiers Climate Change Action Plan, which has a shared voluntary target to reduce regional emissions to 1990 levels by 2010, 10% below 1990 by 2020 and sets a long term target of 75-85% below 1990 by 2050.[144] Provinces have also adopted their own targets either in addition to, or independently of these regional initiatives. British Columbia has targets to reduce emissions 33% from a 2007 base by 2020, with an interim reduction of 6% reduction by 2012 and 18% by 2016, with a long-term goal of an 80% reduction by 2050.[145] These targets are enshrined in legislation, in the *Greenhouse Gas Reductions Target Act*, SBC 2007, c. 42. Manitoba has also legislated emissions reduction targets of 6% below 1990 levels by 2012 in the *Manitoba Climate Change and Emissions Reduction Act*, C.C.S.M. c. C135. Quebec's *2013-2020 Climate Change Action Plan* adopts an ambitious target to reduce emissions by 20% below 1990 levels by 2020.[146]

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[142] See National Communication 6, *supra* note 97 at 63-74.

[143] *Ibid* at 63. For access to the WCI partners' individual climate action plans, see "Partner Climate Action Plans" (2013), online: Western Climate Initiative <http://www.westernclimateinitiative.org>.

[144] *Ibid* at 64. For details of the regional initiative, see The Committee on the Environment and the Northeast International Committee on Energy of the Conference of New England Governors and Eastern Canadian Premiers, "Climate Change Action Plan" (2001), online: The New England Governors' Conference, Inc <http://negc.org/uploads/file/Reports/ClimateChangeAP%5B1%5D.pdf>.

[145] *Ibid* at 72. Access to B.C.'s legislative and regulatory measures implementing its targets and climate change action measures can be found at Ministry of Environment, "Legislation & Regulations" (2013), online: The Province of British Columbia <http://www.env.gov.bc.ca/cas/legislation/>.

[146] *Ibid* at 67. For access to details of Quebec's plan, see Government of Quebec, "2013-2020 Climate Change Action Plan" (2012), online: Ministère du Développement durable, de l'Environnement, de la Faune et des Parcs <http://www.mddefp.gouv.qc.ca/changements/plan_action/pacc2020-en.pdf> [Quebec Action Plan 2013]. Note that the plan sets out the goal above of 20% reduction by 2020, while Canada's National Communication 6 indicates a goal of 25%.

Provinces vary in their ambitions and also in the extent to which they have taken up targets and timetables as legal requirements, rather than aspects of plans or policies. Provinces have pursued a targets and timetables approach, even though federal ambiguity toward implementing Canada's international targets became apparent shortly after Kyoto came into force.[147] Provincial targets generally meet or exceed Canada's current Copenhagen pledge, and for the most part, provinces with targets are on track to achieving their interim goals.[148] Provincial mitigation goals generally reflect the form of the international climate regime's Annex I targets, adopting absolute reductions from a base year as the general metric, with many provinces adopting targets that incorporate the 1990 Kyoto base year.[149] The long-term reductions in the 70-80% range also track the international climate regime's guidance regarding the reductions needed to ensure prevention of dangerous climate interference.

Alberta provides the notable exception to this theme. Alberta regulates emissions and has a Climate Change Action Plan. However, its target takes the form of a reduction in GHG emissions from a Business as Usual (BAU) baseline.[150] If successful, Alberta projects that this will result in a reduction of 14% below 2005 levels, but only by 2050. This is a considerably weaker target than other provinces have adopted, and incorporates increasing overall emissions until 2035. The form of the target, reduction from a BAU baseline, is generally reserved for developing country parties under the international regime. As currently set out in its projections, the bulk of Alberta's GHG reductions from the BAU baseline are to come from implementing carbon capture and storage.[151] Failure to develop this technology will imply emissions much closer to the BAU baseline.

Theories of the influence of international law can potentially help explain both the adoption of mitigation targets and timetables by all the provinces, and the

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[147] See Canada & Kyoto, *supra* note 6 at 500.

[148] National Communication 6, *supra* note 97 at 64-74.

[149] Other provinces with similarly structured targets include Ontario, and recently Saskatchewan, which anticipates proclaiming legislation in 2013 to facilitate its target of 20% below a 2006 base by 2020, see Ministry of Environment, "Climate Change" (2013), online: Government of Saskatchewan <http://www.environment.gov.sk.ca>.

[150] National Communication 6, *supra* note 97 at 71. For details of Alberta's plan and a gateway to relevant documents, see Environment and Sustainable Resource Development, "Climate Change Strategy" (2014), online: Government of Alberta <http://esrd.alberta.ca/focus/alberta-and-climate-change/climate-change-strategy/default.aspx>.

[151] Environment and Sustainable Resource Development, "Implementing Carbon Capture and Storage" (2014), online: Government of Alberta <http://esrd.alberta.ca/focus/alberta-and-climate-change/climate-change-strategy/implementing-carbon-capture-and-storage.aspx>.

variation across these goals. The provinces' choices reflect the role of international law both as a normative benchmark, and as a mechanism for coordination and cooperation. For example, British Columbia's ambitious targets are supported by strong public belief in the threat of anthropogenic climate change.[152] The political feasibility of B.C.'s policy, as well as its content, have been substantially influenced by the earlier adoption of similar climate policy initiatives in California.[153] California's leadership was prompted by failure of the U.S. federal government to take steps under the international regime.[154] California's climate change action has not only helped reinforce the normative desirability of similar policy, but also helped to drive potential for coordinated regional actions, like the Western Climate Initiative. The Canadian provinces with ambitious targets and timetables have generally been influenced by geographically proximate states that have acted as US climate change leaders, reacting to U.S. federal failure to act under the international climate regime.[155] These provinces also share strong public belief in the threat of climate change,[156] public support for government action,[157] and commitment to international climate law.[158]

Provinces have also acted strategically to preserve their own interests in the shadow of the emerging international climate regime.[159] Albertans are not strong believers in climate change,[160] and Alberta was the only provinces with majority

[152] See Mario Canseco, "Less Than Half in U.S. and Britain Believe in Man-Made Climate Change" (April 2013), online: Angus Reid Public Opinion <http://www.angusreidglobal.com/wp-content/uploads/2013/04/2013.04.12_Climate.pdf> [Angus Reid 2013].

[153] See Mahoney Reporter, *supra* note 94 at 5-18-5-19.

[154] *Ibid.*

[155] See e.g. participation of Atlantic provinces in joint initiative with New England states, including Connecticut, Maine, Massachusetts and Vermont, lead petitioners in the landmark case *Massachusetts v Environmental Protection Agency*, 549 US 497 (2007) attempting to force the US EPA to regulate GHG emissions.

[156] See e.g. Canada 2020, "National Survey of Canadian and American Public Opinion on Climate Change" (2013) online: Canada 2020 <http://www.canada2020.ca/climatepoll/docs/Cross_Tabs-Canada_2020_U_of_M_Climate_Poll.pdf>.

[157] See e.g. The Environics Institute / David Suzuki Foundation, "Focus Canada 2013: Canadian Public Opinion about Climate Change" (2013) online: David Suzuki Foundation <http://www.davidsuzuki.org/media/news/downloads/Focus%20Canada%202013%20-%20Canadian%20public%20opinion%20about%20climate%20change.pdf> [Environics/David Suzuki 2013].

[158] See e.g. "Canadians' Stance on the Kyoto Accord" *Public Policy Landscape* 17 (2002) 28, online: Ipsos <http://www.ipsos.ca/common/dl/pdf/tr/publicpolicylandscape1102.pdf>, at 29 [Ipsos Kytoto 2002].

[159] Discussion that follows focuses on Alberta, but this argument applies to other provinces as well. For example, in adopting coordinated targets and timetables with US states under Western Climate Initiative, Ontario first determined that US climate change based emissions standards would not harm the province's critical auto manufacturing sector, see Mahoney Reporter, *supra* note 94 at 9-33.

[160] See Angus Reid 2013, *supra* note 152.

public opinion opposing Kyoto implementation.[161] Nevertheless, the province has embarked on climate change mitigation efforts, recognizing that the broader international commitment to limit GHG emissions will have market implications for its major product – fossil fuels.[162] Enhanced reporting and transparency under the international climate regime have made the Alberta's oil industry's GHG emissions profile increasingly visible, and it has been the focus of international public pressure that threatens access to export markets.[163] The province has resisted adopting policy targets of absolute reductions in GHG emissions in the form of Kyoto / Copenhagen commitments, as the implications for the provincial economy are regarded as too severe.[164] However, the province's targets do mirror the approach taken by non-Annex I countries that are large emitters, such as China, which may help secure their legitimacy. Alberta has clearly recognized that although full compliance with international climate regime targets is too costly for its economy in the short run, the emerging international pressure for GHG mitigation demands a provincial strategy to mitigate emissions over the longer term.

In addition to influencing the adoption of targets and timetables by the provinces, the international climate regime is reflected in the choice of policy strategies for implementing these targets. A key aspect of the international climate regime's targets and timetables strategy is the corresponding incorporation of flexibility mechanisms and market instruments as part of mitigation activity. While Canada's federal government has yet to develop national mechanisms, a number of provinces have taken the lead.

Two provinces have incorporated carbon taxes into their strategies. Quebec was the first province to adopt a carbon tax, in 2007.[165] The tax was levied on large

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[161] See Ipsos Kyoto 2002, *supra* note 158.

[162] See e.g. Mahoney Reporter, *supra* note 94 at 6-1-6-2.

[163] For example, see the US National Wildlife Federation's arguments against Keystone XL Pipeline that would increase export potential for Albertan oil, primarily based on implied contribution to global climate change and status of oil sands production as a "dirty" fuel, at "Keystone XL Pipeline" (2014), online: National Wildlife Federation <http://www.nwf.org/What-We-Do/Energy-and-Climate/Drilling-and-Mining/Tar-Sands/Keystone-XL-Pipeline.aspx>. To similar effect see David Biello, "How Much Will Tar Sands Oil Add to Global Warming?", *Scientific American* (23 January 2013), online: Scientific American <http://www.scientificamerican.com/article.cfm?id=tar-sands-and-keystone-xl-pipeline-impact-on-global-warming>. For discussion of lobby efforts to secure EU Fuel Directive imposing penalty on oil sands production due to GHG intensity, see e.g. Barbara Lewis, "Nobel Laureates Press EU Leaders on Tar Sands Law" (2 October 2013), online: Reuters <http://www.reuters.com/article/2013/10/02/us-eu-tarsands-idUSBRE9911C520131002>.

[164] See e.g. Mahoney Reporter, *supra* note 94 at 6-27-6-29 (opposition to Kyoto target based on costs to province).

[165] *National Communication 6*, *supra* note 97 at 67.

emitters, including producers and distributors of fossil fuels in the province.[166] Revenues were directed to supporting government measures related to climate change, such as public transit improvement. Quebec's levy was not to be permanent, but phased out and replaced by the province's cap and trade system.[167] British Columbia has also incorporated a carbon tax strategy to reduce emissions, introducing a broad based, revenue neutral tax in 2008 levied on emissions from fossil fuel combustion.[168] The tax generates substantial revenue, $3.7 billion since 2008, but by law this is returned to British Columbians via reductions in personal, small business, and corporate income taxes.[169] Both provinces adopted the taxes as a market strategy to put a price on carbon more reflective of its environmental impacts, and incentivize reductions in fossil fuel consumption that would help these provinces reach their emissions targets.

The adoption of carbon tax policies in B.C. and Quebec reflect the influence of the international regime's normative call to mitigate climate change. Neither of these taxes are primarily motivated by simple revenue generation, as B.C.'s tax is revenue neutral, and Quebec's tax is both temporary and earmarked for climate mitigation efforts. As an environmental policy, these stand-alone taxes do not allow the provinces imposing them to capture any of the benefits of associated reductions in GHG emissions. Although a carbon tax has been identified as the preferable policy tool to limit emissions, this is based on imposition of a federal tax, which could address potential competitive and trade-related aspects of a carbon tax that lie outside provincial jurisdiction.[170]

Provinces have also been active in working to develop cap and trade schemes to help mitigate emissions more flexibly. These schemes vary in the extent to which they appear to be influenced by the international climate regime.

As with climate mitigation targets, Alberta has followed its own path in establishing a cap and trade scheme. Alberta introduced the first provincial scheme,

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[166] See "Quebec to Collect Nation's 1st Carbon Tax" (7 June 2007), online: CBC News <http://www.cbc.ca/news/canada/montreal/quebec-to-collect-nation-s-1st-carbon-tax-1.684888>.

[167] National Communication 6, *supra* note 97 at 67.

[168] *Ibid* at 71. For details of B.C.'s Carbon Tax, see Ministry of Finance, "How the Carbon Tax Works", online: The Province of British Columbia <http://www.fin.gov.bc.ca>. See also Mahoney Reporter, *supra* note 94 at 5-33-5-40.

[169] *Ibid* at 72.

[170] See e.g. Courchene, *supra* note 103 at 13. On desirability of carbon tax, see also Shi-Ling Hsu, *The Case for a Carbon Tax* (Washington, DC: Island Press, 2011).

regulating its large industrial emitters.[171] However, rather than a cap on emissions, Alberta's scheme requires a reduction in emissions intensity by 12% relative to a 2003-2005 baseline. Regulated emitters can meet their obligations under the scheme by: complying with the intensity target, purchasing "emissions performance credits" from another emitter that has exceeded compliance, purchasing offset credits in Alberta's Carbon Offset market, or paying a charge of $15 per tonne of CO2 emissions.[172] The scheme currently applies to just over 100 emitters, accounting for about 50% of Alberta's emissions. The scheme has resulted in 40Mt of cumulative emissions reductions and has generated $398 million in revenue, about half of which has been directed toward clean energy projects.[173] Alberta's scheme aligns with the international regime's focus on use of market mechanisms, and incorporation of emissions trading to promote cost-effective means of reducing emissions. Underpinning the scheme is concern that the international climate regime's mitigation efforts will close markets to Alberta's resource industries unless they can show progress in reducing their GHG emissions. However, Alberta has structured its regime in a way that does not impose the large immediate costs of absolute caps. As a result, it does not necessarily lead to reduced emissions overall, particularly as the "safety valve" option of purchasing emissions intensity has a relatively low price.[174] This diverges from the structure of the Kyoto flexibility mechanisms, and also limits the extent to which Alberta's scheme can be incorporated into larger cap and trade systems to facilitate global climate change mitigation efforts.

Other provinces have been working to develop cap and trade schemes for emissions that more closely align with the Kyoto flexibility mechanisms, with greater potential for integration into regional and international climate markets. B.C., Manitoba, Ontario and Quebec are members of the Western Climate Initiative, which is working toward establishing regional emissions trading.[175] B.C., Ontario and Quebec are members of the International Carbon Action Partnership, another organization of governments and public authorities working toward mandatory cap and trade schemes with hard caps, to develop carbon markets.[176] While some provinces, such as B.C., have passed legislation that lays the groundwork for future participation in these cap and trade schemes, at present only Quebec has an operative

[171] National Communication 6, *supra* note 97 at 71. For details of Alberta's scheme, see Alta Reg 139/2007. See also Mahoney Reporter, *supra* note 94 at 6-33-6-45.

[172] National Communication 6, *supra* note 97 at 71.

[173] *Ibid.*

[174] To illustrate, see Coral Davenport "Large Companies Prepared to Pay Price on Carbon" *New York Times* (5 December 2013) online: The New York Times Company<http://www.nytimes.com/2013/12/05/business/energy-environment/large-companies-prepared-to-pay-price-on-carbon.html?_r=0> (Exxon Mobil internal pricing for Carbon assumes price of $60/ton).

[175] National Communication 6, *supra* note 97 at 63.

[176] *Ibid.*

scheme.[177] Quebec's scheme came into force in 2012 and its first compliance period began in 2013.[178] The scheme will initially cover about 80 major emitters, including electricity generation and major industrial facilities. In a second phase from 2015 it will expand to cover fuel and fossil fuels, including the transportation sector.[179] The scheme imposes a global cap for all targeted emitters, which will drop over time to reduce overall emissions. Emitters will have to cover their emissions via credits once the compliance periods begin. They will be assigned some credits by government in an initial allocation and will then generate additional credits through emissions reductions, or cover emissions via purchased credits. Quebec has adopted regulations to harmonize its scheme with the Western Climate Initiative and has entered into an agreement with California to formally link their emissions trading schemes.[180] While they are still at an early stage, these efforts to develop regional cap and trade schemes offer opportunities to promote cooperative emissions reductions, while reducing the costs of limiting emissions. They have the potential to strengthen carbon markets, making investments in emissions mitigation and efficiency for firms more lucrative. The use of true caps, with plans to reduce caps over time, offers the prospect of real gains in limiting emissions.

These cap and trade schemes, as with Alberta's, are underpinned by belief in the eventual adoption of binding commitments to reduce GHG emissions. The broad normative commitments under the international climate regime, and the evolution toward mitigation targets and timetables for all parties provide fundamental support for these beliefs. Multi-lateral initiatives and coordination on the establishment of cap and trade schemes can only be justified if restrictions on emissions generate a price for GHG emissions. Structural concerns about "leakage" of emissions away from regulated jurisdictions help to encourage construction of schemes in a way that permits integration. The coordinating role of international and transnational law is apparent in the patterning of provincial cap and trade schemes so that they can be integrated into federal, regional or international schemes in the future.[181]

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[177] *Ibid* at 72, discussing B.C.'s *Greenhouse Gas Reduction (Cap and Trade) Act*, SBC 2008, c 32.

[178] For general discussion of Quebec's scheme and a gateway to relevant documents, including the regulations and various related orders in council, see "The Québec Cap and Trade System for Greenhouse Gas Emissions Allowances" (2009), online: Gouvernement du Québec <http://www.mddefp.gouv.qc.ca/changements/carbone/Systeme-plafonnement-droits-GES-en.htm>.

[179] National Communication 6, *supra* note 97 at 67.

[180] *Ibid*.

[181] For example, see Mahoney Reporter, *supra* note 94 at 5-28-5-33 on this feature of the B.C. scheme. See also a discussion on Ontario and Quebec's progress toward a cap and trade scheme, noting the need for flexibility to integrate into larger schemes (*ibid* at 9-32-9-35).

While some provinces have incorporated market approaches to reaching their emissions targets, most have pursued industry / sector specific strategies more akin to the federal approach. The provinces have tended to target the electricity and transportation sectors, with policies for direct regulation to reduce emissions, energy efficiency initiatives, and sustainable energy investments. These initiatives track GHG mitigation policies identified under Kyoto, and the sectoral focus picks out industries that make significant contributions to national and provincial GHG emissions profiles.

Numerous provinces have focused on the electricity sector. The largest absolute gains in this sector in terms of GHG emissions reduction have come from Ontario. Its strategy involves phasing out coal fired electricity generation in the province.[182] The province has made substantial progress and is scheduled to complete the program in 2014.[183] Ontario is filling the resulting capacity gap through increased conservation, as well as through development of cleaner alternatives, such as wind, solar, natural gas and nuclear energy.[184] Nova Scotia has also aggressively pursued emissions reduction in its electricity sector by legislating a mandatory, declining cap on emissions for Nova Scotia Power under its *Greenhouse Gas Electricity Regulations*.[185] Facility owners must ensure that the cap is met through operations: there is no alternative such as trading of emissions or purchasing of extra emissions. Nova Scotia has also established a regulatory goal to increase the share of electricity supplied by renewables to 25% by 2015 and 40% by 2020.[186] Nova Scotia has signed an equivalency agreement with the federal government so that the province's regulations will replace the federal electricity sector regulation.[187] Both provinces have pursued aggressive strategies to directly cut emissions from carbon intensive sources of electricity supply via command and control regulation.

Other provinces have decided to cut electricity sector emissions by increasing supply from renewable / non-emitting sources. Newfoundland & Labrador's development of its Lower Churchill project is projected to permit the province to obtain 98% of its electricity from renewables and phase out oil fired

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[182] National Communication 6, *supra* note 97 at 68. This initiative is projected to reduce GHG emissions by 30 Mt CO2e relative to 2003.

[183] *Ibid.*

[184] *Ibid.*

[185] NS Reg 260/2009 as amended to OIC 2013-332 (10 September 2013), NS Reg 305/2013. For discussion, see National Communication 6, *supra* note 97 at 65.

[186] See *Renewable Electricity Regulations*, NS Reg 155/2010 as amended up to OIC 2013-155 (7 May 2013), NS Reg 204/2013

[187] See National Communication 6, *supra* note 97 at 65-66.

generation.[188] PEI is incorporating wind generation, projected to account for 33% of the province's supply.[189] New Brunswick has also adopted a target for its utility New Brunswick Power to provide 40% of in-province electricity supply from renewable sources.[190] The province is also re-introducing nuclear electricity generation, which it expects to further increase supply from non-emitting sources by 35%.[191] Manitoba's *Tomorrow Now* strategic plan calls for a 43% increase in hydro power from 2012 levels over the next 15 years, to be combined with energy saving targets and development of other renewables including wind power.[192] Other jurisdictions that have adopted similar plans to increase renewable / clean electricity as a mitigation strategy include B.C., Yukon, Northwest Territories, and Quebec. Strategies to reduce emissions from electricity generation are expected to be among the most successful mitigation efforts, with a projected reduction of 39 Mt by 2020 relative to a 2005 base.[193]

As with the federal government, provinces have also turned to the transportation sector to address emissions mitigation. A number of provinces support development of biofuels as part of their general climate change investment strategy.[194] Alberta has adopted a Renewable Fuel Standard, with the renewable content to incorporate a 25% reduction in GHG emissions relative to the petroleum equivalent.[195] Other provinces have focused on emissions savings in the transportation sector through promotion of transit plans. Quebec's Public Transit Policy directed at increasing transit services and ridership exceeded its goals. A new plan under development addresses "sustainable mobility."[196] Ontario also has plans to improve transit as part of a broader "Big Move Regional Transportation Plan" for the Greater Toronto area.[197] Nova Scotia has a Sustainable Transportation Strategy

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[188] *Ibid* at 64.

[189] *Ibid* at 65.

[190] Energy and Mines, "Renewable Portfolio Standard: Description and Background" (2013), online: Government of New Brunswick <http://www2.gnb.ca/content/gnb/en/departments/energy/energy_blueprint/content/renewable_portfolio.html>.

[191] *Ibid.*

[192] National Communication 6, *supra* note 97 at 69.

[193] Emissions Trends 2013, *supra* note 93 at 21.

[194] See National Communication 6, *supra* note 97 at 65 discussing Newfoundland (support for biofuel via Green Fund investments); Nova Scotia (support for biofuel development) (*ibid*); and Ontario (support for ethanol industry via Ethanol Growth Fund) (*ibid* at 69).

[195] *Ibid*, at 71. The standard requires 2% renewable content in diesel fuel, and 5% renewable alcohol in gasoline.

[196] *Ibid* at 67.

[197] *Ibid* at 68.

that incorporates improvements in transit fleet efficiency as part of its mitigation efforts.[198] Another prong of provincial transportation strategies for emissions mitigation is the provision of incentives for clean energy vehicles and development of infrastructure to support their use.[199] Despite this suite of policies directed at the transportation sector, effects are projected to be modest as transportation sector emissions incorporating both provincial and federal initiatives are expected to increase by 8 Mt by 2020.[200]

The sector specific policies of the provinces reflect policy-making in the shadow of international climate law. Anticipated binding GHG emissions mitigation targets make these sectors natural focal points for action, as they are significant contributors to overall emissions. The international regime's reporting and inventory mechanisms help to focus attention on these sectors. For many of the provinces, development of clean energy and transportation sectors offer additional benefits beyond GHG emissions reduction. For Provinces such as Quebec, Newfoundland and Labrador, and Manitoba, international climate change action is likely to enhance export opportunities for their expanded climate-friendly energy capacity.[201] Both international and provincial normative mitigation commitments, as well as strategic interests, support action in these key sectors.

In addition to sector-specific regulation, the provinces also incorporate strategic investment as part of their climate change mitigation strategies. Provinces have directed funds toward efforts to increase energy efficiency, develop various clean technologies, and facilitate the use and development of alternative energy sources.[202] In Alberta and Saskatchewan, investment in the development of carbon capture and storage (CCS) technology forms a major component of provincial climate change strategy. Saskatchewan has three initiatives in place. Its Weyburn-

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[198] *Ibid* at 65. See also discussion of Alberta's investments in sustainable transit infrastructure (*ibid* at 71).

[199] *Ibid* at 72, discussing B.C. (Clean Energy Vehicle Program, incentives for purchase of clean energy vehicles (e.g. plug-in electric, hydrogen) and charging infrastructure development); discussing Ontario (incentives for purchase of plug-in electric vehicles) (*ibid* at 68).

[200] Emission Trends 2013, *supra* note 93 at 21. The increase is relative to a 2005 baseline of 168 Mt. Transportation will remain one of the largest contributors to Canada's projected emissions in 2020.

[201] See e.g. Quebec Action Plan 2013, *supra* note 146 at 32-33 (province can capitalize on its renewable energy capacity); "Energy: Expanding Clean Energy & Energy Efficiency – Manitoba Helping the World" (2008), online: Government of Manitoba <http://www.gov.mb.ca/asset_library/en/beyond_kyoto/energy.pdf> (potential for export of Manitoba's low GHG emissions energy to other jurisdictions).

[202] Some common policy choices include investments to increase efficiency in residential and commercial settings, development of energy efficient building codes and standards, investments in biomass / biofuels, small scale energy generation and feed in tariffs, and methane capture projects related to waste management and agriculture.

Midale CO2 Monitoring and Storage Project has been in place since 2000, studying methods for injecting and storing CO2 in depleted oilfields.[203] The Boundary Dam Integrated Carbon Capture and Storage Demonstration Project will see one of the province's largest coal-fired electricity generating facilities upgraded for operation in 2014 with complete carbon capture and storage.[204] Saskatchewan's third project is supporting research into the safety and viability of storing liquefied, captured CO2 underground. [205] Combined, these investments in carbon capture and storage represent well over a billion dollars of research and development.[206] Alberta has also invested heavily in support for carbon capture and storage projects. It is providing $1.3 Bn over a 15-year period to support the Shell Quest and Alberta Trunk Line projects.[207] Alberta's projects are geared to the capture and transportation of CO2 for use in oilfield recovery (and subsequent storage) and underground storage of CO2 to reduce the emissions from oil sands upgrading facilities. A condition of the investment in the projects is a requirement to share information, making the technology accessible for wider adoption.[208]

The influence of international climate law is particularly apparent in these investments in CCS technology. The legitimacy of these investments as mitigation actions is reinforced by Kyoto's exemplars, which include research and development of technology for carbon sequestration. Both Saskatchewan and Alberta are investing in demonstration projects that can be used to develop and share best practices for CCS technology. This is also in line with guidance from the international climate regime that requires parties to cooperate and facilitate the exchange of information and technology transfer. There is significant potential for CCS technology to contribute to GHG mitigation, particularly if it is shared with large emitters that rely on high emissions sources of energy, such as coal-fired electricity generation. The strategic impact of the global climate regime is also a factor in these investments. If Alberta is to continue to develop its oil sands resources, then the development of CCS technology is vital to curbing emissions in the province and in Canada as a

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[203] National Communication 6, *supra* note 97 at 70. The project has generated "best practice" guidelines and a scientific publication sharing information about the technology.

[204] *Ibid*. See also description of the project, "Carbon Capture and Storage" (2014), online: SaskPower <http://www.saskpower.com/our-power-future/work-currently-underway/carbon-capture-and-storage/>. The captured CO2 will either be stored in a liquid form underground, or sold for use to enhance recovery in oilfields where it will remain trapped underground in the process.

[205] National Communication 6, *supra* note 97 at 70.

[206] These projects leverage a combination of federal, provincial and private investment funds. The provincial contribution to Boundary Dam is $1 Bn (via SaskPower). Federal funds of $240 million are also invested in this project (*ibid* at 160).

[207] *Ibid* at 71. See also description of Alberta's Carbon Capture and Storage initiative and support for these projects at Alberta Energy "Carbon Capture and Storage" (2014), online: Government of Alberta <http://www.energy.alberta.ca/Initiatives/1438.asp>.

[208] *Ibid*.

result. The anticipation of binding GHG restrictions, fed by the international climate regime, requires a technological solution to preserve the value of these provinces' energy endowments.

The review of provincial climate law and policy illustrates that while provinces have taken diverse approaches, all have been influenced by the international climate regime. Many provinces have adopted ambitious targets and timetables for emissions reduction, in line with developed country pledges at Copenhagen and for some Kyoto commitments. Most provinces have been successful in pursuing these targets up to 2012, employing a range of strategies that reflect the structure of the international climate regime. This success is largely driven by efforts in the electricity sector. For all provinces, the results from efforts in the transportation sector are more sobering; despite federal and provincial policies, transportation emissions will rise in aggregate. Achieving the deeper cuts required to meet long term mitigation goals (e.g. 2050 targets) will be difficult without better results for this large contributor to emissions. Alberta is somewhat of an outlier, as both its approach to target setting and mitigation fall outside the norms for developed parties in the international regime. Its market mechanism for curbing emissions is also both relatively weak and inconsistent with the form of emissions trading schemes in the international regime. Unfortunately, the projected level of emissions from development of Alberta's oil sands means that gains by other provinces will be completely offset, unless its investments in CCS produce even better results than the province projects. The provincial review of mitigation ambition and action illustrates that it is difficult to characterize a "Canadian" approach to incorporating the international climate regime into domestic law. Provinces' mitigation actions appear to be driven by a combination of normative commitments, coordination efforts, and strategic economic concerns, all influenced by the international regime.

Mitigation is not the only imperative under the international climate regime, although perhaps the most critical for advancing the objective of climate stabilization. Adaptation has taken on increased importance for the provinces, as it has in the international regime. Most provinces have stand-alone adaptation plans, although some have not been updated recently.[209] While each province takes a different approach to adaptation, reflective of differing circumstances and concerns, there are common features to adaptation planning and provinces are increasingly engaged in collaborative regional adaptation planning. An important common element of provincial adaptation planning is the identification of climate change outcomes and associated risks. The high costs of recent extreme weather events has

[209] National Communication 6, *supra* note 97 at 125. The Atlantic provinces have a joint adaptation strategy dating from 2008, and Alberta released its adaptation strategy in 2009. Provinces without stand-alone strategies address climate change adaptation in other ways, e.g. in general climate change plans, or within existing resource / environmental management schemes.

highlighted the need for risk assessment, particularly in light of IPCC 5's conclusion that climate change is inevitable and such events will be more likely.[210] The generation of impact planning and assessment tools is part of this aspect of adaptation strategy.[211] Collaborative research involving the provinces and federal government also informs this dimension of adaptation planning.[212] Adaptation planning and assessment involves multiple dimensions, including: assessment of human impacts (e.g. health, resilience, well-being of communities), resilience and adaptation of economic activity, infrastructure considerations, and vulnerability and adaptation in ecological systems.[213] A common theme across provincial strategies is the "mainstreaming" or integration of climate change adaptation into decision-making processes.[214] Finally, plans point to informed actions to support communities and address climate change adaptation requirements.

Individually and collectively, the provinces appear to have moved in step with the international regime's enhanced focus on adaptation. The work to generate and share relevant information on climate change impacts and risks, mainstreaming of climate change considerations into decision-making, and assessment of vulnerability of communities and ecosystems all conform to international adaptation norms. The push toward an increased focus on adaptation has been supported by the international climate regime's information generation. The increased scientific certainty and specificity about the potential effects of climate change from the work of the IPCC have helped spur confidence in the need for adaptation planning.[215] The international regime's inventory and reporting mechanisms have made the growing emissions gap manifest, further underlining the likelihood of significant, unavoidable effects from climate change.

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[210] *Ibid* at 121 (discussion of risk from extreme weather and associated costs, including examples of flooding in Toronto and Alberta in June 2013).

[211] *Ibid* at 126, discussing as an example use of mapping software to incorporate predicted regional climate effects for B.C. in planning. See also a discussion on the use of "agro-climate" mapping tool to assist farming sector in adaptation decision-making in Quebec (*ibid* at 133). See also discussion of various climate change adaptation assessment tools, for use by various decision-makers, including municipalities, First Nations who may lack resources and capacity for developing them independently (*ibid* at 123).

[212] *Ibid* at 125, discussing role of federal research and knowledge generation to support adaptation planning. See also a discussion of Manitoba's adaptation strategy, work toward shared understanding of climate risks, and collaboration (*ibid* at 126), and a discussion of the Regional Adaptation Collaborative program (*ibid* at 127).

[213] *Ibid* at 125-126. These features can be identified in various provincial strategies, e.g. Quebec, the Territories, B.C.

[214] *Ibid*. See e.g. adaptation plan for Quebec (integrating adaptation into new legislation and policy), the Territories (mainstreaming adaptation into government operations and decision-making).

[215] See e.g. Quebec Action Plan 2013, *supra* note 146 at 3 (IPCC and science behind anticipated impacts in Quebec, need for action).

All provinces have responded to climate change with increased generation of information about emissions, impacts, and mitigation and adaptation responses. Canada's provinces and territories all participate in the Climate Registry, a continental, sub-national initiative to develop and promote a common reporting system.[216] Provincial participation in regional schemes, such as the Western Climate Initiative, also promotes more robust and comparable collection of provincial climate change data. Provincial GHG inventories and initiatives are also included in Canada's National Communications under the FCCC, incorporating estimated impacts for policies that have been implemented. These developments promote access to information on inventories of emissions and the effect of measures by province and sector.[217] At a provincial level, there is increased transparency and rigour in the communication of climate change information. Provinces also increasingly engage the public in climate change policy-making, and through education and outreach encourage individuals to undertake voluntary action to combat climate change.[218] These developments also reflect the emerging norms of the international climate regime, particularly the move toward more transparent and robust communication of climate change mitigation actions and their effects, benchmarking progress toward quantified goals.

An examination of climate law and policy at the provincial level illustrates the complexity of the manner in which international law is "taken up" domestically. Some elements of the international climate regime are reflected in the actions of almost all provinces – such as the adoption of quantified emissions reduction targets and timetables. However, the precise nature of these implemented commitments varies substantially across provinces. While all provinces have undertaken mitigation actions that conform to the suggested range of policy choices in the international regime, the particular set of policies and the ambition of mitigation targets vary considerably across provinces. Similarly, provinces display significant variation in the extent to which they employ market mechanisms in their climate change strategy, as opposed to command and control regulation, or investment in alternative technology that will (hopefully) lead to favourable climate outcomes. The generality and flexibility of the FCCC obligations in particular generally permits and even encourages this range of outcomes. However, in light of both Canada's Copenhagen pledge and an emerging consensus that mitigation actions must be strengthened, the failure of some provinces to achieve any emissions reductions leaves them outside the range of permitted climate policy under the international regime. This lack of "effectiveness" of international law might suggest that it is not important to domestic

[216] National Communication 6, *supra* note 97 at 64.

[217] *Ibid* at 208-229.

[218] *Ibid* at 199-200. Development of provincial climate change plans also involves broad based consultation, including involvement of the public.

action. However, the review of provincial law and policy suggests that even in these provinces, governments are motivated to take action to try and conform in some way to the norms from the international regime. This is not entirely surprising, as the international climate regime increasingly provides a benchmark against which behaviour can be readily measured and normatively judged, leading to pressure from extra-legal sources. While the incorporation of international climate law and its norms is not uniform across provinces, it is universally relevant to provincial climate law and policy.

CONCLUSION

At one time international law's effectiveness was judged primarily in relation to its formal applicability to states and the strength of its internal legal mechanisms for enforcement. Theorists have come to have more complex theories of its influence and scholars have argued that international law can become domestically influential through various channels. States may be influenced to take action based on the implications of international law for preserving their own interests, and international law can help shape collective state action by facilitating international coordination.[219] International law is also thought to provide a normative framework that can induce states to comply, playing a role in constructing the values that states use to judge the legitimacy of their policies.[220] Recently, scholars have suggested that international law can become influential in a domestic setting through its influence on public opinion. The existence of an international obligation helps to influence the way that individuals assess state behaviour, with individuals more receptive to actions that bring states in line with international commitments.[221] Individuals may be informed about international law and its implied requirements by becoming aware of the actions of geographically and culturally proximate states. In this way international norms can spread through effects on broader public opinion and corresponding pressure for government to conform to international law.[222] The theory of international law's influence on state decision-making is complex and can involve diffuse but powerful effects. The reality for many states, including Canada, is that this theory can be applied at a sub-national level, when jurisdiction to take domestic actions to implement international law is held by multiple actors within the state.

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[219] See e.g. Goldsmith & Posner, *supra* note 7.

[220] See e.g. Hathaway & Lavinbuk, *supra* note 8.

[221] See e.g. Beth A Simmons, *Mobilizing for Human Rights: International Law in Domestic Politics* (New York: Cambridge University Press, 2009); James D Fearon, "Domestic Political Audiences and the Escalation of International Disputes" (1994) 88:3 The American Political Science Review 577; Geoffrey PR Wallace, "International Law and Public Attitudes Toward Torture: An Experimental Study" (2013) 67 International Organization 105; Chilton, *supra* note 12.

[222] See e.g. Linos, *supra* note 10.

This theory suggests that we should look beyond the formal structure of the international regime to understand how it may influence government behaviour in Canada. The review of federal and provincial climate law and policy illustrates the complex interaction of the forces producing the domestic influence of international law, and the diversity of policy outcomes supported. In a number of provinces, both provincial economic interests and normative commitments by the public appear to influence climate policy, pushing toward more significant uptake of international climate law and norms. In other provinces, notably Alberta, an interest-based approach appears to drive the province's engagement with international climate law, urging a more minimalist and resistant approach. Across the actions of the Canadian federal and provincial governments, the influence of the international regime can be traced through: more pervasive and robust generation and reporting of climate change information; increased prominence of GHG emissions targets and timetables; increased use of market mechanisms with potential for integration into international / global schemes; focus on specific sectors for GHG mitigation efforts; increasingly cooperative and coordinated GHG mitigation actions; and an increased priority for adaptation. Many of these actions can be explained by more traditional theories of international law and international relations, and particularly the "threat" of economic repercussions if key markets such as the U.S. and E.U. link trade policy to climate change action. However, the role of the international climate regime in shaping public perceptions of the threat posed by climate change and the corresponding obligation on governments to take action should not be lightly dismissed.

Recent public opinion research suggests that Canadians perceive climate change as a real threat.[223] Independent research suggests that Canadians also believe that climate change should be a top priority for the federal government, and favour Canada's participation in an international treaty to limit greenhouse gas emissions.[224] A 2013 Angus Reid poll shows 60% of Canadians favour acting to protect the environment, even if it has negative consequences for economic growth.[225] However, the poll also shows varying regional belief in the existence of anthropogenic climate change, with significantly lower support in Alberta (42%) and Saskatchewan/Manitoba (49%) than in British Columbia (57%), Ontario (60%), Quebec (62%), and the Atlantic provinces (68%). This collection of opinion data suggests that while Canadian public opinion may put pressure on governments to act

[223] In a 2013 opinion poll conducted by the Pew center, 54% of Canadians polled indicated global climate change was a threat to the country, putting it at the top of all tested items, which included international financial instability, Islamist extremists, and Iran's nuclear program, among other items. See "Climate Change: Key Data Points from Pew Research" (27 January 2014), online: Pew Research Center <http://www.pewresearch.org>.

[224] See discussion of poll results in McCarthy & Blackwell, *supra* note 100.

[225] See Angus Reid 2013, *supra* note 152.

to address climate change, it is likely to vary in force, depending on the region in question. While the polling research does not directly tackle the question of whether international law influences the way individuals think about government action, it is plausible that government failure to meet Canada's commitments under international law negatively influences public opinion. The review of provincial climate change policy does indicate stronger action in provinces with majority belief in the threat of anthropogenic climate change.

The willingness of a number of Canada's provinces to take action on climate change, despite a lack of leadership at the federal level, suggests that it is politically astute to conform to basic international climate norms in many parts of the country. While many provincial climate plans stress the economic case for taking action, there is also a strong moral dimension to the choice to act to reduce emissions. The effects of climate change are already beginning to appear in many regions, reinforcing the consequences of failure to take action. Additionally, there is a risk that failure to act consistently with international norms, particularly mitigation obligations, can be deployed to mobilize public opinion against Canada in other jurisdictions. Recent developments in the U.S. have seen environmental groups, individuals and even cities taking action to block the shipment of Alberta's oil sands production through the U.S., potentially frustrating access to key markets.[226] In a similar vein, environmentalists and a group of Nobel Laureates have lobbied the E.U. to classify oilsands crude oil as "dirty" under its Fuel Directive relative to other crudes, because of its negative implications for GHG emissions and potential impact on climate change.[227] The international climate regime provides key normative benchmarks against which Canada's actions can be judged. As such, the structure of this regime is likely to continue to be an important driver of climate law and policy in Canada.

[226] For example, see the US National Wildlife Federation's arguments against approval of Keystone, primarily based on its contribution to global climate change and status as a "dirty" fuel, at: <http://www.nwf.org/What-We-Do/Energy-and-Climate/Drilling-and-Mining/Tar-Sands/Keystone-XL-Pipeline.aspx.>. To similar effect see David Biello, "How Much Will Tar Sands Oil Add to Global Warming?" *Scientific American* (January 23, 2013), available online: <http://www.scientificamerican.com>. See also "South Portland, Maine, Passes Oilsands Moratorium", *The Huffington Post Canada* (17 December 2013) online: TheHuffingtonPost.com <http://www.huffingtonpost.ca> (this would block a different access route to markets for oilsands production).

[227] See e.g. Lewis, *supra* note 163.