Essays on the Law and Politics of Canada's Climate Change Policy

by

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ABSTRACT

The purpose of this thesis is to better understand the law and politics of Canada's ongoing failure to reduce its greenhouse gas emissions and transition toward socio-ecological sustainability in the post-Paris era. To do so, I attempt to peer closely into the "black box" of climate change law and policy in Canada to understand the root causes of Canada's inaction in domestic and international context. I argue that Canadian climate law and policy inaction is the result of regulatory capture. Regulatory capture is at once the process and the effect of regulated entities and entire industries systematically redirecting regulation away from the public interest and toward the private, special interests of regulated industries and firms themselves – in respect of Canadian climate policy, the oil and gas industry and other carbon-intensive industries.

The thesis is organized into two Parts, each comprised of three chapters. Part I examines the "carbon politics" that underlie and animate Canada's climate and sustainability laws and policies. In these chapters I also argue for an alternative approach to climate lawmaking and policymaking in Canada; chapters one and two set the stage for a fully developed alternative model, which is set out in chapter three.

Part II of the thesis extends the model developed in Part I by critically examining Canadian climate and sustainability laws – legislation, regulations, and jurisprudence – through the conceptual lens of carbon politics and capture. I argue for a critical legal pluralist approach that emphasizes the need for greater public participation in bottom-up, polycentric environmental governance.

This thesis fills three critical gaps in the Canadian environmental law and policy literature. First, it systematically examines Canadian climate change and sustainability law and policy during the important initial phase (2015-2020) of the Paris Agreement, and offers an account of its ineffectiveness during this time period. Second, it adopts a dual conceptual approach that examines the normative pre-commitments and political priorities underlying Canadian climate change and sustainability laws while also attending to the legal dimensions of climate change and sustainability politics, seeking throughout to explode the false, formalist law-versus-politics dichotomy. Third, it focuses not only on the root causes of Canadian inaction and ineffectiveness in respect of climate change and sustainability, but it also prioritizes the exploration of an alternative and potentially promising approach to generating public-interest climate change and sustainability policies capable of enhancing socio-ecological resilience.

PREFACE

Earlier versions of each of the chapters of this thesis have been previously published. An earlier version of chapter one was published as Jason MacLean, "Will We Ever Have Paris? Canada's Climate Change Policy and Federalism 3.0" (2018) 55:4 Atla L Rev 889. An earlier version of chapter two was published as Jason MacLean, "Paris *and* Pipelines? Canada's Climate Policy Puzzle" (2018) 32:1 Envtl L & Prac 47. An earlier version of chapter three was published as Jason MacLean, "Regulatory Capture and the Role of Academics in Public Policymaking: Lessons from Canada's Environmental Regulatory Review Process" (2019) 52:2 UBC L Rev 489. An earlier version of chapter four was published as Jason MacLean, "The Crude Politics of Carbon Pricing, Pipelines, and Environmental Assessment" (2019) 70 UNBLJ 129. An earlier version of chapter five was published as Jason MacLean, "Climate Change, Constitutions, and Courts: The *Reference re Greenhouse Gas Pollution Pricing Act* and Beyond" (2019) 82 Sask L Rev 147. An earlier version of chapter six was published as Jason MacLean, "You Say You Want an Environmental Rights Revolution? Try Changing Canadians' Minds Instead (of the *Charter*)" (2018) 49:1 Ott L Rev 183.

In the Introduction below, I describe how I have revised the earlier published versions of these chapters for the purposes of this thesis.

ACKNOWLEDGEMENTS

In researching and writing this thesis I have accumulated a number of debts, both professional and personal. I would like to thank the members of my thesis committee at the University of Alberta, including Cam Jefferies, Moin Yahya, James Muir, and David Percy, as well as Matthew Lewans in his capacity as Associate Dean of Graduate Studies.

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I would also like to thank Nathalie Chalifour for her exemplary scholarship, unparalleled professional integrity, and generous personal friendship, encouragement, and support.

I owe a special debt of gratitude to Lynda Collins, whose wonderful work I at once admire and respectfully take issue with in the following pages. Lynda unfailingly responds to critical engagement with her work with the enthusiasm and open mind of a true scholar.

On a more personal note, I would like to thank Michel Bédard, a truly brilliant academic and an even better friend. Through his example Michel kept me on track and held me accountable throughout the completion of this project. Thank you, my friend.

Finally, in an acknowledgement that entirely effaces the boundary between the personal and the professional, I dedicate this thesis to the memory of Rod Macdonald, who more than anyone else made it possible in the first place.

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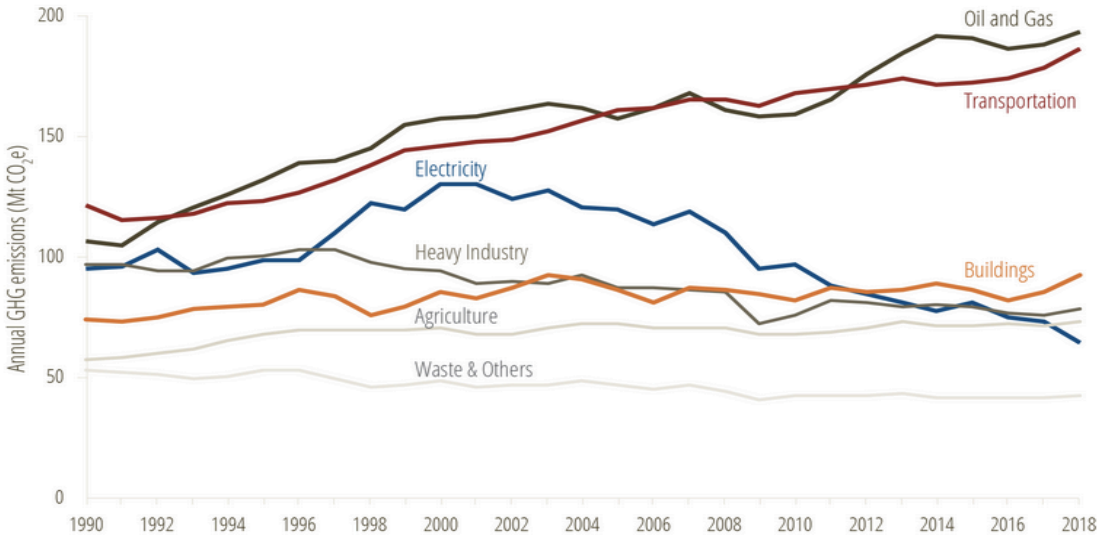
INTRODUCTION

In this thesis I examine the law and politics of Canada's ongoing failure to reduce its greenhouse gas (GHG) emissions and transition toward socio-ecological sustainability. Canada's GHG emissions increased by two percent from 2017 to 2018.[1] In order to meet its target under the Paris Agreement of reducing its GHG emissions by 30 percent from 2005 levels by 2030, Canada needs to reduce its emissions by 22 million tonnes (Mt) each year, the equivalent of taking 4.8 million cars of the road.[2] Canada's GHG emissions increased in every economic sector except electricity (see Fig. 1, *below*).

Fig. 1. Canadian GHG emissions trends by economic sector, 1990-2018[3]

[1] Government of Canada, "Canada's official greenhouse gas inventory" (15 April 2020), online: <https://www.canada.ca/en/environment-climate-change/services/climate-change/greenhouse-gas-emissions/inventory.html>.
[2] Bora Plumptre, "National emissions numbers underscore need to invest in clean economy: What the newest National Inventory Report tells us about Canada's growing carbon emissions" (23 April 2020), *Pembina Institute* (blog), online: <https://www.pembina.org/blog/national-emissions-numbers-underscore-need-invest-clean-economy> [Plumptre, "National emissions numbers"]. See also Stockholm Environment Institute et al, *The Production Gap: The discrepancy between countries' planned fossil fuel production levels consistent with limiting warming to 1.5ºC or 2ºC* (2019), online: <http://productiongap.org/> at 36.
[3] Plumptre, "National emissions numbers", *supra* note 2.



Canadian oil-and-gas-sector emissions reached a record high in 2018, primarily from increased production from the oil sands, where increased *in-situ* production and upgrading continue to outpace gains achieved through lower per-barrel emissions intensities.[4] The oil sands are the largest and fastest-growing source of GHG emissions in Canada.[5] Technological innovation in respect of GHG-emissions reductions remains unable to offset GHG emissions resulting from increased production.[6] The gap between rising oil sands emissions and Canada's climate commitments under the Paris Agreement continues to grow.[7] According to the Pembina Institute, "[t]here's no sugarcoating the story this data tells. The decarbonization of Canada has a long way to go."[8]

[4] *Ibid.*
[5] Benjamin Israel et al, *The oilsands in a carbon-constrained Canada: The collision course between overall emissions and national climate commitments* (Calgary, AB: The Pembina Institute, 2020), online: <https://www.pembina.org/pub/oilsands-carbon-constrained-canada> at 41.
[6] Plumptre, "National emissions numbers", *supra* note 2.
[7] Israel et al, *supra* note 5..
[8] Plumptre, "National emissions numbers", *supra* note 2.

In fact, Canada is going in the wrong direction. According to comparative international data compiled by the environmental nongovernmental organizations Oil Change International and Friends of the Earth U.S., since the adoption of the UN Paris Agreement on climate change in 2015 Canada has provided, through the Crown corporation Export Development Canada alone, at least US$10 billion per year in public financing to the oil and gas sector. This represents the highest level of per capita financing to the oil and gas sector in the G20.[9]

Such significant public financing is but one source of Canada's subsidization of the oil and gas sector. The International Monetary Fund, which regularly measures global post-tax fossil fuel subsidies, estimates that Canada provided US$43 billion in subsidies to the oil and gas sector in 2015 alone.[10] This figure is orders of magnitude larger than Canada's support of clean, renewable energy (see Table 1, *below*). According to the data compiled by Oil Change International and Friends of the Earth U.S., from 2016 to 2018 Canada provided an annual average of US$203 million to clean renewable energy production.[11] For the G20 as a whole, export credit agencies provided nearly 14 times more public

[9] Oil Change International & Friends of the Earth U.S., *Still Digging: G20 Governments Continue to Finance the Climate Crisis* (27 May 2020), online: <http://priceofoil.org/2020/05/27/g20-still-digging/>.
[10] David Coady et al, "Global Fossil Fuel Subsidies Remain Large: An Update Based on Country-Level Estimates" (2019) IMF Working Paper No 19/89, online: <https://www.imf.org/en/Publications/WP/Issues/2019/05/02/Global-Fossil-Fuel-Subsidies-Remain-Large-An-Update-Based-on-Country-Level-Estimates-46509>. Post-tax measures of fossil fuel subsidies account for negative externalities, including the social cost of carbon.
[11] Oil Change International and Friends of the Earth U.S., *supra* note 9 at 16, table 2. Although finding commensurate measures is exceedingly difficult, this appears to align with Canada's own estimates. Natural Resources Canada reports that over the period of 2011 to 2015, federal-provincial investment in renewable energy research and development totaled CDN$1.39 billion. Over the same period, total national investment in fossil fuel research and development was, according to Natural Resources Canada, CDN$2.26 billion. See Government of Canada, "Energy and the economy" (26 May 2020), online: <https://www.nrcan.gc.ca/science-data/data-analysis/energy-data-analysis/energy-and-economy/20062>.

financing for fossil fuel production than for clean renewable energy production (US$40.1 billion to US$2.9 billion).[12]

Table 1. Annual average of total public financing for energy, select G20 countries, 2013-2015 versus 2016-2018 (USD millions)[13]

	Oil and Gas		Clean Renewable	
	2013-2015	**2016-2018**	**2013-206**	**2016-2018**
Canada	8,959	10,564	159	203
China	10,974	20,247	1,042	486
USA	3,361	740	1,290	713
Australia	87	2	519	1,202

Data compiled by the International Energy Agency (IEA) and the Organization for Economic Co-operation and Development (OECD) confirm this trend. According to the IEA and OECD, governments across 77 countries provided $US478 billion to the fossil fuel sector in 2019.[14] In 44 advanced and emerging economies in the OECD and G20, direct and indirect subsidization of the fossil fuel sector increased by 38% from 2018 to 2019.[15] The IEA and OECD observe that several governmental measures supporting the production and consumption of fossil fuels remain in place in Canada.[16]

[12] Oil Change International and Friends of the Earth U.S., *supra* note 9 at 5.
[13] Adapted from *ibid* at 16, table 2. Japan led G20 countries in clean renewable financing during the 2013-2015 period (US$2.8 billion per year). Germany led during the 2016-2018 period (US$3.1 billion per year).
[14] Organization for Economic Co-operation and Development, "Governments should use Covid-19 recovery efforts as an opportunity to phase our support for fossil fuels, say OECD and IEA" (5 June 2020), online: <http://www.oecd.org/environment/governments-should-use-covid-19-recovery-efforts-as-an-opportunity-to-phase-out-support-for-fossil-fuels-say-oecd-and-iea.htm>.
[15] *Ibid.*
[16] Organization for Economic Co-operation and Development, "Fossil Fuel Support Country Note: Canada" (April 2019), online: <https://www.oecd.org/fossil-fuels/data/>.

In an astonishing but telling reaction to the IEA and OECD's subsidy data and analysis, Alberta premier Jason Kenney referred to fossil fuel subsidies as a "myth", and asserted that "[i]n the past there were policies designed to incentivize economic activity in oil and gas, but that's true of many industries. There's simply no subsidy program here."[17] I will return to this reaction below.

Fossil fuel subsidies are perverse public investments in pollution and climate change.[18] Fossil fuel subsidies delay and jeopardize low-to-zero-carbon transitions, both materially and socio-politically.[19] Materially, subsidies are often directed toward new capital investment (*e.g.,* in Canada, the Trans Mountain pipeline expansion project), which bolsters project-investment metrics and prospects (*i.e.,* breakeven estimates), and thereby leads to increases in oil drilling above and beyond the level that otherwise would have been expected.[20] This, in turn, locks in higher fossil fuel production, higher fossil fuel consumption, and higher GHG emissions.[21] Canada's growth estimates for oil and gas production (see Fig. 2, *below*) bear out this reasoning.

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[17] Quoted in Emma Graney, "OECD and IEA call for an end to fossil fuel sector subsidies", *The Globe and Mail* (6 June 2020), online: https://www.theglobeandmail.com/business/article-oecd-and-iea-call-for-an-end-to-fossil-fuel-industry-subsidies/> [Graney, OECD and IEA call for end of subsidies"].

[18] In the Canadian context see e.g. Jason MacLean & Catherine Potvin, "At the ballot box, cast a vote for climate change innovation and investment", *The Conversation* (18 October 2019), online: <https://theconversation.com/at-the-ballot-box-cast-a-vote-for-climate-change-innovation-and-investment-125411>.

[19] Peter Erickson et al, "Why fossil fuel producer subsidies matter" (2020) 578 Nature E1 [Erickson et al, "Fossil fuel subsidies"]. See also Matthew H Goldberg et al, "Oil and gas companies invest in legislators that vote against the environment" (2020) 117:10 Proc Natl Acad Sci 5111; GB Asheim et al, "The case for a supply-side climate policy" (2019) 365 Science 325.

[20] *Ibid.*

[21] *Ibid.*

Fig. 2. Canadian government outlooks for oil and gas production, 2020-2035[22]

Socio-politically, fossil fuel subsidies play a more insidious but no less significant role in delaying low-to-zero-carbon transitions. The additional firm revenue flowing from government subsidies can be used, not only to increase new production, but also for product promotion, political activities, and other efforts (*e.g.,* public relations and community engagement) designed to entrench the oil and gas industry's incumbent status.[23] Moreover, as Peter Erickson and his colleagues argue, fossil fuel subsidies "also have a symbolic effect, in that they communicate the normative position that this industry and its activities are beneficial for society as a whole and, therefore, should be encouraged."[24]

Finally, fossil fuel subsidies beget more fossil fuel subsidies by creating beneficiaries that come to rely on them and robustly demand and advocate for their continuation.[25] This

[22] Adapted from Stockholm Environment Institute et al, *supra* note 2 at 36, Fig 4.7, based on data previously compiled by the National Energy Board.
[23] *Ibid.*
[24] *Ibid* at E2.
[25] *Ibid.* The most recent Canadian example as of this writing is the Canadian Association of Petroleum Producers' (CAAP) demand for an immediate 100% federal tax deduction for capital investments in the oil

makes it appreciably more difficult to enact strong, science-based climate laws.[26] Rapid low-to-zero-carbon transitions in line with the ambition of the Paris Agreement are dependent on dramatically reduced fossil fuel production.[27] Fossil fuel subsidies impede and threaten to undermine policies, laws, and regulations designed to rapidly reduce GHG emissions.[28]

Canada's increasing subsidization of the oil and gas sector following the adoption and subsequent ratification of the Paris Agreement may appear surprising, but it is not. It is entirely consistent with Canada's energy and environmental policymaking over the past 30 years. During that period, Canada's climate policy can be characterized only as a failure. In 1990, Canada emitted 602 megatonnes of CO_2e; by 2005, the year Canada selected as the baseline for its 2030 emissions-reduction commitment under the Paris Agreement, emissions were 730 megatonnes of CO_2e; in 2018, the latest year for which emissions data are available as of this writing, emissions were 729 megatonnes of CO_2e, up from 716 in 2017 and 708 in 2016.[29]

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and gas sector. See Emma Graney, "Oil patch pushes Ottawa for tax breaks on capital investments", *The Globe and Mail* (5 June 2020), online: <https://www.theglobeandmail.com/business/article-canadian-association-of-petroleum-producers-pushes-ottawa-for-tax/>.

[26] See e.g. Kyle C Meng & Ashwin Rode, "The social cost of lobbying over climate policy" (2019) 9 Nat Clim Change 472. In the Canadian context, see Jason MacLean, "Striking at the Root Problem of Canadian Environmental Law: Identifying and Escaping Regulatory Capture" (2016) 29 J Envtl L & Prac 111 [MacLean, "Striking at the Root Problem"].

[27] Joeri Rogelj et al, "Mitigation Pathways Compatible with 1.5 ºC in the Context of Sustainable Development", ch 2 in *Global Warming of 1.5°C: An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty* (Geneva, CH: IPCC, 2018).

[28] Erickson et al, "Fossil fuel subsidies", *supra* note 19.

[29] Environment and Climate Change Canada, "Canadian Environmental Sustainability Indicators: Greenhouse gas emissions" (2020), online: <https://www.canada.ca/en/environment-climate-change/services/environmental-indicators/greenhouse-gas-emissions.html> at 17, Annex A, Table A.1.

Douglas Macdonald provides a schematic history of Canada's failed climate policymaking (if successful energy policymaking, independent of climate concerns).[30] Macdonald's history includes five phases: (1) Canada's National Energy Policy (1973-1981); (2) Canada's first national climate policy process (1990-1997, undermined by Alberta's effective "veto" and weak federal leadership); (3) Canada's second national climate policy process (1998-2002, which Alberta exited, leading to the federal government's unilateral approach, including ratification of the Kyoto protocol); (4) The Canadian Energy Strategy, marked by the federal government's exit, and Alberta's aggressive pursuit of new pipelines); and (5) the Pan-Canadian Framework on Climate Change and Clean Growth (2015-2019, undermined by Saskatchewan's effective "veto" and constitutional challenge, which was soon followed by Alberta, New Brunswick, Manitoba, and Ontario).[31]

For Macdonald, three key processes dominated these five phases, which he treats as climate-and-energy-policy case studies, and account for Canada's ongoing failure to enact strong climate policy: (1) the west-east political divide, including "western alienation"; (2) governmental disputes and demurrals regarding the allocation and the timing of GHG-

[30] Douglas Macdonald, *Hydro Province, Carbon Province: The Challenge of Canadian Energy and Climate Federalism* (Toronto: University of Toronto Press, 2020). The characterization of Canadian climate policy as a failure is the predominant, if not universal, scholarly characterization in Canada. See e.g. Mark Jaccard, *The Citizen's Guide to Climate Success: Overcoming Myths that Hinder Progress* (New York: Cambridge University Press, 2020); Robert MacNeil, *Thirty Years of Failure: Understanding Canadian Climate Policy* (Halifax, NS: Fernwood Publishing, 2019); Donald Gutstein, *The Big Stall: How Big Oil and Think Tanks Are Blocking Action on Climate Change in Canada* (Toronto: James Lorimer & Company, 2018); Ian Urquhart, *Costly Fix: Power, Politics, and Nature in the Tar Sands* (Toronto: University of Toronto Press, 2018). It is also the core allegation of two ongoing legal challenges commenced by Canadian youth plaintiffs against the federal government: *Environnement Jeunesse v Attorney General of Canada,* case file no 500-06-000955-183 (QC Sup Ct); *La Rose v Her Majesty the Queen,* court file no T-1750-19 (FC). As of this writing, the Superior Court of Quebec denied class authorization to the youth plaintiffs (under 35 years of age) in *Environnement Jeunesse*, and the plaintiffs have appealed from that ruling. The *La Rose* class action is in the early, exchange-of-pleadings stage.

[31] *Ibid* at chapters 5, 6, 7, 8, and 9, respectively. Note that Macdonald uses the term "veto," not in the formal, legal sense, but rather in a more practical, political sense.

emissions reductions; and (3) the federal-provincial government process, which Macdonald argues is the most significant obstacle to – but only means of – strong climate policymaking in Canada.[32] Macdonald's analysis focuses almost exclusively on governments, and government-level decisionmaking, conflict (especially federal-provincial conflict), and leadership in respect of energy and climate change policy.

Near the end of his account, however, Macdonald also alludes to the oil and gas industry's influence on Canadian energy and climate policy. He suggests that his case studies show "that in any future process, the oil industry will be seeking to exert influence."[33] Macdonald's prediction is at once indubitably accurate as well as a gross understatement.[34]

Nevertheless, Macdonald's observation adds to a growing scholarly recognition of the role played by the oil and gas industry – and in some jurisdictions, the coal industry – in shaping energy and climate policies throughout the world, including federal states like Australia and the United States.[35] In Australia, where the coal industry is the most powerful of the country's fossil fuel industries, it and other "carbon-dependent" business interests have

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[32] *Ibid.* For a similar analysis that examines the *form* of government but not the processes underlying governmental decisionmaking, which remains the dominant approach to analyzing environmental law and policy in Canada, see e.g. Sari Graben & Eric Biber, "Presidents, Parliaments, and Legal Change: Quantifying the Effects of Political Systems in Comparative Environmental Law" (2017) 35 Virginia Environmental Law Journal 357. Graben and Biber note (*Ibid,* at n 130) that a "general trend in Canada has been to develop environmental policy in closed bargaining between government and business interests", but they do not explore this crucially important fact.

[33] *Ibid* at 243 (electronic version).

[34] Compare to Environmental Defence Canada, *The Single Biggest Barrier to Climate Action in Canada: The Oil and Gas Lobby* (2019), online: <https://environmentaldefence.ca/report/oil_barrier_climate_action_canada/>; see also Jason MacLean, "Striking at the Root Problem", *supra* note 26.

[35] See e.g. Matto Mildenberger, *Carbon Captured: How Business and Labor Control Climate Politics* (Cambridge, MA: The MIT Press, 2020); Leah Cardamore Stokes, *Short Circuiting Policy: Interest Groups and the Battle Over Clean Energy and Climate Policy in the American States* (New York: Oxford University Press, 2020).

effectively interceded over the last decade in the political process across different political parties (*e.g.,* both the Liberal and the Labor parties, through industrial union groups and business lobbies, respectively) to undermine efforts to regulate – and impose a price on – national carbon pollution.[36] While Australia's national government occasionally faces state-level pressure to strengthen its domestic climate policies, Australia remains among the world's worst performing jurisdictions on climate action.[37]

The recent 2019 federal election is a case in point. Because of increasingly intense wildfires, drought, and the risk of the Great Barrier Reef's destruction, the recent 2019 national election had been predicted to be Australia's "climate change election."[38] The election resulted, however, in the return of a conservative Liberal-National party coalition unequivocally supportive of expanded fossil fuel extraction and export, and hostile to national and international climate action. The Liberal-National coalition – made up of the centre-right Liberal Party, the anti-immigration party One Nation, and the coal-supporting United Australia Party – was buoyed not only by a surge of support from the coal-producing state of Queensland, but also from New South Wales, a comparatively more urban state characterized by stronger expressions of support for climate action.[39] The

[36] Mildenberger, *supra* note 35 at 196 (electronic version).
[37] See e.g. Jan Burck et al, *Climate Performance Index: Results 2020* (Bonn: Germanwatch, 2019), online: <www.climate-change-performance-index.org>, which ranked Australia last on national and international climate policy.
[38] See Damien Cave, "It Was Supposed to be Australia's Climate Change Election. What happened?", *The New York Times* (19 May 2019), online: <https://www.nytimes.com/2019/05/19/world/australia/election-climate-change.html>.
[39] *Ibid.* See also Adam Morton, "How Australia election will decide its role in climate change", *Nature* (16 May 2019), online: <https://www.nature.com/articles/d41586-019-01543-6>. Most recently as of this writing, the 128 councils comprising the state of New South Wales has called for a greater role for local government in climate change and biodiversity policy in conjunction with an independent statutory review of Australia's *Environment Protection and Biodiversity Conservation Act 1999*, which has been unevenly implemented since its enactment. See Megan Gorrey, "NSW councils urge reforms to 'challenging' national environmental laws", *The Sydney Morning Herald* (9 June 2020), online:

coalition succeeded in casting the putative costs of climate action as the central issue of the election's climate policy debate. The Liberal Party argued that the Labor Party's proposed climate policies would cost AUS$264 billion and result in the loss of 167,000 jobs.[40] The Labor Party strongly disputed these figures, to no avail.

Soon after the election, the Adani Carmichael coal mine project, which is located in Queensland and which will be, if ultimately completed, among the world's largest, received federal and state government authorization to proceed.[41] Industry influence played a leading role. According to former Australian Prime Minister Kevin Rudd, large mining companies exert day-to-day policy influence in Australia through close and easily accessible networks.[42]

Climate law and policy in the United States is similarly influenced and undermined by industry influence. Since 1990, when climate change first emerged on the international diplomatic stage, the US Congress has largely abdicated its lawmaking function in respect

<https://www.smh.com.au/national/nsw/nsw-councils-urge-reforms-to-challenging-national-environment-laws-20200607-p550c2.html>.

[40] *Ibid.*

[41] *Ibid.* See also "Australia approves controversial coal project", *BBC News* (13 June 2019), online: <https://www.bbc.com/news/world-australia-48618774>; Jeff Goodell, "The World's Most Insane Energy Project Moves Ahead", *Rolling Stone* (14 June 2019), online: <https://www.rollingstone.com/politics/politics-news/adani-mine-australia-climate-change-848315/>. The final government approval of the project was described as "an act of climate vandalism that represents everything that has gone wrong with politics in Australia": Paddy Manning, "Adani approved: Australia's governments can't cope with climate change", *The Monthly* (13 June 2019), online: <https://www.themonthly.com.au/today/paddy-manning/2019/13/2019/1560405239/adani-approved>.

[42] Christopher Knaus, "Mining firms worked to kill off climate action in Australia, says ex-PM", *The Guardian* (10 October 2019), online: <https://www.theguardian.com/environment/2019/oct/10/mining-firms-worked-kill-off-climate-action-australia-ex-pm-kevin-rudd>. For a systematic analysis of industry-government networks and influence in Australia, see Danielle Wood & Kate Griffiths, "Who's in the room? Access and influence in Australian politics" (2018) Grattan Institute Report No 2018-12, online: <https://grattan.edu.au/report/whos-in-the-room/>.

of environmental law, including climate change.[43] Moreover, when Congress does act in respect of the environment, it tends to do so through appropriation bills – omnibus budget bills that tend to run in the thousands of pages.[44] Appropriations legislation is typically characterized by a mix of special-interest riders attached to a regulatory agency's annual, supplemental, or emergency appropriations bill.[45] According to Richard Lazarus, appropriations legislation discourages democratic deliberation and results in narrowly cast, short-term, and piecemeal lawmaking.[46] Appropriations legislation thus precludes "the kind of comprehensive and increasingly coherent legislation that had been the hallmark of our nation's environmental laws."[47]

Notably, while environmentalists and industry, as well as both the Democratic and Republican political parties, have all sought to take advantage of the appropriations process, the rise of appropriations riders has skewed over time in favour of the weakening of pollution-control requirements.[48] The demand for and acquisition of appropriations riders is

> disproportionately generated by those concerned about the more immediate, short-term economic costs imposed by environmental protection requirements. These costs provide those seeking to relax environmental laws with a powerful, focused incentive to lobby for the passage of riders, extending to a willingness to offer financial campaign support to those in Congress who prove responsive to

[43] Richard J Lazarus, "Environmental Law at the Crossroads: Looking Back 25, Looking Forward 25" (2013) 2 Mich J Envtl & Admin L 267.
[44] Richard J Lazarus, "Congressional Descent: The Demise of Deliberative Democracy in Environmental Law" (2006) 94 Geo LJ 619.
[45] *Ibid* at 661.
[46] *Ibid* at 661-664.
[47] *Ibid* at 662.
[48] *Ibid* at 663-664.

> their concerns. The beneficiaries of environmental protection requirements are not similarly situated.[49]

Moreover, the rise and predominance of appropriations riders undermines not only environmental law and policy, but also democracy. Such legislation, according to an early critic of the practice, erodes "the very foundation of the democratic model of bicameral, tripartite government by limiting responsive representation that can only result from fully informed debate and decisionmaking."[50] The descent of US environmental law – and democratic lawmaking generally – has culminated in a largely homogenous anti-climate coalition whose core constituency is comprised of concentrated, carbon-dependent industry interests.[51]

These processes operate independently of federalism in the United States, as they do in both Australia and Canada, though in each country these processes are often strategically expressed in the terms of federalism. While the climate action of subnational actors – states and provinces – and nonstate actors are important and should be encouraged, the evidence

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[49] *Ibid* at 664. See also Richard J Lazarus, *The Making of Environmental Law* (Chicago: University of Chicago Press, 2004) at 24-28, 47. Climate-related lobbying data support this argument. See Robert J Brulle, "The climate lobby: a sectoral analysis of lobbying spending on climate change in the USA, 2000 to 2016" (2018) 149 Climatic Change 289.

[50] Sandra Beth Zellmer, "Sacrificing Legislative Integrity at the Altar of Appropriations Riders: A Constitutional Crisis" (1997) 21 Harv Envtl L Rev 457 at 510. Data from a survey of senior US Congressional staffers lends strong support for this argument, showing that on climate policy issues (among others), staffers mis-perceive their constituents' opinions and preferences and rely significantly on conservative and business interest groups for policy information: Alexander Hertel-Fernandez, Matto Mildenberger & Leah C Stokes, "Legislative Staff and Representation in Congress" (2019) 113:1 American Political Science Review 1.

[51] Mildenberger, *supra* note 35 at 158. According to Mildenberger, the prospects of US efforts to mitigate climate change "will depend, in large part, on whether this distribution of preferences empowers or weakens reformers' capacity to enact climate policies over the coming decade." See also Christian Downie, *Business Battles in the US Energy Sector: Lessons for a Clean Energy Transition* (New York: Routledge, 2019). Finally, it is important to note that this process of regulatory capture – explored in depth in this thesis – operates at the state level as well, as it does in Australia. See Stokes, *supra* note 35; see also Alexander Hertel-Fernandez, *How Conservative Activists, Big Businesses, and Wealthy Donors Reshaped the American States – and the Nation* (New York: Oxford University Press, 2019).

in Canada, Australia, and the United States is that subnational energy and climate policies are heterogeneous, and ultimately dependent on federal leadership and support.[52] Federal climate lawmaking and policymaking, in turn, remain very much a "black box."[53]

The aim of this thesis is to peer closely into the "black box" of climate law and policy in Canada to understand the root causes of Canada's climate inaction. I argue that Canadian climate law and policy is the result of regulatory capture, the process and the effect of regulated entities or entire industries systematically redirecting regulation away from the public interest and toward the private, special interests of regulated industries and firms themselves.[54] Regulatory capture is achieved (in part) by lobbying and the "revolving door" (see Box 1, *below*) between the public and private sectors, but throughout the essays comprising this thesis I will show that it involves much more than that. At its core, regulatory capture is about and is achieved through the shaping of information, norms, and the very policy imagination of what is possible and what is not.

Box 1. Canada's revolving door[55]

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[52] See e.g. Jean Galbraith, "Two Faces of Foreign Affairs Federalism and What They Mean for Climate Change Mitigation" (2018) 112 AJIL Unbound 274; Ann Carlson, "The Trump Administration's Assault on California's Global Climate Leadership" (2018) 112 AJIL Unbound 269; Cinnamon P Carlarne, "On Localism and the Persistent Power of the State" (2018) 112 AJIL Unbound 285; Michelle Wilde Anderson, "Resource Extraction" in Eric Klineberg, Caitlin Zaloom & Sharon Marcus, eds, *Antidemocracy in America: Truth, Power, and the Republic at Risk* (New York: Columbia University Press, 2019); Jason MacLean, "Rethinking the Role of Nonstate Actors in International Climate Governance" (2020) 116:1 Loy U Chi Intl L Rev 21.

[53] Mildenberger, *supra* note 35 at 2, 19. The origin of the phrase in the climate policy context is David G Victor, *Global Warming Gridlock: Creating More Effective Strategies for Protecting the Planet* (New York: Cambridge University Press, 2011) at 8.

[54] Daniel Carpenter & David A Moss, "Introduction" in Daniel Carpenter & David A Moss, eds, *Preventing Regulatory Capture: Special Interest Influence and How to Limit It* (New York: Cambridge University Press, 2014) at 13.

[55] This is just one recent and relevant example. Adapted from The Canadian Press, "Former Bank of Canada governor Stephen Poloz appointed to Enbridge board", *The Globe and Mail* (4 June 2020), online: <https://www.theglobeandmail.com/business/article-former-bank-of-canada-governor-stephen-poloz-appointed-to-enbridge/>.

Former Bank of Canada governor Stephen Poloz appointed to Enbridge board

The Canadian Press, June 4, 2020

Former Bank of Canada governor Stephen Poloz has been appointed to the board of directors at pipeline company Enbridge Inc.

Mr. Poloz retired as the head of the Canada's central bank on Tuesday.

Enbridge chair Greg Ebel says Mr. Poloz has extensive business and financial experience, as well as expertise in global economics and public policy.

Mr. Poloz took over as governor of the Bank of Canada in 2013 and served a seven-year term. Before leading the central bank, he was chief executive of Export Development Canada from 2011 to 2013.

In this thesis I argue that in Canada, the oil and gas industry and other carbon-intensive industries and their representatives have captured climate law and policy. They play an outsized and determinative role in shaping the information deemed relevant to environmental lawmaking and policymaking, and the imagination – a kind of oil-and-gas Overton window – of what is possible, what is thinkable, and what is preferable. Indeed, Alberta Premier Jason Kenney's dismissal in 2020 of the OECD's fossil fuel subsidies data, and his false equivalence of a formal subsidy programme and the otherwise undeniable provision of subsidies, is more than mere mendacity. It illustrates the ideological identification of the broad public interest with the private, special interests of the oil and gas sector in Canada.

This thesis is organized into two Parts, each comprised of three chapters. The three chapters of Part I examine the "carbon politics" that underlie and animate Canada's climate and sustainability laws and policies, and argue for an alternative approach to climate lawmaking and policymaking. The three chapters of Part II of the thesis extend the

approach developed in Part I by critically examining Canadian climate and sustainability laws – legislation, regulations, and jurisprudence – through the conceptual lens of carbon politics and capture, and argue for a critical legal pluralist approach that emphasizes the need for greater public participation in bottom-up, polycentric environmental governance.

The overarching approach to Canadian climate law and policy taken in this thesis is perhaps best described as "undisciplinary."[56] Undisciplinary climate change and sustainability research is primarily issue-driven, as opposed to discipline-driven or literature-driven, meaning that "undisciplinary" research is principally concerned with understanding and solving policy problems, and not (at least not necessarily) disciplinary disputes.[57]

In adopting an "undisciplinary" approach this thesis nonetheless engages with key academic arguments in the post-Paris Canadian climate law and policy literature. Chapter one confronts the persistent claim that federalism, or more precisely federal-provincial jurisdictional conflict and fragmentation, explains Canadian climate policy failures.[58]

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[56] John Robinson, "Being undisciplined: Transgressions and intersections in academia and beyond" (2008) 40:1 Futures 70.
[57] *Ibid* at 71-72.
[58] See e.g. Alistair R Lucas & Jenette Yearsley, "The Constitutionality of Federal Climate Change Legislation" (2011) 4 University of Calgary SPP Research Papers 15; Shi-Ling Hsu & Robin Elliot, "Regulating Greenhouse Gases in Canada: Constitutional and Policy Dimensions" (2009) 54 McGill LJ 463; Peter W Hogg, "Constitutional Authority Over Greenhouse Gas Emissions" (2009) 46 Atla L Rev 207; Nathalie J Chalifour, "Making Federalism Work for Climate Change – Canada's Division of Powers over Carbon Taxes" (2008) 22:2 NJCL 119; Nathalie J Chalifour, "The Constitutional Authority to Levy Carbon Taxes" in Thomas J Courchene & John Allan, eds, *Canada: The State of the Federation* (Montreal: McGill-Queens University Press, 2009) 177; Peter W Hogg, "A Question of Parliamentary Power: Criminal Law and the Control of Greenhouse Gas Emissions" (2008), online: C.D. Howe Institute <https://www.cdhowe.org/question-parliamentary-power-criminal-law-and-control-greenhouse-gas-emissions>; Stewart Elgie, "Kyoto, the Constitution and Carbon Trading: Waking a Sleeping BNA Bear (or Two)" (2007) 13 Rev Const Stud 67; Kai D Sheffield, "The Constitutionality of a Federal Emissions Trading Regime" (2014) 4:1 Western Journal of Legal Studies 1; Nigel D Bankes & Alistair R Lucas, "Kyoto, Constitutional Law and Alberta's Proposals" (2004) 42 Atla L Rev 355; Elizabeth Demarco et al, "Canadian Challenges in in Implementing the Kyoto Protocol: A Cause for Harmonization" (2004) 42 Atla L Rev 209; Philip Barton, "Economic Instruments and the Kyoto Protocol: Can Parliament Implement

Notably, while the Constitution itself is not an obstacle to effective pan-Canadian environmental legislation, it is often *perceived* as such.[59] More importantly, federalism is often *framed* as being just such an obstacle.[60] As a result, the pattern of federal-provincial dealings regarding the environment has shifted in form from disingenuous federal deference that calls for intergovernmental cooperation and harmonization [61] to disingenuous demands for provincial autonomy and federal deference to local subsidiarity, even when there is little or no credible local climate policy capable of attracting deference.[62] Building on this literature, I argue in chapter one that we must move beyond the analysis of doctrinal disputes and re-examine the normative commitments underlying federalism in order to properly understand both the role that it presently plays and the role that it can and should play in our climate law and politics.

In chapter two I engage with key economic and quasi-legal arguments against supply-side climate policy proposals, particularly proposals to phase-out oil sands production and impose a moratorium on adding new oil pipeline capacity in Canada.[63] Drawing on the

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Emissions Trading without Provincial Co-Operation?" (2002) 40 Atla L Rev 417; Kathryn Harrison, "Challenges and Opportunities in Canadian Climate Policy" in Steven Bernstein et al, eds, *A Globally Integrated Climate Policy for Canada* (Toronto: University of Toronto Press, 2008) 336 [Harrison, "Challenges and Opportunities"]; Chris Rolfe, *Turning Down the Heat: Emissions Trading and Canadian Implementation of the Kyoto Protocol* (Vancouver: West Coast Environmental Law Research Foundation, 1998); Joseph F Castrilli, "Legal Authority for Emissions Trading in Canada" in Elizabeth Atkinson, ed, *The Legislative Authority to Implement a Domestic Emissions Trading System* (Ottawa: National Round Table on the Environment and the Economy, 1999); and Steven Kennett, "Federal Environmental Jurisdiction After *Oldman*" (1992) 31 McGill LJ 180 at 187.

[59] Jason MacLean, Meinhard Doelle & Chris Tollefson, "Polyjural and Polycentric Sustainability Assessment: A Once-In-A-Generation Law Reform Opportunity" (2016) 30:1 J Envtl L & Prac 36.

[60] Harrison, "Challenges and Opportunities", *supra* note 58.

[61] Stepan Wood, Georgia Tanner & Benjamin J Richardson, "What Ever Happened to Canadian Environmental Law?" (2010) 37 Ecology LQ 981 at 1019.

[62] See e.g. Dwight Newman, "Federalism, Subsidiarity, and Carbon Taxes" (2019) 82:2 Sask L Rev 187 [Newman, "Federalism, Subsidiarity, and Carbon Taxes"].

[63] In Canada, the leading advocates of the argument *against* supply-side climate policies are the Alberta economists Trevor Tombe and Andrew Leach. See e.g. Trevor Tombe, "Policy, not pipelines, will determine if we meet our goals", *Maclean's* (2 December 2016), online:

work of political theorists Timothy Mitchell[64] and Laurie Adkin and her colleagues,[65] I argue that policy arguments against supply-side climate policy in Canada cannot be maintained on the grounds of economic efficiency or the law and politics of the Constitution. Rather, such arguments further illustrate the capture of the Canadian climate policy imagination by the oil and gas industry.

In chapter three I engage with the applied, policy-engaged academic literature on environmental law and regulatory reform in Canada[66] in order to develop a new model of climate law and policymaking that is capable not only of conceptualizing regulatory capture, but also *countering* it in the form of law and policy proposals that promote the

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<http://www.macleans.ca/economy/economicanalysis/policy-not-pipelines-will-determine-if-we-meet-our-goals/>; Trevor Tombe, "Put a price on emissions and let the chips fall where they may", *Maclean's* (3 October 2016), online: <http://www.macleans.ca/economy/economicanalysis/put-a-price-on-emissions-and-let-the-chips-fall-where-they-may/>; Andrew Leach, "The challenges ahead for Liberals' carbon plan", *The Globe and Mail* (3 October 2016), online: <http://www.theglobeandmail.com/opinion/the-challenges-ahead-for-liberals-carbon-plan/article32266670/>; Andrew Leach & Martin Olszynski, "Clearing the Air on Teck Frontier" (13 February 2020), *ABlawg.ca* (blog), online: <https://ablawg.ca/2020/02/13/clearing-the-air-on-teck-frontier-extended-ablawg-edition/>. On the ongoing obverse commitment to supply-side *economic* policy, see e.g. Max Fawcett, "Jason Kenney's government will live or die on supply-side economics", *The Globe and Mail* (3 July 2020), online: <https://www.theglobeandmail.com/opinion/article-jason-kenneys-government-will-live-or-die-on-supply-side-economics/>.

[64] Timothy Mitchell, "Carbon democracy" (2009) 38:3 Economy and Society 399; Timothy Mitchell, *Carbon Democracy: Political Power in the Age of Oil* (New York: Verso, 2011).

[65] Laurie E Adkin, ed, *First World Petro-Politics: The Political Ecology and Governance of Alberta* (Toronto: University of Toronto Press, 2016).

[66] See e.g. Sustainable Canada Dialogues, "Acting on Climate Change: Solutions from Canadian Scholars" (18 March 2015), online (pdf): <www.sustainablecanadadialogues.ca/files/PDF_DOCS/SDC_EN_30marchlr.pdf>; Mark Winfield, "A New Era of Environmental Governance in Canada: Better Discussions Regarding Infrastructure and Resource Development Projects" (May 2016), Metcalf Foundation Green Prosperity Papers, online (pdf): <metcalffoundation.com/stories/publications/a-new-era-of-environmental-governance-in-canada/>; Aerin L Jacob et al, "Cross-Sectoral Input for the Potential Role of Science in Canada's Environmental Assessment" (2018) 3 FACETS 512; Anna Johnston, "Imagining EA 2.0: Outcomes of the 2016 Federal Environmental Reform Summit" (2016) 30:1 J Envtl L & Prac 1; Martin Olszynski et al, "Sustainability in Canada's Environmental Assessment", *Policy Options* (5 September 2017), online: <policyoptions.irpp.org/magazines/september-2017/sustainability-in-canadas-environmental-assessment-and-regulation/>; Daniel Rosenbloom, Brendan Haley & James Meadowcroft, "Critical Choices and the Politics of Decarbonization Pathways: Exploring Branching Points Surrounding Low-Carbon Transitions in Canadian Electricity" (2018) 37 Energy Research & Soc Science 22.

public interest in climate change mitigation and enhanced sustainability. In doing so I draw on the promising insights emerging out of research on the potential "co-benefits" of climate policies.[67]

In chapter four I engage with constitutional law scholarship on the jurisdiction over environmental governance in Canada, particularly the work of Nathalie Chalifour, who has shown that, as a matter of doctrine, the federal government has ample authority to regulate in respect of GHG emissions and climate change.[68] My goal in this chapter (as well as in chapter five), however, is to use this doctrinal scholarship as a point of departure that creates analytic space to look *underneath* the formal Constitution to understand the normative pre-commitments and public policy priorities in Canada[69] truly responsible for animating legal disputes over jurisdiction in respect of carbon pricing, pipeline approvals and regulation, and environmental assessment more generally.

In chapter five I focus specifically on the constitutional challenges leveled against the federal government's carbon-pricing legislation and critically engage with constitutional

[67] Paul G Bain et al, "Co-benefits of addressing climate change can motivate action around the world" (2016) 6 Nat Clim Change 154.

[68] Chalifour suggests, for example, that provincial objections to the federal government's carbon-pricing framework "appear to be at least partly driven by Parliament's choice of carbon pricing as a policy instrument." She further argues that once the matter of jurisdiction is settled, the choice of instrument is a political one that is outside the constitutional analysis. I agree, and seek to extend her doctrinal analysis to show that *all* of the putatively legal arguments surrounding not only carbon pricing but also pipeline approvals and regulations as well as environmental assessment processes more generally are political and fall outside the traditional boundaries of doctrinal constitutional analysis. See Nathalie J Chalifour, "Jurisdictional Wrangling over Climate Policy in the Canadian Federation: Key Issues in the Provincial Constitutional Challenges to Parliament's *Greenhouse Gas Pollution Pricing Act*" (2019) 50:2 Ottawa L Rev 197 at 27.

[69] I do so by again utilizing, as I do in chapter one, the brilliant national-policy framework developed in Roderick A Macdonald & Robert Wolfe, "Canada's Third National Policy: The Epiphenomenal or the Real Constitution" (2009) 59:4 UTLJ 469.

law scholars who both oppose the federal government's jurisdiction to address climate change by regulating GHG emissions[70] as well as those who argue forcefully in favour of constitutionalized environmental rights and duties.[71] In doing so I seek to transcend the narrowly cast doctrinal debate by showing that recourse to constitutional principle to anchor a backward-looking policy priority in favour of the political-economic status quo is a strategic move equally capable of being adapted and utilized by proponents of progressive, forward-looking policy priorities; doctrine simply is not determinative. This, in turns, help reorient discussion and debate toward the true ground of contestation over competing norms and public policy priorities in respect of economic development and climate protection.

In the thesis's final chapter, I remain focused on leading proposals to constitutionalize environmental rights, eloquently expressed in particular by Lynda Collins and David Boyd,[72] to show that legal arguments about constitutionalized environmental rights are inescapably *political* arguments. Notwithstanding their serious legal and empirical flaws, arguments about constitutionalizing environmental rights are especially useful because

[70] See e.g. Newman, "Federalism, Subsidiarity, and Carbon Taxes", *supra* note 62.
[71] See e.g. Lynda Collins & Lorne Sossin, "In Search of an Ecological Approach to Constitutional Principles and Environmental Discretion in Canada" (2019) 52:1 UBC L Rev 293; Lynda Collins, "The Unwritten Constitutional Principle of Ecological Sustainability: A Lodestar for Canadian Environmental Law?" (5 June 2019), *IACL-AIDC Blog* (blog), online: <https://blog-iacl-aidc.org/unwritten-constitutional-principle-of-ecological-sustainability-a-lodestar-for-canadian-environmental-law>; Hope M Babcock, "The Federal Government Has an Implied Moral Constitutional Duty to Protect Individuals from Harm Due to Climate Change: Throwing Spaghetti against the Wall to See What Sticks" (2019) 45:4 Ecology Law Quarterly 735.
[72] See e.g. Lynda M Collins & David R Boyd, "Non-Regression and the *Charter* Right to a Healthy Environment" (2016) 29 J Envtl L & Prac 285. See also David Richard Boyd, *The Environmental Rights Revolution: A Global Study of Constitutions, Human Rights, and the Environment* (Vancouver: UBC Press, 2012); David Richard Boyd, *The Right to a Healthy Environment: Revitalizing Canada's Constitution* (Vancouver: UBC Press, 2012); Lynda M Collins, "Safeguarding the *Longue Durée*: Environmental Rights in the Canadian Constitution" (2015) 71 SCLR (2d) 519; Lynda M Collins, "An Ecologically Literate Reading of the Canadian Charter of Rights and Freedoms" (2009) 26 Windsor Rev Legal Soc Issues 7.

both their flaws and their underlying normative commitments gesture toward a more promising bottom-up, polycentric approach to climate law and policymaking, which is one of the central claims of this thesis.

In addition to the critical engagements with and contributions to the Canadian environmental law and policy literature highlighted above, this thesis fills three critical gaps in that literature.

First, the thesis systematically examines Canadian climate change and sustainability law and policy during the important initial phase (2015-2020) of the Paris Agreement, and offers an account of the ineffectiveness of Canadian climate law and policy during this period.

Second, the thesis adopts a dual conceptual approach whereby it examines the normative pre-commitments and political priorities underlying Canadian climate change and sustainability laws and regulations while simultaneously attending to the legal dimensions of Canadian climate change and sustainability politics, seeking throughout to explode the false, formalist law-versus-politics dichotomy that continues to characterize much environmental law and policy research.[73]

And third, this thesis focuses not only on the root causes of Canadian inaction and ineffectiveness in respect of climate change and sustainability, but it also prioritizes

[73] This dichotomy obtains both in Canadian and leading American environmental law and policy research. For an illustration and response, see Jason MacLean, "Learning to overcome political opposition to transformative environmental law" (2020) 117:115 Proc Nat Acad Sci 8243.

throughout the exploration of an alternative and potentially promising approach to generating public-interest climate change and sustainability policies capable of enhancing socio-ecological resilience.

Before proceeding to a more specific introduction to Part I, below, a few words about the theory and methods used in this otherwise "undisciplinary" thesis are in order. While each chapter itself includes a description of the theoretical approach and methods of analysis brought to bear on the particular problem it addresses, the overarching theory and methodology of this thesis is that of critical legal pluralism.[74] Critical legal pluralism rejects the taken-for-granted objectivity of formal enactments of law, and begins instead with the presumption that law – and social knowledge more generally – is a process of creating and maintaining myths about realities.[75] In other words, critical legal pluralism resists the presumption that formal State law is the privileged unit of analysis of law and legal change, and explores instead deeper questions of law's underlying normativity.[76] The meaning of law and policy through the critical-legal-pluralist lens "is the belief of those whose narrative of its prospects succeeds for the narrator."[77] Law reform, with which this thesis is concerned in both its formal and informal senses, must accordingly ask "how best to engender changes to these dominant narratives."[78] That is precisely the undisciplinary aim of this thesis.

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[74] Martha-Marie Kleinhans & Roderick A Macdonald, "What is a *Critical* Legal Pluralism?" (1997) 12 Can J L & Soc 25 [Kleinhans & Macdonald, "Critical Legal Pluralism"].
[75] For an application of this approach to climate change governance, see e.g. Amanda H Lynch & Siri Veland, *Urgency in the Anthropocene* (Cambridge, MA: The MIT Press, 2018).
[76] Kleinhans & Macdonald, "Critical Legal Pluralism", *supra* note 74 at 44.
[77] *Ibid* at 46.
[78] *Ibid* at 44.

Methodologically, to examine law and policy through a critical-legal-pluralist lens is to seek "to understand how each hypothesized legal regime is at the same time a social field within which other regimes are interwoven, as a part of a larger field in which it is interwoven with other regimes."[79] For the purposes of this thesis, this entails examining not only case law, doctrine, and formal legal submissions, but also the charges and justifications that public officials proffer in the news media as well as the law-and-policy discourses of a wide variety of stakeholders, including Indigenous peoples, fossil fuel industry players and representatives, international organizations, environmental nongovernmental organizations, climate scientists, public opinion pollsters, and political pundits. These are the sources, the raw materials, of Canada's climate and sustainability law and policy commitments, and the true sites of contestation and law reform.

On a final methodological note, the chapters comprising this thesis were conceived and completed as a thematically integrated series of explorations of Canada's climate change laws and policies in the dual context of Canadian domestic politics and its commitments under international law, primarily the Paris Agreement as well as the UN 2030 Sustainable Development Goals. In undertaking these explorations, I published earlier versions of the chapters as peer-reviewed articles in academic journals. In revising and finalizing the chapters for inclusion in this thesis, I have sought to include the most up-to-date information as possible with respect to ongoing law and policy developments. In doing so, I have also reassessed the arguments advanced in the thesis in light of such new

[79] *Ibid* at 41.

developments, and where appropriate I discuss the implications of new developments for the thesis's central claims.

PART I

> *A demonstration that 'it all depends on politics' does not move one inch towards a better politics*.[1]

In the three chapters making up the first Part of this thesis I examine the politics underlying Canada's climate change and sustainability policies in the era of the Paris Agreement.

In chapter one – "Will We Ever Have Paris? Canada's Climate Change Policy and Federalism 3.0"[2] – I examine the aspirations of the UN Paris Climate Change Agreement in relation to environmental federalism in Canada. After critically assessing earlier applications of federalism to environmental protection in Canada, I argue that a new model of environmental federalism, and national policymaking more generally, is required if Canada is to ever meet its commitment to reduce its greenhouse gas emissions in line with the Paris Agreement.

In chapter two – "Paris *and* Pipelines? Canada's Climate Policy Puzzle"[3] – I pick up where chapter one concluded by seeking to explain and critically assess the climate policy approach in Canada that uncritically links economic growth and environmental protection, including the reduction of greenhouse gas emissions. In this chapter, I explore the question of whether Canada can continue to expand its oil and gas sector and also meet its emissions-reduction target under the Paris Agreement. I argue that Canada can be understood as a

[1] Martti Koskenniemi, 'The Politics of International Law – 20 Years Later' (2009) 20:1 EJIL 7 at 8.
[2] An earlier version of this chapter was published in the *Alberta Law Review*: Jason MacLean, "Will We Ever Have Paris? Canada's Climate Change Policy and Federalism 3.0" (2018) 55:4 Atla L Rev 889.
[3] An earlier version of this chapter was published in the *Journal of Environmental Law & Practice*: Jason MacLean, "Paris *and* Pipelines? Canada's Climate Policy Puzzle" (2018) 32:1 J Envtl L & Prac 47.

"carbon democracy," and that this conceptual lens helps to explain the economic and scientific contradictions – and overall ineffectiveness – of Canada's climate change policy.

In chapter three – "Regulatory Capture and the Role of Academics in Public Policymaking: Lessons from Canada's Environmental Regulatory Review Process"[4] – I conclude the first Part of the thesis by tying together the analyses presented in the first two chapters by (1) comprehensively setting out my core argument that Canadian climate change policy – and its approach to environmental protection generally – is the result of regulatory capture, and (2) proposing an alternative model of public policymaking capable of countering regulatory capture. I argue that Canadian climate policy scholars must articulate and advocate for a fundamentally different political-economic model for Canada in which maintenance of ecological integrity is a precondition to all economic activity. In doing so, scholars must not merely identify but also grapple with the structural power of capital and the corresponding weakening of countervailing constituencies in Canada.

[4] An earlier version of this chapter was published in the *UBC Law Review*: Jason MacLean, "Regulatory Capture and the Role of Academics in Public Policymaking: Lessons from Canada's Environmental Regulatory Review Process" (2019) 52:2 UBC L Rev 489.

1 WILL WE EVER HAVE PARIS? CANADA'S CLIMATE CHANGE POLICY AND FEDERALISM 3.0

> *Does the power to change the world belong to the people in the conference rooms of Le Bourget or to the people in the streets of Paris?*[1]

The world has entered a "new era of climate reality."[2] In 2015, the global average concentration of carbon dioxide (CO_2) in the atmosphere reached the "symbolic and significant" milestone of 400 parts per million (ppm).[3] According to data collected by the World Meteorological Organization, the atmospheric CO_2 concentration reached 400 ppm again in 2016, the Earth's hottest year on record,[4] and will likely remain at that level "for many generations."[5] To put this development in perspective, the citizens' environmental organization 350.org takes its name from the research of renowned climate scientist James Hansen, who argued in 2008 that humanity should aim to cap the concentration of CO_2 in the atmosphere at 350 ppm in order to avoid dangerous and irreversible climate tipping

[1] Rebecca Solnit, "Power in Paris", *Harper's,* (18 November 2015), online: <http://harpers.org/archive/2015/12/power-in-paris/> [Solnit, "Power in Paris"].
[2] World Meteorological Organization, "Globally Averaged C02 Levels Reach 400 parts per million in 2015", World Meteorological Organization, (24 October 2016), online: <http://public.wmo.int/en/media/press-release/globally-averaged-co2-levels-reach-400-parts-million-2015> [WMO, "Globally Averaged CO2 Levels"].
[3] *Ibid.*
[4] Jugal K Patel, "How 2016 Became Earth's Hottest Year on Record", *The New York Times* (18 January 2017), online: <https://www.nytimes.com/interactive/2017/01/18/science/earth/2016-hottest-year-on-record.html>.
[5] WMO, "Globally Averaged CO2 Levels", *supra* note 2.

points, which are further associated with a 2 °C increase in global temperature above pre-industrial levels.[6]

Avoiding the most dangerous and disruptive impacts of climate change will require, in place of business as usual, a rather unusual law and politics. Above all, meeting the challenges posed by the new climate reality will require fulfilling, not merely the formal and procedural requirements of the law,[7] but also the law's deepest substantive aspirations, its underlying normative foundations. Constitutions, after all, "are not just about restraining and limiting power; they are about the empowerment of ordinary people in a democracy and allowing them to control the sources of law and harness the apparatus of government to their legitimate aspirations."[8] Democracy "is committed to the idea and practice that governance is to be for the people and, as important, *by* the people. This deceptively simple but actually subversive and sophisticated notion provides a starting point for any discussion of governance in all its forms."[9] Indeed, as former U.S. President Barack Obama remarked in his farewell address, the "Constitution is a remarkable, beautiful gift. But it's really just a piece of parchment. It has no power on its own. We, the people, give it power. We, the

[6] James E Hansen et al*,* "Target atmospheric CO_2: Where should humanity aim?" (2008) 2 Open Atmos Sci J 217 [Hansen et al*,* "Target atmospheric CO_2"]. See also https://350.org/.
[7] See e.g. Jason MacLean, "Autonomy in the Anthropocene? Libertarianism, Liberalism, and the Legal Theory of Environmental Regulation" (2017) 40:1 Dal LJ 279.
[8] Jeremy Waldron, *Political Political Theory: Essays on Institutions* (Cambridge, MA: Harvard University Press, 2016) at 43. See also Heather K Gerken, "A New Progressive Federalism" (2012) 24 Democracy Journal 37.
[9] Allan C Hutchinson, *The Companies We Keep: Corporate Governance for a Democratic Society* (Toronto, ON: Irwin Law, 2005) at 35 [emphasis original].

people, give it meaning — with our participation, and with the choices that we make and the alliances that we forge."[10]

How is this subversive and sophisticated conception of constitutionalism actually accomplished? Jeremy Waldron puts it this way:

> In general, we need to understand the importance of the way in which a constitution provides *housing* for the political activity of a society, establishing an in-between of furniture and formality so that public deliberation becomes a structured exercise, allowing the views of one person to be brought articulately into relation with the views of others and facilitating the formation of well-thought-through, responsible, and politically effective opinions.[11]

For Waldron, this conception of constitutional culture as "affirmative empowerment"[12] means that the state must provide both the institutional fora and the information its citizens need in order to meaningfully – *i.e.,* equally and effectively – participate in public governance. Ideals are not enough; progressive constitutionalism must also attend to the design and dimensions of *institutions* capable of enabling citizen engagement in democratic governance.[13]

This, to be sure, is not "your father's federalism."[14] As Heather Gerken argues in respect of the not-unrelated *practice* of American federalism, "when you really look at how

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[10] "President Obama's Farewell Address: Full Video and Text", *The New York Times* (10 January 2017), online: <https://www.nytimes.com/2017/01/10/us/politics/obama-farewell-address-speech.html?_r=0>.
[11] Waldron, *supra* note 8 at 37.
[12] *Ibid* at 36.
[13] *Ibid* at 7.
[14] Heather K Gerken, "The Loyal Opposition: Why Our Federalism is Not Your Father's Federalism" (Opening Keynote Address of the 2013 Doctoral Scholarship Conference delivered at the Yale Law School, 23 December 2013), (2014) 123 Yale LJ 1958 at 1963.

federalism works in practice, it looks not like anything you see in the case law. Our model of federalism is what you read in a case. But when federalism plays out, it's messy and not easy to trace."[15] Aspirational, "progressive" federalism, Gerken argues, is driven by its "participatory dimensions".[16] It includes, on this at once progressive and practical view of federalism "all the way down," not only the federal government and the states, but also "the substate, local, and sublocal institutions that constitute states: juries, zoning commissions, local school boards, locally elected prosecutor's offices, state administrative agencies, and the like."[17] Climate change policy, the topic at the heart of this chapter, is a case in point. Once again remarking on the American experience to date, Gerken observes that "[p]rogressives have long leveraged local population concentrations into political power. Indeed, much of the most important work on progressive issues started at the local level. Take climate change: From green building codes to cap-and-trade, the bulk of the work is being accomplished outside of Washington."[18]

Similarly in the Canadian context, the abrogation of responsibility for environmental protection and sustainable development at the federal level – which is described in greater detail later in this chapter – has galvanized some provinces, municipalities, Indigenous communities, and civil society organizations to move in and try to fill the void.[19] While

[15] "Progressive politics from the ground up", *CommonWealth* (Summer 2017) 56 at 64.
[16] *Ibid.*
[17] Heather K Gerken, "Federalism as the New Nationalism: An Overview" (2014) 123 Yale LJ 1889 at 1910. See also Heather K Gerken, "The Supreme Court 2009 Term—Foreword: Federalism All the Way Down" (2010) 124 Harv L Rev 4 at 21-21
[18] Heather K Gerken, "A New Progressive Federalism" (2012) 24 Democracy Journal, online: <https://democracyjournal.org/magazine/24/a-new-progressive-federalism>.
[19] See e.g. Jason MacLean, Meinhard Doelle & Chris Tollefson, "The Past, Present, and Future of Canadian Environmental Law: A Critical Dialogue" (2015-2016) 1:1 Lakehead LJ 81 at 83 [MacLean, Doelle & Tollefson, "The Past, Present, and Future of Canadian Environmental Law"].

such efforts are to be lauded, they cannot hope to succeed on their own absent federal facilitation. Our new climate reality calls for a new conception of constitutionalism – call it federalism 3.0 – capable of encouraging and empowering Canadians to participate equally alongside their elected representatives amid the surrounding sources of social and economic power in collaboratively fashioning collective commitments to a sustainable future.

Taking its cue from the emerging legal scholarship on progressive federalism touched on above, the argument advanced here is unapologetically aspirational insofar as it attempts to articulate a normatively attractive account of the potential of existing institutional arrangements and recent public policy pronouncements. *Pace* the conventional expectations of students and scholars of federalism, however, this necessarily means going beyond the text of the Constitution itself in order to excavate its popular foundations and envisage their potential fulfillment. After all, if the participatory dimensions of federalism 3.0 are nowhere to be found in the text of the *Constitution Act, 1867* (whether in its division of powers provisions or elsewhere), neither is the likewise unwritten principle of democracy. Nor, for that matter, is the principle of democracy – let alone its actual practice – confined to representation, suffrage, or the processes of government. Democracy, rather, is connected "to substantive goals, most importantly, the promotion of self-government."[20]

[20] *Reference re Secession of Quebec,* [1998] 2 SCR 217 at para 64; see also *Switzman v Elbling,* [1957] SCR 285 at 302; *R v Oakes,* [1986] 1 SCR 103 at 136 (identifying as a democratic value the "faith in social and political institutions which enhance the participation of individuals and groups in society").

As Mari Matsuda argues, either we will become deeply aspirational in our constitutional interpretation, or we will face other challenges.[21]

The argument advanced here is also unapologetically *critical*. As one anonymous peer reviewer of an earlier version of this chapter remarked, "I have no objection to wishful thinking or to pure theory, but no-one should complain when fact and theory do not coincide. They rarely do. And this author does."[22] Indeed, I do. Citizens of constitutional democracies should care – and *complain* – when the facts on the ground do not live up to the shared principles and commitments that we choose to live up to, namely, our collective working theory of a constitutional democracy. The success and ultimate survival of our polity depends on it. The alternative – corrosive, self-defeating cynicism – is hardly an attractive one, no matter how hard-won it may appear.

The specific argument advanced in this chapter unfolds as follows. In the first part, I discuss the simultaneously ambitious and aspirational bottom-up architecture of the United Nations Framework Convention on Climate Change (UNFCCC) agreement concluded in Paris in December 2015 and its implications for Canada's climate change policy and governance, particularly the need for greater citizen engagement in climate-related decisionmaking. In the second part, I briefly retrace the regrettable history of Canadian climate and sustainable development policy through the conventional lens of federalism and the question of

[21] Mari Matsuda, "The Next Dada Utopian Visioning Peace Orchestra: Constitutional Theory and the Aspirational" (2017) 62:4 McGill LJ 1203.

[22] I am grateful to the peer reviewer for making this objection to my approach so pointedly, thereby forcing me to sharpen my argument and commit fully and openly to its aspirational valence at the very outset of the analysis. I cannot help but note, however, that the result here is this very kind of constructively critical dialogue and debate that is the very lifeblood of a vital constitutional democracy, and also the kind of dialogue and debate that the state ought to facilitate to fulfill its constitutional obligations.

jurisdiction over environmental protection, ranging from the federal government's penchant for "passing the buck" to the provinces (federalism 1.0) to so-called federal-provincial cooperation, harmonization, and further federal retrenchment (federalism 2.0). In the third part, I argue that a new conception of aspirational federalism (federalism 3.0) capable of meeting Canada's climate change commitments is urgently needed. In the fourth part, I articulate and apply this conception of federalism to the federal government's promises under Prime Minister Justin Trudeau of greater citizen engagement, including a new, Nation-to-Nation relationship with Indigenous peoples, and his government's initial but potentially path-dependent climate policies and decisions taken during the early days of the post-Paris era. At a minimum, federalism 3.0 must take the shape of new institutions that provide Canadians with the opportunities and the information they need to have a meaningful voice in articulating the shape and substance of Canada's climate change policies. I conclude, however, that Canada's policy commitments and initial climate-governance decisions – the facts on the ground – are instead the proximate result of a kind of formalistic, "check-the-box constitutionalism," and fall far short of fulfilling the aspirations of both the historic Paris Agreement and the promise of a new constitutional law and politics in Canada. Instead of true democracy, we are issued "Deliverology"; instead of the Paris Agreement, we are promised pipelines. Unless we as a country change course, the harm to both our constitutional culture and our climate may well be irreparable.

I. The Paris Climate Change Agreement

The Paris climate change negotiations conducted pursuant to the UNFCCC[23] brought together over 36,000 participants, including approximately 23,100 government officials, 9,400 representatives from UN bodies and agencies, intergovernmental and civil society organizations, and some 3,700 members of the media.[24] The agreements[25] concluded in Paris established a new international climate change regime that includes all countries and seeks to address climate change mitigation, adaptation, loss and damage, finance, technology transfer, and capacity building.[26] As discussed below, the Paris Agreement represents an ambitious, bottom-up approach to global cooperation and norm building in response to our new climate reality.[27]

A. A Bottom-Up Approach to Global Cooperation and Norm Building

The Paris Agreement completes a decade-long transition from a top-down, legally binding climate change regime focused on the mitigation of developed countries' greenhouse gas (GHG) emissions to a bottom-up, substantively non-binding approach aimed at fostering

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[23] United Nations Framework Convention on Climate Change, Intergovernmental Negotiating Committee for a Framework Convention on Climate Change (992), 31 ILM. 849, online: <http://unfccc.int/resource/docs/a/18p2a01.pdf>.

[24] See Jennifer Allan et al, "Summary of the Paris Climate Change Conference: 29 November – 13 December 2015" Earth Negotiations Bulletin Vol 12, No 663 (December 2015), online: <http://www.iisd.ca/climate/cop21/enb/> [Allan et al, "Summary of the Paris Climate Change Conference"].

[25] The phrase "Paris Agreement" is used throughout this chapter to refer collectively to the Paris Conference of the Parties (COP) Decision and the Paris Agreement; the latter was adopted in Paris as an Annex to the Paris COP Decision, but it became a separate, legally binding agreement when ratified by at least 55 parties accounting for at least an estimated 55% of total global GHG emissions. See *Paris Agreement*, being an Annex to the *Report of the Conference of the Parties on its twenty-first session, held in parties from 30 November to 13 December 2015 – Addendum Part two: Action taken by the Conference of the Parties at its twenty-first session*, 29 January 2016, Decision 1/CP.21, CP, 21st Sess., FCCC/CP/2015/10/Add.1 [Paris Agreement] at 21-36, online: UNFCCC <http://unfccc.int/resource/docs/2015/cop21/eng/10a01.pdf>.

[26] Allan et al, Summary of the Paris Climate Change Conference, *supra* note 24 at 13-18.

[27] See Meinhard Doelle, "The Paris Agreement: Historic Breakthrough or High Stakes Experiment?" (2016) 6:1-2 Climate Law 1 [Doelle, "The Paris Agreement"].

global cooperation through transparency, peer pressure, and voluntary norm building.[28] In particular, the Paris Agreement represents a radical change in direction from the Kyoto Protocol, which was based on legally binding GHG-reduction targets with enforceable consequences for non-compliance.[29] While the Kyoto Protocol enjoyed some success in Europe, the United States refused to ratify it,[30] and Canada chose to withdraw from the protocol rather than genuinely attempt to meet its GHG-emissions-reduction target.[31] Moreover, most developed countries outside of Europe declined to accept a second commitment-period target pursuant to the 2012 Doha Amendments to the protocol.[32] Meanwhile, GHG emissions in a number of developing countries – including China, India, Brazil, and South Africa – have continued to increase significantly.[33] Accordingly, the Paris negotiations attempted to establish a fundamentally different approach, one that moves from a "top-down strategy to a bottom-up approach."[34]

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[28] *Ibid*.
[29] See Meinhard Doelle, *From Hot Air to Action? Climate Change, Compliance and the Future of International Environmental Law* (Toronto: Carswell, 2005).
[30] Report of the Conference of the Parties on its Third Session, Kyoto Protocol to the UN Framework Convention on Climate Change, 3rd Sess, pt 2, Annex I, UN Doc. FCCC/CP/1997/7/add. 1, reprinted in 37 ILM. 22 (1998).
[31] Canada was the first country to withdraw from Kyoto. Government of Canada, "A Climate Change Plan for the Purposes of the Kyoto Protocol Implementation Act 2012: Canada's Withdrawal from the Kyoto Protocol", (5 December 2011), online: <https://www.ec.gc.ca/Publications/default.asp?lang=En&n=EE4F06AE-1&xml=EE4F06AE-13EF-453B-B633-FCB3BAECEB4F&offset=3&toc=hide>; see also Doelle, "The Paris Agreement", *supra* note 25.
[32] UN Treaty Collection, "7 c Doha Amendment to the Kyoto Protocol", online: <https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-7-c&chapter=27&lang=en>.
[33] For data on countries' GHG emissions, see Climate Action Tracker, online: <http://climateactiontracker.org>. While Kyoto included only developed countries, the Paris Agreement includes both developed and developing countries.
[34] Daniel C Esty, "Bottom-Up Climate Fix", *The New York Times,* (21 September 2014), online: <http://www.nytimes.com/2014/09/22/opinion/bottom-up-climate-fix.html?_r=0> [Esty, "Bottom-Up Climate Fix"]; see also David A Wirth, "The International and Domestic Law of Climate Change: A Binding International Agreement Without the Senate or Congress?" (2015) 39 Harv Envtl L Rev 515 at 521; Cinnamon P Carlarne, "Rethinking A Failing Framework: Adaptation and Institutional Rebirth for the Global Climate Change Regime" (2013) 25 Geo Int'l Envtl L Rev 1 at 2-3; William Boyd, "Climate Change, Fragmentation, and the Challenges of Global Environmental Law: Elements of a Post-Copenhagen

The bottom-up approach of the Paris Agreement is based on the idea that voluntary, self-imposed commitments are more likely to result in compliance than are "targets and timetables"[35] imposed by the global community and implemented by top-down, national mandates accompanied by government support for clean energy technologies.[36] The Paris Agreement seeks to build, from the bottom up, new norms of state behaviour through the clear articulation of an ambitious collective goal, interaction and information-sharing among states and other actors, responsiveness to scientific evidence and changing circumstances, and transparency and informal accountability mechanisms designed to ratchet up countries' efforts.[37]

How does the Paris Agreement address each of these objectives? The Agreement begins by articulating a highly ambitious collective goal. Article 2 of the Agreement *encourages* parties to hold "the increase in the global average temperature to well below 2 °C above pre-industrial levels" and pursue "efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change".[38] Article 2 establishes the expectation that the Agreement's long-term ambition will be matched by the individual and coordinated actions of the parties.[39] Accordingly, 1.5 °C is now the ultimate standard against which the success of collective,

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Assemblage" (2010) 32 U Pa J Intl L 457 at 457; David Roberts, "The Conceptual Breakthrough Behind the Paris Climate Treaty", VOX, (15 December 2015), online: <http://www.vox.com/2015/12/15/10172238/paris-climate-treaty-conceptual-breakthrough>.

[35] Esty, "Bottom-Up Climate Fix", *supra* note 34.

[36] *Ibid*; Doelle, "The Paris Agreement", *supra* note 27.

[37] Allan, "Summary of the Paris Climate Change Conference", *supra* note 24; Doelle, "The Paris Agreement", *supra* note 27; Daniel Bodansky, "The Paris Climate Change Agreement: A New Hope?" (2016) 110:2 Am J Intl L 288.

[38] Paris Agreement, *supra* note 25 at art 2.

[39] *Ibid*.

global climate change mitigation efforts will be judged.[40] Whereas the Agreement lacks a top-down mechanism for the assessment and enforcement of countries' individual contributions to this collective goal, the Agreement requires parties to publicly justify the level of their mitigation efforts vis-à-vis the Agreement's long-term ambition over time.[41]

The baseline for countries' mitigation efforts pursuant to the Paris Agreement is established by the nationally-determined contributions (NDCs) filed along with parties' ratification of the Agreement; the Intended Nationally Determined Contributions (INDCs) filed by most countries in advance of the Paris negotiations will serve as the default NDCs unless strengthened through domestic processes prior to ratification,[42] through the Agreement's initial global stocktaking exercise scheduled for 2018,[43] or on the voluntary initiative of a party.[44]

In addition to the progressive ratcheting-up of parties' mitigation efforts relative to their baseline NDCs, article 4.1 of the Paris Agreement stipulates that parties will collectively aim to reach a global peaking of GHG emissions "as soon as possible".[45] Again, true to its bottom-up architecture, the Paris Agreement does not dictate how parties must meet or

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[40] Doelle, "The Paris Agreement", *supra* note 27.
[41] See the Paris COP Decision, *supra* note 16 at para 27.
[42] See e.g. Susana Mas & Catherine Cullen, "Justin Trudeau signs Paris climate treaty at UN, vows to harness renewable energy", *CBC* (22 April 2016), online: <http://www.cbc.ca/news/politics/paris-agreement-trudeau-sign-1.3547822> [Mas & Cullen, "Justin Trudeau signs Paris climate treaty"]; but see Laura Payton, "Liberals back away from setting tougher carbon targets", *CTV News* (18 September 2016), online: <http://www.ctvnews.ca/politics/liberals-back-away-from-setting-tougher-carbon-targets-1.3075857#_gus&_gucid=&_gup=twitter&_gsc=ocMiVmd> [Payton, "Liberals back away from setting tougher targets"].
[43] Paris COP Decision, *supra* note 25 at para 20.
[44] Paris Agreement, *supra* note 25 at art 4.11. The initial global stocktake was originally scheduled to be discussed and finalized at COP 26 in December 2020, but it has been postponed due to the COVID-19 pandemic.
[45] *Ibid* at art 4.1.

measure the adequacy of their NDCs. Instead, article 4.1 proceeds to explain that parties are expected to undertake rapid reductions in GHG emissions "in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century, on the basis of equity, and in the context of sustainable development and efforts to eradicate poverty."[46]

Article 4.2 extends and further shapes the individualized obligation expressed in articles 2 and 4.1 by providing that each party "shall prepare, communicate, and maintain successive nationally determined contributions that it intends to achieve. Parties shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions."[47] This disclosure, transparency, and accountability mechanism applicable to all parties under the Agreement embodies U.S. Supreme Court Justice Louis Brandeis's axiom that sunlight is the "best of disinfectants."[48] The assumption undergirding this mechanism is that peer pressure and more general public pressure can be just as effective as a formally binding, top-down legal obligation in driving compliance.[49]

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[46] *Ibid.*

[47] *Ibid* at art 4.2; see also art 13, which sets out a number of other procedural obligations designed to facilitate transparency regarding parties' domestic mitigation efforts (and others, including adaptation efforts and efforts directed at financial, technology transfer and capacity-building support provided to developing countries – important as these efforts are, they are beyond the scope of this chapter).

[48] Louis Brandeis, *Other People's Money and How the Bankers Use It* (New York: Frederick A. Stokes, 1914) at 92.

[49] This assumption has long been debated in the literature on so-called soft law. See e.g. Dinah Shelton, ed, *Commitment and Compliance: The Role of Non-Binding Norms in the International Legal System* (New York: Oxford University Press, 2003); David Victor et al*,* eds, *The Implementation and Effectiveness of International Environmental Commitments: Theory and Practice* (Cambridge, MA: The MIT Press, 1998). For a more up-to-date discussion of the pros and cons of different regulatory approaches, see Chris Tollefson, Anthony R Zito & Fred Gale, "Symposium Overview: Conceptualizing New Governance Arrangements" (2012) 90 Public Administration 1.

Because the language of the Paris Agreement is technologically neutral, however, the Agreement leaves to individual countries – and possibly multilateral initiatives[50] – the determination of how best to pursue domestic reductions of GHG emissions in a manner that promotes integrated solutions and maximizes sustainability[51] while minimizing risks,[52] for example the loss of energy security.[53]

In order to ensure that this voluntary, state-driven process proceeds apace, article 14 of the Paris Agreement establishes its critically important iterative approach, whereby parties gather together every five years to take stock of collective progress and table progressively more ambitious GHG emissions reduction targets for the next five-year period.[54] This "global stocktake" is designed to "inform Parties in updating and enhancing, *in a nationally determined manner*, their actions and support in accordance with the relevant provisions of this Agreement, as well as in enhancing international cooperation for climate action."[55] Complementing this "ratcheting" mechanism as a means of driving progressively more ambitious domestic efforts in a kind of "race to the top," article 4.19 states that all parties

[50] See e.g. Paris Agreement, *supra* note 25 at art 6.2, which recognizes that parties may engage in "cooperative approaches to achieve their domestic NDCs, including the use of internationally transferred mitigation outcomes", which could include emissions trading schemes and other institutions capable of linking national climate policies.
[51] See *ibid* at art 6.4, which establishes a new mechanism to "promote the mitigation of greenhouse gas emissions and support sustainable development".
[52] See Meinhard Doelle, "Integration Among Global Environmental Regimes: Lessons Learned from Climate Change Mitigation" in Aldo Chircop et al, eds, *The Future of Regime-Building in the Law of the Sea: Essays in Tribute to Douglas M. Johnston* (Leiden: Martinus Nijhoff Publishers, 2009) at 63.
[53] See e.g. Liam Wagner et al*,* "Trading Off Global Fuel Supply, CO2 Emissions and Sustainable Development" (2016) 11:3 PLoS One e0149406.
[54] See Paris COP Decision, *supra* note 25 at paras 20, 23; Paris Agreement, *supra* note 25 at art 14 (see also arts 4.2 and 4.9).
[55] Paris Agreement, *supra* note 25 at art 14.3 [emphasis added].

"should strive to formulate and communicate long-term low greenhouse gas emissions development strategies".[56]

B. Canada and the "High Ambition Coalition"

It remains too early to conclusively assess the Paris Agreement. Nevertheless, upon its conclusion the Agreement was instantly pronounced "historic,"[57] a "landmark,"[58] the "world's greatest diplomatic success,"[59] a "watershed deal aimed at preventing catastrophic climate change,"[60] the "beginning of the end of the fossil fuel era,"[61] and, not least, a "big, big deal."[62] The remarkable optimism surrounding the Paris Agreement was due in large part to the failed negotiations that preceded it, particularly the failure of COP 15 in Copenhagen in 2009, which ended in acrimony, bitter disappointment, and profound

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[56] *Ibid* at art 4.19.
[57] Jody Warrick & Chris Mooney, "196 Countries Approve Historic Climate Agreement", *Washington Post* (12 December 2015), online: <https://www.washingtonpost.com/news/energy-environment/wp/2015/12/12/proposed-historic-climate-pact-nears-final-vote/>.
[58] Coral Davenport, "Nations Approve Landmark Climate Accord in Paris", *The New York Times* (13 December 2015), online: <http://www.nytimes.com/2015/12/13/world/europe/climate-change-accord-paris.html?_r=0>.
[59] Fiona Harvey, "Paris Climate Change Agreement: The World's Greatest Diplomatic Success", *The Guardian* (14 December 2015), online: <http://www.theguardian.com/environment/2015/dec/13/paris-climate-deal-cop-diplomacy-developing-united-nations>.
[60] Eric Reguly & Shawn McCarthy, "Paris climate accord marks shift toward low-carbon economy", *The Globe and Mail* (12 December 2015), online: <http://www.theglobeandmail.com/news/world/optimism-in-paris-as-final-draft-of-global-climate-deal-tabled/article27739122/>.
[61] Union of Concerned Scientists, "Global Action on Historic Climate Change Agreement Expected in Paris" (12 December 2015), online: <http://www.ucsusa.org/news/press_release/global-action-on-historic-climate-change-agreement-expected-in-paris-0651#.V752y4Xbanc>; see also Anne-Marie Codur, William Moomaw & Jonathan Harris, "After Paris: The New Landscape for Climate Policy", Global Development and Environment Institute, Tufts University, Climate Policy Brief No 2 (February 2016) at 1, online: <www.ase.tufts.edu/gdae/Pubs/climate/ClimatePolicyBrief2.pdf>.
[62] Thomas L Friedman, "Paris Climate Accord is a Big, Big Deal", *The New York Times* (16 December 2015), online:< http://www.nytimes.com/2015/12/16/opinion/paris-climate-accord-is-a-big-big-deal.html>. But see Allan et al, "Summary of the Paris Climate Change Conference", *supra* note 24 at 44 noting that many observers immediately dismissed the Paris Agreement as "business as usual."

pessimism about the prospects of a multilateral climate change framework.[63] Following years of doubt and indecision, the Paris Agreement appears to have restored faith in the ability of multilateralism to effectively address problems besetting the international community.[64] But it is perhaps the high ambition of the Agreement itself that most accounts for the high hopes engendered in Paris in 2015.

The Agreement's high ambition was not, however, an inevitable outcome of the negotiations, as the dismal failure of COP 15 in Copenhagen illustrates. Rather, the high ambition of the Paris Agreement began on the margins of the formal meetings organized by the French Presidency of the conference.[65] Side meetings were instigated by the Marshall Islands and included 15 "like-minded" ministers from different regions, including Canada.[66] These informal parallel meetings formed the basis of what became known as the "High Ambition Coalition."[67] Canada's then Minister of the Environment and Climate Change, Catherine McKenna, explained that "Canada has advocated for this recognition of the urgency of the threat to small-island states, like the Marshall Islands with whom we now stand as part of the High Ambition Coalition. The Coalition brings together developed

[63] See e.g. Meinhard Doelle, "The Legacy of the Climate Talks in Copenhagen: Hopenhagen or Brokenhagen?" (2010) 4 Carbon & Climate Review 86; Daniel Bodansky, "The Copenhagen Climate Change Conference – A Postmortem" (2010) 104 Am J Intl L 230.
[64] Allan et al, "Summary of the Paris Climate Change Conference", *supra* note 24 at 45; see also Jason MacLean, "The misleading promise of 'balance' in Canada's climate change policy," *Policy Options* (29 March 2016), online: <http://policyoptions.irpp.org/magazines/march-2016/the-misleading-promise-of-balance-in-canadas-climate-change-policy/> [MacLean, "The misleading promise of balance"].
[65] Allan et al, "Summary of the Paris Climate Change Conference", *supra* note 24 at 44.
[66] Karl Mathiesen & Fiona Harvey, "Climate coalition breaks cover in Paris to push for binding and ambitious deal", *The Guardian* (8 December 2015), online: <https://www.theguardian.com/environment/2015/dec/08/coalition-paris-push-for-binding-ambitious-climate-change-deal>; Carol Linnitt, "Canada Joins 'High Ambition Coalition' To Push for Strong Climate Treaty in Paris", *Desmog* (11 December 2015), online: <http://www.desmog.ca/2015/12/11/canada-joins-high-ambition-coalition-push-strong-climate-treaty-paris> [Linnitt, "Canada Joins 'High Ambition Coalition'"].
[67] Allan et al, "Summary of the Paris Climate Change Conference", *supra* note 24 at 44.

and developing countries from around the world as we lay the groundwork for a safe climate future."[68]

This initially loose alliance eventually came to comprise up to 100 countries that agreed on a list of "ambitious tasks," including a clear long-term goal (*i.e.,* the 1.5 °C target) and the five-year review cycle (*i.e.,* the global stocktaking mechanism).[69] As the previous section of this chapter sought to illustrate, these "ambitious tasks" were ultimately included in and constitute the core of the Paris Agreement.[70] Several commentators have described the transparency and global stocktake mechanisms as the Agreement's "mechanisms for ambition."[71]

Realizing these "ambitious tasks," however, will almost assuredly prove far more difficult than setting them. As a multilateral instrument, success will depend largely on what happens next at the national, subnational, and regional levels.[72] Particularly important will be how subnational efforts feed into and drive national efforts. In the next part of the chapter below I will explore the implications of this crucial question for Canada's climate

[68] Linnitt, "Canada Joins 'High Ambition Coalition'", *supra* note 66.
[69] Allan et al, "Summary of the Paris Climate Change Conference", *supra* note 24 at 44.
[70] See also *ibid*.
[71] *Ibid.*
[72] Doelle, "The Paris Agreement", *supra* note 25. For a further discussion of this point in respect of multilateral environmental governance, see Jason MacLean, "Troubled Waters: Reinvigorating Great Lakes Governance through Deliberative Democracy" (2018) 9:3 Sea Grant Law & Policy Journal 9.

change policy. Before proceeding, however, the ambition of the Paris Agreement must be further examined in respect of its explicit "ambition gap."[73]

C. Mind the Ambition Gap!

A remarkable feature of the Paris COP Decision is its explicit acknowledgement of its own ambition gap. The Paris COP Decision "*[n]otes with concern* that the estimated aggregate greenhouse gas emissions levels in 2025 and 2030 resulting from the intended nationally determined contributions do not fall within the least-cost 2 °C scenarios but rather lead to a projected level of 55 gigatonnes in 2030."[74] The Paris COP Decision further notes that "much greater emission reduction efforts will be required than those associated with the intended nationally determined contributions in order to hold the increase in global average temperature to below 2 °C above pre-industrial levels".[75] Specifically, GHG emissions must be reduced to 40 gigatonnes in order to meet the Paris Agreement's ambitious target.[76] The "ambition gap" quantified in the COP Decision is thus fifteen gigatonnes by 2030. Another way of expressing the Agreement's "ambition gap" is to observe that the set of INDCs filed at or before the conclusion of the Paris Agreement, which represented 95% of global GHG emissions, "put collective efforts only on a path to an approximately 3 °C temperature increase."[77] That is a full degree higher than the Paris Agreement's upper

[73] Doelle, "The Paris Agreement", *supra* note 27.
[74] Paris COP Decision, *supra* note 25 at para 17 [emphasis original].
[75] *Ibid*.
[76] *Ibid.*
[77] Allan, "Summary of the Paris Climate Change Conference", *supra* note 24 at 44; see also Joeri Rogelj et al*,* "Paris Agreement climate proposals need a boost to keep warming well below 2 °C" (2016) 534 Nature 631 [Rogelj et al*,* "Paris Agreement climate proposals need a boost"].

target of 2 °C, which James Hansen and his colleagues nonetheless consider to be "dangerous."[78]

A mere eight months following the conclusion of the COP Decision and the Paris Agreement, a number of climate scientists warned that we were already alarmingly close to reaching and surpassing the lower 1.5 °C temperature target.[79] Data collected by NASA and the U.S. National Oceanic and Atmospheric Association (NOAA) demonstrated that the first six months of 2016 were the hottest on record, averaging 1.3 °C above the pre-industrial average.[80] August 2016 was the hottest of any month since the advent of adequate recording in 1880,[81] making the month of August 2016 the eleventh consecutive record-breaking month for global temperatures,[82] the longest such streak since 1880.[83] According to NASA climate scientist Gavin Schmidt, "I certainly would not say that we have now

[78] James Hansen et al*,* "Ice melt, sea level rise and superstorms: evidence from paleoclimate data, climate modeling, and modern observations that 2 °C global warming could be dangerous" (2016) 16 Atmospheric Chemistry & Physics 3761 at 3801 [Hansen et al*,* "Ice melt, sea level rise and superstorms"].
[79] See e.g. Robin McKie, "World risks missing key climate target", *The Guardian* (6 August 2016), online: <https://www.theguardian.com/science/2016/aug/06/global-warming-target-miss-scientists-warn>.
[80] Henry Fountain, "Global Temperatures Are on a Course for Another Record This Year", *The New York Times* (19 July 2016), online: <http://www.nytimes.com/2016/07/20/science/nasa-global-temperatures-2016.html> [Fountain, "Global Temperatures"].
[81] National Aeronautics and Space Administration, "NASA Analysis Finds August 2016 Another Record Month", GISTEMP Update (12 September 2016), online: <http://data.giss.nasa.gov/gistemp/news/20160912/>. See also Henry Fountain, "How Hot Was It in July? Hotter than Ever", *The New York Times* (22 August 2016), online: <http://www.nytimes.com/2016/08/23/science/how-hot-was-it-in-july-hotter-than-ever.html?_r=0>.
[82] *Ibid.*
[83] Michael Slezak, "Hottest ever June marks 14th month of record-breaking temperatures", *The Guardian* (20 July 2016), online: <https://www.theguardian.com/environment/2016/jul/20/june-2016-14th-consecutive-month-of-record-breaking-heat-says-us-agencies>.

gotten to that initial Paris number and are going to stay there. But I think it's fair to say that we are *dancing with that lower target*."[84]

In order to mind and ultimately close the "ambition gap" between the initial GHG-reduction commitments (INDCs) made by the parties and the Agreement's overall objective, "[s]ubstantial enhancement or over-delivering on current INDCs by additional national, sub-national and non-state actions is required to maintain a reasonable chance of meeting the target of keeping warming well below 2 degrees Celsius."[85] This burden will – and ought – to be disproportionately onerous for developed country parties such as Canada. As article 4.4 of the Paris Agreement states, "[d]eveloped country Parties should continue taking the lead by undertaking economy-wide absolute emission reduction targets."[86] The reputational stakes for Canada are particularly high. Canada was a highly visible and outspoken member of the "High Ambition Coalition" during the Paris Agreement negotiations, and Prime Minister Justin Trudeau, on signing the Agreement at the UN in April 2016, remarked that "[t]oday, with my signature, I give you our word that

[84] Fountain, "Global Temperatures", *supra* note 80 [emphasis added]. See also Hansen et al*,* "Ice melt, sea level rise and superstorms", *supra* note 78; for a similar analysis sounding a similar warning, see Katarzyna B Tokarska et al*,* "The climate response to five trillion tonnes of carbon" (2016) 6 Nat Clim Change 851 at 854-55 (concluding that "[o]ur results show that five trillion tonnes of cumulative carbon emissions, corresponding approximately to the unregulated exploitation of the fossil fuel resource, would result in considerably larger global and regional climate changes than previously suggested. Such climate changes, if realized, would have extremely profound impacts on ecosystems, human health, agriculture, economies and other sectors").
[85] Rogelj et al*,* "Paris Agreement climate proposals need a boost", *supra* note 77 at 631.
[86] Paris Agreement, *supra* note 25 at art 4.4.

Canada's efforts will not cease. Climate change will test our intelligence, our compassion and our will. But we are equal to that challenge."[87]

But are we? Is Canada capable of doing its part to close the "ambition gap" inherent in the Paris Agreement? This is the question pursued throughout the remainder of this chapter. In part III below I examine the federal government's "pass the buck" approach to environmental protection generally – call it environmental federalism 1.0. I will then proceed to examine the short-lived and largely unfulfilled promise of an upgrade to environmental federalism 2.0 characterized by attempts at "cooperative federalism" and "harmonization." This analysis sets the stage for part IV, in which I argue that a new model of environmental federalism and national policymaking more generally – call it federalism 3.0 – will be required if Canada is to create a climate change policy capable of meeting its ambitious commitments under the Paris Agreement.

[87] Quoted in Mas & Cullen, "Justin Trudeau signs Paris climate treaty", *supra* note 42.

II. Canadian Climate Change Policy and Federalism 1.0 – Passing the Buck

Neither the "environment" nor "climate change" is mentioned or assigned to a head of legislative power in the *Constitution Act, 1867*.[88] As Justice LaForest explained in *Friends of the Oldman River Society v Canada (Minister of Transport)*, "the *Constitution Act, 1867* has not assigned the matter of 'environment' *sui generis* to either the provinces or Parliament. The environment, as understood in its generic sense, encompasses the physical, economic and social environment touching several of the heads of power assigned to the respective levels of government."[89] Justice LaForest proceeded to characterize the environment as "a constitutionally abstruse matter which does not comfortably fit within the existing division of powers without considerable overlap and uncertainty."[90] More recently, Hutchinson characterized climate change as a "constitutional puzzle."[91] Underlying the formation of a credible and cooperative national climate change policy involving the federal, territorial, and provincial governments, Hutchinson argues, is the "hidden dynamic" of the "constitutional division of powers. Who can do what? And who can prevent the other from doing what?"[92] While "the question of which jurisdiction has constitutional authority to regulate what aspects of climate and GHG emissions in the Canadian federation is not exactly an easy one, whether politically or legally",[93] on closer inspection it becomes clear that it is not – or it need not be – a controversial one.

A. The Constitutional Controversy That Wasn't (and Still Isn't)

[88] *Constitution Act, 1867,* 30 & 31 Victoria, c 3 (U.K.), ss 91(10) and 91(12).
[89] [1992] 1 SCR. 3 at 63.
[90] *Ibid* at 64.

The jurisdictional controversy over the environment and climate change in Canada is an example *par excellance* of the principle *plus ça change, plus c'est la même chose*. As Hsu and Elliot recount, former Alberta Premier Peter Lougheed once warned of a "major constitutional battle" over the regulation of GHG emissions.[94] Today it is Saskatchewan Premier Brad Wall sounding the constitutional alarm. In response to the federal government's public statements about the importance of establishing a "strong price on carbon right across the country" as part of a pan-Canadian climate change policy,[95] Premier Wall stated that "[w]e would constitutionally challenge any attempt by a federal government to impose a tax on, for example, a government Crown (corporation) like SaskPower or SaskEnergy. This does not come into play with the private sector, but it does with respect to government entities, we believe. And we would challenge it."[96] And so it goes.

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[91] Allan Hutchinson, "Climate change: A constitutional puzzle", *The Globe and Mail* (27 April 2016), online: <http://www.theglobeandmail.com/opinion//climate-change-a-constitutional-puzzle/article29764807/> [Hutchinson, "Climate change: A constitutional puzzle"].

[92] *Ibid.* Authority to legislate on environmental issues is shared in Canada. The federal government may legislate pursuant to its powers over fisheries, navigation and shipping, trade, international borders, offshore coastal areas, federal lands, criminal law, taxation, and, notably, the Peace, Order, and Good Government (POGG) power; provincial governments may legislate pursuant to its powers over property and civil rights, "local matters," provincial land, and natural resources, among others.

[93] Nathalie J Chalifour, "Climate Federalism – Parliament's Ample Constitutional Authority to Regulate GHG Emissions" (2016) University of Ottawa Faculty of Law Working Paper Series, online: <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2775370> [Chalifour, "Climate Federalism"]. This topic is further developed in chapters four and five of this thesis.

[94] Peter Lougheed, "Address (delivered to the Canadian Bar Association, Calgary, 14 August 2007)" [unpublished], quoted in Shi-Ling Hsu & Robin Elliot, "Regulating Greenhouse Gases in Canada: Constitutional and Policy Dimensions" (2009) 54 McGill LJ 463 at 465 [Hsu & Elliot, "Regulating Greenhouse Gases in Canada"].

[95] Kathleen Harris, "Justin Trudeau won't rule out imposing carbon price plan on provinces", *CBC News* (20 July 2016), online: <http://www.cbc.ca/news/politics/trudeau-carbon-tax-provinces-1.3686769>.

[96] Quoted in Andy Blatchford, "Baloney Meter: Brad Wall could challenge any federal carbon tax on Crown corps", *CBC News* (28 July 2016), online: <http://www.cbc.ca/news/politics/baloney-meter-brad-wall-carbon-tax-1.3699134>. Premier Wall also (and perhaps more importantly) opposes a carbon tax on economic grounds: see Ian Vandaelle, "Brad Wall slams Ottawa for mulling carbon tax: 'Now is not the time'", *Business News Network* (14 June 2014), online: <http://www.bnn.ca/News/2016/6/14/Brad-Wall-Dissonant-to-even-talk-carbon-tax.aspx>; Shawn McCarthy, "Saskatchewan Premier Brad Wall Rejects

In her comprehensive and up-to-date analysis of the constitutional jurisdiction to regulate GHG emissions in Canada, Chalifour notes that considerable ink has already been spilled on this issue.[97] A review of this literature reveals a variety of technical, doctrinal disagreements over which constitutional head of power is the preferable basis for the exercise of federal jurisdiction – for example, the "national concern" doctrine under POGG versus POGG's "emergency doctrine"; the taxation power versus the criminal law power versus the declaratory power.

Ottawa's Carbon Plan", *The Globe and Mail* (19 February 2016), online: <http://www.theglobeandmail.com/news/politics/saskatchewan-premier-brad-wall-rejects-ottawas-carbon-pricing-plan/article28808667/>. In addition, both Saskatchewan and Nova Scotia oppose the federal government's stated intention to accelerate the phase-out of coal-fired power plants. See Shawn McCarthy, "Provinces balk at federal push to speed up phase-out of coal power", *The Globe and Mail* (2 September 2016), online: <http://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/provinces-balk-at-federal-push-to-accelerate-phasing-out-of-coal-power/article31685245/>.

[97] See e.g. Jason MacLean, Meinhard Doelle & Chris Tollfeson, "Polyjural and Polycentric Sustainability Assessment: A Once-In-A-Generation Law Reform Opportunity" (2016) 30:1 J Envtl L & P 36 [MacLean, Doelle & Tollefson, "Polyjural and Polycentric Sustainability Assessment"]; Alistair R. Lucas & Jenette Yearsley, "The Constitutionality of Federal Climate Change Legislation" (2011) 4 University of Calgary SPP Research Papers 15; Hsu & Elliot, "Regulating Greenhouse Gases in Canada", *supra* note 85; Peter W. Hogg, "Constitutional Authority Over Greenhouse Gas Emissions" (2009) 46 Atla L Rev 207; Nathalie J Chalifour, "Making Federalism Work for Climate Change – Canada's Division of Powers over Carbon Taxes" (2008) 22:2 NJCL 119; Nathalie J Chalifour, "The Constitutional Authority to Levy Carbon Taxes" in Thomas J. Courchene & John Allan, eds, *Canada: The State of the Federation* (Montreal: McGill-Queens University Press, 2009) 177; Peter W. Hogg, "A Question of Parliamentary Power: Criminal Law and the Control of Greenhouse Gas Emissions" (2008), online: C.D. Howe Institute <https://www.cdhowe.org/question-parliamentary-power-criminal-law-and-control-greenhouse-gas-emissions>; Stewart Elgie, "Kyoto, the Constitution and Carbon Trading: Waking a Sleeping BNA Bear (or Two)" (2007) 13 Rev Const Stud 67; Kai D Sheffield, "The Constitutionality of a Federal Emissions Trading Regime" (2014) 4:1 Western Journal of Legal Studies 1; Nigel D Bankes & Alistair R Lucas, "Kyoto, Constitutional Law and Alberta's Proposals" (2004) 42 Atla L Rev 355; Elizabeth Demarco et al, "Canadian Challenges in in Implementing the Kyoto Protocol: A Cause for Harmonization" (2004) 42 Atla L Rev 209; Philip Barton, "Economic Instruments and the Kyoto Protocol: Can Parliament Implement Emissions Trading without Provincial Co-Operation?" (2002) 40 Atla L Rev 417; Kathryn Harrison, "Challenges and Opportunities in Canadian Climate Policy" in Steven Bernstein et al, eds, *A Globally Integrated Climate Policy for Canada* (Toronto: University of Toronto Press, 2008) 336 [Harrison, "Challenges and Opportunities"]; Chris Rolfe, *Turning Down the Heat: Emissions Trading and Canadian Implementation of the Kyoto Protocol* (Vancouver: West Coast Environmental Law Research Foundation, 1998); Joseph F Castrilli, "Legal Authority for Emissions Trading in Canada" in Elizabeth Atkinson, ed, *The Legislative Authority to Implement a Domestic Emissions Trading System* (Ottawa: National Round Table on the Environment and the Economy, 1999); and Steven Kennett, "Federal Environmental Jurisdiction After *Oldman*" (1992) 31 McGill LJ 180 at 187.

These doctrinal disputes notwithstanding, there is an emerging consensus that the federal government has broad powers to enact legislation in respect of the environment generally and climate change in particular. Hsu and Elliot argue that "the Canadian constitution does not present any significant barriers to federal or provincial regulation"[98] and that policy considerations strongly favour the use of a federal carbon tax to regulate GHG emissions along with the use of the *Canadian Environmental Assessment Act* (in its pre-2012 iteration) to review proposed economic activities that may increase GHG emissions.[99] Chalifour concludes "there is ample authority within the Constitution for a strong federal role in regulating GHG emissions and pricing carbon without displacing appropriately scoped provincial climate programs."[100] Hutchinson observes that the federal government has legally valid – if politically contentious – avenues available to it "if it wants to take a more unilateral position and impose a legislative regime on reluctant or recalcitrant provinces." [101] MacLean, Doelle, and Tollefson similarly argue that "the federal government's jurisdiction to make decisions based on the integration of social, economic, and environmental considerations is far broader than commonly understood."[102] Wood, Tanner, and Richardson observe that in Canada "the primary obstacle to national leadership on the environment is a lack of political will on the part of successive federal governments

[98] Hsu & Elliot, "Regulating Greenhouse Gases in Canada", *supra* note 94 at 463.
[99] *Ibid.*
[100] Chalifour, "Climate Federalism", *supra* note 93 at 3. Notably, the Manitoba provincial government reluctantly reached the same conclusion after seeking a legal opinion on the constitutional validity of the federal government's proposed pan-Canadian carbon price. See Government of Manitoba, "News Release: Province Releases Expert Legal Opinion on Carbon Pricing" (11 October 2017), online: <http://news.gov.mb.ca/news/index.html?item=42320>.
[101] Hutchinson, "Climate change: A constitutional puzzle", *supra* note 91.
[102] MacLean, Doelle & Tollefson, "Polyjural and Polycentric Sustainability Assessment", *supra* note 97 at 2.

rather than constitutionally imposed jurisdictional constraints."[103] And as Harrison pointedly concludes her comprehensive analysis of what I call environmental federalism 1.0, the federal government has historically been largely "ill-inclined to exercise its jurisdiction and takes advantage of jurisdictional uncertainty by 'passing the buck' to jurisdictionally defensive provinces."[104]

B. Federalism 2.0: Cooperation and Harmonization, or Still Passing the Buck?

The legal clarity of the federal government's jurisdiction to legislate in respect of climate change does not, however, dispose of climate change's undeniable public policy complexity. Nor does it exhaust the constitutional issues surrounding the creation of a national climate change policy. Given Canada's regionally distinct economies, federalism has thus far proven to be an obdurate political obstacle to adopting an integrated and effective climate change policy.[105] Historically, Alberta has protected its oil and gas industry, Ontario has safeguarded its automotive industry, and Quebec has sought to uphold what it views as its exclusive political jurisdiction.[106] Saskatchewan has also begun

[103] Stepan Wood, Georgia Tanner & Benjamin J Richardson, "What Ever Happened to Canadian Environmental Law?" (2010) 37 Ecology LQ 981 at 1017 [Wood, Tanner & Richardson, "Whatever Happened to Canadian Environmental Law?"], citing David R Boyd, *Unnatural Law: Rethinking Canadian Environmental Law and Policy* (Vancouver: UBC Press, 2003) at 92-93. See also Meinhard Doelle, *The Federal Environmental Assessment Process: A Guide and Critique* (Markham, ON: LexisNexis, 2008) at 81 (arguing that the "Supreme Court's approach to jurisdictional issues in the environmental field has been driven more by its recognition of the environment as an issue that requires the active engagement of all levels of government than a strict application of constitutional law principles…. The overall message to governments in Canada is that the SCC is not interested in being made the scapegoat for government inaction").

[104] Kathryn Harrison, *Passing the Buck: Federalism and Canadian Environmental Policy* (Vancouver: UBC Press, 1996) at 162.

[105] Kathryn Harrison, "The Road Not Taken: Climate Change Policy in Canada and the United States" (2007) 7:4 Global Environmental Politics 92.

[106] The Province's insistence on ensuring that the proposed interprovincial oil pipeline Energy East also comply with Quebec's own environmental assessment regime is a case in point. For example, the pipeline proponent, TransCanada Corp., acceded to the Province's demand that the project be reviewed by its

to more aggressively assert the rights of its energy industry and its related natural resource extraction initiatives. Meanwhile, even the election of the New Democratic Party in British Columbia, made possible only by the support of the province's Green Party, has not appreciably enhanced the province's approach to environmental protection, climate change mitigation, or its relationship with Indigenous peoples.[107]The environment and climate change policy landscape in Canada has long been and remains very much a fragmented and ultimately ineffective patchwork.[108]

Notably, while the Constitution itself is not an obstacle to effective pan-Canadian environmental legislation, it is often *perceived* as such.[109] More importantly, it is often *framed* as being just such an obstacle.[110] As a result, the pattern of federal-provincial

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Bureau d'audiences publiques sur l'environnement (BAPE). See Sidhartha Banerjee, "TransCanada to produce Energy East environmental impact study: Quebec". *The Globe and Mail* (22 April 2016), online: <http://www.theglobeandmail.com/news/national/transcanada-to-produce-energy-east-environmental-impact-study-quebec-says/article29728353/>. Another example is the Province's reaction to the federal ministry of the Environment and Climate Change's issuance of an "emergency order" under the *Species At Risk Act*, SC 2002, c 29 that effectively blocked part of a residential development project south of Montreal in order to protect the habitat of the western chorus frog. Quebec's Environment Minister David Heurtel stated in response that the federal government's decision "raises serious questions about a potential intrusion of Quebec's jurisdiction": Daniel Leblanc, "Quebec hopping mad over federal intervention to protect frog habitat", *The Globe and Mail* (22 June 2016), online: <http://www.theglobeandmail.com/news/politics/quebec-slams-ottawa-for-unilateral-action-to-protect-frog-habitat/article30565269/>.

[107] The governing NDP Party in British Columbia has, in very short order, approved the continuation of the construction of the Site C hydroelectric dam megaproject over the concerns of environmentalists and Indigenous groups while also refusing to oppose its predecessor's approval of the Trans Mountain oil pipeline expansion, once again over the concerns of environmentalists and Indigenous peoples. There appears to be no discernable difference in environmental policy as between the most recent NDP government and the former Liberal government in British Columbia. The province's present climate change policy is discussed further in chapter four of this thesis.

[108] Office of the Auditor General of Canada, *2014 Fall Report of the Commissioner of the Environment and Sustainable Development* (Ottawa, 2014), online: <http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201410_e_39845.html>; see also Josh Wingrove, "Scathing report details Canada's environmental shortfalls", *The Globe and Mail* (7 October 2014), online: <http://www.theglobeandmail.com/news/politics/canada-lagging-on-emissions-goals-environment-watchdog-warns/article20959840/?page=all>.

[109] MacLean, Doelle & Tollefson, "Polyjural and Polycentric Sustainability Assessment", *supra* note 97 at 2.

[110] Harrison, *supra* note 104; for recent examples of this approach, see the Prime Minister's mandate letter to then Minister of Natural Resources Jim Carr explaining to Minister Carr that "[w]e made a commitment

dealings regarding the environment has taken the shape of disingenuous federal deference that calls for cooperation and harmonization.[111] Prominent examples include the 1998 Canada-Wide Accord on Environmental Harmonization,[112] which was concluded on the basis of "widespread yet dubious complaints of unnecessary duplication of federal and provincial legislation."[113] This accord "put the provinces firmly in the driver's seat and barred the federal government from acting whenever a province is designated the 'lead authority'."[114] The *Canadian Environmental Protection Act of 1999*[115] and the former *Canadian Environmental Assessment Act*[116] similarly established a leading role for the provinces in those cases where they have equivalent regulatory standards.[117] These federal enactments gave provincial governments the final word on just how stringently (or not) to assess the environmental impacts of proposed economic activities.[118] Once again, under

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to Canadians to pursue our goals with a renewed sense of collaboration. Improved partnerships with provincial, territorial, and municipal governments are essential to deliver the real, positive change that we promised Canadians." Office of the Prime Minister, "Minister of Natural Resources Mandate Letter", online: <http://pm.gc.ca/eng/minister-natural-resources-mandate-letter>; identical language is included in the Prime Minister's mandate letter to the Minister of Environment and Climate Change. See Prime Minister's Office, "Minister of Environment and Climate Change Mandate Letter", online: <http://pm.gc.ca/eng/minister-environment-and-climate-change-mandate-letter>.

[111] Wood, Tanner & Richardson, "Whatever Happened to Canadian Environmental Law?" *supra* note 104 at 1019.

[112] Canadian Council of Ministers of the Environment, *A Canada-Wide Accord on Environmental Harmonization* (Ottawa, 1998), online: <http://www.ccme.ca/en/resources/harmonization/index.html>.

[113] Wood, Tanner & Richardson, "Whatever Happened to Canadian Environmental Law?" *supra* note 104 at 1019.

[114] *Ibid.*

[115] *Canadian Environmental Protection Act of 1999,* SC 1999, c 33, s 4(1)(b2).

[116] *Canadian Environmental Assessment Act,* SC 1992, c 37, s 54(1).

[117] Wood, Tanner & Richardson, "Whatever Happened to Canadian Environmental Law?" *supra* note 104 at 1019.

[118] Melody Hessing, Michael Howlett & Tracy Summerville, *Canadian Natural Resource and Environmental Policy* (Vancouver: UBC Press, 2005) at 205, cited in Wood, Tanner & Richardson, "Whatever Happened to Canadian Environmental Law?" *supra* note 104 at 1019.

the dubious banners of cooperation and harmonization, the federal government effectively "passed the buck" by delegating its environmental responsibilities to the provinces.[119]

The *Canadian Environmental Assessment Act, 2012*[120] significantly extended this practice. When the previous version of the Act came up for review, British Columbia argued forcefully that economic activity in the province was being hampered by the overlapping jurisdiction of the federal and provincial environmental assessment regimes; as of 2011, approximately 60% (42 of 71) of provincial projects were subject to both regimes.[121] British Columbia argued that instead of "harmonization," the federal government should exempt most projects based in the province from the federal environmental assessment regime if the project was subject to an assessment undertaken by British Columbia. Under this proposed approach, project proponents would only be required to undergo "a single (provincial) assessment."[122] The province maintained that the B.C. environmental assessment process "meets or exceeds the rigour of the federal environmental assessment process."[123] The following year, when the then Harper federal government unveiled *CEAA,*

[119] Wood, Tanner & Richardson, "Whatever Happened to Canadian Environmental Law?" *supra* note 104 at 1019; see also PJ Fitzpatrick & A John Sinclair, "Multi-jurisdictional environmental assessment" in KS Hanna, ed, *Environmental Impact Assessment: Practice and Participation*, 3rd ed (Toronto: Oxford University Press, 2016) at 184 (arguing that actual progress toward harmonizing the legal architecture and requirements of Canadian environmental assessment regimes has been modest at best) [Fitzpatrick & Sinclair, "Multi-jurisdictional environmental assessment"].
[120] *Canadian Environmental Assessment Act, 2012,* SC 2012, c 19, s 52 [*CEAA, 2012*].
[121] See the Submission of the B.C. Government to the *Canadian Environmental Assessment Review*, online: <http://www.eao.gov.bc.ca/pdf/BC_Submission_5Yr_review_Nov_28-2011.pdf> at 4.
[122] *Ibid* at 6.
[123] *Ibid* at 7.

2012, British Columbia's proposed amendments were embodied largely intact in the new law.

Fitzpatrick and Sinclair describe *CEAA, 2012* as federal environmental assessment "retrenchment."[124] Retrenchment, they argue, is a deliberate strategy of "limiting the application of federal EA."[125] In the context of multijurisdictional environmental assessments, *CEAA, 2012* established three new mechanisms through which the federal government could "pass the buck" in respect of its environmental assessment obligation: (1) delegation;[126] (2) substitution;[127] and (3) exemption.[128]

Under both the delegation and substitution mechanisms, the federal government arrogated to itself the power to pass off its environmental assessment obligations to a province or territory in respect of projects that would otherwise require a federal assessment; the federal government retained the right – but not the obligation – to make the ultimate project decision on the basis of the delegated or substituted assessment. The exemption mechanism

[124] Fitzpatrick & Sinclair, "Multi-jurisdictional environmental assessment", *supra* note 119 at 189; see also Robert B. Gibson, "In full retreat: the Canadian government's new environmental assessment law undoes decades of progress" (2012) 30:3 Impact Assessment and Project Appraisal 179.
[125] Fitzpatrick & Sinclair, "Multi-jurisdictional environmental assessment", *supra* note 119 at 189
[126] *CEAA, 2012, supra* note 110 at s 26.
[127] *Ibid* at s 32.
[128] *Ibid* at s 37.

went even further. Where this power was exercised, the federal government forfeited its right to make the final decision regarding the assessed project.[129]

According to the B.C. Environmental Assessment Office, the province persuaded the federal government to exercise its new substitution powers early and often under the amended law, totaling fourteen assessments, primarily in respect of mining and liquefied natural gas (LNG) projects.[130]

Just as Wood, Tanner, and Richardson concluded that collaborative federalism and harmonization largely failed to improve environmental governance generally, [131] retrenchment has thus far proved equally disappointing.[132] Following the enactment of *CEAA, 2012,* the federal government failed to establish clear guidelines regarding which economic activities and project proposals required an environmental assessment. As the Commissioner of the Environment and Sustainable Development concluded in her 2014 audit, the consequence of this failure was that "some significant projects may not be assessed."[133]

More recently, in her Fall 2017 Report, the Commissioner noted that the federal government had yet to transition "from a seemingly endless planning mode into an action

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[129] See MacLean, Doelle & Tollefson, "Polyjural and Polycentric Sustainability Assessment", *supra* note 97.
[130] For additional and up-to-date details, see the website of the B.C. Environmental Assessment Office, online: <http://www.eao.gov.bc.ca>.
[131] Wood, Tanner & Richardson, "What Ever Happened to Canadian Environmental Law?", *supra* note 104 at 1020.
[132] MacLean, Doelle & Tollefson, "Polyjural and Polycentric Sustainability Assessment", *supra* note 97.
[133] Commissioner of the Environment and Sustainable Development, *2014 Fall Report of the Commissioner of the Environment and Sustainable Development* (Ottawa, October 2014), online: <http://www.oag-

mode", and concluded that "in two important areas – reducing greenhouse gases and adapting to the impacts of climate change – the federal government has yet to do much of the hard work that is required to bring about this fundamental shift."[134]

Meanwhile, at the provincial level, some provinces "have taken advantage of Ottawa's timidity to keep their own laws weak."[135] British Columbia's proposed new climate change policy[136] (under its former Liberal government), for example, resulted in renewed calls for a stronger federal role in environmental governance, particularly in respect of climate change.[137] Andrew Gage of the West Coast Environmental Law Clinic expressed the issue this way: "… the important thing is that each province has a plan that credibly and transparently shows how it will achieve its [GHG reduction targets] and/or its fair share of Canada's national target. Accountability must be an integral part of the national framework

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bvg.gc.ca/internet/English/parl_cesd_201410_e_39845.html> [Commissioner of the Environment and Sustainable Development, "2014 Fall Report"].

[134] Commissioner of the Environment and Sustainable Development, "The Commissioner's Perspective" (Ottawa, October 2017), online: <http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201710_00_e_42488.html> [Commissioner of the Environment and Sustainable Development, "2017 Fall Report"].

[135] Wood, Tanner & Richardson, "What Ever Happened to Canadian Environmental Law?", *supra* note 104 at 1020; see also Jason MacLean, "Ontario's cap-and-trade regime off to a shaky start", *Toronto Star* (March 3, 2016), online: <http://www.thestar.com/opinion/commentary/2016/03/03/ontarios-cap-and-trade-regime-off-to-a-shaky-start.html> (arguing that Ontario's new cap-and-trade regime is unlikely to assist the province in meeting its or Canada's GHG reduction target because of the regime's initial and indefinite exemption of approximately 14% of Ontario's large GHG emitters and its insufficiently stringent carbon price).

[136] British Columbia, *Climate Leadership Plan* (Victoria, 2016), online: <http://climate.gov.bc.ca/tile/read-bcs-climate-leadership-plan/>. But see Mark Jaccard, "B.C.'s climate plan reaches Olympian heights of political cynicism", *The Globe and Mail* (21 August 2016), online: <http://www.theglobeandmail.com/opinion/bcs-climate-plan-reaches-olympian-heights-of-political-cynicism/article31464244/>.

[137] See e.g. Ian Bailey, "B.C. environmental law group criticizes federal approach to climate change", *The Globe and Mail* (31 August 2016), online: <http://www.theglobeandmail.com/news/british-columbia/bc-environmental-law-group-criticizes-federal-approach-to-climate-change/article31656437/>.

that you are in the process of developing, from both a fairness and an efficiency perspective."[138]

The absence of federal leadership has also hampered Canada's efforts to promote and institutionalize sustainability.[139] A case in point is the unfulfilled promise of the *Federal Sustainable Development Act*,[140] which is explored briefly below.

C. Whatever Happened to the *Federal Sustainable Development Act*?

In 2008 the minority federal government supported a Liberal private member's bill to create a *Federal Sustainable Development Act*. Two aspects of the Act are notable. The first is the federal government's subsisting acceptance of "the basic principle that sustainable development is based on an ecologically efficient use of natural, social and economic resources"[141] and the government's accompanying acknowledgment of "the need to *integrate* environmental, economic and social factors *in the making of all decisions by government*."[142] The second is the Act's core purpose of providing "the legal framework for developing and implementing a Federal Sustainable Development Strategy that will

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[138] Andrew Gage, "BC's Climate Plan shows why real leadership requires accountability", West Coast Environmental Law Clinic (31 August 2016), online: <http://wcel.org/resources/environmental-law-alert/bc-climate-plan-shows-why-real-leadership-requires-accountabilit>.
[139] See e.g. G Toner, J Meadowcraft & D Cherniak, "The Struggle of the Canadian Federal Government to Institutionalize Sustainable Development", in D VanNijnatten, ed, *Canadian Environmental Policy and Politics: The Challenges of Austerity and Ambivalence* (Toronto: Oxford University Press, 2015) at 116-129 [Toner, Meadowcraft & Cherniak, "The Struggle of the Canadian Federal Government to Institutionalize Sustainable Development"]; see also Mark Winfield, "Decision-Making, Governance and Sustainability: Beyond the Age of 'Responsible Resource Development'" (2016) 29 J Envtl L & P 129; Rod Northey, "Fading Role of Alternatives in Federal Environmental Assessment" (2016) 29 J Envtl L & P 41.
[140] *Federal Sustainable Development Act,* SC 2008, c 33.
[141] *Ibid* at s 5.
[142] *Ibid* [emphasis added].

make environmental decision-making more transparent and accountable to Parliament."[143] This Strategy, which was to be initially developed by 2010 and then renewed within every three-year period hence, is also to be "based on the precautionary principle."[144] The *Federal Sustainable Development Act* is thus a remarkably ambitious legislative instrument, at least on its face.

It is also a curious one, given that the initial Federal Sustainable Development Strategy period (2010-2013)[145] coincided with the federal government's retrenchment from environmental assessment and environmental governance more generally.[146] Toner, Meadowcroft, and Cherniak argue that this ostensible contradiction is due to the previous federal government's cunning cooptation of the discourse of sustainability as a form of "empty rhetoric" deployed to promote the federal government's altogether unsustainable "Responsible Resource Development" agenda.[147] Their argument is supported by the audits of the Federal Sustainable Development Strategy conducted by the Commissioner of the Environment and Sustainable Development. The Commissioner's audit of the federal government's 2012 "Progress Report," for example, criticized the government for misleading Canadians by failing to "present a representative, clear and complete picture", explaining that "balanced reporting [is necessary to ensure] there are no distortions of

[143] *Ibid* at s 3.
[144] *Ibid* at s 9(1).
[145] Government of Canada, *Planning for a Sustainable Future: A Federal Sustainable Development Strategy for Canada 2010-2013* (Ottawa: Sustainable Development Office, Environment Canada, 2013).
[146] The federal government's overall retrenchment, including but extending beyond its environmental assessment regime, was accomplished through its "Responsible Resource Development" initiative, which was ushered in by the controversial omnibus bill C-38, or the *Jobs, Growth and Long-term Prosperity Act, 2012,* SC 2012, c 19. The term "streamlining" is also used to characterize this move. See A. Bond et al, "Impact Assessment: Eroding benefits through streamlining" (2014) 45 Impact Assessment Review 46.
[147] Toner, Meadowcroft & Cherniak, "The Struggle of the Canadian Federal Government to Institutionalize Sustainable Development", *supra* note 139.

information through presentation or tone, or through the omission of information and context."[148] The Commissioner's critique referred to the government's portrayal of Canada as being well on its way to meeting the GHG-emissions-reduction target that it pledged in Copenhagen in 2009[149] when, at the same time, Environment Canada's own data unequivocally indicated that due to rapidly increasing GHG emissions from Alberta's oil sands, Canada was on course to *exceed* its Copenhagen target by 20%.[150] The Commissioner concluded her initial audit by noting that the federal government had not been honest with Canadians, and that the government lacked the political will to impose regulations on the oil and gas sector capable of achieving its stated climate change mitigation and sustainability aspirations.[151]

Similarly, the potential of the renewed 2013-2016 Federal Sustainable Development Strategy has not been realized. In her 2014 report, the Commissioner of the Environment and Sustainable Development observed that "Environment Canada is not coordinating with the provinces and territories to achieve the national [GHG emissions reduction] target."[152]

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[148] Commissioner of the Environment and Sustainable Development, *Federal and Departmental Sustainable Development Strategies Part 2—Review of 2012 Progress Report of the Federal Sustainable Development Strategy* (Ottawa: Office of the Auditor General of Canada, 2013) at ch 8, 31 [Commissioner of the Environment and Sustainable Development, "Review of 2012 Progress Report"].

[149] As part of the Copenhagen Accord concluded in 2009, Canada committed to reduce its GHG emissions by 17% of 2005 levels by the year 2020. See Kathleen Harris, "Canada failing to meet its 2020 emissions targets", *CBC News* (24 October 2013), online: <http://www.cbc.ca/news/politics/canada-failing-to-meet-2020-emissions-targets-1.2223930>.

[150] Environment Canada, *Canada's Emissions Trends* (Ottawa, October 2013), online: <http://www.ec.gc.ca/ges-ghg/985F05FB-47444269-8C1A-D443F8A86814/1001-Canada's%20Emissions%20Trends%202013_e.pdf>.

[151] Commissioner of the Environment and Sustainable Development, "Review of the 2012 Progress Report", *supra* note 148.

[152] Commissioner of the Environment and Sustainable Development, "2014 Fall Report", *supra* note 133 at s 1.30; see also Commissioner of the Environment and Sustainable Development, "2015 Fall Report of the Commissioner of the Environment and Sustainable Development" (Ottawa, January 2016), online: <http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201512_e_41007.html> [Commissioner of the Environment and Sustainable Development,"2015 Fall Report"].

Regarding the related and crucially important issue of a regulatory framework for the oil and gas sector, where GHG emissions continue to increase more rapidly than in any other sector of the Canadian economy, the Commissioner noted that while "detailed regulatory proposals have been available internally for over a year," the government had only consulted privately, largely through a "small working group of one province and selected industry representatives."[153] The Commissioner concluded her 2014 report thus: "In many key areas that we looked at, it is not clear how the government intends to address the significant environmental challenges that future growth and development will likely bring about."[154]

The successive failures of the Federal Sustainable Development Strategy neatly illustrate that, when it comes to federalism and environmental protection, the most pressing constitutional issue is hardly one of federal versus provincial jurisdiction.[155] Nor is it one

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[153] Commissioner of the Environment and Sustainable Development, "2014 Fall Report," *supra* note 133 at s 1.19; see also Mark S. Winfield, "Climate Change and Canadian Energy Policy" in Steven Bernstein et al, eds, *A Globally Integrated Climate Policy for Canada,* (Toronto: University of Toronto Press, 2008) at 266 (arguing that the federal government has failed "to develop an overall strategy to re-orient Canada's energy path away from conventional non-renewable energy development and export and towards greater energy efficiency and reliance on low-impact renewable energy sources").

[154] Office of the Auditor General of Canada, "Commissioner of the Environment and Sustainable Development releases Fall 2014 Report" (Ottawa, 7 October 2014), online: <http://www.oag-bvg.gc.ca/internet/English/mr_20141007_e_39911.html>; see also Josh Wingrove, "Scathing report details Canada's environmental shortfalls", *The Globe and Mail* (7 October 2014), online: <http://www.theglobeandmail.com/news/politics/canada-lagging-on-emissions-goals-environment-watchdog-warns/article20959840/?page=all>. The Commissioner reached substantially the same conclusion in her 2015 report but frames it in comparatively more optimistic language, presumably in light of the intervening change in government at the federal level: "Canada has embraced the two sides of the coin: combatting climate change and its impacts, and working to achieve sustainable development. Concrete actions on these commitments will put Canada on the road to meeting the needs of present and future generations. I look forward to reporting to Parliament on the government's progress in achieving these all-important goals." See Commissioner of the Environment and Sustainable Development, "2015 Fall Report", *supra* note 152.

[155] But see Andrew J Green, "Bringing Institutions and Individuals into a Climate Policy for Canada" in Bernstein et al, *supra* note 143 at 249 (arguing that "it is not at all clear that the federal government has the constitutional jurisdiction to put in place a national system").

of intergovernmental accountability. Neither the federal nor the provincial governments of Canada can claim superiority – much less success – in promoting environmental protection and sustainability.[156] Harrison concludes her landmark study of federalism and Canadian environmental policy by observing that "governments generally will be unwilling to pursue policies to protect the environment, although their reluctance may be *briefly overcome during periods of exceptional public attentiveness to environmental issues*."[157] Harrison's conclusion gestures toward an altogether different federalism issue in respect of the public's interest in effective climate change mitigation and a fair and efficient transition to sustainability. The most pressing federalism issue in respect of Canadian environmental law and policy is the federal government's direct accountability to Canadians, whose trust the current government has repeatedly vowed to restore. This altogether different issue calls for an altogether different approach to federalism and national policymaking more generally – call it federalism 3.0.[158] In the next part of this chapter I unpack and critically

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[156] For example, the present federal government, after being an outspoken member of the "High Ambition Coalition" during the Paris climate change agreement negotiations, refused to update the former Conservative federal government's GHG emissions reduction target of 30% below the 2005 level by 2030, despite having previously characterized the Conservative's target as "unambitious" and, even more pointedly, as "fake." See Payton, "Liberals back away from setting tougher targets", *supra* note 42.

[157] Harrison, *Passing the Buck, supra* note 104 at 162 [emphasis added]. Douglas Macdonald reaches a similar conclusion with respect to the ability of industry to avoid stringent environmental regulations, observing that Canadian business "is less powerful when fighting high-profile issues that have mobilized countervailing forces"; see Douglas Macdonald, *Business and Environmental Politics in Canada* (Peterborough, ON: Broadview Press, 2007) at 191. Nevertheless, Macdonald attributes the enduring failure of Canadian climate policy to the fraught and dysfunctional relationship between the federal government and the provincial governments, particularly those of Alberta and Saskatchewan: Douglas Macdonald, *Hydro Province, Carbon Province: The Challenge of Canadian Energy and Climate Federalism* (Toronto: University of Toronto Press, 2020).

[158] The concept of federalism 3.0 is coined for the sake of analytical convenience, is inspired by Macdonald & Wolfe's conception of Canada's third national policy, or NP3, and seeks to test the normative predictions made by Macdonald & Wolfe in respect of the evolution of NP3 in the context of Canada's emerging climate governance. See Roderick A Macdonald & Robert Wolfe, "Canada's Third National Policy: The Epiphenomenal or the Real Constitution?" (2009) 59 UTLJ 469 at 522 [Macdonald & Wolfe, "Canada's Third National Policy"]; see also Roderick A Macdonald, "Kaleidoscopic Federalism" in J-F Gaudreault-DesBiens & Fabien Gélinas, eds, *The States and Moods of Federalism: Governance, Identity and Methodology* (Montreal: Blais, 2005) at 261. In the specific context of climate change, see MacLean, "Autonomy in the Anthropocene?", *supra* note 7.

examine the constitutive elements of this new approach and discuss its implications for Canada's initial climate change and sustainability policies and decisions following the adoption of the Paris Agreement.

III. Canadian Climate Change Policy and Federalism 3.0 – From Retrenchment to Restoring Canadians' Trust

"Canada is back." Or so declared Prime Minister Justin Trudeau at the outset of the final Paris climate change negotiations in November 2015, telling the conference delegates that Canada was ready to assume a new climate leadership role on the international stage.[159] The first visible domestic manifestation of this new commitment arose out of the First Ministers' Meeting on climate change and the release of the "Vancouver Declaration on clean growth and climate change."[160] In the Vancouver Declaration, the federal, provincial, and territorial governments agreed to "build on the momentum of the Paris Agreement by developing a concrete plan to achieve Canada's international commitments through a pan-Canadian framework for clean growth and climate change."[161] To that end, the First Ministers recognized "that the level of ambition set by the Paris Agreement will require global emissions to approach zero by the second half of the century and that all governments, Indigenous peoples, as well as civil society, business and individual Canadians, should be mobilized in order to face this challenge".[162] Instigated by the federal

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[159] James Fitz-Morris, "Justin Trudeau tells Paris climate summit Canada ready to do more", *CBC News* (30 November 2015), online: <http://www.cbc.ca/news/politics/trudeau-address-climate-change-paris-1.3343394>.

[160] Canadian Intergovernmental Conference Secretariat, "Conferences – First Ministers' Meeting – Vancouver Declaration on clean growth and climate change" (3 March 2016), online: <http://www.scics.gc.ca/english/conferences.asp?a=viewdocument&id=2401> [Canadian Intergovernmental Conference Secretariat, "Vancouver Declaration"].

[161] *Ibid.*

[162] *Ibid.* The Vancouver Declaration relatedly recognizes "the importance of public education, participation and access to information to increase climate change awareness and literacy". However, and perhaps

government, the discourse of the Vancouver Declaration is an example of what Macdonald and Wolfe characterize as "the constitutional (constitutive) conversation of the future",[163] which "will be couched in the rhetoric of policy, purposes, and human agency, not that of jurisdiction, power, and imposed authority."[164] What does this new and aspirational constitutional (constitutive) conversation – what Macdonald and Wolfe call Canada's "Third National Policy," or "NP3"[165] – involve, and what are its implications for Canada's evolving climate change policies? More pointedly, will Canada's emerging climate change policies vindicate its commitments under the Paris Agreement and fulfill its own promises of a democratically-enhanced mode of environmental governance (federalism 3.0)?

A. Canada's Third National Policy, or Let's Talk TV?

Macdonald and Wolfe conceive of national policies as both collective, normative endeavors originating in the actions and demands of citizens, and also as analytic frameworks. Moreover, they argue that national policies are more constitutive of the Canadian state and its governing instruments than any of its renamed *Constitution Acts*, which they view as epiphenomenal, the products of underlying public policy commitments.[166]

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tellingly, the Vancouver Declaration emphasizes "the diversity of provincial and territorial economies" and, in particular, "the economic importance of Canada's energy and resource sectors, *and their sustainable development* as Canada transitions to a low carbon economy" [emphasis added].

[163] Macdonald & Wolfe, "Canada's Third National Policy", *supra* note 158 at 494.

[164] *Ibid*.

[165] *Ibid.*

[166] *Ibid*.

Canada's underlying national policy, they argue, has evolved from the creation of a resource-wealthy transcontinental country (NP1), to the establishment of an administrative state tasked with widely redistributing the fruits of the country's transcontinental wealth (NP2), to enhancing citizens' agency (NP3).[167] The primary and ongoing ambition of NP3 is to "unbundle programs and reaggregate policy goals now largely managed by centralized bureaucracies (both public and private) … in ways that enhance the ability of citizens to lead self-directed lives in concert with others, surely the litmus test for a liberal democracy."[168] In order to give full effect to this emergent third national policy, Macdonald and Wolfe argue that

> governments at all levels are experimenting with new policy instruments, new forms of civic engagement, and *new processes and channels through which bi-directional communication and understanding may be negotiated and refashioned*. The political challenge of NP3, then, *lies in finding models of participation and accountability that ensure a continuation of the democratic ideal of citizen equality in an unstable, plural, relatively boundary-less universe of policy implementation*.[169]

Macdonald and Wolfe argue that government instruments such as the *Constitution Act, 1982*,[170] the Macdonald Royal Commission,[171] the Free Trade Agreement,[172] NAFTA,[173]

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[167] *Ibid* at 494.
[168] *Ibid* at 494-95.
[169] *Ibid* at 505 [emphasis added]. In the U.S. constitutional context a similar argument is advanced in Michael C Dorf & Charles F Sabel, "A Constitution of Democratic Experimentalism" (1998) 98 Colum L Rev 267.
[170] *Constitution Act, 1982,* being Schedule B to the *Canada Act 1982* (UK), 1982, c 11, s 52.
[171] *The Royal Commission on the Economic Union and Development Prospects for Canada*, (Ottawa: Privy Council Office, 1985), online: <http://publications.gc.ca/site/eng/472251/publication.html>.
[172] *Canada-United States Free Trade Agreement*, 1987 (superseded), online: <http://www.international.gc.ca/trade-agreements-accords-commerciaux/agr-acc/us-eu.aspx?lang=eng>.
[173] *North American Free Trade Agreement,* 1994, online: <http://www.international.gc.ca/trade-agreements-accords-commerciaux/agr-acc/nafta-alena/index.aspx?lang=eng>.

the GST,[174] the Royal Commission on Aboriginal Peoples,[175] and the Nisga'a Final Agreement[176] "can be seen as competing diagnoses of and competing legal responses to a perceived need to articulate a third National Policy".[177]

To this list one could add still more explicit examples, including: (1) Canada's Action Plan on Open Government, which "seeks to engage in public dialogue that will inform the policy creation process and contribute directly to more *responsive*, innovative and effective governance";[178] (2) the federal government's commitment to a "true partnership" – cooperation and collaboration – with the provinces and territories;[179] and (3) the federal

[174] Canada Revenue Agency, Goods and services tax (introduced in 1991), online: <http://www.cra-arc.gc.ca/tx/bsnss/tpcs/gst-tps/gnrl/menu-eng.html>.
[175] *The Report of the Royal Commission on Aboriginal Peoples*, (Ottawa, Library of Parliament, 1996), online: <http://www.lop.parl.gc.ca/content/lop/researchpublications/prb9924-e.htm>.
[176] *The Nisga'a Final Agreement Act*, SC 2000, c7, online: <http://laws-lois.justice.gc.ca/eng/acts/N-23.3/>.
[177] Macdonald & Wolfe, "Canada's Third National Policy", *supra* note 158 at 522.
[178] Government of Canada, *Canada's Action Plan on Open Government,* (last modified on 9 September 2016), online: <http://data.gc.ca/eng/canadas-action-plan-open-government> [emphasis added]. Canada is also part of the Open Government Partnership, an international platform for domestic reformers committed to making their governments more open to the public. According to the federal government: "Within Canada, the Open Government Partnership provides us with a real opportunity to *accelerate the transformation of our public service and of our government through a fundamental openness to working with Canadians*" [emphasis added]. See Open Government Partnership, online: <http://www.opengovpartnership.org>. Finally, soon after its first election in 2015, the Trudeau federal government implemented an "Open and Accountable Government" policy, which provides, among other things, that "there should be no preferential access to government, or appearance of preferential access, accorded to individuals or organizations because they have made financial contributions to politicians and political parties." Justin Trudeau, Prime Minister of Canada, online: http://www.pm.gc.ca/eng/news/2015/11/27/open-and-accountable-government>.
[179] CBC News, "Canada election 2015: Trudeau promises 'true partnership' with provinces", *CBC News* (22 August 2015), online: <http://www.cbc.ca/news/politics/canada-election-2015-learned-this-week-aug22-1.3200542>.

government's commitment to reconciliation and a new, Nation-to-Nation relationship with Indigenous peoples.[180]

In order to unpack the elements of this new aspirational and responsive approach to federalism, consider as an illustrative case study the Canadian Radio-television and Telecommunications Commission's (CRTC) initiative "Let's Talk TV: A Conversation with Canadians" launched in 2013.[181] The objective of the CRTC's "Let's Talk TV" was to explore options for the future of Canadians' television system and how it can adapt to changing technologies and viewing habits.[182] The initiative's first phase featured an online solicitation of comments. In particular, the CRTC asked Canadians to share their open-ended views on television programming, and asked Canadians whether they have sufficient information to make choices and whether they knew where to turn if they are not satisfied. The comments received during phase one *informed* and *helped shape* phase two of the initiative, the "Let's Talk TV Choicebook," an interactive questionnaire designed to "provide an opportunity to consider some of the issues that have been raised, as well as the perspectives of other Canadians, and explore some of the trade-offs associated with certain options. Ultimately, *this input will help shape a proposed framework that is flexible and responsive to a communication environment that is in constant flux.*"[183] The Choicebook

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[180] Liberal Party of Canada, *Real Change,* "A New Nation-To-Nation Process", online: <https://www.liberal.ca/realchange/a-new-nation-to-nation-process/> [Liberal Party of Canada, "A New "Nation-To-Nation Process"].
[181] Canadian Radio-television and Telecommunications Commission (CRTC), "Let's Talk TV: A Conversation with Canadians", online: <http://www.crtc.gc.ca/eng/talktv-parlonstele.htm> [CRTC, "Let's Talk TV"].
[182] Government of Canada, "News Release: Let's Talk TV: CRTC sets out a roadmap to maximize choice and affordability for Canadian TV viewers" (19 March 2015), online: <http://news.gc.ca/web/article-en.do?nid=952659>.
[183] CRTC, Let's Talk TV, *supra* note 181.

was followed by both a formal proceeding and a public hearing.[184] The CRTC received over 13,000 comments from Canadians through the various phases of "Let's Talk TV."[185]

Decisions taken pursuant to the "Let's Talk TV" initiative include the elimination of 30-day cancellation policies; the promotion of Canadian-made content; the implementation of measures to improve access for Canadians with disabilities to content that meets their needs; a new Code of Conduct for broadcasters and TV service providers; enabling Canadians to watch live Super Bowl advertisements by the end of the 2016 season; and the introduction of a new, affordable entry-level service capped at $25 per month,[186] also known as the "skinny basic" TV package.[187] Notably, after the initial "skinny packages" arrived, consumers complained that the TV providers added extra costs for hardware and designed the packages to be unappealing, prompting the CRTC's Chairman at the time, Jean-Pierre Blais, to call the four-largest TV providers in Canada before a public hearing to answer for the consumer frustration. In response, Rogers promised to offer bundle discounts with its skinny package, and Bell promised it would stop requiring some customers to subscribe to its Internet service in order to get its skinny TV option.[188]

The broader regulatory context of the CRTC's "Let's Talk TV" initiative aligns closely with the core principles of NP3 and federalism 3.0. Under the leadership of the CRTC's

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[184] *Ibid.*
[185] *Ibid.*
[186] *Ibid*.
[187] James Bradshaw & Christine Dobby, "How 'the Blais show' shook up Canadian telecom", *The Globe and Mail* (9 September 2016), online: <http://www.theglobeandmail.com/report-on-business/blais-crtc-profile/article31797971/> [Bradshaw & Dobby, "The Blais Show"].
[188] *Ibid.* See also Terry Pedwell, "Consumer groups urge CRTC to ban discriminatory TV discount plans", *The Globe and Mail* (8 September 2016), online: <http://www.theglobeandmail.com/report-on-business/consumer-groups-want-crtc-to-ban-discriminatory-basic-tv-offerings/article31763165/>.

then Chair Jean-Pierre Blais, whose five-year term began in 2012, the CRTC endeavoured to transform itself by 2017 into an institution that is "trusted by Canadians" and no longer "in the pockets of the big companies" of the CDN$63-billion industry that it regulates.[189] In a remarkably – and refreshingly – candid response to industry complaints that the CRTC under Blais' leadership tended toward a more formal, public hearing-based approach to dialogue, Blais countered that "[w]hat they [industry players] want is that informal 'yeah yeah, nudge nudge, wink wink, your application will be approved.' If that's what they want, they're not going to get it from me and my commission."[190] Asked if he thought Canadians will ever truly be convinced, Blais responded that "[t]ime will tell whether it's irreversible, but I do think the institution is more focused on Canadians than ever before."[191]

At the same time, various federal governments' genuine commitment to aspirational federalism may be questioned. As part of the federal government's environmental policy "retrenchment" discussed above, for instance, the federal government severely restricted the ability of Canadians to participate in the public hearings conducted by the National Energy Board assessing major energy projects, including interprovincial oil pipeline proposals. In 2012, the federal government amended the *National Energy Board Act*[192] by adding section 55.2, which allowed the Board to grant public participation rights to only those Canadians who in the Board's sole discretion were "directly affected by the refusing or granting of an application."[193] The National Energy Board interpreted this standard

[189] Bradshaw & Dobby, "The Blais Show", *supra* note 187.
[190] *Ibid.*
[191] *Ibid.*
[192] *National Energy Board Act,* RSC, 1985, c N-7.
[193] *Ibid* at s 55.2.

narrowly, with full deference from the Federal Court of Appeal,[194] notwithstanding that the Board described its own mandate as regulating pipelines, energy development, and trade in "the Canadian public interest," which it defined as being "inclusive of *all Canadians* and refers to a balance of economic, environmental and social considerations *that changes as society's values and preferences evolve over time*."[195]

Tellingly, Macdonald and Wolfe's approach to examining the Canadian Constitution as an epiphenomenon of an underlying and evolving national policy is at once positive and normative; they favour aspirational federalism (or NP3) and point to a number of instruments indicative of its core commitments (chief among them, perhaps, being the *Charter of Rights and Freedoms*, which embodies a direct relationship between state and citizen), but they also reflexively question whether Canada still has a national policy, given the broad and deep political apathy and cynicism of citizens in Canada.[196] Put another way, they ask whether "Canadians have a shared, if unarticulated, sense of what they wish to do together that shapes their understanding of the goals and tools of governance?"[197] This, in turn, raises the question of whether the current federal government is truly committed to adopting and delivering on policies that prioritize the preferences of Canadians, including Indigenous peoples and local communities on the front lines of natural resource development projects. The most revealing answers to these fateful questions may well be found in an examination of the federal government's approach to public consultation in

[194] *Forest Ethics Advocacy Association v The National Energy Board,* 2014 FCA 245.
[195] National Energy Board, "Strategic Plan", online: <https://www.neb-one.gc.ca/bts/whwr/gvrnnc/strtgcpln-eng.html>. The current federal government has committed to reviewing and reforming the National Energy Board.
[196] Macdonald & Wolfe, "Canada's Third National Policy", *supra* note 158 at 472.
[197] *Ibid.*

respect of its emerging climate change policies, as well as its initial policy planks and decisions on controversial natural resources projects, following the adoption of the Paris Agreement.

B. Let's Talk Climate Action, or Check-the-Box Constitutionalism?

Notwithstanding the old chestnut that Canadians' concern for the environment is a mile wide and an inch deep,[198] a quickly growing body of recent evidence suggests that Canadians now express – if not entirely understand – strong support for government action on climate change. Moreover, Canadians appear to want to have a *say* in how the government makes decisions on policies and projects having significant climate change implications.

1. Canadians' Support for a New National Climate Policy

In April 2015 a representative poll of 3,040 Canadians conducted by Oracle Research for the Climate Action Network Canada found that 61% of Canadians agreed or strongly agreed with the proposition that "protecting the climate is more important than building the Energy East Pipeline and further developing the tar sands."[199] Over 80% of Canadians in the poll were familiar with the Energy East oil pipeline project, and by a three-to-one margin respondents agreed or strongly agreed that "building the Energy East pipeline to

[198] Boyd, *supra* note 103.
[199] Climate Action Network Canada, "61% of Canadians say protecting the climate more important than pipelines and tarsands" (7 April 2015), online: <http://climateactionnetwork.ca/2015/04/07/61-of-canadians-say-protecting-the-climate-more-important-than-pipelines-and-tarsands/>.

export tarsands oil is unethical because it is harmful to the environment."[200] Notably, 78% of respondents signaled a desire "to have a say in decision-making about projects like the tarsands and Energy East."[201]

In or around the same time, a national poll conducted by Angus Reid found that most Canadians supported carbon pricing in one form or another, and saw climate change as an electoral issue.[202] Over half (56%) believed that the federal government was not doing enough on climate change, and 75% and 56% of those polled supported a national cap-and-trade or carbon tax policy, respectively.[203]

Moreover, in a poll conducted just before Prime Minister Trudeau attended at the U.N. climate change negotiations in Paris late in 2015, the Nanos Research Group found that 73% of a representative sample of 1,000 Canadians agreed or somewhat agreed that "climate change presents a significant threat to our economic future."[204] Another 72% agreed that "the science of climate change is irrefutable"; 79% believed "Canada's international reputation has been hurt by its previous efforts"; and 63% indicated that they "would pay more for certain products so Canada could meet its climate commitments."[205]

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[200] *Ibid.*
[201] *Ibid*. Relatedly, 85% of respondents believed that the proponent of Energy East, TransCanada Corp., should be required to translate its project-related documents into French to allow Francophone Canadians to properly review the project.
[202] Carol Linnitt, "Most Canadians Support Carbon Pricing, See Climate as Election Issue: New Poll", *Desmog.ca* (22 April 2015), online: <http://www.desmog.ca/2015/04/22/most-canadians-support-carbon-pricing-see-climate-election-issue-new-poll>.
[203] *Ibid*.
[204] Campbell Clark, "Canadians back bold climate-change action, poll finds", *The Globe and Mail* (27 November 2015), online: <http://www.theglobeandmail.com/news/politics/canadians-back-bold-climate-change-action-poll-finds/article27518927/>.
[205] *Ibid*.

More recently, in a survey of 1,000 Canadians conducted by Nanos Research for Clean Energy Canada, 77% of Canadians supported or somewhat supported "a national plan that ensures Canada achieves its international climate change targets to reduce carbon emissions."[206] Moreover, 62% of respondents supported or somewhat supported "a minimum carbon price that applies across Canada."[207] And 66% of respondents agreed or somewhat agreed that "it is more important to have a plan to meet Canada's climate change targets than to have all provincial and territorial premiers agree with that plan."[208] According to pollster Nik Nanos: "The appetite to move forward on environmental issues is quite strong—whether it be strong leadership by the Government of Canada to make sure Canada meets its climate targets, or carbon pricing."[209]

In a subsequent poll of 1,500 Canadians conducted by Abacus Data, 86% of respondents – including majorities in each geographic region of Canada – supported a plan to "shift Canada's energy use over the coming decades, including to promote cleaner transportation and buildings, and pricing carbon to encourage a shift towards greater use of cleaner energy."[210] Canadians certainly appear to be exceptionally attentive to issues around climate change and sustainability.

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[206] Merran Smith, "Poll: Most Canadians Want Federal Leadership on Climate Change", Clean Energy Canada (2 October 2016), online: <http://cleanenergycanada.org/poll-canadians-want-federal-leadership-climate-change/>.
[207] *Ibid.*
[208] *Ibid.*
[209] *Ibid.*
[210] Bruce Anderson & David Coletto, "Climate, Carbon, and Pipelines: A Path to Consensus", *Abacus Data* (18 October 2016), online: <http://abacusdata.ca/climate-carbon-and-pipelines-a-path-to-consensus/> [Anderson & Coletto, "Climate, Carbon, and Pipelines"].

2. *Climate Change Policy's New "Sunny Ways"*

The federal Liberal party – and now federal government – certainly appears to have heard Canadians. On climate change, its 2015 election platform promised to "provide national leadership with the provinces and territories to take action on climate change, put a price on carbon, and reduce carbon pollution."[211] Regarding the government's environmental assessment processes, the Liberal platform recognized that "Canadians must be able to trust that government will engage in appropriate regulatory oversight, including credible environmental assessments".[212] To restore Canadians' trust in those processes, which are critical to ensuring that Canada can deliver on its climate change commitments and its promise of a "New Nation-to-Nation Process" between Canada and Indigenous peoples,[213] the party's platform promised among other things to "provide ways for Canadians to express their views and opportunities for experts to meaningfully participate".[214] As the

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[211] Liberal Party of Canada, *Real Change*, "Climate Change", online: <https://www.liberal.ca/realchange/climate-change/>. This was an important plank in the Liberals' promise of a new, "sunny ways" approach to federal politics. See Mark Gollum, "Trudeau pledges 'real change' as Liberals leap ahead to majority government", *CBC News* (19 October 2015), online: <http://www.cbc.ca/news/politics/canada-election-2015-voting-results-polls-1.3278537>. The phrase was coined, however, by former Liberal Prime Minister Sir Wilfred Laurier. See CBC News, "Justin Trudeau's 'Sunny Ways' a nod to Sir Wilfred Laurier", *CBC News* (20 October 2015), online: <http://www.cbc.ca/news/canada/nova-scotia/ns-prof-trudeau-sunny-ways-1.3280693>. Following the 2019 federal election, the Liberals lost their majority, and presently govern as a minority government. During the election, the Liberals pledged to achieve net-zero emissions by the year 2050. As of this writing, however, it has not translated that campaign promise into either a law or a policy proposal.

[212] Liberal Party of Canada, *Real Change,* "Environmental Assessments", online: <https://www.liberal.ca/realchange/environmental-assessments/> [Liberal Party of Canada, "Real Change: Environmental Assessments"].

[213] Liberal Party of Canada, "A New Nation-To-Nation Process", *supra* note 180.

[214] Liberal Party of Canada, "Real Change: Environmental Assessments", *supra* note 212.

party platform notably added, "[w]hile governments grant permits for resource development, *only communities can grant permission*."[215]

In order to give effect to these commitments during its first year in office the federal government launched a public consultation process ostensibly modelled on the CRTC's popular "Let's Talk TV" initiative, branding it "Let's Talk Climate Action."[216] According to the initiative's "Activity Scorecard," the government received 10,1777 comments and 3,462 ideas from 4,045 participants.[217]Commenced in April 2016, participants' comments and ideas[218]were collected and categorized by theme, presumably for ease of reference and use by the working groups created by the government to create its national climate change plan. Specifically, the government pre-established working groups to address the following four issues: (1) how and where to reduce emissions; (2) clean technology, innovation, and job creation; (3) how to prepare for the impacts of a changing climate; and (4) putting a price on carbon.[219]

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[215] *Ibid* [emphasis added]. See also Government of Canada, "Environmental and Regulatory Reviews: Discussion Paper" (June 2017), online: <https://www.canada.ca/content/dam/themes/environment/conservation/environmental-reviews/share-your-views/proposed-approach/discussion-paper-june-2017-eng.pdf>.

[216] Government of Canada, "Let's Talk Climate Action", online: <http://letstalkclimateaction.ca/index.php?lang=en>. As of this writing, the interactive online initiative had closed: "Thank you Canada! The deadline for submitting ideas has now passed. You can keep the conversation going on social media using the #CANClimateAction hashtag." See also the Twitter page for #CANClimateAction, online: <https://twitter.com/search?q=%23CANclimateaction>.

[217] *Ibid* at <http://letstalkclimateaction.ca/ideas#/page/1>.

[218] This distinction was not defined by the government; *ibid.*

[219]Government of Canada, "Canada's approach to climate change", online: <http://letstalkclimateaction.ca/canada-s-approach-to-climate-change> [Government of Canada, "Canada's approach to climate change"].

In concert with its "Let's Talk Climate Action" initiative the Liberal government commenced a comprehensive review of its environmental assessment processes.[220] In addition, pursuant to interim measures for reviewing oil pipeline proposals adopted in February 2016,[221] the government struck an expert panel to carry out a supplemental review of Kinder Morgan's Trans Mountain oil pipeline proposal,[222] despite the National Energy Board having recommended that Cabinet approve the project subject to 157 technical conditions in the spring of 2016.[223] The government also reviewed applications for permits necessary to continue construction of the CDN$9-billion Site C hydroelectric power dam project in northeastern British Columbia,[224] and completed the environmental assessment of the controversial Pacific Northwest LNG proposal.[225] The federal government summed up its climate change policymaking approach following the adoption of the Paris Agreement thus: "Provincial, territorial and federal governments are working together with Indigenous Peoples and the public to find ways to encourage clean economic

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[220] Government of Canada, "Backgrounder: Review of Environmental Assessment Processes" (20 June 2016), online: <http://news.gc.ca/web/article-en.do?nid=1088149> [Government of Canada, "Review of Environmental Assessment Processes"]. This review is discussed in detail in chapter three of this thesis.
[221] Government of Canada, "Backgrounder: Interim Measures for Pipeline Reviews" (27 January 2016), online: <http://news.gc.ca/web/article-en.do?nid=1029989>; see also Jason MacLean, "How to evaluate Energy East? Try evidence", *Toronto Star* (7 February 2016), online: <https://www.thestar.com/opinion/commentary/2016/02/07/how-to-evaluate-energy-east-try-evidence.html>.
[222] *Ibid*.
[223] National Energy Board, "Summary of Recommendation: Trans Mountain Expansion Project" (19 May 2016), online: <http://www.neb-one.gc.ca/pplctnflng/mjrpp/trnsmntnxpnsn/smmrrcmmndtn-eng.html> [National Energy Board, "Summary of Recommendation"].
[224] See Betsy Trumpener, "Trudeau government signals support for Site C dam, grants two permits", *CBC News* (29 July 2016), online: <http://www.cbc.ca/news/canada/british-columbia/trudeau-government-issues-key-federal-permits-for-site-c-1.3700880>.
[225] Government of Canada, "News Release: The Government of Canada Approves Pacific Northwest LNG Project" (27 September 2016), online: <http://news.gc.ca/web/article-en.do?nid=1130489> [Government of Canada, "Canada Approves Pacific Northwest LNG"].

growth, reduce greenhouse gas emissions and prepare for the impacts of climate change."[226]

3. *Walking the Climate Talk, or Sunny ways Talking Points?*

How to assess federal government's approach to climate policymaking, which certainly bears the formal trappings of a new, aspirational federalism? Leaving aside for the moment the nature of the consultations, by the fall of 2016 the government began to issue initial decisions on natural resource development projects having significant climate change and sustainability implications along with the key planks of its emerging national climate policy.

The first such decision was the federal government's quiet approval of two permits necessary for the continuation of the construction of the Site C hydroelectric power dam in northeastern British Columbia.[227] The reaction of affected First Nations along with environmentalists and academics, however, was anything but quiet.[228] Two First Nations – West Moberly First Nation and Prophet River First Nation – immediately commenced a legal challenge against the government's issuance of the permits in Federal Court.[229] The First Nations argued that the 1,100-megawatt dam on the Peace River, which will flood approximately 5,500 hectares of land, violates Aboriginal rights to hunt, fish, and collect

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[226] Government of Canada, "Canada's approach to climate change", *supra* note 219.
[227] Carol Linnitt, "Trudeau silent as B.C. First Nations Take Site C Dam Fight to Federal Court", *Desmog.ca* (13 September 2016), online: <http://www.desmog.ca/2016/09/13/trudeau-silent-bc-first-nations-take-site-c-dam-fight-federal-court> [Linnitt, "Trudeau silent"].
[228] See e.g. Emma Gilchrist, "Trudeau Just Broke His Promise to Canada's First Nations", *Desmog.ca* (29 July 2016), online: <http://www.desmog.ca/2016/07/29/trudeau-just-broke-his-promise-canada-s-first-nations>.
[229] Linnitt, "Trudeau silent", *supra* note 227.

medicinal plants on what is Treaty 8 territory. The First Nations further relied on the findings of a joint federal-provincial environmental assessment concluding that the project will result in significant and irreversible environmental impacts, but which was *unable* to conclude that the power from Site C was actually necessary on the schedule provided by B.C. Hydro.[230]

Moreover, the project has been characterized as the most environmentally destructive project ever considered under the *Canadian Environmental Assessment Act*.[231] In a public "Statement of Concern," 250 scientists and academics urged the B.C. government to direct the B.C. Utilities Commission to conduct a comprehensive review of the project, echoing a recommendation of the joint environmental assessment panel. The then B.C. Liberal government refused and the project proceeded.[232]

Making the government's issuance of the permits all-the-more controversial were the recently-surfaced remarks made by then federal Minister of Justice Jody Wilson-Raybould, who prior to being elected to Parliament observed in 2012 that

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[230] Review Panel Established by the Federal Minister of the Environment and the British Columbia Minister of the Environment, *Report of the Joint Review Panel, Site C Clean Energy Project* (Ottawa, 1 May 2014) at 308, online: <https://www.ceaa-acee.gc.ca/050/documents/p63919/99173E.pdf>*;* see also Judith Lavoie, "Anxious Communities Still Without Answer on Fate of Site C Mega-dam After JPR Report Release" *Desmog.ca,* (8 May 2014), online: <http://www.desmog.ca/2014/05/08/communities-without-answer-fate-site-c-after-jrp-report>.

[231] Judith Lavoie, "Site C Not Subject to 'Rigorous Scrutiny,' Fails First Nations, Royal Society of Canada Warns Trudeau", *Desmog.ca* (24 May 2016), quoting Professor Karen Bakker, Canada Research Chair in Water Governance at the University of British Columbia, online: <http://www.desmog.ca/2016/05/24/site-c-not-subject-rigorous-scrutiny-fails-first-nations-royal-society-canada-warns-trudeau>.

[232] *Ibid*; see also "Site C: Statement by Concerned Scholars, online: <https://sitecstatement.org/>. However, the NDP provincial government, elected during the summer of 2017, directed the B.C. Utilities Commission to review and reassess the project. The Site C project is discussed further in chapter four of this thesis.

> [t]he country's reputation is at stake with approval of these projects like Site C, like the Enbridge pipeline. Our reputation as a caring and considerate environmentally friendly nation internationally is going to be questioned. *Running roughshod over Aboriginal treaty and rights, including treaty rights, is not the way to improve that reputation*.[233]

Next was the government's decision to approve – subject to 190 technical (and mainly toothless) conditions – the CDN$36-billion Pacific NorthWest LNG project in British Columbia backed by Malaysia's state-owned energy company Petronas.[234] The project involved the construction of two pipelines to carry shale gas from northeastern British Columbia to an CDN$11.4-billion LNG terminal to be constructed on the Pacific coast with an estimated operational lifespan of 30 years; from the terminal approximately 19 million tonnes of liquefied natural gas was to be exported to Asian markets. In issuing its decision, the government reiterated its key policy commitments, noting that (1) the views of the public and affected communities were sought and considered, (2) Indigenous peoples were meaningfully consulted and, where appropriate, impacts on their rights and interests were accommodated, (3) the decision was based on science and the traditional knowledge of Indigenous peoples, and (4) direct and upstream GHG emissions linked to the project were assessed.[235] The Canadian Environmental Assessment Agency's report concluded, however, that the project would cause GHG emissions (approximately four million tonnes per year, and perhaps twice that amount in upstream emissions) that are "high in

[233] Ian Bailey, "Site C criticism by federal justice minister surfaces in 2012 video", *The Globe and Mail* (29 March 2016), online: <http://www.theglobeandmail.com/news/british-columbia/site-c-criticism-by-federal-justice-minister-surfaces-in-2012-video/article29374893/> [emphasis added].
[234] Government of Canada, "Canada Approves Pacific Northwest LNG", *supra* note 225.
[235] *Ibid.*

magnitude, continuous, irreversible and global in extent."[236] The project – had it ultimately proceeded – might well have become the largest source of carbon pollution in Canada.[237] The federal Cabinet concluded, however, that in accordance with paragraph 52(4)(*a*) of *CEAA, 2012*, "the significant adverse environmental effects that the Designated Project is likely to cause are *justified in the circumstances*."[238]

Environmental and First Nations advocates did not agree, and responded critically to the government's announcement. Donnie Wesley, described as the highest-ranking hereditary chief of the Gitwilgyoots tribe, which claims jurisdiction over Lelu Island where the LNG terminal would have been built, called Prime Minister Trudeau "an outright liar" and said the project's approval was "a slap in the face."[239] A spokesperson for Sierra Club British Columbia similarly characterized the government's approval of the LNG project as a "betrayal" to the many who voted for action on climate change: "The Trudeau government's lofty rhetoric on climate has been proven nothing more than sunny ways talking points."[240]

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[236] Canadian Environmental Assessment Agency, *Pacific NorthWest LNG Project: Environmental Assessment Report* (Ottawa, September 2016) at 43, online: <http://www.ceaa.gc.ca/050/document-eng.cfm?document=115668>.
[237] *Ibid*. See also the open letter dated May 26, 2016 from 90 international climate change scientists and climate policy experts urging the government to reject the project "due to its significant adverse environmental effects from greenhouse gas (GHG) emissions." Online: <https://www.scribd.com/document/314292821/Climate-Scientists-Letter-to-Federal-Government>.
[238] Canadian Environmental Assessment Agency, "Decision Statement Issued under Section 54 of the *Canadian Environmental Assessment Act, 2012* (Ottawa, 27 September 2016), online: <http://www.ceaa.gc.ca/050/document-eng.cfm?document=115669> [emphasis added].
[239] Hilary Beaumont, "First Nation Groups Launching Massive Lawsuit After Trudeau's LNG Decision", *VICE* (29 September 2016), online: <http://www.vice.com/en_ca/read/first-nations-groups-launching-massive-lawsuit-after-trudeaus-lng-decision>.
[240]Ashifa Kassam, "Environmentalists 'expected better' of Trudeau as Canada backs natural gas projects", *The Guardian* (28 September 2016), online: <https://www.theguardian.com/world/2016/sep/28/canada-pacific-northwest-lng-natural-gas-pipeline-british-columbia>.

First Nations and environmental organizations immediately signaled their intention to seek judicial review of the government's decision, which, they argued, had ignored both the adverse impacts on wild salmon in the Skeena River, British Columbia's second-longest salmon-bearing river, as well as the magnitude and cumulative effects of the project's estimated GHG emissions on climate change. The decision drew international recognition, with *The Guardian* newspaper in the United Kingdom reporting that "Canada's commitment to fighting climate change has been questioned after the Liberal government, led by Justin Trudeau, announced conditional approval for a C$36bn liquefied natural gas project in northern British Columbia."[241]

Just days after its approval of Pacific NorthWest LNG, however, the federal government announced the key plank of its pan-Canadian climate change policy – a national price on carbon beginning in 2018, *with or without provincial and territorial cooperation*.[242] The proposed plan is simple on its face: beginning in 2018 there would be national price on carbon of at least CDN$10 per tonne, which will rise by CDN$10 per year until 2022 when the price will reach CDN$50 per tonne, whereupon the price will be reviewed – and presumably raised – as part of the Paris Agreement's iterative global stocktake. Provinces have the choice of implementing either a carbon price (*e.g.,* British Columbia and Alberta) or a cap-and-trade regime (*e.g.,* Quebec and, briefly, Ontario) in order to price carbon

[241] *Ibid*. Note, however, that the project's principal proponent ultimately decided during the summer of 2017 not to proceed with construction.
[242] Government of Canada, "News Release: Government of Canada Announces Pan-Canadian Pricing on Carbon Pollution", (3 October 2016), online: <http://news.gc.ca/web/article-en.do?nid=1132149>.

emissions, with all revenues returning to the source province, making the policy revenue neutral with respect to the federal government.[243]

The government announced its carbon-pricing policy – which was adumbrated in the Vancouver Declaration[244] – as it tabled a motion to ratify the Paris climate change agreement and Canada's target of a 30% reduction of its GHG emissions from 2005 levels by 2030 for debate and a vote in the House of Commons.[245] The government further explained that it would complement its pan-Canadian carbon price with a range command-and-control and flexible energy efficiency regulations in respect of transportation as well as commercial and residential buildings.[246]

Soon thereafter, however, the federal government announced its approval (for the first time) of Kinder Morgan's controversial expansion of the Trans Mountain pipeline.[247]

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[243] *Ibid.* See also Andrew Leach, "The challenges ahead for Liberals' carbon plan", *The Globe and Mail* (3 October 2016), online: <http://www.theglobeandmail.com/opinion/the-challenges-ahead-for-liberals-carbon-plan/article32266670/> [Leach, "The challenges ahead"].

[244] Canadian Intergovernmental Conference Secretariat, "Vancouver Declaration", *supra* note 160.

[245] See Shawn McCarthy, "Liberal government formally ratifies Paris climate accord", *The Globe and Mail* (5 October 2016), online: <http://www.theglobeandmail.com/news/politics/ottawa-formally-ratifies-paris-climate-accord/article32267242/>. It is important to note that the government introduced its motion regarding the Paris Agreement and its carbon-pricing plan in Parliament while, at the same time in Montreal, the Minister of the Environment and Climate Change was in a meeting with her provincial and territorial counterparts discussing the pros and cons of the very policy simultaneously being announced by the Prime Minister as a *fait accompli*. See Bruce Cheadle, "Sask., N.S. and N.L. ministers walk out of climate talks after Trudeau announces carbon price", *CBC News* (3 October 2016), online: <http://www.cbc.ca/news/politics/federal-provincial-environment-ministers-meeting-1.3789134>.

[246] See Michelle Zilio, "Ottawa to roll out new rules to cut Canadian carbon emissions", *The Globe and Mail* (9 October 2016), online: <https://beta.theglobeandmail.com/news/politics/ottawa-to-roll-out-new-rules-to-cut-canadian-carbon-emissions/article32312495/>. For example, incentives for home-energy retrofits and phased-in changes to the national building code standard. See e.g. Shawn McCarthy, "Ottawa set to re-introduce incentives for home-energy retrofits", *The Globe and Mail* (19 October 2016), online: <http://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/ottawa-to-incentivize-energy-efficient-home-retrofits/article32429370/> [McCarthy, "Ottawa set to re-introduce incentives"].

[247] John Paul Tasker, "Trudeau cabinet approves Trans Mountain, Line 3 pipelines, rejects Northern Gateway", *CBC News* (29 November 2016), online: <http://www.cbc.ca/news/politics/federal-cabinet-trudeau-pipeline-decisions-1.3872828> [Tasker, "Trudeau approves Trans Mountain"].

Kinder Morgan proposed to twin the existing pipeline running from Edmonton, Alberta to Burnaby, British Columbia, effectively tripling its capacity to 890,000 barrels per day of diluted bitumen from Alberta's oil sands.[248] According to the federal Ministry of the Environment and Climate Change, once fully operational at capacity the expanded Trans Mountain pipeline may contribute *upstream* GHG emissions of 20-26 megatonnes of carbon dioxide per year of its operation.[249] Notwithstanding his government's own GHG-emissions estimates for the expanded Trans Mountain pipeline, the Prime Minister insisted that Canada remained a "climate leader."[250] Once again, however, advocates of environmental protection and Indigenous rights disagreed, and commenced legal proceedings contesting the government's approval.[251]

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[248] *Ibid.*

[249] This estimate does not account, however, for the vast majority of GHG emissions associated with the pipeline's expansion, which will be emitted *downstream* in export markets where the oil reaches its ultimate destination and is combusted. See Environment and Climate Change Canada, "Trans Mountain Pipeline ULC – Trans Mountain Expansion Project: Review of Related Upstream Greenhouse Gas Emissions Estimates" (Ottawa, ON: May 19, 2016) at 5.

[250] Tasker, "Trudeau approves Trans Mountain", *supra* note 247. But see Chris Tollefson & Jason MacLean, "Here is why B.C. must do its own review of the Trans Mountain pipeline", *The Globe and Mail* (23 May 2017), online: <https://beta.theglobeandmail.com/opinion/why-bc-must-do-its-own-review-of-the-trans-mountain-pipeline/article35095482/?ref=http://www.theglobeandmail.com&>.

[251] See e.g. Bruce Cheadle, "Environmentalists file court challenge of Ottawa's Trans Mountain pipeline approval", *CBC News* (20 December 2016), online: <http://www.cbc.ca/news/canada/calgary/pipelines-whales-british-columbia-lawsuit-noise-trans-mountain-calgary-court-1.3904797>; Geordan Omand, "Trans Mountain pipeline facing new legal challenge from First Nations", *The Canadian Press* (17 January 2017), online: <http://globalnews.ca/news/3187421/first-nations-take-crown-to-court-over-pipeline/>. The recently-elected B.C. NDP government sought and secured intervener status in the consolidated proceeding before the Federal Court of Appeal: *Tsleil-Waututh Nation et al v Attorney General of Canada et al,* 2017 FCA 174. As discussed further in chapters four and five of this thesis, the application for judicial review was initially successful. But following a further environmental assessment and an additional phase of consultation with affected Indigenous communities, the federal government once again approved the Trans Mountain pipeline expansion, and a renewed application for judicial review of the approval was dismissed by the Federal Court of Appeal.

4. Aspirational Climate Federalism, or Let's Talk Climate Contradiction?

All of which leads to the critical question pursued in this chapter: Are the federal government's policy proposals and initial climate-related decisions capable of vindicating its commitments under the Paris Agreement and its own lofty promises of a democratically enhanced mode of environmental governance, which I have termed for analytic purposes federalism 3.0?

MacDonald and Wolfe considered a carbon tax to be an ideal illustration of aspirational social-cum-fiscal federal policy tool.[252] They argued that for demand-driven government programmes to succeed, governments must provide citizens with the information and wherewithal they need to make their own meaningful choices. But this, they argued, "often requires embedding information in the tool."[253] Unlike consumption taxes, which convey only the general and undifferentiated information that consumption attracts more tax than saving, "a visible, point-of-sale carbon tax is *information rich*. Climate-change policy could therefore be based not on top-down regulation or large bureaucracies but on price signals that convey information to citizens about their choices" and "help citizens as consumers make environmentally aware decisions."[254] Regulatory instruments, no matter

[252] Macdonald & Wolfe, "Canada's Third National Policy", *supra* note 158 at 509. See also Michael Wara, "Instrument Choice, Carbon Emissions, and Information" (2015) 4:2 Mich J Envtl & Admin L 261.
[253] Macdonald & Wolfe, "Canada's Third National Policy", *supra* note 158 at 507.
[254] *Ibid* at 509 [emphasis added]. Similarly, *The Economist* puts it this way: "Ask an economist how best to reduce pollution, and the chances are that they will recommend taxing carbon emissions. And with good reason: doing so should encourage markets to find the least costly way to reduce pollution, something governments will struggle discover themselves." See *The Economist,* "Of wood and trees" (15 October 2016), online: <http://www.economist.com/news/united-states/21708684-environmentalists-against-environment-evergreen-state-wood-and-trees>.

how flexible and information-rich, are "significantly less respectful of citizen autonomy."[255]

What signal does the government's evolving climate change policies and decisions send to Canadians? Beginning with the pan-Canadian price on carbon – starting at $10 per tonne in 2018 and rising to $50 per tonne in 2022 – the government is signaling that, while it wants to appear to be taking serious and timely action on climate change, it is not yet prepared to do so. The government's carbon-price proposal suffers from three fundamental – yet fixable – flaws.[256]

First, the price is too low to matter. While any price on carbon will reduce emissions, the government's proposed price is too low to help Canada meet its already insufficiently ambitious GHG-reduction target of 30% below 2005 levels by 2030. To play a meaningful role in meeting our escalating obligations under the Paris Agreement, the price must approximate the true externalized social cost of carbon, or the monetized damage of emitting one tonne of CO_2 into the atmosphere.[257] Estimates vary, but that cost is likely between US$50 and US$220 per tonne.[258] For example, an economic analysis of Canada's

[255] Macdonald & Wolfe, "Canada's Third National Policy", *supra* note 158 at 510.
[256] See e.g. Jason MacLean, "Trudeau's carbon price clever politics, not credible climate policy", *Policy Options* (14 October 2016), online: <http://policyoptions.irpp.org/magazines/october-2016/trudeaus-carbon-price-clever-politics-not-credible-climate-policy/> [MacLean, "Trudeau's carbon price"]; see also Mark Jaccard, "Penny wise and pound foolish on climate policy?", *Policy Options* (11 October 2016), online: <http://policyoptions.irpp.org/magazines/october-2016/penny-wise-and-pound-foolish-on-climate-policy/>; Trevor Tombe, "Put a price on emissions and let the chips fall where they may", *Maclean's* (3 October 2016), online: <http://www.macleans.ca/economy/economicanalysis/put-a-price-on-emissions-and-let-the-chips-fall-where-they-may/>; Leach, "The challenges ahead", *supra* note 243.
[257] See e.g. Inge van den Bijgaart, Reyer Gerlagh & Matti Liski, "A simple formula for the social cost of carbon" (2016) 77 Journal of Environmental Economics and Management 77.
[258] See e.g. JCJM van den Bergh & WJW Botzen, "A lower bound to the social cost of CO_2 emissions" (2014) 4 Nat Clim Change 253; Frances C Moore & Delavane B Diaz, "Temperature impacts and economic growth warrant stringent mitigation policy" (2015) 5 Nat Clim Change 127; Carbon Pricing

GHG reduction target found that an effective pan-Canadian price on carbon would need to start at CDN$30 per tonne and increase CDN$15 annually to a price of CDN$200 per tonne by 2030.[259] Even if supplemented by a suite of flexible – but not cost-free – sectoral energy efficiency regulations bearing an implicit carbon price, the explicit carbon price would still need to be significantly higher, and significantly sooner, than the government's present policy.[260]

Second, the government's policy is puzzlingly – yet tellingly – paradoxical. It appears to be designed, not to rapidly reduce GHG emissions in line with the Paris Agreement, but rather to facilitate further oil and gas extraction in Canada. For years oil and gas projects wanted for both legal and social license due to the Harper government's refusal to impose regulations on the sector. But the imposition of a price on carbon, even one as patently ineffective as the Trudeau government's present price, provides potential political cover for otherwise unsustainable and unjustifiable oil and gas projects to proceed.[261] Indeed, while the timing of the government's announcement of its carbon-price proposal rankled certain provinces (Newfoundland and Labrador, Nova Scotia, and Saskatchewan in particular), the timing may well have been politically strategic. Recall that the announcement followed closely on the heels of the government's controversial decision to approve the Pacific NorthWest LNG project, despite its significant GHG emissions. The

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Leadership Coalition, *Report of the High-Level Commission on Carbon Pricing* (29 May 2017), online: <https://www.carbonpricingleadership.org/report-of-the-highlevel-commission-on-carbon-prices>.

[259] Mark Jaccard, Mikela Hein & Tiffany Vass, "Is Win-Win Possible? Can Canada's Government Achieve Its Paris Commitment … and Get Re-Elected?" (2016) School of Resource and Environmental Management, Simon Fraser University, online: <http://markjaccard.blogspot.ca/2016/09/is-win-win-possible-can-canadas.html>.

[260] *Ibid* at 5, 16.

[261] MacLean, "Trudeau's carbon price", *supra* note 256.

timing of the government's carbon price announcement, along with its rushed ratification of the Paris Agreement before the government had even finalized its climate change policy, may well have been chosen to help legitimize its LNG decision while seeking to reassure domestic and international stakeholders that Canada remains committed to combatting climate change.[262]

Moreover, the timing of the announcement may also have been designed to help legitimize the government's then-anticipated (and soon-after-consummated) approval of the equally controversial Trans Mountain pipeline expansion. As explained above, the approved expansion would triple the pipeline's capacity to carry bitumen crude oil from Alberta's oil sands to the coast of British Columbia and international markets beyond.[263] The proposed expansion, however, would also significantly increase Canada's GHG emissions.[264]

This suggestion is not mere speculation. Consider the following representations made by senior Cabinet members of the federal government, beginning with the "flip-flop" in the government's definition of "social license" in respect of the approval of natural resources projects like Trans Mountain that are opposed by local communities, among others.[265] As

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[262] *Ibid*.
[263] National Energy Board, "Summary of Recommendation", *supra* note 223.
[264] Indeed, over the expected and locked-in 50-year lifespan of the pipeline, its associated upstream GHG emissions would constitute up to 83% of Canada's share of the Paris Agreement carbon budget under the 2 °C limit, and 100% of its share under the 1.5 °C limit. See Simon Donner, "Statement on greenhouse gas emissions associated with Trans Mountain Pipeline expansion" (17 August 2016), online: <http://blogs.ubc.ca/maribo/2016/08/17/statement-on-greenhouse-gas-emissions-associated-with-the-trans-mountain-pipeline-expansion/>.
[265] For example, the municipalities of Burnaby, British Columbia, and Vancouver, British Columbia opposed the Trans Mountain pipeline expansion and commenced litigation in opposition to it. Other local communities and First Nations also opposed to the project in court, ultimately unsuccessfully.

noted above, in its 2015 federal election campaign platform, the Liberals proclaimed: "While governments grant permits for resource development, *only communities can grant permission*." [266] Many communities, including the municipalities of Burnaby and Vancouver, took that campaign promise to mean that communities will have a strong say in – if not an outright veto over – natural resources projects involving significant adverse environmental impacts in their jurisdictions. After less than a year in office, however, the office of the then Natural Resources Minister Jim Carr noted in response to formal questions tabled by the New Democratic Party Member of Parliament for Burnaby South that reviews of natural resource projects will "provide regulatory certainty not only to project proponents, so they know the basis on which decisions will be made, but also to the public, so they know that the environment will be protected and that economic growth will be based on proper oversight, protections and safeguards."[267] Conspicuously absent is any mention of community participation, let alone approval.

Even more telling are the remarks made by the Prime Minister about critics of his government's carbon-price policy. According to the Prime Minister, the price on carbon will "make it more possible than it was for the past 10 years to actually get our resources to market, *to perhaps build a pipeline to tidewater*." [268] Later, the Prime Minister misleadingly and irresponsibly dismissed critics of new oil pipelines by remarking that "[w]here we have to recognize that we're not going to find common ground is in the people

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[266] Liberal Party of Canada, "Real Change: Environmental Assessments", *supra* note 212 [emphasis added].
[267] Quoted in Peter O'Neil, "Federal government's 'social license' for pipelines 'permission' cuts out communities", *Vancouver Sun* (21 September 2016), online: <http://vancouversun.com/news/local-news/federal-governments-social-licence-for-pipelines-permission-cuts-out-communities>.
[268] The Canadian Press, "Trudeau says naysayers on Canada's carbon-tax-plan using 'scare tactics'", *CBC News* (14 October 2016), online: <http://www.cbc.ca/news/canada/calgary/trudeau-carbon-tax-scare-tactics-1.3805715> [emphasis added].

who say the only thing we can do to save the planet is to shut down the oilsands tomorrow and stop using fossil fuels altogether within a week",[269] a straw-man argument not actually advanced by anyone in Canada.[270] The Prime Minister also generated considerable controversy in early 2017 when he told an audience of Canadians in Peterborough, Ontario that Alberta's oil sands must be "phased out", only to soon thereafter tell an audience of Canadians gathered in Calgary, Alberta that "I misspoke", adding that only in about 100 years will fossil fuels no longer be needed for fuel or energy.[271]

Hence the paradoxical nature – the mixed signals – of the federal government's proposed carbon price: while the purpose of imposing an escalating price on carbon emissions is to phase out those emissions as soon as possible along with the industry activities most responsible for those emissions, the government's proposed price is more akin to a subsidy than a price, more an incentive than a penalty.[272]

Which leads to the third and most perverse flaw of the government's carbon-price policy – the persistence of actual subsidies to the oil and gas sector. According to the United

[269] Quoted in Ian Bailey, "Trudeau resolute on Trans Mountain pipeline expansion despite protests", *The Globe and Mail* (20 December 2016), online: <http://www.theglobeandmail.com/news/british-columbia/trudeau-resolute-on-trans-mountain-pipeline-expansion-despite-expected-protests/article33397590/>.
[270] Emma Gilchrist, "Trudeau's New Pipeline Talking Point – Straight From the Oil Industry", *Desmog Canada* (21 December 2016), online: <https://www.desmog.ca/2016/12/21/trudeau-s-new-pipeline-talking-point-straight-oil-industry> (observing that "I've never once come across a single environmentalist who has taken that position").
[271] Bill Curry, "Trudeau says he 'misspoke' about phasing out oil sands", *The Globe and Mail* (24 January 2017), online: <http://www.theglobeandmail.com/news/politics/trudeau-says-he-misspoke-about-phasing-out-oil-sands/article33748712/>.
[272] MacLean, "Trudeau's carbon price", *supra* note 256; see also Jason MacLean, "No, carbon pricing alone will not be enough to lower emissions", *Maclean's* (29 November 2016), online: <http://www.macleans.ca/economy/economicanalysis/no-carbon-pricing-alone-wont-be-enough-to-lower-emissions/>.

Nations Climate Change Secretariat, fossil fuels subsidies, be they direct government transfers of money or tax benefits, "encourage investment in fossil fuel extraction, processing and consumption."[273] Imposing a price on carbon while refusing to eliminate subsidies to the fossil fuels industry is not unlike raising the tax on cigarettes while giving tobacco companies cash payouts and tax exemptions to produce and market more cigarettes.[274] In 2009, the G20 committed to eliminating fossil fuels subsidies.[275] In 2015, the Liberal party's campaign platform promised "We will fulfill Canada's G-20 commitment to phase out subsidies for the fossil fuel industry."[276] But in the Trudeau government's first budget, hailed as "the greenest budget ever," the government actually locked in LNG subsidies until 2025, and otherwise refused to eliminate subsidies to the oil and gas sector, which in recent years have surpassed CDN$3 billion annually, and which exceed subsidies to the renewable energy sector by a ratio of approximately four to one.[277] As the Commissioner on the Environment and Sustainable Development concluded in her Fall 2017 Report, "[t]he government does not have a solid strategy for eliminating *inefficient* fossil fuel subsidies".[278]

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[273] United Nations Climate Change Secretariat, "Climate Action Now: Summary for Policymakers 2016", online: <http://climateaction2020.unfccc.int/spm/spm-archive/>.
[274] MacLean, "Trudeau's carbon price", *supra* note 256.
[275] Jeff Mason & Darren Ennis, "G20 agrees on phase-out of fossil fuel subsidies", *Reuters* (25 September 2009), online: <http://www.reuters.com/article/us-g20-energy-idUSTRE58O18U20090926>.
[276] Liberal Party of Canada, "A New Plan for Canada's Environment and Economy" (August 2015), online: <https://www.libera.ca/files/2015/08/A-new-plan-for-Canadas-environment-and-economy.pdf>.
[277] See International Institute for Sustainable Development, Global Subsidies Initiative, "Unpacking Canada's Fossil Fuel Subsidies: Their size, impacts, and what should happen next" (2016), online: <http://www.iisd.org/faq/ffs/canada/>; see more generally David Coady, Ian Parry, Louis Sears & Baoping Shang, "IMF Working Paper: How Large Are Global Energy Subsidies?" (2015) International Monetary Fund Fiscal Affairs Department Working Paper, online: <https://www.imf.org/external/pubs/ft/wp/2015/wp15105.pdf>.
[278] Commissioner of the Environment and Sustainable Development, "Fall 2017 Report", *supra* note 134 [emphasis added].

What makes fossil fuels subsidies to the oil and gas sector even more perverse is that the sector's major players arguably did not need them (at least, prior to the outbreak of the global COID-19 pandemic). Oil majors have been preparing for the imposition of a price on carbon for years by imposing their own "shadow price" on emissions. Shadow pricing is an investment and decisionmaking tool used by companies to manage their exposure to the risks associated with a carbon-constrained future by imposing their own internal, hypothetical surcharges to market prices for goods and services entailing significant carbon emissions. These shadow prices range from US$15 to US$68 per tonne,[279] a further demonstration of the ineffectiveness of the government's proposed carbon price.

While the government likes to trumpet the corporate sector's support for carbon pricing, especially the support of the oil and gas sector, there is no evidence the sector's major players would support a carbon price that even remotely approaches the true social cost of carbon, which would be well above the sector's average shadow prices. For example, one commentator and former senior Canadian energy executive, Dennis McConaghy, responded to the federal government's carbon-price policy by arguing that "a carbon tax, *appropriately conditioned*, is a necessary condition for a breakthrough on market access."[280] What does that mean for the government's carbon price? According to

[279] This estimate is derived from Adele Morris, "Why the federal government should shadow price carbon", *Brookings* (13 July 2015), online: <https://www.brookings.edu/blog/planetpolicy/2015/07/13/why-the-federal-government-should-shadow-price-carbon/>; see also *The Economist,* "Some firms are preparing for a carbon price that would make a big difference" (14 December 2013), online: <http://www.economist.com/news/business/21591601-some-firms-are-preparing-carbon-price-would-make-big-difference-carbon-copy> (disclosing that as of 2013 that ExxonMobil internally priced carbon at US$60 per tonne, BP and Shell US$40 per tonne, while Microsoft employed a shadow price of US$6-7 per tonne).

[280] Dennis McConaghy, "The Canadian right is failing on carbon pricing", *Maclean's* (20 October 2016), online: <http://www.macleans.ca/economy/economicanalysis/the-canadian-right-is-failing-on-carbon-pricing/> [emphasis added].

McConaghy, the price should be set at CDN$30 per tonne, and "would only rise over time to levels that are comparable to what Canada's other major trading partners are imposing on themselves in terms of carbon pricing, explicitly or implicitly."[281] McConaghy further argued that the government's policy ought to be accompanied by an acknowledgement "that Canada's national carbon targets are fundamentally aspirational, but not enforceable, obligations."[282]

Moreover, oil-and-gas-sector representatives tend to claim that they support a price on carbon because it produces a level competitive playing field in the energy sector. It turns out, however, that the costs of conventional energy production are approximately in line with the costs of generating wind and solar power, which have declined by (at least) 61% and 82% respectively since 2009,[283] despite being substantially *under-subsidized* by governments.[284]

Nevertheless, the oil and gas industry continues to accept generous government subsidies while decrying public investments in renewable energy. Writing in support of government-led carbon pricing, Shell Canada's president Michael Crothers publicly impugned the wisdom of the U.S. federal government's US$2-billion loan to the world's fourth-largest

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[281] *Ibid*.
[282] *Ibid*.
[283] Paul Krugman, "Wind, Sun and Fire", *The New York Times* (1 February 2016), online: <http://mobile.nytimes.com/2016/02/01/opinion/wind-sun-and-fire.html>
[284] Notwithstanding this disproportionate level of subsidization, renewable energy is now in a position to meet our energy needs: "In sum, the total energy demand for the United States is predicted to be constant for approximately the next fifty years. Electricity generated by renewable energy can easily provide 100 percent of the average [if not yet actual] energy consumption of the United States during those fifty years, virtually eliminating the negative environmental consequences associated with fossil fuels consumption." See Mara Prentiss, *Energy Revolution: The Physics and the Promise of Efficient Technology* (Cambridge, MA: Harvard University Press, 2015) at 304.

photovoltaic solar farm in California while applauding the Canadian and Albertan governments' CDN$865-million contribution to Shell's carbon capture & sequestration (CCS) project "Quest,"[285] a potential but far from economically or scientifically established means of removing carbon emissions from the atmosphere.[286]

These fundamental flaws suggest that the federal government's carbon price policy is *information-poor* and fundamentally misleading. As such, it fails to satisfy the normative aspirations of either federalism 3.0 or the Paris Agreement. With respect to the former, the government's proposed explicit carbon price and its promised implicit carbon pricing by way of a portfolio of command-and-control and flexible energy efficiency regulations fails the NP3 standard "[w]here an identifiable cost can easily be associated with an identifiable policy, and providers are enabled to compete on cost, both types of instruments, informational and monetary, are more effective."[287] Regarding the Paris Agreement, consider the remarks following its coming into force in the fall of 2016 made by the president of the Marshall Islands, the country that founded the "High Ambition Coalition" joined by Canada during the Agreement's negotiations: "Now we need to turn our words into action. *Without action, the Paris agreement will just be a piece of paper*."[288]

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[285] Michael Crothers, "Why carbon capture is just as important as renewable energy", *The Globe and Mail* (9 October 2016), online: <http://www.theglobeandmail.com/report-on-business/rob-commentary/why-carbon-capture-is-just-as-important-as-renewable-energy/article32311433/>.
[286] Pete Smith et al, "Biophysical and economic limits to negative CO_2 emissions" (2015) 6 Nat Clim Change 42.
[287] Macdonald & Wolfe, "Canada's Third National Policy", *supra* note 158 at 510.
[288] John Vidal, "Climate deal ratified but fears linger", *The Guardian Weekly* (14 October 2016) at 4 [emphasis added].

Another reading, however, is possible. Recall the poll described above wherein 86% of respondents – including majorities in every geographic region of Canada – supported a shift towards greater use of cleaner energy.[289] After posing this question, the pollsters then asked the following question: "let's imagine that while putting in place these measures to encourage a shift to renewable energy, the federal government also approved a new pipeline to get Canada's oil and gas to new markets, would you strongly support, support, accept, oppose, or strongly oppose such a decision?"[290] The results belie a simple, linear accounting of the relationship between aspirational federalism and Canadians' commitment to the aspirations of the Paris Agreement: 41% would "support" this proposal, while 35% would "accept" it and only 23% would "oppose."[291] Based on these figures, which included majority support in every geographic region of Canada, the poll's authors suggested that "there is a path to creating more comprehensive national support, with a blend of carbon pricing, incentives to promote a shift in energy use, and adding pipeline capacity to get Canada's oil to markets while a shift towards more renewable energy is underway."[292] As one commentator observed, "[i]t would be fair to guess that the government has known this for some time – *at least as far back as early spring, when*

[289] Anderson & Coletto, "Climate, Carbon, and Pipelines", *supra* note 210.
[290] *Ibid*.
[291] *Ibid.* Note, however, that in a poll conducted by EKOS Research Associates in early 2016 found that "[t]hose under the age of 35 are consistently more likely to oppose these [pipeline] proposals, while those ages 65 and over are consistently more supportive." EKOS Research Associates, "Canadian Attitudes toward Energy and Pipelines: Survey Findings" (1 March 2016), online: <www.ekospolitics.com/wp-content/uploads/full_report-march_17_2016.pdf>.
[292] *Ibid.* See also the results of a poll midway through the Liberal government's first term in office noting that approval of the Trans Mountain pipeline expansion *and* the imposition of carbon pricing are among the government's most-approved-of actions to date: "From Sunny Ways to Midterm Blues? Two years after Trudeau majority, Liberals and CPC in dead heat", Angus Reid Institute (13 October 2017, online: <angusreid.org/trudeau-midterm/>.

Prime Minister Trudeau instructed his team to ensure that at least one of the proposed pipelines [i.e., Trans Mountain or Energy East] makes it to salt water."[293]

The early spring of 2016 also coincided with the launch of the government's NP3-style initiative "Let's Talk Climate Action" discussed above. Once again, the timing appears tellingly strategic, with the initiative's invitation to Canadians to share their ideas and take part in a conversation about how to combat climate change effectively providing political cover for a predetermined policy choice to approve one or more major pipeline proposals. When news of the federal government's internal direction to approve at least one pipeline project became public, environmental organizations and climate scientists were understandably nonplussed at this mixed signal regarding the government's public commitments to combat climate change pursuant to the Paris Agreement. Notably, Dr. John Stone, formerly a climatologist with Environment Canada and vice-chair of the U.N.'s Intergovernmental Panel on Climate Change's (IPCC) Working Group II, responded to the news by noting that "[i]f you build a pipeline, you're going to fill it with tar sands that's going to increase our emissions and that's not going to allow us to meet our climate change commitments."[294]

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[293] John Ivison, "Liberals' carbon pricing along with pipeline approval a winner with voters, poll suggests", *National Post* (18 October 2016), online: <http://news.nationalpost.com/full-comment/john-ivison-liberals-strategy-of-pipeline-approval-with-carbon-pricing-a-winner-with-voters-poll-suggests> [emphasis added]; see also Josh Wingrove, "Trudeau Said to Plan Pipeline Approval, Favor Kinder Morgan", *Bloomberg* (13 September 2016), online: <http://www.bloomberg.com/news/articles/2016-09-13/trudeau-said-to-plan-pipeline-approval-favoring-kinder-morgan>; John Ivison, "Trudeau convinced that pipeline strategy must be top priority", *National Post* (11 April 2016), online: <http://news.nationalpost.com/full-comment/john-ivison-trudeau-convinced-that-pipeline-strategy-must-be-top-priority>.

[294] Charles Mandel & Mike De Souza, "Trudeau attacked from all sides over pipeline stance", *National Observer* (12 April 2016), online: <http://www.nationalobserver.com/2016/04/12/news/trudeau-attacked-all-sides-over-pipeline-stance>. Dr. Stone's response is anything but an outlier. See generally the climate science literature discussed above in part two.

Indeed, this alternative reading of the government's policy approach to climate change as being directed toward a "win-win" for the environment and the economy is ultimately untenable. Not only does the government's apparent predetermination regarding pipelines betray its commitment to the Paris Agreement, it further betrays its manifold commitments to NP3-style bi-directional engagement with Canadians. "Let's Talk Climate Action" turns out to be little different than existing e-governance and information technology and communication tools (ICT) already employed in environmental assessment processes.[295] As Sinclair and his colleagues observe in respect of such processes, "[w]hile information sharing through such e-governance is an essential on-ramp to meaningful participation our cases indicate further that sharing has largely been of the *monologue form of information-out* and that e-governance tools are not being used to promote the sorts of *two-way dialogue and deliberation essential to meaningful participation and genuine project betterment through involvement*."[296]

The design of government's Ministerial Panel to hear from Canadians on the Trans Mountain pipeline expansion further illustrates this deficiency of e-governance and ICT as applied to date in Canadian climate change governance.[297] Natural Resources Canada established an online questionnaire to allow Canadians to make their views on the project

[295] See e.g. A John Sinclair, Timothy J Peirson-Smith & Morrissa Boerchers, "The Role of E-Governance and Social Media in Creating Platforms for Meaningful Participation in Environmental Assessment", *Conference for Democracy & Open Government,* Research Papers, Case Studies and Policy Papers (Hong Kong, 2014), online: <http://www.donau-uni.ac.at/de/department/gpa/telematik/edemocracy-conference/edem/vid/20593/index.php?URL=/en/department/gpa/telematik/edemocracy-conference/20593>.
[296] *Ibid* [emphasis added].
[297] This claim is limited to the federal government's use of these tools. For an interesting examination of both the limits and the potential of these tools in other settings, see Cynthia Farnia et al, "Democratic Deliberation in the Wild: The McGill Online Design Studio and the RegulationRoom Project" (2014) 41 Fordham Urb LJ 1527.

known, and also established a three-person panel to review those comments as well as to conduct town halls across Canada. Natural Resources Canada's website announced upon the closing of the questionnaire in early October 2016 that "[w]e have received over 35,000 responses! Thank you to all who participated!"[298] Plainly, the panel could not have meaningfully reviewed and considered over 35,000 comments before finalizing its report, which was due to the Minister of Natural Resources on November 1, 2016. Moreover, a truly bi-directional engagement process would have allowed for the review panel's terms of reference to be shaped by public participation. Had that been the case, neither the panel's recommendation nor Cabinet's ultimate decision would have appeared to be quite so predetermined. At a climate forum held following the close of the comment period regarding the Trans Mountain expansion, however, the Minister of Natural Resources remarked that "*people say*, 'Leave the oil in the ground,' they don't want any development. *Our view* is we use the wealth of the old economy to finance the new energy economy."[299] While a majority of Canadians may ultimately *accept* this muddled, federalism 2.0 approach,[300] it is not what they presently *aspire* to, particularly younger Canadians who

[298] Natural Resources Canada, "Trans Mountain Expansion Project", online: <https://www.nrcan.gc.ca/questionnaire/18721>.
[299] Bruce Cheadle & The Canadian Press, "Carr tells climate forum fossil fuel wealth can't be left in the ground", *National Observer* (21 October 2016), online: <http://www.nationalobserver.com/2016/10/21/news/carr-tells-climate-forum-fossil-fuel-wealth-cant-be-left-ground> [emphasis added] [Cheadle & The Canadian Press, "Fossil fuel wealth can't be left in the ground"].
[300] FL Morton, "The Constitutional Division of Powers with Respect to the Environment in Canada" in Kenneth M Holland et al, eds, *Federalism and the Environment: Environmental Policymaking in Australia, Canada, and the United States* (Westport, CT: Greenwood Press, 1996) at 52 (arguing that "[a]s in all things Canadian, 'muddling through' is always a likely scenario").

will bear a disproportionate burden of the costs and consequences of presently inadequate mitigation efforts.[301]

Nor is the government's climate policymaking approach consistent with its promise of a new, Nation-to-Nation relationship with Indigenous peoples in Canada. The Regional Chiefs of the Assembly of First Nations (AFN) publicly announced that it would cease its efforts to collaborate with the federal government on amendments to federal environmental laws, including the *Canadian Environmental Assessment Act, 2012*, the *Fisheries Act*, the *Navigation Protection Act,* and the *National Energy Board Act*. The AFN cited the federal government's refusal to include the AFN as a partner in the legislative drafting process as the reason for its public break with the government; the federal government claimed that it was precluded from doing so by the requirement of Cabinet confidentiality, a tenuous claim given the participation of the AFN in previous amendments to the *Species At Risk Act* through the use of confidentiality agreements.[302] According to Ontario Regional Chief Isadore Day, "[t]he federal government persists in using the AFN as a *top-down, side-door approach* to getting consent and that's simply not acceptable. It's simply not right in the eyes of First Nations across Canada or for treaty reasons".[303]

Nor, finally, is it what climate science demands. Recall in particular the stark conclusion of renowned climate scientist James Hansen and his colleagues in their analysis of the Paris

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[301] See e.g. Amanda Harvey-Sanchez, "Opinion: Trudeau could lose millennials (and the 2019 election) if he approves a pipeline", *National Observer* (21 October 2016), online: <http://www.nationalobserver.com/2016/10/21/opinion/opinion-trudeau-could-lose-millennials-and-2019-election-if-he-approves-pipeline>.
[302] James Munson, "The AFN is divided on environmental assessment reform", *ipolitcs* (21 October 2017), online: <http://ipolitics.ca/2017/10/21/the-afn-is-divided-on-environmental-assessment-reform/>.
[303] Quoted in *ibid.*

Agreement's 2 °C target: "we have a global emergency. Fossil fuel CO_2 emissions should be reduced as rapidly as practical."[304] Whereas Canadian climate policy appears to premised on the counterintuitive (and counterfactual) idea that it is possible to build new oil pipelines and mitigate GHG emissions at the same time.[305] Or even more counterintuitive and counterfactual still, that *only* by building new pipelines can we craft a pan-Canadian climate change mitigation policy.[306]

The Trudeau government's approach to both federalism generally and climate change policymaking in particular appears to be more about empty formalism than actionable substance. Rather than federalism 3.0 – *i.e.,* bi-directional and responsive engagement with all Canadians, not just special interests,[307] a new and collaborative partnership with provinces, territories, municipalities, and Indigenous peoples, and science-based policymaking – the government is practicing a kind of "check-the-box constitutionalism."[308] Establish formal consultations with Canadians, including Indigenous peoples – *check*. Form working groups with the provinces and the territories – *check*. Consider the direct and upstream GHG emissions of natural resources projects while

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[304] Hansen et al*,* "Ice melt, sea level rise and superstorms", *supra* note 78.
[305] MacLean, "The misleading promise of balance", *supra* note 64. See also chapter five in this thesis.
[306] For a critique of this argument on both economic efficiency and legal grounds, see Jason MacLean, "We can't build pipelines and meet our climate goals", *Maclean's* (9 December 2016), online: <http://www.macleans.ca/economy/economicanalysis/we-cant-build-pipelines-and-meet-our-climate-goals/>. This argument is more fully developed in chapter two of this thesis.
[307] See e.g. Carol Linnitt, "Why is Trudeau Back-Tracking On B.C.'s Oil Tanker Ban? These 86 Meetings with Enbridge Might Help Explain", *Desmog.ca* (20 October 2016), online: <http://www.desmog.ca/2016/10/20/why-trudeau-back-tracking-b-c-s-oil-tanker-ban-these-86-meetings-enbridge-might-help-explain>. For a more detailed discussion of lobbying and the other mechanisms of regulatory capture, see chapter three of this thesis.
[308] See e.g. Jason MacLean, "Gateway to Nowhere: Environmental Assessment, the Duty to Consult, and the Social License to Operate in *Gitxaala Nation v. Canada (Northern Gateway)"* (July 2016) *Toronto Law Journal, online:* http://archive.constantcontact.com/fs158/1107293291635/archive/1125455087928.html#LETTER.BLOCK57.

ignoring their cumulative effects on Canada's share of the global carbon budget tied to the global temperature targets established in the Paris Agreement – *check*. Implement a price on carbon far below the true social cost of carbon pollution, with or without provincial and territorial consent – *check*. Proceed apace with large GHG-emitting natural resources projects that adversely impact traditional Indigenous rights and interests and make meeting Canada's Paris Agreement commitments practically impossible – *check.*[309] This is far removed from what Waldron, Gerken, and Matsuda, (discussed above) view as the affirmative empowerment of constitutionalism and progressive federalism, whereby the state provides the housing and the furniture, as it were, required to facilitate responsible and transformative public deliberation.[310] The Trudeau government's climate change policy is neither federalism 3.0 (or even a beta version thereof) nor a credible plan to meet Canada's commitments under the Paris Agreement.

Consequently, Canada is a climate policy laggard, not a leader. In a 2020 ranking prepared by the World Economic Forum, Canada ranked 28th in the world in terms of preparedness

[309] See e.g. CS Mantyka-Pringle et al*,* "Honouring indigenous treaty rights for climate justice" (2015) 5 Nat Clim Change 798 (arguing that "[t]ogether with other impacts, including those of hydroelectricity, roads and forestry, the rapid expansion of oil sands extraction (in addition to conventional oil and gas) can be viewed as a cumulative assault on the ecosystems of the Treaty Eight territory and the rights of the First Nations signatories of Treaty Eight").

[310] Waldron, *supra* note 8 at 36; see also K Sabeel Rahman, *Democracy Against Domination* (New York, NY: Oxford University Press, 2017). It is important to note, however, that federalism 3.0 does not contemplate – let alone require – any *particular* substantive outcome *a priori* (*i.e.,* a substantive pre-commitment to such-and-such a law or policy). As one anonymous peer reviewer objected in response to an earlier version of this chapter, "it is not self-evident to me that 'the Canadian people' generally would or could agree on any specific substantive laws. And that seems to be what federalism 3.0 requires." On the contrary, federalism 3.0, as I hope to have shown in this chapter, contemplates in terms that are unapologetically aspirational a *procedural role* for the state as the facilitator of meaningful democratic deliberation that is itself capable of producing substantive outcomes – laws and regulations – that Canadians can agree on, and short of the chimera of consensus, otherwise acknowledge as being democratically legitimate. Indeed, Canadians' lack of substantive agreement on a credible climate policy is not evidence of federalism 3.0's impossibility, but of its urgent need.

to mitigate climate change and transition to a clean and affordable energy future.[311] Canada's climate-policy performance was compared to that of Brazil and the United States in the following terms: "High energy-consuming countries including the U.S., Canada and Brazil show little, if any, progress towards an energy transition."[312]

IV. CONCLUSION: THE "DELIVEROLOGY" OF PARIS, OR PIPELINES?

The federal government's check-the-box constitutionalism and climate change policy appear to flow proximately from the government's subscription to the so-called science of "deliverology."[313] Developed by Sir Michael Barber,[314] "deliverology" consists of a series of procedural protocols designed to help governments implement their policies. The Canadian government retained Barber's consultancy, Delivery Associates, in April 2016 to work with the Privy Council Office's "Results and Delivery Unit" – itself a product of deliverology-speak [315] – over a two-year period to provide ongoing information,

[311] World Economic Forum, "Energy Transition Index 2020: from crisis to rebound" (13 May 2020), online: <https://www.weforum.org/reports/fostering-effective-energy-transition-2020> [World Economic Forum, "Energy Transition Index 2020"]. Incidentally, this report was released one day after Norway's sovereign wealth fund blacklisted four Canadian oil sands producers for "acts or omissions that on an aggregate company level lead to unacceptable greenhouse-gas emissions" under new ethical guidelines established by Norway's parliament. See Emma Graney, "Canada called out for slow move to sustainable energy: Report by World Economic Forum follows a sharp rebuke by the world's largest wealth fund", *The Globe and Mail* (14 May 2020), online: <https://www.theglobeandmail.com/business/article-world-economic-forum-calls-out-canada-for-slow-move-to-sustainable/>.

[312] World Economic Forum, "Energy Transition Index 2020", *supra* note 311.

[313] Michelle Zilio, "Liberals spend $200,000 for advice on delivering campaign pledges", *The Globe and Mail* (30 September 2016), online: <http://www.theglobeandmail.com/news/politics/liberals-spend-200000-for-advice-on-delivering-campaign-pledges/article32187629/> [Zilio, "Advice on delivering campaign pledges"].

[314] See e.g. Michael Barber, *How to Run a Government So that Citizens Benefit and Taxpayers Don't Go Crazy* (Toronto: Penguin Books, 2015). Barber sets out 57 rules of deliverology.

[315] *Ibid* at 291 (rule 10. "Set up a Delivery Unit (call it what you like, but separate it from strategy and policy").

recommendations, and advice on a tailored program to guide departments to meet commitments and deliver on priorities.[316]

Deliverology is agnostic, however, about what it is that governments decide to deliver. Rule one of deliverology, for example, is to "have an agenda"; rule two is to "decide on your priorities (really decide)."[317] Deliverology is not particularly bullish, however, on public consultation. In relaying his experience consulting on the reform of the school system in Pakistan, for example, Barber observes that "we could not have been more top-down if we had tried. 'Top-down' is often hurled as a term of abuse, but there are circumstances when it is the best approach".[318]

Regarding the future development of "citizen engagement," wherein citizens "will expect to exercise choice as well as voice,"[319] Barber is decidedly circumspect. Responding to commentators who argue that the new "open, participatory and peer-driven" power of public participation is poised to replace the older model of "closed, inaccessible and leader-driven" power, Barber is unmoved: "I doubt that the new power will replace the old power."[320]

Canadians had better hope that Barber is wrong. So far, the government's promise of "real change" is far more federalism 2.0 than 3.0, far more NP2 than NP3. As Harrison astutely noted in respect of climate federalism 2.0, "for two decades Canadian politicians have

[316] Zilio, "Advice on delivering campaign pledges", *supra* note 313.
[317] Barber, *supra* note 314 at 2.
[318] *Ibid* at 22.
[319] *Ibid* at 284.
[320] *Ibid.*

embraced the 'sustainable development' mantra that economic prosperity and environmental protection go hand in hand: Canada can save the planet and get rich too."[321] Fast-forward to Prime Minister Trudeau's first speech from the throne, wherein he promised that his "Government will prove to Canadians and to the world that a clean environment and a strong economy go hand in hand. We cannot have one without the other."[322] More to the point, Canada's first Minister of the Environment and Climate Change, Catherine McKenna, who described herself "as much an economic minister as I am an environment minister,"[323] launched the government's review of its *environmental* assessment processes by reiterating that

> [o]ur belief that a clean environment and a strong economy go hand in hand is central to the health and well-being of Canadians. This is especially important as we work to get resources to market and develop major projects responsibly in the twenty-first century. Canadians expect and deserve to have an environmental assessment system that they can trust.[324]

Deliverology rule 49: "Drift is the enemy of delivery (momentum is its friend)."[325]

To whom, then, does the power to change the world belong? It is still too early to say for certain. However, notwithstanding the aspirations of federalism 3.0 and the Paris Agreement, the odds in Canada appear to favour the denizens of the conference rooms of the oil and gas industry over those in the streets, be they the streets of Paris or Ottawa.[326]

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[321] Harrison, "Challenges and Opportunities", *supra* note 97 at 341.
[322] Government of Canada, "Making Real Change Happen: Speech from the Throne to Open the First Session of the Forty-second Parliament of Canada" online (4 December 2015): <http://speech.gc.ca/en/content/making-real-change-happen>.
[323] Bruce Cheadle & The Canadian Press, "Fossil fuel wealth can't be left in the ground", *supra* note 299.
[324] Government of Canada, "Review of Environmental Assessment Processes", *supra* note 212.
[325] Barber, *supra* note 314 at 294.
[326] Solnit, "Power in Paris", *supra* note 1.

Instead of democracy, there will be "Deliverology"; in lieu of Paris, there will be pipelines. For both our constitution and our climate, the harm may well be irreparable.

In the next chapter, I examine the manifold ways in which the interests and imperatives of the oil and gas industry have insinuated themselves into the Canadian climate-policy imaginary, the implications of that insinuation, and an alternative political path forward.

2 PARIS *AND* PIPELINES? CANADA'S CLIMATE POLICY PUZZLE

> *No country would find 173 billion barrels of oil in the ground and just leave them*.[1]
>
> *The Stone Age didn't end for want of stones.*[2]

Can Canada build new oil pipelines *and* reduce its greenhouse gas (GHG) emissions pursuant to its international legal commitment under the Paris Agreement?[3] Moreover, can Canada simultaneously promote oil sands production *and* sustainability? A great many otherwise reasonable Canadians – including academics, NGO and government policy analysts, media pundits, politicians, and members of the general public – insist we can. Paris versus pipelines, on this Panglossian view, is a false choice. This get-rich-and-save-the-environment-too view, however, is fatefully mistaken – the federal government's own GHG emissions data leave absolutely no doubt about this. But it is mistaken in an interesting and instructive way. Only by excavating and exposing the normative foundations of this view will Canada be able to effectively chart a course towards net-zero carbon emissions and sustainability.

This chapter proceeds as follows. In the first part, I examine Canada's emerging climate change policies following the adoption of the Paris Agreement through the conceptual

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[1] Prime Minister Justin Trudeau, quoted in Jeremy Berke, "No country would find 173 billion barrels of oil in the ground and just leave them", *Business Insider* (10 March 2017), online: http://www.businessinsider.com/trudeau-gets-a-standing-ovation-at-energy-industry-conference-oil-gas-2017-3>.

[2] Ella Hickson, *Oil* (London: Nick Hern Books, 2016) at back cover.

[3] *Paris Agreement,* being an Annex to the *Report of the Conference of the Parties on its twenty-first session, held in parties from 30 November to 13 December 2015 – Addendum Part two: Actions taken by the Conference of the Parties at its twenty-first session, 29 January 2016,* Decision 1/CP.21, CP, 21st Sess, FCCC/CP/2015/10/Add.1 [Paris Agreement] at 21-36, online: UNFCCC <http://unfcc.int/resource/docs/2015/cop21/eng/10a01.pdf>.

prism of Canada as a "carbon democracy." In parts II and III, I use the "carbon democracy" concept to unpack and explain the contradictions of Canadian climate change policy vis-à-vis climate science and economics, respectively. In part IV, I conclude the chapter by sketching out an alternative, democratic pathway for Canadian climate change and sustainability policy.

I. Canada as Carbon Democracy

There is perhaps no better mark of Canada's steadfast commitment to carbon than the role new oil pipelines are often claimed to play in Canada's concomitant commitment to reduce its GHG emissions and promote sustainability. As a matter of public policy in Canada, building new oil pipelines, reducing emissions, and promoting sustainability effectively walk hand in hand. A few examples will illustrate – though hardly vindicate – the point:

> — Prime Minister Justin Trudeau: "*The choice between pipelines and wind turbines is a false one. We need both to reach our goals*."[4]
>
> — Former Minister of the Environment and Climate Change Catherine McKenna, who described herself "*as much an economic minister as I am an environment minister*," [5] launched the government's review of its environmental assessment process (discussed in chapter three of this thesis) in the following way: "*Our belief that a clean environment and a strong economy go hand in hand is central to the health and well-being of Canadians. This is especially important as we work to get resources to market and develop major projects responsibly in the twenty-first century.*

[4] Quoted in Shawn McCarthy & Ian Bailey, "Provinces oppose Trudeau's carbon floor-price proposal", *The Globe and Mail* (2 March 2016), online: <https://www.theglobeandmail.com/news/british-columbia/environment-shouldnt-become-arena-for-political-fights-trudeau/article28996991/> [emphasis added].

[5] Bruce Cheadle & The Canadian Press, "Carr tells climate forum fossil fuel wealth can't be left in the ground", *National Observer* (21 October 2016), online: <http://www.nationalobserver.com/2016/10/21/news/carr-tells-climate-forum-fossil-fuel-wealth-cant-be-left-ground> [emphasis added].

> *Canadians expect and deserve to have an environmental assessment system that they can trust*."[6]
>
> — Former Minister of Natural Resources Jim Carr: "*people say*, '*Leave the oil in the ground*,' *they don't want any development. Our view is we use the wealth of the old economy to finance the new energy economy*."[7]
>
> — Former Alberta Premier Rachel Notley's reaction to the federal government's plan to impose a pan-Canadian price on carbon, starting at $10 per ton in 2018 and rising to $50 per ton in 2022: "*We're just not prepared to accept that big of a jump in the prices until we get more progress on the matter of the pipeline*."[8]
>
> — Prime Minister Justin Trudeau, suggesting that his government's proposed pan-Canadian price on carbon will "*make it more possible than it was for the past 10 years to actually get our resources to market, to perhaps build a pipeline to tidewater*."[9]

These quotations admit of multiple interpretations. Each was made following the election of a new federal government in 2015, a government whose nominal – and very likely sincerely held – position is that climate change is a public policy problem that is simultaneously (1) real, (2) serious, (3) caused by human activities, and (4) in need of a government response.

Each statement, moreover, was made in reference to, or in the context of, proposed regulatory responses to climate change, including: (1) the federal government's proposed

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[6] Government of Canada, "Backgrounder: Review of Environmental Assessment Processes" (20 June 2016), online: <http://news.gc.ca/web/article-en.do?nid=1088149> [emphasis added] [Government of Canada, "Backgrounder"].
[7] Bruce Cheadle & The Canadian Press, "Carr tells climate forum fossil fuel wealth can't be left in the ground", *National Observer* (21 October 2016), online: <http://www.nationalobserver.com/2016/10/21/news/carr-tells-climate-forum-fossil-fuel-wealth-cant-be-left-ground> [emphasis added].
[8] Quoted in Wallis Snowdon, "'Alberta is struggling': Notley defends carbon tax ultimatum", *CBC News* (4 October 2016), online: <http://www.cbc.ca/news/canada/edmonton/alberta-is-struggling-notley-defends-carbon-tax-ultimatum-1.3790650> [emphasis added].
[9] Quoted in The Canadian Press, "Trudeau says naysayers on Canada's carbon-tax plan using 'scare tactics'", *CBC News* (14 October 2016), online: <http://www.cbc.ca/news/canada/calgary/trudeau-carbon-tax-scare-tactics-1.3805715> [emphasis added].

pan-Canadian price on carbon;[10] (2) a legislative review of Canada's environmental and regulatory processes, including the environmental assessment regime, the National Energy Board, the *Fisheries Act*, and the *Navigation Protection Act*;[11] and (3) a review of the National Energy Board's prior review and recommendation of the Trans Mountain pipeline expansion proposal.[12] Read in the context of the previous Harper era, regarded by many as a "lost decade" in terms of addressing climate change and advancing sustainability in Canada,[13] these statements may well sound like the pragmatic, incremental beginnings of a credible climate policy.[14] Call it climate politics as the art of the possible, the attainable, the next best, to adapt Bismarck's famous line. Or, to adapt another political chestnut, one emanating from Canada, these statements can be read as declarations of Canada's "grand bargain" on climate change.[15] Call it pipelines *for* Paris.

An alternative interpretation, however, is also possible. That interpretation takes as its starting point the very *raison d'être* of Canadian climate policy in the first place: climate

[10] Government of Canada, "News Release: Government of Canada Announces Pan-Canadian Pricing on Carbon Pollution", (3 October 2016), online: <http://news.gc.ca/web/article-en.do?nid=1132149>; see also Government of Canada, "Technical paper: federal carbon pricing backstop" (9 June 2017), online: <https://www.canada.ca/en/services/environment/weather/climatechange/technical-paper-federal-carbon-pricing-backstop.html>.
[11] Government of Canada, "Environmental and Regulatory Reviews: Discussion Paper" (June 2017), online: <https://www.canada.ca/en/services/environment/conservation/assessments/environmental-reviews/share-your-views/proposed-approach.html>.
[12] Natural Resources Canada, "Trans Mountain Expansion Project", online: <https://www.nrcan.gc.ca/questionnaire/18721>. But see Chris Tollefson & Jason MacLean, "Here is why B.C. must do its own review of the Trans Mountain pipeline", *The Globe and Mail* (23 May 2017), online: <https://www.theglobeandmail.com/opinion/why-bc-must-do-its-own-review-of-the-trans-mountain-pipeline/article35095482/> [Tollefson & MacLean, "B.C. must review Trans Mountain"].
[13] Jason MacLean, Meinhard Doelle & Chris Tollefson, "Polyjural and Polycentric Sustainability Assessment: A Once-in-a-Generation Law Reform Opportunity" (2016) 30:1 J Envtl L & Prac 35 at 65-66.
[14] But see Jason MacLean, "Trudeau's carbon price clever politics, not credible policy", *Policy Options* (14 October 2016), online: <http://policyoptions.irpp.org/magazines/october-2016/trudeaus-carbon-price-clever-politics-not-credible-climate-policy/> [MacLean, "Trudeau's carbon price"].
[15] The phrase "grand bargain" was reportedly popularized in Canada by former Canadian ambassador to the United States Allan Gottlieb.

science. In a widely read article published in the leading science journal *Nature* in 2014, an interdisciplinary team of eight Canadian scholars argued for a moratorium on new pipeline construction – and new oil-sands projects more generally – in Canada unless and until those developments "are consistent with national and international commitments to reducing carbon pollution."[16] The article described a "broken policy process"[17] whereby "public debate about oil-sands development focuses on individual pipeline decisions. Each is presented as an ultimatum – a binary choice between project approval and lost economic opportunity."[18] However, the authors proceeded to note that

> impacts mount with multiple projects. The cumulative effects of new mines, refineries, ports, pipelines, railways and a fleet of transoceanic supertankers are often at odds with provincial, state, federal or international laws protecting clean water, indigenous rights, biodiversity and commitments to control carbon emissions.[19]

Fast-forward to the fall of 2016. Notwithstanding the recently elected federal government's pronouncements about the importance of tackling climate change and developing major projects "*responsibly*,"[20] in its first major project approval, of the $36 billion Pacific Northwest LNG pipeline and terminal project in British Columbia, the government neglected to consider the cumulative impact of the project's estimated GHG emissions.[21] This is no minor omission. In its review of the project, the Canadian Environmental

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[16] Wendy J. Palen et al, "Consider the global impacts of oil pipelines" (2014) 510 Nature 465 at 466.
[17] *Ibid* at 465.
[18] *Ibid* at 466.
[19] *Ibid.*
[20] Minister Catherine McKenna, quoted in Government of Canada, "Backgrounder", *supra* note 6.
[21] Carol Linnit, "Feds Never Considered Cumulative Climate Impacts of Pacific Northwest LNG, Court Docs Reveal", *Desmog* (14 July 2017), online: <https://www.desmog.ca/2017/07/14/feds-never-considered-cumulative-climate-impacts-pacific-northwest-lng-court-docs-reveal>.

Assessment Agency (CEAA) concurred "with Environment and Climate Change Canada that the Project would be one of the largest greenhouse gas emitters in Canada and that the accepted science links environmental effects globally and in Canada to cumulative greenhouse gas emissions."[22] But CEAA did not conduct a cumulative effects analysis. Instead, CEAA assessed the project's GHG emissions only in terms of annual emissions; it assessed neither the project's *cumulative* GHG emissions over its approximate 30-year lifespan nor the project's *cumulative contribution* to Canada's share of the global carbon budget corresponding to the Paris Agreement's aspiration to limit mean global temperature rise to well below 2 ºC above pre-industrial levels.

An independent analysis of the project's cumulative GHG emissions concluded, however, that the Pacific Northwest LNG project *alone* would – if built[23] – comprise between 3% and 10% of Canada's total carbon budget; 3% if Canada's share of the global carbon budget is determined on the basis of its current level of GHG emissions (the "grandfathering" approach); 10% if Canada's share of the global carbon budget is based on its per capita emissions (the "equity" approach).[24]

Interpreted in light of the federal government's pronouncements about climate change, sustainability, and "responsible" resource development, it is nothing short of astonishing

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[22] Canadian Environmental Assessment Agency, "Pacific NorthWest LNG Project: Environmental Assessment Report" (September 2016) at 43, online: <http://www.ceaa.gc.ca/050/documents-eng.cfm?evaluation=80032>.

[23] Notwithstanding the government's approval, the project's proponent decided not to proceed with the project due to changing market conditions, the importance of which is discussed in part IV, *below*. See Jeffrey Jones, "Malaysia's Petronas scraps $11.4-billion LNG project in B.C.", *The Globe and Mail* (25 July 2017), online: <https://www.theglobeandmail.com/report-on-business/pacific-northwest-lng-megaproject-not-going-ahead/article35790713/> [Jones, "Petronas scraps LNG project"].

[24] Affidavit of Dr. Kirsten Zickfeld (26 April 2017), filed in *SkeenaWild Conservation Trust v HTMQ et al,* Federal Court (Court File No T-1836-16) at paras 11-18.

that the government assessed and approved the Pacific Northwest LNG project without calculating and considering its cumulative GHG emissions. Not only does the government's omission contradict its public policy rhetoric and seriously compromise its ability to meet its commitments under the Paris Agreement, but it is also a clear violation of the *Canadian Environmental Assessment Act, 2012*.[25] Under the *CEAA, 2012*, "[t]he environmental assessment of a designated project must take into account the following factors: […] any cumulative environmental effects that are likely to result from the designated project."[26] Because the Canadian Environmental Assessment Agency failed to consider the project's cumulative GHG emissions, its report is legally invalid, and the government's ultimate approval of the project did not properly find its source in law.[27]

How to interpret these contradictory commitments to meaningfully mitigate climate change while proceeding apace with the approval of new oil pipeline projects? How to reconcile the incongruity between the federal government's ostensible acceptance of climate science and the unscientific basis of its climate policies and targets (discussed further in part II)? How to explain the federal government's (and others') insistence that we can simultaneously promote oil sands development *and* sustainability (discussed in more detail

[25] *Canadian Environmental Assessment Act, 2012,* SC 2012, c 19, s 52 [*CEAA, 2012*].
[26] *Ibid* at s 19(1)(a). The same requirement is included in *CEAA, 2012's* successor legislation, the *Impact Assessment Act,* SC 2019, c 28, s1 at para 22(1)(a)(ii).
[27] It was on these grounds that SkeenaWild Conservation Trust commenced a judicial review of the government's approval of the Pacific Northwest LNG project (Federal Court file no. T-1836-16). The judicial review was discontinued following the decision of the proponent, Pacific NorthWest LNG Limited Partnership, not to pursue the project. See Jones, "Petronas scraps LNG project", *supra* note 23.

in part III)? These contradictory commitments can be understood – if not reconciled – by interpreting Canada as a "carbon democracy."[28]

As political theorist Timothy Mitchell explains, the world's leading industrialized states – including Canada – are also oil states, whose citizens' ways of living and working "require very large amounts of energy from oil and other fossil fuels."[29] This dependence significantly shapes states' economies and political dynamics. Economic and political policies – and policy options – in oil states are influenced "by different ways of organizing the flow and concentration of energy, and these possibilities were enhanced or limited by arrangements of people, finance, expertise and violence that were assembled in relationship to the distribution and control of energy."[30] In particular, the oil industry has played – and continues to play – a significant role in shaping economic and political policy options in oil states, including the range of potential policies for environmental protection. Mitchell describes the historical context of the oil industry's influence on democratic politics as follows:

> […] the international oil industry was well equipped to meet the challenge of the 1967-74 crisis. Facing both the demand from producer states for a much larger share of oil revenues and the rise of environmentalist challenges to carbon democracy, the major oil companies could draw upon a wide array of resources in public relations, marketing, planning, energy research, international finance and government relations, *all of which could be used to*

[28] Timothy Mitchell, "Carbon democracy" (2009) 38:3 Economy and Society 399 [Mitchell, "Carbon democracy"]; Timothy Mitchell, *Carbon Democracy: Political Power in the Age of Oil* (New York: Verso, 2011). For a similar approach in the Albertan context, see Laurie E Adkin, ed, *First World Petro-Politics: The Political Ecology and Governance of Alberta* (Toronto: University of Toronto Press, 2016).
[29] Mitchell, "Carbon democracy", *supra* note 28 at 400.
[30] *Ibid* at 401.

> *help define the nature of the crisis and promote a particular set of solutions*.[31]

This relationship between the oil and gas industry and democratic politics continues unabated today. In Canada, the oil and gas industry's ability to define the nature of policy problems and to promote particular solutions is remarkable. When it comes to environmental assessment, for example, the industry has not only been able to lobby successfully for its chosen reforms, it has played and continues to play a leading role in literally drafting its preferred amendments to existing environmental legislation.[32]

Examples of the oil and gas industry's political influence abound. Consider, for instance, the federal government's recent accession to the oil and gas industry's objections to new regulations calling for reductions in methane emissions, which were the only regulations in Canada's climate policy regulating the emissions of this highly potent GHG: "Oil and gas companies successfully lobbied to delay compliance, getting themselves more [at least three] years of limitless pollution. And industry continues to push for higher limits and less frequent inspections – *both of which would undercut the very mission of the regulations*."[33]

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[31] *Ibid* at 421 [emphasis added].

[32] See e.g. Jason MacLean, "Striking at the Root Problem of Canadian Environmental Law: Identifying and Escaping Regulatory Capture" (2015) 29 J Envtl L & Prac 111; Jason MacLean "Like oil and water? Canada's administrative and legal framework for oil sands pipeline development and climate change mitigation" (2015) 2 The Extractive Industries and Society 785. For a classic but still relevant historical account, including a discussion of oil and gas development as a continuation of the staples theory of Canadian economic production, see John Richards & Larry Pratt, *Prairie Capitalism: Power and Influence in the New West* (Toronto: McClelland and Stewart, 1979).

[33] See Ed Whittingham & Diane Regas, "Trudeau must hold the line on new methane rules", *The Globe and Mail* (11 June 2017), online: <https://www.theglobeandmail.com/report-on-business/rob-commentary/trudeau-must-hold-the-line-on-canadas-new-methane-rules/article35280646/> [emphasis added].

The federal government also recently weakened its regulations concerning the Laurentian Channel Marine Protected Area by reducing the size of the protected area by more than 33% of its original plotting in 2007, and by carving out a number of exceptions for offshore oil and gas exploration and drilling. The government conceded that it changed these regulations after fossil fuel lobbyists "raised concerns with respect to limitations on potential future activities."[34] According to Sigrid Kuehnemund, a marine biologist and lead specialist for oceans with the World Wildlife Fund, "we have felt the federal government has been much more willing to concede to industry interests and concerns as opposed to listening to the scientists who are making the recommendations about the standards of protection that are needed for the site."[35] Unsurprisingly, Canada is failing to meet its international commitments under the United Nations Convention on Biodiversity.[36]

These examples are disquieting, and disquietingly typical, in Canada. They illustrate Mitchell's larger thesis about carbon democracies, which reflects an emerging – if not already firmly established – consensus view of the way that carbon-intensive industries effectively shift energy and environmental regulations away from the broader public interest in climate change mitigation.[37] The mechanisms by which carbon democracies are

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[34] James Wilt, "Industry Sways Feds to Allow Offshore Drilling in Laurentian Channel Marin Protected Area", *Desmog* (22 July 2017), online: <https://www.theglobeandmail.com/report-on-business/rob-commentary/trudeau-must-hold-the-line-on-canadas-new-methane-rules/article35280646/>.

[35] Quoted in *ibid*. This example is by no means an outlier. See more generally David Schindler, "Facts Don't Matter: Harper is gone, but pro-development governments continue to ignore science", *Alberta Views* (30 June 2017), online: <http://albertaviews.ca/facts-dont-matter/>.

[36] See Gloria Galloway, "Canada lags in conservation efforts", *The Globe and Mail* (23 July 2017), online: <https://www.theglobeandmail.com/news/politics/canada-lagging-behind-on-commitment-to-protect-lands-and-fresh-water-reportsays/article35779173/>.

[37] See e.g. Jesse D Jenkins, "Political economy constraints on carbon pricing policies: What are the implications for economic efficiency, environmental efficacy, and climate policy design?" (2014) 69 Energy Policy 467; Dale D Murphy, "The Business Dynamics of Global Regulatory Competition" in David Vogel & Robert A Kagan, eds, *Dynamics of Regulatory Change: How Globalization Affects National Regulatory Policies* (Los Angeles, CA: University of California Press, 2004) at 94-99.

created and reproduced, however, extend far beyond the by-now-familiar tactics of lobbying, the revolving door circulating oil industry representatives in and out of government regulatory agencies, and political campaign financing. As Adkin and her collaborators illustrate in their comprehensive account of Alberta's "first world petro-politics,"[38] a "carbon democracy" is achieved and sustained through the coordinated operation of very particular and highly stylized governance practices, including:

> • ***Media campaigns*** that emphasize and normalize the employment and economic benefits of oil and gas production. In 2014, for example, the Canadian Association of Petroleum Producers (CAPP) launched a social media campaign in support of the Northern Gateway oil pipeline proposal (among others) called "Canada's Energy Citizens." The campaign urged Canadians to identify as "energy citizens," and to "join the team" and become an "industry advocate".[39]
>
> • ***Industry "grassroots community engagement"*** projects whereby the oil and gas industry players form and/or fund not-for-profit organizations to promote their interests in local communities, such as "Synergy Alberta," whose mission was one of "fostering and supporting mutually satisfactory outcomes in Alberta communities."[40] One critic of "Synergy Alberta" characterized it as a "civil peacekeeping organization" that measures success by pipelines build, oil wells dug, and profits reaped.[41] Similarly, Enbridge, a major pipeline proponent, created a coalition of local councilors and business owners called the "Northern Gateway Alliance" to promote the Northern Gateway pipeline.[42] The oil and gas industry in Alberta is also a prominent – and highly visible – player in community philanthropy. Suncor, for instance, has donated millions to develop the Northern Lights Regional Health Foundation's programs (which include the provision of medical equipment), the Suncor Energy Centre for the Performing Arts, and

[38] Adkin, *supra* note 28 at 14.
[39] Angela V Carter, "The Petro-Politics of Environmental Regulation in the Tar Sands" in Adkin, *supra* note 28 at 169 [Carter, "Environmental Regulation in the Tar Sands"].
[40] *Ibid*.
[41] Gordon Jaremko, "Disaster Relief Now Means Healing Relations", *Edmonton Journal* (20 November 2006) at A16.
[42] Carter, ""Environmental Regulation in the Tar Sands", *supra* note 39 at 170.

> the Suncor Community Leisure Centre at MacDonald Island in Fort McMurray.[43] Other examples abound.
>
> - ***Industry funding for postsecondary educational institutions,*** including the funding of targeted programs or facilities in colleges and universities to generate a skilled labour force and scientific research useful to industry, both of which are additionally – and substantially – subsidized by general tax revenues.[44] A case in point is the University of Calgary's Institute for Sustainable Energy, Environment and Economy (ISEEE), which was funded by the oil and gas industry in 2003 to increase conventional and unconventional oil recovery rates.[45] Similarly, in 2004 Imperial Oil Limited gave $10 million to the University of Alberta for its Imperial Oil Centre for Oil Sands Innovation.[46]

A "carbon democracy" is thus an ongoing accomplishment. In the illustrative case of Alberta, the "tar sands industry works to protect billions of dollars of investments and profits via political lobbying, political funding, public relations, and local 'engagement' activities, including co-opting the public education system."[47] Captured by these strategies and chronically dependent on oil and gas development revenues and jobs for its citizens, "Alberta's governments have legitimized and protected tar sands projects."[48] The result – besides an ineffective environmental regulatory regime – is the ideological identification of the oil and gas industry's private interests with the broader public interest. This identification is reflected and further reproduced by popular slogans such as "Alberta *is*

[43] *Ibid*.
[44] *Ibid*.
[45] *Ibid*.
[46] *Ibid*.
[47] *Ibid* at 170.
[48] *Ibid*.

energy,"[49] "what's good for oil is good for Alberta,"[50] and former premier Alison Redford's claim that "Alberta's oil sands are the lifeblood of our economy."[51]

The problem oil poses for democracy is not limited, then, to the difficult-enough fact that the ways that citizens of states like Canada have become accustomed to eating, travelling, housing, and consuming other goods and services are dependent on very large amounts of energy derived from oil and other fossil fuels, and are therefore unsustainable. As Mitchell argues, "[a] larger limit that oil presents for democracy is the political machinery that emerged to govern the age of fossil fuels may be incapable of addressing the events that will end it."[52] The next two parts of this chapter further unpack the ideological influence of carbon on Canada's climate change and sustainability policies before turning to "the possibility of more democratic futures"[53] and "the political tools with which we address the passing of the era of fossil fuel."[54]

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[49] Randolph Haluza-DeLay & Angela V Carter, "Social Movements Scaling Up: Strategies and Opportunities in Opposing the Oil Sands Status Quo" in Adkin, *supra* note 28 at 484 [emphasis original] [Haluza-DeLay & Carter, "Social Movements Scaling Up"].

[50] Kevin Taft, *Oil's Deep State: How the petroleum industry undermines democracy and stops action on global warming – in Alberta, and in Ottawa* (Toronto, ON: James Lorimer & Company Ltd., Publishers, 2017) at 205.

[51] As Adkin notes, this ideological identification is hardly unique to Alberta: "That identification of the interests of oil producers with the interests of the citizenry as a whole – one both actively promoted by governments and (the same) corporations and passively internalized by citizens as consumers of downstream products and as automobile owners – operates as powerfully in Alberta as it does in most parts of the USA" (Adkin, *supra* note 28 at 21). Or, indeed, in most parts of Canada, as the quotations reproduced at the outset of this chapter amply suggest. Indeed, one need only harken back to former Prime Minister Stephen Harper's boast that "Canada's emergence as a global energy powerhouse – *the* emerging 'energy superpower' our government intends to build … is an enterprise of epic proportions, akin to the building of the pyramids or China's Great Wall. Only bigger." The Honourable Stephen Harper, "Address to the Canada-UK Chamber of Commerce, London, England (14 July 2006), online: <http://www.pm.gc.ca/eng/media.asp?id=1247>.

[52] Mitchell, "Carbon democracy", *supra* note 28 at 401.

[53] *Ibid* at 422.

[54] *Ibid* at 423.

II. Canada's "Fake" Climate Targets

In defence of his government's approval of the Kinder Morgan Trans Mountain pipeline expansion, Prime Minister Trudeau insisted that his government "is determined to balance economic development and environmental protection."[55] The Prime Minister added that "[w]e know that decisions we take are based on facts and evidence, and we are going to continue to stand by the decisions that we took in a respectful way."[56] The federal government approved the Trans Mountain pipeline expansion only after conducting its own supplementary review of the National Energy Board's review and recommendation of the project, which did not consider the project's GHG emissions. The government's supplementary review was carried out under interim regulations it adopted in respect of the Trans Mountain project as well as TransCanada's proposed Energy East pipeline.[57] Those interim regulations stipulated that pipeline decisions would be based on science and Indigenous knowledge; public input; and the direct and upstream GHG emissions that can be linked to pipelines.[58]

In its approval of Trans Mountain, however, the government conceded that its own supplemental review of the project was unable "to conclude definitively on whether emissions will increase as a result of the project."[59] Curiously, the government nevertheless

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[55] Shawn McCarthy, "B.C.'s John Horgan remains tight-lipped on Trans Mountain pipeline permits", *The Globe and Mail* (25 July 2017), online: <https://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/bcs-john-horgan-remains-tight-lipped-on-transmountain-pipeline-permits/article35798930/>.
[56] *Ibid.*
[57] See Jason MacLean, "How to evaluate Energy East? Try evidence", *Toronto Star* (7 February 2016), online: <https://www.thestar.com/opinion/commentary/2016/02/07/how-to-evaluate-energy-east-try-evidence.html>.
[58] *Ibid.*
[59] Tollefson & MacLean, "B.C. must review Trans Mountain", *supra* note 12.

concluded that Trans Mountain will "not impact the emissions projections that underpin the plan to meet or exceed Canada's 2030 target of at least 30 per cent reduction below 2005 levels of emissions."[60]

By contrast, a study conducted by energy economist Mark Jaccard estimated the annual upstream GHG emissions of Trans Mountain to be 8.8 million metric tonnes of carbon dioxide equivalent, the GHG-emissions equivalent of adding 2.2 million cars to Canada's roads every year. Meanwhile, to meet its 2030 reduction target, Canada now has less than 10 years to cut nearly 200 million tonnes of annual emissions, the equivalent of removing 44 million cars from the road.[61]

According to a separate analysis by climate scientist Simon Donner, Trans Mountain's upstream GHG emissions over its estimated lifespan would consume 83% of Canada's share of the Paris Agreement carbon budget linked to the 2 ºC limit, and 100% of Canada's share under the 1.5 ºC limit.[62]

The government's Trans Mountain approval respects neither the prevention and precautionary purposes of the *CEAA, 2012*[63] nor the climate-science rationale for Canada's GHG emissions target under the Paris Agreement.[64] Moreover, the government's approval

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[60] *Ibid*.
[61] *Ibid.*
[62] Simon Donner, "Statement on greenhouse gas emissions associated with Trans Mountain Pipeline expansion", (17 August 2016), *Maribo* (blog), online: <http://blogs.ubc.ca/maribo/2016/08/17/statement-on-greenhouse-gas-emissions-associated-with-the-trans-mountain-pipeline-expansion/>.
[63] See Government of Canada, "Basics of Environmental Assessment" (5 June 2017), online: <https://www.canada.ca/en/environmental-assessment-agency/services/environmental-assessments/basics-environmental-assessment.html>. The approval would also contravene the letter of the *Impact Assessment Act*, subject to the broadly discretionary nature of that legislation.
[64] *Paris Agreement, supra* note 3.

of Trans Mountain – like its approval of the Pacific NorthWest LNG project – illustrates the incoherent and unscientific nature of Canada's climate policies, which reflect more the priorities of a carbon democracy than a climate democracy.

Consider first Canada's Paris Agreement target itself – namely, Canada's commitment to reduce its GHG emissions by 30% from 2005 levels by 2030. Before forming the federal government in 2015, members of the Liberal Party characterized this target, originally established by the Harper government, as "unambitious" and even "fake."[65] And they were right, insofar as the targets established by countries – including Canada – in the lead-up to the final negotiations of the Paris Agreement put the global community on a path to approximately a 3 ºC temperature increase.[66] That is a full degree Celsius higher than the Paris Agreement's upper target of 2 ºC. As noted earlier in this thesis, climate scientist James Hansen and his colleagues argue that even "2 °C global warming is dangerous"[67] and concluded that "we have a global emergency. Fossil fuel CO_2 emissions should be reduced as rapidly as possible."[68] To do so, "[s]ubstantial enhancement or over-delivering on current INDCs [independent nationally determined contributions, including Canada's 2030 target] by additional national, sub-national and non-state actions is required to

[65] Laura Payton, "Liberals back away from setting tougher carbon targets", *CTV News* 18 September 2016), online: <http://www.ctvnews.ca/politics/liberals-back-away-from-setting-tougher-carbon-targets-1.3075857>.
[66] See Joeri Rogelj et al, "Paris Agreement climate proposals need a boost to keep warming well below 2 °C" (2016) 534 Nature 631 [Rogelj et al, "Paris Agreement climate proposals need a boost"].
[67] James Hansen et al, "Ice melt, sea level rise and superstorms: evidence from paleoclimate data, climate modeling, and modern observations that 2 °C global warming could be dangerous" (2016) 16 Atmospheric Chemistry & Physics 3761 at 3801.
[68] *Ibid*.

maintain a reasonable chance of meeting the target of keeping warming well below 2 degrees Celsius."[69]

Nevertheless, upon forming the federal government in the fall of 2015, the Liberals adopted the "unambitious" and "fake" Harper-era emissions-reduction target as its initial commitment under the Paris Agreement.

A year later, the federal government announced the key plank in its climate change policy – a pan-Canadian price on carbon starting at $10 per tonne in 2018.[70] Like Canada's 2030 GHG-emissions target, Canada's proposed carbon price, if not fake, is unambitious and unscientific.[71] As noted in chapter one, an economic analysis of Canada's 2030 target found that for Canada's carbon price to be effective, it would need to start at a minimum of CDN$30 per tonne and increase by CDN$15 a year to a price of CDN$200 by the year 2030.[72] The Report of the High-Level Commission on Carbon Prices (co-chaired by Nobel Laureate Joseph Stiglitz and Lord Nicholas Stern) concluded that for the world to meet the

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[69] Rogelj et al, "Paris Agreement climate proposals need a boost", *supra* note 51 at 631.
[70] Government of Canada, "News Release: Government of Canada Announces Pan-Canadian Pricing on Carbon Pollution" (3 October 2016), online: <http://news.gc.ca/web/article-en.do?nid=1132149>; for technical details, see Government of Canada, "Technical paper: federal carbon pricing backstop" (June 2017), online: <https://www.canada.ca/en/services/environment/weather/climatechange/technical-paper-federal-carbon-pricing-backstop.html>. Note, however, that as of this writing, the government has signaled that it may delay the implementation of its price. See The Canadian Press, "Provinces have until the end of 2018 to submit carbon price plans: McKenna", *CBC News* (15 December 2017), online: <http://www.cbc.ca/news/politics/carbon-price-2018-mckenna-1.4450739>.
[71] For an initial critique, see MacLean, "Trudeau's carbon price", *supra* note 14. See also Alina Averchenkova & Sini Maitikainen, "Assessing the consistency of national mitigation actions in the G20 with the Paris Agreement" (London: Grantham Research Institute on Climate Change and the Environment, London School of Economics, 2016), online: <http://www.lse.ac.uk/GranthamInstiturte/wp-content/uploads/2016/11/Averchenkova-and-Matikainen-2016.pdf>.
[72] Mark Jaccard, Mikela Hein & Tiffany Vass, "Is Win-Win Possible? Canada's Government Achieve Its Paris Commitment … and Get Re-Elected?" (2016) School of Resource and Environmental Management, Simon Fraser University, online: <http://markjaccard.glogspot.ca/2016/09/is-win-win-possible-can-canadas.html>.

Paris Agreement targets, countries must set higher carbon prices, and sooner. Specifically: between US$40-80 by 2020, and between US$50-100 by 2030.[73] While significant uncertainty surrounding the true social cost of carbon nevertheless remains, "there is widespread recognition that to avoid severe climate change, society should be pricing CO_2 *at a level well above that observed in nations that price carbon today*."[74] The Commission's report also calls for countries to reduce subsidies to the fossil fuels industry,[75] which Canada has pledged but thus far failed to do.[76]

Nor has Canada established or implemented policies capable of meeting key climate mitigation milestones by 2020, which is a crucially important year. According to a recent report tracking global GHG emissions trends, if emissions continue to rise beyond the year 2020 – or even remain level – the temperature goals of the Paris Agreement become virtually unattainable.[77] In order to ensure Canada is on track, by 2020 Canada must not only significantly increase its carbon price while phasing out subsidies to fossil fuels, but it must also implement policies capable of: (1) increasing renewable energy production; (2) implementing a plan to fully decarbonize buildings and infrastructure by 2050; (3)

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[73] Carbon Pricing Leadership Coalition, *Report of the High-Level Commission on Carbon Pricing* (29 May 2017) at 3, online: <https://www.carbonpricingleadership.org/report-of-the-highlevel-commission-on-carbon-prices/ > [Carbon Pricing Leadership Coalition, "Report on Carbon Pricing"]. See also RS Tol, "The Social Cost of Carbon" (2011) 3:1 Annual Review of Economics 419 (recommending a carbon price of US$70). The ideal carbon price may vary to some extent depending on a country's circumstances, and where the cost is subject to politically binding constraints, other second-best carbon abatement strategies must also be pursued in addition to a continuously increasing carbon price. This use of second-best (*i.e.,* less than maximally efficient) abatement policy tools in the Canadian context is discussed below. For a formal model that applies more generally, see Jesse D Jenkins & Valerie J Karplus, "Carbon pricing under binding political constraints" (2016) United Nations University WIDER Working Paper 2016/44, online: <https://www.wider.unu.edu/publication/carbon-pricing-under-binding-political-constraints> [Jenkins & Karplus, "Carbon pricing under political constraints"].

[74] Jenkins & Karplus, "Carbon pricing under political constraints", *supra* note 73 at 4.

[75] Carbon Pricing Leadership Coalition, "Report on Carbon Pricing*",* supra note 73 at 2.

[76] MacLean, "Trudeau's carbon price", *supra* note 14.

[77]Mission 2020, *2020: The Climate Turning Point* (Mission 2020, 2017), online: <http://go.nature.com/2takuw3>.

significantly increasing the share of electric vehicles making up new-car sales, increasing the fuel efficiency of heavy-duty vehicles, reducing GHG emissions from aviation, all the while significantly expanding mass transit; (4) reducing forest destruction and increasing reforestation and afforestation; and (5) encouraging its financial sector to further finance climate mitigation efforts.[78]

In each of these areas, Canada remains more a laggard than leader. In 2014, the Commissioner for the Environment and Sustainable Development's audit indicated that "Environment Canada has no overall implementation plan that indicated how different regulations or how different federal departments and agencies would work together to achieve the reductions required to meet the 2020 target of the Copenhagen Accord."[79] Since then, the federal government has issued what it calls a "Pan-Canadian Framework on Clean Growth and Climate Change," which is tellingly subtitled "Canada's Plan to Address Climate Change and Grow the Economy."[80] While the main plank of this framework is the government's proposed price on carbon, the framework also includes a number of "complementary actions to reduce emissions."[81] Most of the "new actions" of this variety, however, will not even begin until 2020, and several much later than that.

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[78] *Ibid.* See also Christiana Figueres et al, "Three years to safeguard our climate" (2017) 546 Nature 593.
[79] Office of the Auditor General, "2014 Fall Report of the Commissioner of the Environment and Sustainable Development" (Fall 2014) at 1.36, 1.39, online: <http://oag-bvg.gc.ca/internet/English/parl_cesd_201410_01_e_39848.html> [Commissioner of the Environment and Sustainable Development, "Fall 2014 Report"].
[80] Government of Canada, "Pan-Canadian Framework on Clean Growth and Climate Change: Canada's Plan to Address Climate Change and Grow the Economy" (9 December 2016), online: <https://www.canada.ca/en/services/environment/weather/climatechange/pan-canadian-framework.html>.
[81] *Ibid.*

Moreover, most of these actions are merely sketched out, and in remarkably broad strokes. Consider the complementary action of increasing renewable and non-emitting energy sources, which is a representative example: "Federal, provincial, and territorial governments will work together to facilitate, invest in, and increase the use of clean electricity across Canada, including through additional investments in research, development, and demonstration activities."[82] How? When? By how much? At what cost? How will this be financed? By whom? The federal framework does not begin to say. These are aspirations, not plans.

Perhaps unsurprisingly, then, Canada is not on track to meet even its already unambitious GHG emissions-reduction target. According to Environment and Climate Change Canada, Canada is on pace to emit *at least* 30% *more* GHGs in 2030 than it emitted in 2005.[83] This overshoot is largely due to the ongoing expansion of Canada's oil sands; GHG emissions from the oil sands sector are rising faster than emissions from any other sector of the Canadian economy.[84] "It remains to be seen," one Canadian environmental advocacy

[82] *Ibid* at 12.
[83] Environment and Climate Change Canada, "Canadian Environmental Sustainability Indicators: Progress Towards Canada's Greenhouse Gas Emissions Reduction Target" (Ottawa: Government of Canada, 2017), online: <www.ec.gc.ca/indicateurs-indicators/default.asp?lang=en&n=CCED3397-1>. Chapters four and five of this thesis provide a further discussion of Canada's key climate policy, carbon pricing, including the constitutional challenges commenced by Saskatchewan, Ontario, and Alberta against the federal government's carbon-pricing legislation, the *Greenhouse Gas Pollution Pricing Act*. Chapter five also briefly discusses the federal government's clean fuel standard, which at this writing remains – tellingly – inchoate.
[84] Commissioner of the Environment and Sustainable Development, "Fall 2014 Report", *supra* note 79 at 1.19.

group observed in response to the government's own emissions data, "whether the government is serious about meeting its targets."[85]

The architects of Canadian carbon pricing policies – and their apologists – suggest that there is a simple answer to this sorry state of affairs. If the pan-Canadian price on carbon is too low – as it plainly is – to meet our climate goals, then we should simply raise the price, they say. Doing so, they add, is simple matter of political leadership. And that, they say, is where new pipelines come in.[86]

III. Pipelines for Paris – Canada's Grand Bargain on Climate Change?

The federal government's view of the relationship between new pipelines – a proxy for expanded oil sands production – and its commitment to reduce GHG emissions is

[85] Dale Marshall, National Program Manager, Environmental Defence, quoted in Alex Ballingall, "Environment Canada report says we are on pace to miss emissions target", *Toronto Star* (27 March 2017), online: <https://www.thestar.com/news/canada/2017/03/27/environment-canada-report-says-we-are-on-pace-to-miss-emissions-target.html>. See also Shawn McCarthy, "Carbon prices must rise to meet Canada's 2030 greenhouse-gas targets: officials", *The Globe and Mail* (31 March 2017), online: <http://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/carbon-prices-must-rise-to-meet-2030-ghg-targets-officials/article34510739/>.

[86] For an initial discussion of this proposal and critical response, see Jason MacLean, "No, carbon pricing alone won't be enough to lower emissions", *Maclean's* (29 November 2016), online: <http://www.macleans.ca/economy/economicanalysis/no-carbon-pricing-alone-wont-be-enough-to-lower-emissions/>; see also Jason MacLean, "We can't build pipelines and meet our climate goals", *Maclean's* (9 December 2016), online: <http://www.macleans.ca/economy/economicanalysis/we-cant-build-pipelines-and-meet-our-climate-goals/>. While there are others who also advance this position, not least the current Prime Minister of Canada and his Minister of the Environment and Climate Change, Tombe provides the clearest articulation of its logic, and for that reason I concentrate my analysis on his model. For an oil-and-gas-industry insider's articulation of this argument, see Dennis McConaghy, *Dysfunction: Canada after Keystone XL* (Toronto, ON: Dundurn, 2017). For a political and public policy account, see Jim Prentice & Jean-Sébastian Rioux, *Triple Crown: Winning Canada's Energy Future* (Toronto: HarperCollins, 2017). Further discussion of the policy ineffectiveness – from a climate-science perspective – of the federal carbon price, quite independent of the vicissitudes of federal-provincial politics, is provided in chapter five of this thesis.

communicated obliquely in its "Mid-Century Long-Term Low-Greenhouse Gas Development Strategy":

> In Canada, there are challenges to reducing greenhouse gas emissions from emissions-intensive heavy industry, primary extraction, and certain applications in the transportation sector. In the short-to-medium term, there may be more cost effective GHG reduction opportunities in *other sectors or regions*, where abatement technologies are more effective or lower-GHG alternatives exist. Emissions trading, or accessing internationally transferred mitigation outcomes, can provide a lower cost method of reducing GHG emissions, allowing *more time* for GHG intensive capital stock to turn over and allow low-carbon alternatives to be introduced *without stranding assets*.[87]

University of Calgary economist Trevor Tombe makes this argument in much clearer terms.[88] Tombe argues that blocking new pipelines would reduce direct, upstream, and downstream GHG emissions: "No new pipelines means less production, and less production means lower emissions."[89] But Tombe argues that the cost per tonne of avoided carbon emissions is too high. He begins by estimating the *implied costs* of blocking pipelines due to the discounted price for oil sands crude and the costs of *forgone production*. His back-of-the-envelope estimate is that blocking pipelines will cost between $1500 and $2000 per tonne of global emissions avoided, "a massive cost."[90] He then corrects for the relatively high GHG-emissions-intensity of oil sands crude, and estimates

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[87] Government of Canada, "Canada's Mid-Century Long-Term Low-Greenhouse Gas Development Strategy" (19 November 2016) at 11, online: <https://www.canada.ca/en/environment-climate-change/news/2016/11/canada-submits-century-strategy-clean-growth-economy.html?=undefined&> [emphasis added].
[88] Trevor Tombe, "Blocking pipelines is a costly way to lower emissions", *Maclean's* (22 November 2016), online: <http://www.macleans.ca/economy/economicanalysis/blocking-pipelines-is-a-costly-way-to-lower-emissions/>.
[89] *Ibid.*
[90] *Ibid*.

that the per-barrel cost of blocking new pipelines is between $200 and $1000. "Blocking pipelines is therefore a very expensive means of lowering emissions, and far above the likely danger from a tonne of GHG emissions."[91] Far better to establish a carbon price of $50 per tonne, Tombe concludes.

Moreover, Tombe argues that blocking new pipelines also has political costs:

> Calls to block pipelines also risk severe blowback by undermining the political case for pricing. If pipelines are successfully blocked, the political price for hard won carbon pricing gains may collapse. Premier Notley and Prime Minister Trudeau both went to great lengths to connect Alberta's carbon policies with pipeline approval. If the pipelines fail, many will judge the carbon tax a failure too. *A Canada with no pipelines and no carbon price is worse for the climate than one with pipelines and proper pricing*."[92]

Tombe's analysis rests, however, on three counterfactual assumptions, each of which helps illustrate the perverse and pervasive ideological influence of the oil and gas industry in a carbon democracy.

First, Tombe assumes that the hypothetical notional (*i.e.,* implied) opportunity costs of oil producers due to forgone production opportunities if new pipelines are blocked are fairly

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[91] *Ibid*.

[92] Trevor Tombe, "Policy, not pipelines, will determine if we meet our goals", *Maclean's* (2 December 2016), online: <http://www.macleans.ca/economy/economicanalysis/policy-not-pipelines-will-determine-if-we-meet-our-goals/> [Tombe, "Policy, not pipelines"]. For a more recent application of this line of thinking, see e.g. Andrew Leach & Martin Olszynski, "Clearing the Air on Teck Frontier" (13 February 2020), *ABlawg.ca* (blog), online: <https://ablawg.ca/2020/02/13/clearing-the-air-on-teck-frontier-extended-ablawg-edition/> (asserting that the question – now moot – of whether or not to approve Teck Resources' Frontier oil sands mine project was "not easy" and was "made more precarious by those who have turned it into a litmus test for either the government's commitments to action on climate change or to national unity").

and meaningfully comparable to the real costs that the public will bear if Canada fails to effectively reduce GHG emissions and mitigate climate change. This is a puzzling and incommensurable comparison, not only on its face, but also for an economist who characteristically espouses an otherwise very limited role for government policy with respect to pipelines. Tombe argues that the "[c]oncerns of policy makers should be limited to safety, spill risks, aboriginal land claims, engineering regulations, ensuring the new pipelines doesn't [*sic*] disadvantage others (through network effects), and so on."[93] However, Tombe continues, "if public dollars are not subsidizing the project, then a willing company proposing to build a pipeline is a strong signal that it will be used. *And if they turn out to be wrong, the company's shareholders bear the cost*."[94]

How can it be that an oil producer's stranded assets due to a lack of pipeline capacity are the sole concern of its shareholders – and creditors, as is increasingly the case in Alberta's oil sands[95] – but its notional foregone opportunity costs ought to factor into public policymaking, trumping the real negative externality costs that will be actually borne by the public in the bargain? Perhaps it is because in the former scenario, the loss is due to a drop in market demand (which Tombe does not think will actually occur), while in the latter the loss would be due to a decline in supply caused by a government policy? Perhaps (Tombe does not explain one way or another), but that distinction is equally false: market

[93] *Ibid*.
[94] *Ibid* [emphasis added].
[95] See e.g. Allison McNeely & Kevin Orland, "Fight over abandoned oil wells may head to Supreme Court of Canada", *The Globe and Mail* (1 August 2017), online: <https://beta.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/fight-over-abandoned-oil-wells-may-head-to-supreme-court/article35858825/?ref=http://www.theglobeandmail.com&>. While the liability risks in respect of orphan wells are distinct from the liability risks associated with stranded assets in the oil sands more generally, a point for which I am grateful to Professor David Percy, the specific point I am making here relates to the inappropriateness of factoring industry opportunity costs into public-interest policymaking.

demand for oil is as much a product of government policy and regulatory decisions as is supply (or liability for spills and safety defects, for that matter). After all, an effective carbon price set by the government ought to have the very same effect. If it is acceptable for the government to set a price on carbon to lower GHG emissions, as opposed to simply letting "the market" decide, then there is no coherent, principled objection to a government *also* and *concurrently* reducing GHG emissions through supply measures.[96] This is all-the-more important where, as in Canada, the carbon price is not high enough to reduce emissions as much or as quickly as desired. As a recent formal model of carbon pricing under binding political constraints illustrates, "[a]ttention to how clever policy design can manage the distributional impacts and costs associated with a clean energy transition while maximizing the efficiency and efficacy of policy measures has thus proven an important (and elusive) challenge."[97]

Of course, the inconvenient fact is that the Canadian government *is* subsidizing pipeline projects, and handsomely at that.[98] Indeed, an insufficiently high carbon price is itself an indirect subsidy to oil and gas producers and pipeline companies. The Carbon Pricing Leadership Coalition likens subsidies to the oil and gas industry to a "negative emissions price."[99] And what is the factoring-in of the oil and gas industry's future notional

[96] This approach is being implemented with considerable success in Sweden. See e.g. Michael Lazarus, Peter Erickson & Kevin Tempest, "Supply-side climate policy: the road less taken" (2015) Stockholm Environment Institute Working Paper 2015-13.
[97] Jenkins & Karplus, "Carbon pricing under binding political constraints", *supra* note 73 at 6. Mark Jaccard makes the same point about the importance of regulations capable of *complementing* a price on carbon in Canada. See Mark Jaccard, *The Citizen's Guide to Climate Success: Overcoming Myths that Hinder Progress* (New York: Cambridge University Press, 2020), especially chapter six.
[98] See e.g. Oliver Milman, "Canada gives $3.3bn subsidies to fossil fuel producers despite climate pledge", *The Guardian* (15 November 2016), online: <https://www.theguardian.com/world/2016/nov/15/climate-change-canada-fossil-fuel-subsidies-carbon-trudeau>.
[99] Carbon Pricing Leadership Coalition, "Report on Carbon Pricing", *supra* note 73 at 2.

opportunity costs in present-day policymaking if not a massive and perverse subsidy to that industry? Tombe's comparison, far from apples-to-apples, is more like oil to water.

But what if refusing to block new oil pipelines and phase out oil sands production in conjunction with other policies and regulations – including a carbon price – is not the best policy choice? Will Canadians be able to look to oil producers, pipeline companies, and their shareholders for compensation? Aside from the legal difficulties of doing so, both in terms of establishing liability [100] and actually recovering damages from insolvent entities,[101] the costs of failing to mitigate climate change as soon as possible are staggering, and will assuredly exceed oil producers' incommensurably notional future losses. [102] Tombe's second counterfactual assumption is that Canada's proposed carbon price, which will reach $50 per tonne by the year 2022, is a reasonable estimate of the damage caused by carbon emissions. In making that assumption, Tombe concedes that estimates vary widely, but he nevertheless uncritically accepts the federal government's estimate as falling within a reasonable range, not obviously too high or too low.[103] Tombe's let-the-chips-fall-where-they-may approach to climate change policymaking is exactly the gamble it sounds

[100] See e.g. Martin Olszynski, Sharon Mascher & Meinhard Doelle, "From Smokes to Smokestacks: Lessons from Tobacco for the Future of Climate Change Liability" (2017) 30:1 Geo Envtl L Rev 1.
[101] See e.g. *Orphan Well Association v Grant Thornton Ltd.,* [2019] 1 SCR 150.
[102] Such pollution costs include reduced human welfare, lost production and consumption of market goods and services, impaired produced and natural capital. According to a recent estimate prepared by the International Institute for Sustainable Development, pollution of all types cost Canadians *at least* CDN$39-billion in 2015 alone. See International Institute for Sustainable Development, "Costs of Pollution in Canada: Measuring the impacts on families, businesses and governments" (June 2017), online: <http://www.iisd.org/library/cost-pollution-canada>. See also National Roundtable on the Environment and Economy, *Paying the price: The economic impacts of climate change in Canada* (Ottawa, 2011), which estimated the cost of climate change in Canada to be CDN$21-43 billion (2008 value) per year.
[103] Trevor Tombe, "Put a price on emissions and let the chips fall where they may", *Maclean's* (3 October 2016), online: <http://www.macleans.ca/economy/economicanalysis/put-a-price-on-emissions-and-let-the-chips-fall-where-they-may/>.

like.[104] The federal government's proposed price is based on integrated assessment models, which may well *underestimate* both the quantum and the distribution – intra-generational, intergenerational, and spatial – of the costs of climate change.[105] In a scientific estimate of the costs of climate change, by contrast, James Hansen and his colleagues concluded that "continued high fossil fuel emissions today place a burden on young people to undertake massive CO_2 extraction if they are to limit climate change and its consequences."[106] Presently proposed extraction methods of bioenergy and carbon capture and storage or air capture of carbon "have minimal estimated costs of USD 89-535 trillion this century and also have large risks and uncertain feasibility."[107] A precautionary approach to climate policy[108] is plainly preferable to letting the chips fall where they may by setting a *politically* feasible price on carbon, a price that would allow oil sands extraction to continue because it is lower than the shadow carbon prices that major oil companies already employ as a matter of internal costing practices,[109] as opposed to a price that reflects and is responsive to the evolving findings of climate science.[110]

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[104] *Ibid*.
[105] See e.g. Solomon Hsiang et al, "Estimating economic damage from climate change in the United States" (2017) 356 Science 1362. See also Shawn McCarthy, "Carbon prices must rise to meet Canada's 2030 greenhouse-gas targets: officials", *The Globe and Mail* (31 March 2017), online: <https://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/carbon-prices-must-rise-to-meet-2030-ghg-targets-officials/article34510739/>.
[106] James Hansen et al, "Young people's burden: requirement of negative CO_2 emissions" (2017) 8 Earth System Dynamics 577 at 577.
[107] *Ibid* at 577-578.
[108] See e.g. Farhad Manjoo, "How Y2K Offers a Lesson for Fighting Climate Change", *New York Times* (19 July 2017), online: <https://www.nytimes.com/2017/07/19/technology/y2k-lesson-climate-change.html?hpw&rref=business&action=click&pgtype=Homepage&module=well-region&region=bottom-well&WT.nav=bottom-well>.
[109] Carbon Pricing Leadership Coalition, "Report on Carbon Pricing", *supra* note 73 at 12.
[110] See e.g. Mohammad S Masnadi & Adam R Brandt, "Climate impacts of oil extraction increase significantly with oilfield age" (2017) 7 Nat Clim Change 551.

Tombe's ready answer to the charge that Canada's proposed carbon price is too low is simply to raise it, which in his view is a simple matter of political leadership. According to Tombe, there is "*strong evidence* that political leadership is indeed *sufficient to implement efficient policy*. Michael Chong is further evidence of this."[111] Tombe is referring to former federal Conservative Party leadership candidate Michael Chong, who during his leadership campaign proposed a carbon price of CDN$130 per tonne.[112] Mr. Chong was quite literally booed on stage during a leadership debate before party delegates when he proposed this policy,[113] and he finished with less than 10% of the vote for leadership of his party.[114]

Curiously, however, Tombe's third counterfactual assumption is that new pipelines are the political price that must be paid for provincial support of a pan-Canadian carbon price. This is the "grand bargain"[115] trope of Canadian climate policy discourse, which Tombe expresses as follows:

> Calls to block pipelines also risk severe blowback by undermining the political case for [carbon] pricing. If pipelines are successfully blocked, the political price for hard won carbon pricing gains may collapse. Premier Notley and Prime Minister Trudeau both went to great lengths *to connect Alberta's carbon policies with pipeline approval*. If the pipelines fail, many will judge the carbon tax a

[111] Tombe, "Policy, not pipelines", *supra* note 92.
[112] Geordan Omand, "Tories boo leadership candidate Michael Chong for proposing to reduce carbon pollution", *The National Observer* (19 February 2017), <online: http://www.nationalobserver.com/2017/02/19/news/tories-boo-leadership-candidate-michael-chong-proposing-reduce-carbon-pollution>.
[113] *Ibid.*
[114] "Scheer wins Conservative leadership race: results by ballot", *The Hill Times* (27 May 2017), online: <https://www.hilltimes.com/2017/05/27/conservative-leadership-race-results-ballot/108523>.
[115] See e.g. Claudia Cattaneo, "'A key test': Canadian oil executives await Trudeau's grand bargain on pipelines", *Financial Post* (28 November 2016), online: <http://business.financialpost.com/commodities/energy/canadian-oil-executives-await-trudeaus-grand-bargain-on-pipelines/wcm/4e28ee64-aa6d-4e1a-a816-88a0e008d4ab>.

> failure too. A Canada with no pipelines and no carbon price is worse for the climate than one with pipelines and proper pricing.[116]

Political leadership, it turns out, is not sufficient to implement a carbon price; on Tombe's view, pipelines are also required. This contradiction aside, Tombe's final assumption of the political necessity of pipelines rests on two further conceptual missteps. The first and most obvious is the bald assumption that, if at least one new pipeline from the oil sands to tidewater is built (for example the Trans Mountain expansion), then Albertans will support a price on carbon. In fairness, Tombe's assumption pre-dates the formation of the United Conservative Party in Alberta (a merger of the Progressive Conservative and Wildrose parties),[117] but that merger was hardly unforeseeable following the historic election of the NDP in 2015. There was simply no evidence at the time of Tombe's analysis that a majority of Albertans would vote to re-elect Premier Notley's NDP Party and thereby support its carbon if one or more new pipelines are approved. To the contrary, Jason Kenney, the leader of Alberta's new united right-wing political party, vociferously opposed carbon pricing, *new pipelines or not*, and easily won the 2019 Alberta provincial election.[118] This "grand bargain" of pipelines for carbon pricing that the federal government and the former NDP Alberta government were so eager to strike does not appear to have a willing partner in the new Alberta government or, for that matter, in Saskatchewan or Manitoba, all of

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[116] Tombe, "Policy, not pipelines", *supra* note 92 [emphasis added].
[117] See e.g. Kelly Cryderman, "Alberta Wildrose, PC members overwhelmingly vote to merge", *The Globe and Mail* (22 July 2017), online: <https://beta.theglobeandmail.com/news/alberta/wildrose-progressive-conservative-unite-right-united-conservative-party-alberta/article35776606/?ref=http://www.theglobeandmail.com&> [Cryderman, "Alberta Wildrose, PC merge"].
[118] See e.g. Chris Turner, "The Coal Phase-Out: Why it's right and Jason Kenney is wrong", *Alberta Views* (30 June 2017), online: <https://albertaviews.ca/the-coal-phase-out/>; Canadian Press, "Brian Jean: 'Climate change costs are going to hit everybody': Wildrose gives party leader a mandate to fight to end carbon tax", *Maclean's* (29 October 2016), online: <http://www.macleans.ca/news/canada/brian-jean-climate-change-costs-are-going-to-hit-everybody/>; see also Cryderman, "Alberta Wildrose, PC merge", *supra* note 117.

which are challenging the constitutional validity of the federal government's carbon-pricing framework (these challenges are discussed in chapters four and five of this thesis).

Second, and worse still, this is a "bargain" that is legally unnecessary to strike in the first place. As Nathalie Chalifour convincingly shows, the federal government has ample constitutional authority to implement a pan-Canadian price on carbon to mitigate climate change pursuant to its commitments under the Paris Agreement.[119] Indeed, the constitutional law arguments in favour of the federal government's power to impose a carbon price on the provinces are arguably stronger than the arguments in favour of its constitutional authority to impose an interprovincial pipeline on a reluctant province concerned about local environmental impacts.[120] And yet both the federal and Alberta provincial governments appear to be fully confident that the federal government has

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[119] Nathalie J Chalifour, "Canadian Climate Federalism: Parliament's Ample Constitutional Authority to Legislate GHG Emissions through Regulations, a National Cap and Trade Program, or a National Carbon Price" (March 2016), University of Ottawa Faculty of Law Working Paper No 2016-18, online: <https://fivethirtyeight.com/features/the-comey-letter-probably-cost-clinton-the-election/>. The Manitoba government recently arrived at precisely the same conclusion, having received an independent legal opinion to the effect that the federal government has jurisdiction to impose a price on Carbon in the province. See Government of Manitoba, "Province Releases Expert Legal Opinion on Carbon Pricing" (11 October 2017), online: <http://news.gov.mb.ca/news/index.html?item=42320>.

[120] See e.g. *Coastal First Nations v British Columbia (Environment),* 2016 BCSC 34 (CanLII) at para 53 [citations omitted]:

> This Project is clearly distinguishable from past division of powers jurisprudence dealing with aviation or telecommunications; the proposed [Northern Gateway oil pipeline] Project, while interprovincial, is not national and it disproportionately impacts the interests of British Columbians. To disallow any provincial environmental regulation over the Project because it engages a federal undertaking would significantly limit the Province's ability to protect social, cultural and economic interests in its lands and waters. It would also go against the current trend in the jurisprudence favouring, where possible, co-operative federalism.

See also *Sawyer v Transcanada Pipeline Limited,* 2017 FCA 159 (FCA), where the Federal Court of Appeal held that the National Energy Board must examine not only the location but also the *purpose* of a project in order to determine jurisdiction. The contradictions and the ultimate constitutionality of pipeline regulations and carbon pricing are discussed in detail in chapters four and five of this thesis.

plenary constitutional power to approve the controversial Trans Mountain pipeline expansion over and above the concerns of British Columbians.[121] And while it might be argued that, while the federal government may have plenary constitutional power to implement a pan-Canadian carbon price to combat climate change, the ultimate viability of the carbon price "on the ground" will depend on provincial cooperation, this reasonable counterargument is ignored altogether when the question shifts to the jurisdiction of the federal government over interprovincial pipeline approvals, despite the obvious importance of local "on the ground" cooperation in both instances.[122]

Politically insufficient and legally unnecessary, pipelines in exchange for carbon pricing – and for the Paris Agreement more generally – is hardly a "grand bargain." Faustian, more like. Building new pipelines will – as Tombe readily admits – increase Canada's GHG emissions, and as noted above, oil sands extraction is already the fastest-rising source of GHG emissions in Canada. But building new pipelines will not guarantee Canada's successful implementation of a carbon price that is high enough to meaningfully lower its GHG emissions and facilitate the transition to a sustainable economy and society. Pipelines for scientifically inadequate carbon pricing is counterfactual and counterproductive public policy. Pipelines for scientifically inadequate carbon pricing is also an example *par excellence* of "carbon democracy," particularly the oil and gas industry's ability to both

[121] See Tollefson & MacLean, "B.C. must review Trans Mountain ", *supra* note 12. As discussed in chapters four and five of this thesis, the Court of Appeal for British Columbia ruled that British Columbia lacked the legislative authority to regulate in respect of an interprovincial pipeline, a decision that was subsequently endorsed by the Supreme Court of Canada.
[122] But see "Graveyard of the pipelines", *The Economist* (6 July 2017), online: <https://www.economist.com/news/americas/21724840-new-leftist-coalition-may-delay-construction-controversial-pipeline-turmoil-british>, noting that "[i]f BC manages to forestall the [Trans Mountain] pipeline for long enough, support from the right for Mr Trudeau's grand bargain could wither in a hurry."

directly and indirectly "define the nature of the crisis and promote a particular set of solutions."[123] Effective carbon pricing, and meeting our Paris Agreement commitments and sustainability goals more generally, accordingly depends on replacing *carbon* politics with a reinvigorated *democratic* politics of sustainability.

IV. Conclusion: Pathways to Paris—Contango, or Co-Benefits?

"Contango" is the technical term used to describe the present and subsisting situation in the market for crude oil where prices for immediate delivery are lower than forward contracts,[124] and where futures prices are falling relative to present forward contract prices. Investors who are net long – as opposed to short – the price of a commodity when its market is in contango are accordingly at risk of incurring losses because of falling futures prices. Oil has been in contango since 2014, and the future outlook of oil continues to appear "bearish."[125]

The opposite of contango is called "backwardation,"[126] which is described as the normal state of affairs of a commodity, where futures prices are expected to rise. Contango, however, shows every sign of being the crude oil market's new normal. Royal Dutch Shell PLC announced, for example, that it is undertaking severe cost cutting in order to prepare

[123] Mitchell, "Carbon democracy", *supra* note 28 at 421 [emphasis added].
[124] See e.g. Javier Blas & Alex Longley, "Oil market abandons 2017 re-balancing hope as contango returns", *World Oil* (9 June 2017), online: <http://www.worldoil.com/news/2017/6/9/oil-market-abandons-2017-re-balancing-hope-as-contango-returns>.
[125] See e.g. John Kemp, "Should OPEC worry about contango and backwardation?", *Reuters* (24 May 2017), online: <http://www.reuters.com/article/us-opec-oil-contango-kemp-idUSKBN18K2G3>.
[126] *Ibid*.

for "lower forever" oil prices.[127] Shell's cuts included, incidentally, its Alberta oil sands business, which it sold to Canadian Natural Resources Ltd.[128] Shell's sale is part of the sell-off of approximately CDN$30 billion in oil sands assets by foreign corporations to Canadian concerns, "heralding a Canadianization of the world's third-largest deposit of crude."[129]

Besides providing valuable information about the characteristics of the global oil market, "contango" and "backwardation" are also apt indicia of the political economy of carbon democracies. A financial analysis of the market performance of commodities more generally – including oil – suggests that while commodities are good for traders and arbitrageurs, they are a poor long-term option for investors: "Commodities are more of an input than a financial asset. *In many ways, a bet for commodities is a bet against technology and innovation*."[130]

This is precisely the bet, however, that Canada appears intent on doubling-down on. According to a report prepared in 2017 by the Canadian oil and gas industry's chief lobbying group, the Canadian Association of Petroleum Producers (CAPP), the industry "continues to face mounting costs and *barriers to growth* due to changes in provincial and federal government policies and regulations such as methane emissions, carbon pricing,

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[127] Ron Bousso & Karolin Schaps, "Shell braces for 'lower forever' oil prices as profits soar", *Reuters* (27 July 2017), online: <http://www.reuters.com/article/us-shell-results-idUSKBN1AC0LO>.
[128] Jeffrey Jones, "Oil sands megadeal gives boost to CNRL", *The Globe and Mail* (3 August 2017), online: <https://www.theglobeandmail.com/report-on-business/canadian-natural-resources-cuts-capital-expenditures-as-profit-tops-estimates/article35870832/>.
[129] *Ibid*.
[130] Ben Carlson, "Commodities are good for traders, bad for investors", *The Globe and Mail* (24 July 2017) [emphasis added], online: <https://www.theglobeandmail.com/globe-investor/commodities-are-good-for-traders-bad-for-investors/article35784585/>.

municipal and corporate tax increases, wetland policy, well liability and closure, and caribou management, among others."[131] In response, CAPP advocated that governments "streamline provincial and federal policies and regulations" in order to "achieve regulatory efficiencies, eliminate duplication, and create a framework for shared sustainable prosperity in Canada."[132]

In response to the publication of CAPP's report and the openness of both Alberta's provincial government and the federal government to partnering with CAPP on its ongoing regulatory reviews,[133] one academic commentator noted that "[w]hat's so politically astonishing to me is there's no recognition that the regulation of these issues also affect the rest of civil society."[134] But this is precisely Mitchell's point about carbon democracies. The key challenge, both analytically and politically, is not to try to alter the relationship between democracy and oil. Instead, the challenge is to understand our democracy *as* oil – "as a form of politics whose mechanisms on multiple levels involve the processes of

[131] Canadian Association of Petroleum Producers, "Collaboration between industry and government key to enhancing the competitiveness of Alberta's oil and natural gas sector internationally: CAPP" (5 July 2017) [emphasis added], online: <http://www.capp.ca/media/news-releases/economic-competitiveness-report-media-release>.
[132] *Ibid*. Full report: Canadian Association of Petroleum Producers, "A competitive policy and regulatory framework for Alberta's upstream oil and natural gas industry", (July 2017), online: <http://www.capp.ca/publications-and-statistics/publications/304673>.
[133] See Trish Audette-Longo, "Oilpatch wants Alberta to ease up on rules", *National Observer* (28 July 2017), online: <http://www.nationalobserver.com/2017/07/28/analysis/oilpatch-wants-alberta-ease-rules>.
[134] Professor Laurie Adkin, quoted in *ibid*. Lest this characterization be taken as unduly critical or one-sided, consider CAPP's response to the launch of the Alberta NDP government's climate plan, which did not fully accord with CAPP's own proposals. According to CAPP, "[i]n the coming days we can work with the Alberta government to make changes to its climate plan and find new ways to protect jobs, spur innovation and attract the investment needed to make Alberta strong." Absent any evidence, CAPP characterized Canada as "one of the world's most responsible energy producers" while claiming that Alberta's climate plan – which was supported and in fact *relied upon* by the federal government as a key plank of its own plan – "makes doing business in Alberta more difficult." Nary a word, however, about how to better protect the environment or promote sustainability. See Tim McMillan, "Clouds hang over NDP's climate change plan", *Calgary Herald* (11 December 2017), online: <http://calgaryherald.com/opinion/columnists/mcmillan-dark-clouds-hang-over-ndps-climate-change-plan>.

producing and using carbon energy"[135] – and to reimagine our democracy *as* sustainability. The challenge, in other words, is to articulate and advocate for a post-carbon model of economic wellbeing and broadly conceived environmental citizenship.

Fittingly, *The Economist* argued in its 2016 special report on the global oil industry that "the world needs to face the prospect of an end to the oil era."[136] Given how intimately imbricated oil and politics are in carbon democracies, however, this is no mean task, and simply saying so will not make it so, "contango" or not. For example, campaigning for President in 2008, Barack Obama declared: "We must end the age of oil in our time."[137]

Critique of carbon democracy will not succeed on its own absent the creation and communication of credible policy alternatives. Scholars across relevant disciplines must instead collaborate on and effectively communicate concrete alternative pathways, political-economy trajectories away from oil and gas development towards sustainability.[138] Contango – the new normal of the oil and gas industry – presents sustainability scholars and advocates with a new strategic opening to do so. As the economic rent-seeking power of the oil and gas industry wanes, so too should its purchase on government ideology along with its identification of the prospects of the oil and gas industry with the public interest.

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[135] Mitchell, *supra* note 28 at 5.
[136] "Special Report: Breaking the Habit: The Future of Oil", *The Economist* (26 November 2016), online: <https://www.economist.com/news/special-report/21710628-worlds-use-oil-approaching-tipping-point-writes-henry-tricks-dont-expect>.
[137] Quoted in Steve Coll, *Private Empire: ExxonMobil and American Power* (New York: Penguin, 2012) at 500.
[138] A Canadian initiative of this kind is Sustainable Canada Dialogues, online: <http://www.sustainablecanadadialogues.ca/en/scd>.

A particularly promising approach is to identify and communicate the tangible co-benefits of addressing climate change, including the co-benefits of economic development and enhanced community resilience. Emerging research suggests that climate policies framed as having co-benefits motivate pro-environmental action and commitment to a degree on par with the normative pre-commitment that climate change is important, and does so *independent* of that normative pre-commitment.[139] Thus, individuals "convinced" of the importance of addressing climate change as well as individuals who are "unconvinced" are equally likely to be motivated to actually act on climate change through citizenship, consumerism, and making financial donations when they learn of the integrated economic and local communitarian co-benefits of climate change policies.[140] Those identifying as "unconvinced" about the importance of climate change appear to be especially influenced by the prospect of economic development co-benefits.[141]

These still-preliminary findings suggest a potentially fruitful research-cum-policy strategy at a particularly critical time, and they stand in stark distinction to the pessimistic implications of cognitive psychology research suggesting that action on climate change is prevented by partisan ideology, lack of direct personal experience with climate change, or otherwise insufficient concern, which appears to play a part in explaining climate inaction in Canada.[142] Communicating the co-benefits of addressing climate change can encourage

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[139] Paul G Bain et al, "Co-benefits of addressing climate change can motivate action around the world" (2016) 6 Nat Clim Change 154.
[140] *Ibid*.
[141] *Ibid.*
[142] See e.g. Wesley Wark, "Fear not: Canadians largely unfazed by global threats", *The Globe and Mail* (3 August 2017), online: <https://www.theglobeandmail.com/opinion/fear-not-canadians-largely-unfazed-by-global-threats/article35873146/>. Drawing on Pew Research Center survey data, Wark finds that Canadians "seem a little too attuned to the terrorism threat and a little too unaware of the dangers posed by cyberattacks and climate change."

greater public attention and action, and thereby influence government action, even among those unconvinced or otherwise unconcerned about climate change.[143] Importantly, this emerging line of research suggests that climate and sustainability policy actions that clearly embody co-benefits – especially the co-benefit of economic development, including the prospect of secure employment – are capable of attracting broad public support,[144] which is the critical ingredient of a countervailing democratic movement capable of displacing the outsized influence of the oil and gas industry on policymaking in contemporary carbon democracies like Canada.[145]

In order to fulfill this potential, considerable future research and policy experimentation are required in Canada, both in terms of constructing national and regional co-benefit pathways and determining how to communicate those pathways in ways that are sufficiently sensitive to varying cultural and political-economy contexts across the country. Consider again the case of Alberta's "carbon democracy." The very same mechanisms that created and reproduced Alberta's "petro-politics" – *i.e.* lobbying and industry-government partnerships, media campaigns, community engagement initiatives, and not least, academic research – may be deployed to help create a political economy based on renewable energy and community resilience, particularly now in carbon democracy's perhaps permanent state of "contango." While environmental and labour organizations have long been active

[143] *Ibid.* See also Heide Hackmann, Susanne C Moser & Asuncion Lera St Clair, "The social heart of global environmental change" (2014) 4 Nat Clim Change 653.
[144] See e.g. Brett A Bryan et al, "Designer policy for carbon and biodiversity co-benefits under global change" (2016) 6 Nat Clim Change 301.
[145] Regarding the "democratization of clean energy" in Germany pursuant to its *Energiewende*, see Elizabeth McSheffrey, "Step one, get fossil fuel money out of politics, German analyst tells Ottawa", *National Observer* (23 May 2017), online: <http://www.nationalobserver.com/2017/05/23/news/step-one-get-fossil-fuel-money-out-politics-german-analyst-tells-ottawa>.

in the province (and throughout the rest of Canada), empirical evidence suggests that Albertans remain largely unaware of their efforts.[146] Notably, focus-group participants in one study insisted that the environmental movement has thus far failed to complement its critique of oil sands development with credible alternatives capable of simultaneously promoting economic development, job creation, and environmental stewardship.[147] Sustainability advocates and scholars must do more to show how a post-carbon democracy can work – and flourish – in practice.[148]

For example, an initiative aptly called "PostCarbon" may become a standard-setter in this regard. Structured as a transdisciplinary network of Canadian climate change scholars, private-sector renewable energy producers and host communities, and Natural Resources Canada (a federal government ministry), "PostCarbon" seeks to (1) initiate transformative low-carbon energy transition experiments, (2) facilitate co-learning to broaden and scale-up low-carbon energy initiatives, both in Canada and abroad, and (3) promote the co-design of evidence-based climate change and sustainability policies capable of enabling Canada to meet its Paris Agreement pledges.[149] As Jenkins & Karplus conclude their analysis of carbon pricing under political constraints, "encouraging near-term deployment of clean

[146] Haluza-DeLay & Carter, "Social Movements Scaling Up", *supra* note 49 at 480.
[147] *Ibid*.
[148] See e.g. Jamie Henn, "Our Greener, Climate-Friendly Future Is Going to Be Amazing – It's Our Job to Tell That Story", *Common Dreams* (15 May 2020), online: <https://www.commondreams.org/views/2020/05/15/our-greener-climate-friendly-future-going-be-amazing-its-our-job-tell-story>. A promising research initiative in this direction is the "Seeds of a Good Anthropocene" project. See e.g. Elena M Bennett et al, "Bright spots: seeds of a good Anthropocene" (2016) 14:8 Front Ecol Environ 441. I discuss an application of this idea in the conclusion of this thesis.
[149] "PostCarbon," of which the author is a member of its Research Management Committee, is an outgrowth of Sustainable Canada Dialogues, a transdisciplinary research network comprised of over 80 Canadian scholars (for more information, see http://www.sustainablecanadadialogues.ca/en/scd). "PostCarbon" is discussed in more detail in chapter three of this thesis. See also Daniel Rosenbloom & James Meadowcroft, "Transition Experiments: Unlocking low-carbon transition pathways for Canada through innovation and learning" (2017), online: <http://www.researchgate.net/publication/320161503>.

energy to an extent that realizes benefits from scale economies, learning, and a growing clean energy constituency with a strong interest in its own continued survival and growth could have significant impacts on the political durability of climate policy over time."[150]

A new vision is urgently needed. The Age of Oil will not end for a want of oil. The task and the challenges of creating that vision are discussed in the next chapter.

[150] Jenkins & Karplus, "Carbon pricing under binding political constraints", *supra* note 73 at 32.

3 REGULATORY CAPTURE AND THE ROLE OF ACADEMICS IN PUBLIC POLICYMAKING: LESSONS FROM CANADA'S ENVIRONMENTAL REGULATORY REVIEW PROCESS

> *Sustainability in Canada, as elsewhere, will likely only arise if people are prepared to choose fundamentally different goals for their society, including a fundamentally different economic model in which maintenance of ecological integrity is a precondition to all development.*[1]

> *What we need now are more concrete proposals for reform rather than suggestions that someone else should do something. I believe that the responsibility for making these proposals is very largely that of academics.*[2]

There is no greater obstacle to achieving Canada's greenhouse gas (GHG) emissions reduction targets under the Paris Agreement and contributing to the accomplishment of the UN's Sustainable Development Goals (SDGs) than the phenomenon of regulatory capture. Regulatory capture is at once the process and the effect of regulated entities or entire industries systematically redirecting regulation away from the public interest and toward the private, special interests of regulated industries and firms themselves.[3] Although it has been characterized as the root problem of Canadian environmental law,[4] not only does regulatory capture continue to receive far less scholarly attention than it deserves,[5] it is also

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[1] Stepan Wood, Georgia Tanner & Benjamin J Richardson, "Whatever Happened to Canadian Environmental Law?" (2010) 37:4 Ecology LQ 981 at 1039-40 [Wood, Tanner & Richardson, "Whatever Happened to Canadian Environmental Law?"].

[2] John Swan, "Consideration and the Reasons for Enforcing Contracts" (1976) UW Ontario L Rev 83 at 121 [Swan, "Consideration"].

[3] Daniel Carpenter & David A Moss, "Introduction" in Daniel Carpenter & David A Moss, eds, *Preventing Regulatory Capture: Special Interest Influence and How to Limit It* (New York: Cambridge University Press, 2014) at 13. See also Brink Lindsey & Steven M Teles, *The Captured Economy: How the Powerful Enrich Themselves, Slow Down Growth, and Increase Inequality* (New York: Oxford University Press, 2017).

[4] See e.g. Jason MacLean, "Striking at the Root Problem of Canadian Environmental Law: Identifying and Escaping Regulatory Capture" (2016) 29 J Envtl L & Prac 111.

[5] As Masur and Posner observe in their recent review of the literature on regulatory theory, "[a] strand of the literature focuses on political influences on [regulatory] agencies": Jonathan S Masur & Eric A Posner,

rarely made the focus of environmental advocacy in Canada.[6] Not unlike climate change itself,[7] regulatory capture can be difficult to discern directly,[8] although as our analytic methods improve and the evidence of each continues to accumulate, detection is rapidly improving. And not unlike climate change, it is not enough to merely identify regulatory capture and its effects, analytically challenging and complex a task as that is. Both call out for not only critiques of "business as usual" – an unusually apt phrase in this context[9] – but also constructive public policy alternatives to the status quo. Both, moreover, call out for broad-based, countervailing democratic movements in support of such policy alternatives. Indeed, these issues intersect in the increasing understanding that the nature of the

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"Norming in Administrative Law" (2018) University of Chicago Coase-Sandor Institute for Law & Economics Working Paper No 840 at 2, online: <papers.ssrn.com/sol3/papers.cfm?abstract_id=3132881>. There is some evidence, however, suggesting that the Canadian public is becoming increasingly aware of the problem of regulatory capture. The National Energy Board, for instance, became widely perceived as a "captured regulator," and it was ultimately retired and replaced by a newly constituted agency, the Canadian Energy Regulator. See e.g. Marc Eliesen, "National Energy Board is a Captured Regulator in Urgent Need of Overhaul", *The Narwhal* (9 September 2016), online: <thenarwhal.ca/national-energy-board-captured-regulator-urgent-need-overhaul>.

[6] A promising exception is the ongoing investigative reporting of the *National Observer*, a Canadian news website focused on investigative reporting and daily news on energy, climate, politics, and social issues that has "a special focus on highlighting how governments and industry make decisions as well as the factors that influence their policies": "About", *National Observer,* online: <www.nationalobserver.com/about>. See also Emma Gilchrist, "Welcome to the Narwhal" (14 May 2018), online: *The Narwhal* <thenarwhal.ca/welcome-to-the-narwhal/>. For further discussion of the relationship between regulatory capture and the media, see Jason MacLean, "Manufacturing Climate Inaction: A Case Study of *The Globe and Mail's* Pipeline Coverage" (2019) 42:2 Dal LJ 283.

[7] Climate change, for example, has been characterized as a "catastrophe in slow motion": see e.g. Bruce Lindsay, "Climate of Exception: What Might a 'Climate Emergency' Mean in Law?" (2010) 38:2 Federal L Rev 255 at 269.

[8] As George Stigler concluded his foundational analysis of regulatory capture, "[u]ntil the basic logic of political life is developed, reformers will be ill-equipped to use the state for their reforms, and victims of the pervasive use of the state's support of special groups will be helpless to protect themselves": George J Stigler, "The Theory of Economic Regulation" (1971) 2:1 Bell J Economics & Management Science 3 at 18 [Stigler, "Economic Regulation"]. See also George J Stigler, "Supplementary Note on Economic Theories of Regulation," in George J Stigler, *The Citizen and the State: Essays on Regulation* (Chicago: University of Chicago Press, 1975) 137 at 140 [Stigler, "Supplementary Note"].

[9] See e.g. Jeffrey D Sachs, *The Age of Sustainable Development* (New York: Columbia University Press, 2015) at 3–4.

challenge of mitigating climate change and catalyzing a just transition to sustainability is neither primarily scientific nor technical, but social and political.[10]

The aim of this chapter is to better understand how regulatory capture pre-empts effective government action on climate change and sustainability, and how such capture can be countered. Specifically, this chapter argues that academics are at once ideally positioned and ethically obligated to assist in countering capture by generating socially and politically transformative regulatory alternatives capable of attracting broad popular appeal.[11] Broad social and political movements do not just happen all of a sudden or on their own. Their dynamics are complex, so much so that they tend to elude the movements' participants themselves. This creates a gap between the equally critical ingredients of movement participation and the understanding of movements. How do we expose the entrenched economic interests reproducing our reliance on fossil fuels while building a broad coalition in support of transitioning to renewable energy, all the while ensuring that this transition is socially and politically just? These are the questions that must be answered to counter the regulatory capture of climate change and sustainability law and policy, and academics are uniquely well positioned to propose answers and alternatives for broader, democratic debate. In order to demonstrate this argument, this chapter proposes an academic law reform model capable of generating viable climate and sustainability policy proposals having the potential to attract broad popular appeal.

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[10] See e.g. Daniel Rosenbloom et al, "Transition Experiments: Opening Up Low-Carbon Transition Pathways for Canada through Innovation and Learning" (2018) 44:4 Can Pub Pol'y 368.

[11] On the need for a more activist academy with respect to climate change, see e.g. Jessica F Green, "Why We Need a More Activist Academy" (15 July 2018), online: *The Chronicle of Higher Education* <www.chronicle.com/article/Why-We-Need-a-More-Activist/243924>.

By way of introduction to regulatory capture's little-understood processes and the peculiar challenges it poses to public interest policymaking, it is useful to begin by momentarily revisiting regulatory capture's brief and unlikely moment of popular attention. In February 2014 US political scientists Martin Gilens and Benjamin Page appeared on Comedy Central's *The Daily Show*,[12] then hosted by popular political comedian Jon Stewart, to discuss their recently published paper, "Testing Theories of American Politics: Elites, Interest Groups, and Average Citizens".[13] It is not every day, of course, that academics of any stripe appear on television, much less on a show as popular as *The Daily Show*. But Gilens and Page's article raised questions of fundamental importance: Who governs? Who *really* rules? Are citizens sovereign, or largely powerless? Gilens and Page's findings – based on a longitudinal and multivariate analysis of public policy preferences cross-referenced against their actual legislative outcomes – reveal that economic elites and their lobbyists have significantly shaped US government policy, while broader public interest groups and average citizens have enjoyed "little or no independent influence."[14] Putting an even finer point on their findings, they concluded that in the United States the familiar democratic notion of majority rule does not hold in respect of the determination of public policy.[15] In a wry turn of phrase, Gilens and Page conceded "this does not mean that ordinary citizens always lose out; they fairly often get the policies they favor, but only because those policies happen also to be preferred by the economically elite citizens who

[12] Comedy Central, "The Daily Show with Jon Stewart: Martin Gilens & Benjamin Page" (30 April 2014), online (video): Comedy Central <www.cc.com/video-clips/kj9zai/the-daily-show-with-jon-stewart-martin-gilens---benjamin-page >.
[13] Martin Gilens & Benjamin I Page, "Testing Theories of American Politics: Elites, Interest Groups, and Average Citizens" (2014) 12:3 Perspectives on Politics 564.
[14] *Ibid* at 565.
[15] See *ibid* at 576 [emphasis in original].

wield the actual influence."[16] Perhaps it was these professors' penchant for sardonic political interpretation that attracted the attention of *The Daily Show's* producers. Or perhaps it was the professors' stark conclusion that "if policymaking is dominated by powerful business organizations and a small number of affluent Americans" as their findings strongly suggest, then America's claim to being a democracy is in serious question.[17]

The findings of Gilens and Page reflect – and stem from – the phenomenon of regulatory capture. This form of capture is characterized by US law scholar Lawrence Lessig as systemic corruption, which he identifies not as the most important issue facing democracy, but rather the *first* issue. Take any public policy issue, Lessig argues, be it climate change or excessive regulation, financial reform or healthcare, a complex and invasive tax system or growing income inequality, debt, or education – whatever the policy issue may be, regulatory capture is likely at play. That is what makes it the first, logically prior issue underlying matters of public interest. Regulatory capture is the issue that must be solved before we can address any other more specific public policy issue and enact progressive reform.[18]

And thus does the surprising appearance of Gilens and Page on *The Daily Show* gesture toward both the solution to the scourge of regulatory capture as well as that solution's

[16] *Ibid*.
[17] *Ibid* at 577.
[18] See Lawrence Lessig, *The USA is Lesterland* (CC-BY-NC (4.0), 2013) at 30. See also Lawrence Lessig, *Republic, Lost: How Money Corrupts Congress – and a Plan to Stop It* (New York: Twelve, 2011); Zephyr Teachout, *Corruption in America: From Benjamin Franklin's Snuff Box to Citizens United* (Cambridge, MA: Harvard University Press, 2014).

primary obstacle: the inherent difficulty of establishing a compelling countervailing democratic movement aimed at redirecting regulation back to its proper public interest.

Both the importance and the difficulty of founding such a movement is underscored in a paper by the noted political economist Thomas Piketty.[19] By analyzing post-electoral surveys from France, Britain, and the United States covering the period of 1948–2017, Piketty observed a long-run evolution in the structure of political cleavages. Specifically, Piketty shows that while the vote in the 1950s–1960s for "left wing" (*i.e.*, socialist-labour-democratic) parties was strongly associated with lower-education and lower-income voters, left wing electoral support has gradually become associated with higher-education voters. The result in all three countries is the replacement of a class-based party system with what Piketty describes as a multiple-elite party system: higher-education elites vote for the left while high-income and high-wealth elites still vote for the right. Meanwhile, all three countries witnessed a significant increase in voter abstention between the 1950s–1960s and the 2000s–2010s. Not unsurprisingly, this abstention arose largely within lower-education and lower-income groups. A natural interpretation, Piketty argues, is that lower-education and lower-income voters do not feel well represented in a "multiple-elite" party

[19] Thomas Piketty, "Brahmin Left vs Merchant Right: Rising Inequality & the Changing Structure of Political Conflict (Evidence from France, Britain, and the US, 1948-2017)" (March 2018) WID.world Working Paper Series No 2018/7, online: <wid.world/wid-publications/#library-working-papers> [Piketty, "Brahmin Left vs Merchant Right"]. See also Thomas Piketty, *Capital in the Twenty-First Century* (Cambridge, MA: Harvard University Press, 2014).

system.[20] Overall, Piketty argues, this shifting structure of political cleavages helps explain both "rising inequality and the lack of democratic response to it".[21]

But how to explain this structural evolution itself? Piketty's account points both to the limits of universal suffrage and the processes of regulatory capture. Elite capture of politics, according to Piketty, is hardly new. One of the oldest political party divisions in the western world, the Conservatives versus the Whigs in eighteenth-century Britain, was largely a conflict of and among elites (*i.e.*, the landed elite versus the urban-commercial elite).[22] Throughout this period, only the approximate top one percent of the population was eligible to vote, so electoral politics was naturally predominated by elite concerns and conflicts.[23] It would be naive, however, to suppose that the advent of universal suffrage occasioned a new and permanent political balance. Rather, Piketty argues that economic elites influence and effectively control electoral politics through their disproportionate access to political financing, corporate mass media, and political decisionmakers themselves.[24] Here Piketty arrives at the same conclusion reached by Lessig and Gilens and Page: Overcoming the difficulty of uniting low-education and low-income voters who otherwise have little in common in terms of origins and values requires the formation of an attractive and viable political platform based on broad socioeconomic equality.[25] And yet Piketty's analysis has

[20] Piketty, "Brahmin Left vs Merchant Right", *supra* note 19 at 7. This particular interpretation warrants further research. For example, in the United States, phenomena such as redistricting and voter suppression might also contribute to observed voter abstention.
[21] *Ibid* at 61.
[22] See *ibid* at 62.
[23] See *ibid*.
[24] *Ibid*.
[25] *Ibid*.

no more to say with respect to the critical question of *how* to overcome this inherent difficulty and establish an attractive and viable democratic platform.[26]

So crucially important and yet so fragile are the prospects of such a countervailing democratic movement that economist Paul Krugman has warned against over-emphasizing the otherwise inarguable evidence of elite political dominance. Referring specifically to Gilens and Page's important insight[27] that when elite preferences and popular preferences diverge, the elites almost always win,[28] Krugman cautioned that "there is a danger . . . of going too far [by] imagining that electoral politics is irrelevant. Why bother getting involved in campaigns," Krugman asks rhetorically, "when the [economic elite] rules whichever party is in power?[29]

In Gilens and Page's appearance on *The Daily Show*, host Jon Stewart raised this very issue with the authors, asking them what can be done about elite regulatory capture. Responding directly to Krugman's warning, Page argued that it is a solvable problem, but one that requires a very big social movement.[30] Pressed by Stewart for an actual example of such a

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[26] But see Piketty's more recent set of public policy proposals to help democratize Europe: Thomas Piketty, "Manifesto for the Democratisation of Europe" (10 December 2018), online (blog): *Le Blog de Thomas Piketty* <piketty.blog.lemonde.fr/2018/12/10/manifesto-for-the-democratisation-of-europe/>.
[27] Paul Krugman, "Class, Oligarchy, and the Limits of Cynicism", *The New York Times* (21 April 2014), online: <krugman.blogs.nytimes.com/2014/04/21/class-oligarchy-and-the-limits-of-cynicism/>.
[28] See *ibid.*
[29] *Ibid.* It is worth adding here that the same concern is frequently raised in respect of climate change itself as a public issue. Many commentators caution that placing too much emphasis on the seriousness of climate change can have the unintended effect of causing fatalism and apathy. See e.g. John Schwartz, "William T. Vollmann Would Like a Word or Two About Climate Change. Or 1,200 Pages", *The New York Times* (6 August 2018), online: <www.nytimes.com/2018/08/06/books/review/william-t-vollmann-carbon-ideologies-no-immediate-danger-no-good-alternative.html?hpw&rref=books&action=click&pgtype=Homepage&module=well-region&region=bottom-well&WT.nav=bottom-well> (in which Schwartz quotes the influential climate scientist and advocate Katherine Hayhoe as warning that "[d]oomsday messaging just doesn't work").
[30] *The Daily Show*, *supra* note 12.

movement, Page offered the Progressive Period of the United States at the beginning of the twentieth century as having lessons to teach twenty-first-century democratic advocates.[31]

Of course, very big social movements do not just all of a sudden come into being. Nor are their dynamics, past or present, self-evident. On the contrary, past social movements were the products of complex causal processes, the nature of which participants in contemporary movements may not understand well, if at all.[32] There are profound gaps, in other words, between public political knowledge and awareness, on-the-ground social movement practices, and academic analyses.

Stewart's ironic introduction of Gilens and Page's paper further (and humorously) illustrates this disjuncture. After reading aloud the paper's title to his audience, Stewart clowned in a rapid, staccato cadence: "if you read but one empirically-based post-survey quantitative multivariate analysis of . . . umm . . . ah . . . oh #%$! it. Let's just talk about net neutrality."[33] Later, in response to a smattering of applause as the authors appeared on stage, Stewart quipped "the people love a quantitative analysis."[34] Stewart's deadpan irony aside, his not-unintentional point is instructive. Pressing the authors by pointing out the absence of any such very big social movement on the horizon, Page countered that "it's

[31] *Ibid*.
[32] See Charles Tilly & Lesley J Wood, *Social Movements: 1768–2012*, 3rd ed (Boulder, CO: Paradigm, 2013) at 15.
[33] *The Daily Show*, *supra* note 12.
[34] *Ibid*.

still true a little academic article [caused] a whole bunch of fuss on the Internet, [and] that only happens because it hits a nerve, there are a lot of people who are really upset."[35]

That was 2014. One looks in vain for evidence of a movement since, let alone a very big movement aimed at countering elite regulatory capture. Merely calling attention to capture – notwithstanding the considerable analytic effort required to do so – is insufficient to counter it. And yet identifying capture remains the predominant aim of scholarly work in this area.[36]

Worse still, the operation of regulatory capture – let alone proposals for countering it – remains understudied in relation to mitigating climate change and transitioning toward greater sustainability. As Wood, Tanner, and Richardson *concluded* their sobering analysis of the manifold shortcomings of Canadian environmental law, "[s]ustainability in Canada . . . will likely only arise if people are prepared to choose fundamentally different goals for their society, including a fundamentally different economic model in which maintenance of ecological integrity is a precondition to all development. Environmental law is a means to an end, not an end in itself."[37] Doubtless, they are correct to de-emphasize the importance of environmental law and re-emphasize the importance of a broad social

[35] *Ibid*.
[36] In fairness to Page and Gilens, they have subsequently proposed reforms in response to the specter of capture. Their work, however, does not escape the Catch-22 of proposed reforms of capture, whereby the prospects of reform are contingent on the agency and capacity of institutions that are already captured. As Page and Gilens argue, for example, "[w]ell-designed government policies could help deal with these problems": Benjamin I Page & Martin Gilens, *Democracy in America? What Has Gone Wrong and What We Can Do About It* (Chicago, IL: University of Chicago Press, 2017) at 3. No doubt. But the very problem to be solved is one that affects the very design of policies in the first place. This "Catch-22" of reforming capture is explored in further detail below in part II of this chapter.
[37] Wood, Tanner & Richardson, "Whatever Happened to Canadian Environmental Law?", *supra* note 1 at 1039–40.

movement supportive of sustainability. But who will propose such fundamentally different goals? From where will a fundamentally different economic model emerge?

Writing earlier and in respect of a different law reform context – that is, the need to reform Canadian contract law – John Swan observed (rightly)[38] that the time had come for concrete and actionable reform proposals, and not merely further suggestions and exhortations that someone ought to do something. According to Swan, academics bear the responsibility for providing those proposals.[39] Swan's call to academic arms applies as much to regulatory capture and climate change policy today as it did to the contract law doctrine of consideration in the 1970s. Proposals concerning Canada's climate change and sustainability policies, if they are to be effective, must squarely confront and counter those policies' regulatory capture by carbon-intensive industries, including the petroleum, automotive, cement, steel, lime, and nitrogen industries.[40] To date, however, Canadian environmental law scholarship and advocacy has been largely reticent in this regard, tending instead to take a technocratic approach aimed at encouraging incremental improvements to an otherwise unsustainable economic model.[41]

The purpose of this chapter is to propose an academic law reform model capable of generating viable climate and sustainability policy proposals capable of attracting broad

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[38] See e.g. Margaret Jane Radin, *Boilerplate: The Fine Print, Vanishing Rights, and the Rule of Law* (Princeton, NJ: Princeton University Press, 2012). In the Canadian context, see Jason MacLean, "The Death of Contract, Redux: Boilerplate and the End of Interpretation" (2016) 58:3 Can Bus LJ 289.
[39] Swan, "Consideration" *supra* note 2 at 121.
[40] See e.g. Konrad Yakabuski, "Balancing Carbon Emissions with the Economy Proves to be Difficult Task for Ottawa" *The Globe and Mail* (7 August 2018), online: <www.theglobeandmail.com/business/commentary/article-balancing-carbon-emissions-with-economy-proves-to-be-difficult-task/>.
[41] See the discussion in MacLean, Doelle & Tollefson, "The Past, Present, and Future of Canadian Environmental Law", *supra* note 19 at 99–104.

popular appeal. The rest of the chapter proceeds as follows. In the first part, I further unpack the concept of regulatory capture and the processes by which capture is accomplished, using the Canadian petroleum industry's capture of environmental law and policy to illustrate how capture works in practice and to ground the novel academic law reform model that is the central contribution of this chapter; this part of the chapter significantly expands on the discussion of Canada as a "carbon democracy" introduced in chapter two. In part II, I explain the need for a novel academic approach to countering capture by briefly examining what I call the "Catch-22" of regulatory-capture reform, and draw on recent evidence from Canadian environmental law reform efforts as illustration. In part III, the core of the chapter, I examine Canada's recent environmental regulatory review process – which concerned the reform of the critically important federal environmental assessment regime and which culminated in Bill C-69 and the enactment of the *Impact Assessment Act* in 2019 – to advocate for a novel, iterative model of academic law reform capable of countering regulatory capture and generating effective and politically durable climate and sustainability policies in the public interest. In part IV, I conclude by discussing the limitations of the model proposed here and areas in need of further research.

I. CONCEPTUALIZING CAPTURE

The year 1971 was a fateful one for the theory of regulation. In 1971 economist George Stigler published a paradigm-shifting paper entitled "The Theory of Economic Regulation"[42] and corporate lawyer – and future US Supreme Court Justice – Lewis Powell

[42] *Supra* note 8. The significance of Stigler's novel theory of regulation cannot be overstated. In 1982 Stigler was awarded the Nobel Prize in Economics "for his seminal studies of industrial structures,

drafted a memorandum to his friend Eugene Sydnor, Jr., the Director of the US Chamber of Commerce, arguing that the Chamber could better advance the interests of the corporate sector by taking a more active role in the political process.[43] These publications provided, respectively, a formal, theoretical model of regulatory capture (Stigler), and a series of practical, programmatic approaches to obtaining regulations more favourable to US industry interests (Powell). Revisiting each publication in turn will assist in unpacking the processes underlying regulatory capture, and how capture can be countered.

A. The Theory of Regulatory Capture

Stigler proposed a new theory of regulation opposed to what he identified as the then-predominant competing accounts: (1) that regulation was instituted primarily for the protection and benefit of the public at large (or some large subclass of the public), versus (2) the null hypothesis that the political process defies rational explanation – "politics" as an "imponderable" (*i.e.,* essentially irrational).[44] By contrast, Stigler argued that the purpose of the theory of regulation is "to explain who will receive the benefits or burdens

functioning of markets and causes and effects of public regulation": The Royal Swedish Academy of Sciences, Press Release, "The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 1982" (20 October 1982), online: *The Nobel Prize* <www.nobelprize.org/nobel_prizes/economic-sciences/laureates/1982/press.html>.

[43] Lewis F Powell, Jr, "Confidential Memorandum: Attack of American Free Enterprise System" (23 August 1971), online: *Moyers* <billmoyers.com/content/the-powell-memo-a-call-to-arms-for-corporations/2/>. Powell wrote the memo—known subsequently as "The Powell Memo"—which he submitted to the US Chamber of Commerce at the request of Sydnor, the Chamber's Education Committee's Chairman.

[44] Stigler, "Economic Regulation", *supra* note 8 at 3. For an assessment of the legacy of Stigler's work on regulation, see e.g. Sam Peltzman, "George Stigler's Contribution to the Economic Analysis of Regulation" (1993) 101:5 J Political Economy 818; Christopher Carrigan & Cary Coglianese, "George J. Stigler, 'The Theory of Economic Regulation'" in Steven J Balla, Martin Lodge & Edward C Page, eds, *The Oxford Handbook of Classics in Public Policy and Administration* (Oxford: Oxford University Press, 2015) 287.

of regulation, [and] what form regulation will take".[45] Stigler hypothesized that "regulation is acquired by the industry, and is designed and operated primarily for its benefit."[46] Regulatory theory and analysis, Stigler argued, must determine how putatively regulated entities and other interest groups are able to redirect and redeploy the state's regulatory powers and processes for their own special purposes.[47] And that task is accomplished, according to Stigler, by "examin[ing] the nature of the political process in a democracy."[48]

Specifically, industries seeking favourable regulation must provide, directly or indirectly, one or both of a governing political party's primary needs: votes and resources.[49] Such resources include, among others, campaign contributions and contributed services (Stigler gives the example of a businessperson heading a fundraising committee), along with more indirect contributions (*e.g.*, the employment of political party members).[50] Such contributions go a long way toward explaining the systemic and institutional – as opposed to criminal or outwardly corrupt – nature of regulatory capture:

> Why are so many politicians lawyers?—because everyone employs lawyers, so the congressman's firm is a suitable avenue of compensation, whereas a physician [politician] would have to be given bribes rather than patronage. Most enterprises patronize insurance companies and banks, so we may expect that legislators commonly have financial affiliations with such enterprises.[51]

[45] Stigler, "Economic Regulation", *supra* note 8 at 3.
[46] *Ibid*.
[47] See *ibid* at 4.
[48] *Ibid* at 10.
[49] See *ibid* at 12.
[50] See *ibid.*
[51] *Ibid* at 13.

Industries also provide useful services (*e.g.*, specialized knowledge and expertise) to legislators and regulators, typically through industry lobbying organizations.[52] Stigler explains that the costs of comprehensive information in the political arena are high (and higher than in markets) because the information sought often concerns issues of little or no direct interest to individuals or, for that matter, most legislators and administrative agencies. Stigler accordingly described the channels of political decision making as gross, filtered, and noisy.[53] Industry lobbying lowers legislators' and regulators' organizational as well as electoral costs, both of which extend beyond elections and continue throughout the governing life of parties and (unelected) administrative agencies. A political party attempts to maintain its organization and *electoral appeal* by performing costly services for the voter at all times, not just before elections.[54]

This does not mean, however, that regulation produced by these processes is in the public interest. As Stigler explained, were this to be the case, the idealistic protection-of-the-public theory of regulation would have to argue, for instance, that oil import quotas are dictated by the concern of the federal government for an adequate domestic supply of petroleum in the event of war. Stigler characterized this argument as "a remark calculated to elicit uproarious laughter at the Petroleum Club."[55] Instead, Stigler demonstrated that when an industry receives a grant of power from the state, such as protectionist oil import quotas, the private benefit to the industry will fail to compensate for the damage caused to

[52] See *ibid*. This theory has subsequently received considerable empirical support. See e.g. Lee Drutman, *The Business of America is Lobbying: How Corporations Became Politicized and Politics Became More Corporate* (New York: Oxford University Press, 2015).
[53] Stigler, "Economic Regulation", *supra* note 8 at 12.
[54] See *ibid* at 12. This is a crucial point to which I will return and further develop in Part III of this chapter.
[55] *Ibid* at 4.

the public (*e.g.*, higher consumer prices due to lessened competition).[56] Even though a regulation designed to favour one or more industries may be characterized as being in the public interest, Stigler showed that what matters for regulatory theory are the comparative costs and benefits as between regulated industries and society more generally.

And yet, Stigler observed in 1971 that the idealistic view of public regulation is deeply embedded in professional economic thinking. Economists of the day reflexively denounced the Interstate Commerce Commission (ICC) for its biased, pro-railroad policies, so much so that the ICC's bias became a cliché in the literature.[57] But because of the hegemony of the idealistic theory of regulation, economists critical of the ICC failed to inquire further into the root causes of the ICC's policymaking record. The only way to effectively reform a regulatory agency such as the ICC, Stigler argued, was to alter the basis of the agency's political support, and reward its officials and staff members on a basis unrelated to their services to the railroad carriers.[58] Merely calling attention to capture – even repeatedly, to the point of making it a cliché – is insufficient to counter it.[59] This is a critical lesson of Stigler's theory of regulatory capture, and is further developed below in part III of the chapter.

[56] *Ibid* at 10.
[57] See *ibid* at 17.
[58] *Ibid* at 17–18.
[59] Stigler was otherwise silent on how to counter capture. His implicit argument was that reformers could draw upon "the basic logic of political life" (*ibid* at 18) to do so. But Stigler's analysis, as groundbreaking as it was, did not suggest any reforms capable of changing the political support or incentives of a given regulatory body. Stigler's analysis of the comparative costs of information, however, is suggestive of a promising approach, which is developed below in part III of this chapter.

B. The Practice of Regulatory Capture: The Powell Memo

A striking aspect of Stigler's groundbreaking paper is its ahistorical nature, although that was and remains far from uncommon for a formal economic model.[60] Reading Stigler's paper outside of its historical context would give the reader the impression that the concentrated corporate capture of government regulation was complete and absolute. From 1969 to 1972, however, the American business community as a whole suffered a series of setbacks unprecedented in the postwar period.[61]

During this period, the US federal government significantly expanded its regulatory reach by enacting extensive and stringent requirements and restrictions applicable to corporations in respect of issues ranging from consumer rights to occupational safety to environmental protection.[62]

This pronounced change in the federal government's regulatory approach was met in corporate circles with a mix of disbelief and alarm.[63] It was in this specific and shifting context that future Supreme Court Justice Lewis Powell drafted a memorandum at the request of the US Chamber of Commerce.[64] Starting from the premise that the American economic system was under a broad attack,[65] and observing "the stampedes by politicians

[60] For a trenchant discussion of the limits of formal economic models, see e.g. Dani Rodrik, *Economics Rules: The Rights and Wrongs of the Dismal Science* (New York: W.W. Norton & Company, 2015).
[61] See David Vogel, *Fluctuating Fortunes: The Political Power of Business in America* (New York: Basic Books, 1989) at 59.
[62] See *ibid.*
[63] Jacob S Hacker & Paul Pierson, *Winner-Take-All Politics: How Washington Made the Rich Richer – and Turned its Back on the Middle Class* (New York: Simon & Schuster, 2011) at 117.
[64] Powell, "Powell Memo", *supra* note 43.
[65] *Ibid* at 1.

to support almost any legislation related to 'consumerism' or to the 'environment,'"[66] Powell proceeded to set out a programmatic strategy for the US corporate sector to regain and redouble its previous political power. According to Powell, this would involve much more than merely redoubling the American corporate sector's reliance on the standard practices of public relations and governmental affairs – two areas in which corporations had already long and substantially invested.[67] Powell noted that independent and uncoordinated activity by individual corporations, while important, would not be sufficient.[68] Instead, Powell counselled that strength resided in organization, careful long-range planning and implementation, and consistency of action over an indefinite period of years at a level of financing available only through joint and coordinated effort at a national level.[69]

The Powell Memo proceeds by articulating a multi-pronged strategy focused on universities (including their faculty and staff, the speakers they invite, the textbooks assigned in relevant business administration and social sciences courses, and their publications in scholarly journals);[70] secondary education action programs;[71] monitoring television coverage of business affairs (including launching complaints in respect of unfair coverage to the Federal Communication Commission) and demanding equal time for pro-business perspectives on news programs;[72] devoting part of businesses' advertising

[66] *Ibid* at 25.
[67] *Ibid* at 10.
[68] *Ibid* at 11.
[69] *Ibid.*
[70] *Ibid* at 15–20, 22.
[71] *Ibid* at 20.
[72] *Ibid* at 21–22. It is worth noting here that the tactic of demanding equal time and "balance" is also a stock technique of climate change denial. See e.g. Michael Brüggermann & Sven Engesser, "Beyond False

budgets to advertisements, not for specific products but in favour of the overall economic system; [73] increasing direct political action; [74] strategic litigation; and enhancing shareholder power.[75]

The strategy, broadly conceived, was a considerable success. On every dimension of corporate political activity, the numbers portray a sizeable, rapid mobilization of business resources by the late–1970s and early–1980s.[76] The number of corporations with public affairs offices in Washington grew from 100 in 1968 to over 500 in 1978.[77] In 1971, only 175 firms had registered lobbyists in Washington; by 1982, the number grew to approximately 2,500.[78] The number of corporate political action committees (commonly referred to as PACs) increased from under 300 in 1976 to over 1,200 by the middle of 1980.[79] These numbers demonstrate that the US business community implemented with considerable alacrity the programmatic recommendations set out in the Powell Memo. These numbers also align closely, not coincidentally, with the observed trends toward elite-favoured legislative outcomes and a multi-elite political party system identified respectively by Gilens and Page[80] and Piketty[81] (discussed above).

Balance: How Interpretative Journalism Shapes Media Coverage of Climate Change" (2017) 42 Global Environmental Change 58.
[73] *Ibid* at 23–24.
[74] *Ibid* at 26.
[75] *Ibid.*
[76] See Hacker & Pierson, *supra* note 63 at 239.
[77] See Vogel, *supra* note 61 at 197.
[78] See *ibid*.
[79] See *ibid* at 207.
[80] Gilens & Page, "Testing Theories of American Politics", *supra* note 13.
[81] Piketty, "Brahmin Left vs Merchant Right", *supra* note 19.

But even more important than these numbers themselves was the new capacity they generated for US corporations to collaborate on common political goals. A mere decade after the publication of the Powell Memo, corporations could now mobilize more proactively and on a much broader front as members of a large special-interest-based coalition in search of beneficial regulation.[82]

C. The Petroleum Industry's Capture of Canada's Environmental Regulations

1. Oil Affects Everyone and Everything

"That political juggernaut, the petroleum industry, is an immense consumer of political benefits".[83] That the petroleum industry was Stigler's example *par excellence* of regulatory capture is hardly surprising given that industry's power to shape regulations in its favour. Stigler's more specific analysis of US oil import quotas obtained by the petroleum industry showed that such quotas would be rejected if a direct and *informed* vote on the regulation were ever held, even in the absence of deadweight losses of consumer and producer surpluses arising from the acquired regulation.[84]

Neither is Stigler's example dated. The industrial sectors of the petroleum industry – *e.g.*, fossil energy extraction, fossil electricity production, fuel refining, concrete and cement production, and energy-intensive manufacturing – have succeeded in mounting effective

[82] See Hacker & Pierson, *supra* note 63 at 240.
[83] Stigler, "Economic Regulation", *supra* note 8 at 3.
[84] *Ibid* at 10.

opposition to climate change policies.[85] In a special report on the future of oil, *The Economist* newspaper posed the question of whether the industry will respond to climate change by investing in the transition to renewable energy, or by doubling down on its current investments in a future based on fossil fuels.[86] Thus far, the industry has embraced the latter option.

Nor is the petroleum industry's immense consumption of regulation limited to the United States. Along with mining, the petroleum industry has significantly influenced the development and application of environmental regulations in Canada. From the very beginning of the development of regulatory frameworks and institutions for the management of the environment and natural resources in the late nineteenth century, environmental regulation in Canada has been defined by a governance paradigm of bipartite bargaining.[87] Participation in natural resources and environmental decisionmaking was limited in practice to the relevant government agencies and affected private-sector economic interests.[88] There were no formal opportunities for the public to

[85] See e.g. Jesse D Jenkins & Valerie J Karplus, "Carbon Pricing under Binding Political Constraints" (2016) United Nations University WIDER Working Paper 2016/44, online: <www.wider.unu.edu/publication/carbon-pricing-under-binding-political-constraints> [Jenkins & Karplus, "Carbon Pricing"]; Jesse D Jenkins, "Political Economy Constraints on Carbon Pricing Policies: What are the Implications for Economic Efficiency, Environmental Efficacy, and Climate Policy Design?" (2014) 69 Energy Policy 467 [Jenkins, "Political Economy Constraints"; Dale D Murphy, "The Business Dynamics of Global Regulatory Competition" in David Vogel & Robert A Kagan, eds, *Dynamics of Regulatory Change: How Globalization Affects National Regulatory Policies* (Los Angeles, CA: University of California Press, 2004) at 94–99.

[86] "Special Report: Oil: Breaking the Habit", *The Economist* (26 November 2016) at 3 [*The Economist*, "Breaking the Habit"].

[87] See George Hoberg, "Environmental Policy: Alternative Styles" in Michael Atkinson, ed, *Governing Canada: Institutions and Public Policy* (Toronto: Harcourt Brace Javanovich, 1993) at 307.

[88] See Mark Winfield, "A New Era of Environmental Governance in Canada: Better Discussions Regarding Infrastructure and Resource Development Projects" (May 2016), Metcalf Foundation Green Prosperity Papers at 9, online (pdf): <metcalffoundation.com/stories/publications/a-new-era-of-environmental-governance-in-canada/> [Winfield, "A New Era of Environmental Governance"].

learn about or comment on proposed projects; even informal opportunities were rare.[89] Following the advent of environmental assessment legislation in the early 1970s, the extractive industries of mining, oil, and gas continued to shape environmental regulations to their own ends.[90] Meanwhile, industry lobbyists soon succeeded in indicting environmental assessment processes as "green tape" barriers to economic development,[91] a characterization that continues to enjoy considerable bipartisan acceptance.[92] For instance, a report recently prepared by the Canadian petroleum industry's chief lobbying group, the Canadian Association of Petroleum Producers (CAPP), claimed that the industry continues to face mounting costs and barriers to growth due to changes in provincial and federal government policies and regulations such as methane emissions, carbon pricing, municipal and corporate tax increases, wetland policy, well liability and closure, and caribou management.[93] In order to remove these so-called barriers to growth, CAPP

[89] See *ibid.*
[90] See e.g. David W Schindler, "The Impact Statement Boondoggle" (1976) 192:1 Science 509.
[91] See e.g. Brendan Haley, "From Staples Trap to Carbon Trap: Canada's Peculiar Form of Carbon Lock-In" (2011) 88:1 Studies in Political Economy 97 [Haley, "Staples Trap to Carbon Trap"]. For a more general discussion of the structural, political economy elements of the relationship between the state and various business interests in Canada in respect of environmental policy, see William Coleman & Grace Skogstad, eds, *Policy Communities and Public Policy in Canada: A Structural Approach* (Mississauga, ON: Copp Clark Pitman, 1990); Melody Hessing, Michael Howlett & Tracy Summerville, eds, *Canadian Natural Resource and Environmental Policy: Political Economy and Public Policy* 2nd ed (Vancouver, BC: UBC Press, 2005), especially ch 2; Douglas Macdonald, *Business and Environmental Politics in Canada* (Toronto, ON: University of Toronto Press Higher Education, 2007); Douglas Macdonald, *Hydro Province, Carbon Province: The Challenge of Canadian Energy and Climate Federalism* (Toronto: University of Toronto Press, 2020); Paul Kellogg, *Escape from the Staple Trap: Canadian Political Economy after Left Nationalism* (Toronto: University of Toronto Press, 2015); Ian Urquhart, *Costly Fix: Power, Politics, and Nature in the Tar Sands* (Toronto: University of Toronto Press, 2018); Donald Gutstein, *The Big Stall: How Big Oil and Think Tanks are Blocking Climate Action on Climate Change in Canada* (Toronto: James Lorimer & Company LTD., 2018); Robert MacNeil, *Thirty Years of Failure: Understanding Canadian Climate Policy* (Halifax: Fernwood Publishing, 2019).
[92] See e.g. Shawn McCarthy, "Canadian Energy Industry Slams Liberal's Environmental Assessment Rules", *The Globe and Mail* (2 April 2018), online: <www.theglobeandmail.com/business/article-canadian-energy-industry-slams-liberals-environmental-assessment/>.
[93] Canadian Association of Petroleum Producers, "Collaboration Between Industry and Government Key to Enhancing the Competitiveness of Alberta's Oil and Natural Gas Sector Internationally: CAPP" (5 July 2017), online: <www.capp.ca/media/news-releases/economic-competitiveness-report-media-release>.

proposed to streamline provincial and federal policies and regulations in order to achieve regulatory efficiencies, eliminate duplication, and create a framework for what it calls "shared sustainable prosperity in Canada."[94] It is unclear how much – if any – room is left for policies and regulations designed to mitigate climate change, conserve biodiversity, and promote environmental protection within CAPP's narrow conception of shared sustainable prosperity.

Canadian governments – federal and provincial – have largely internalized CAPP's industry-specific view of efficient environmental regulation. They continue to act, not as neutral arbiters guarding the public interest, but as champions and cheerleaders of particular projects and technologies, a role consistent with the historical bipartite bargaining governance model.[95]

How has the petroleum industry in particular succeeded in capturing public regulation? As introduced in chapter two, the world's leading industrialized states – including Canada – are also oil states, whose citizens' ways of living and working require substantial amounts of energy from oil and other fossil fuels.[96] This dependence shapes states' economies and political dynamics. Economic and political policy options in such oil states are shaped by different modes of organizing the extraction, production, transport, and consumption of

[94] *Ibid*. For CAPP's full report, see Canadian Association of Petroleum Producers, "A Competitive Policy and Regulatory Framework for Alberta's Upstream Oil and Natural Gas Industry", (July 2017), online: <www.capp.ca/publications-and-statistics/publications/304673>.
[95] See Winfield, "A New Era of Environmental Governance", *supra* note 88 at 18–19.
[96] See Timothy Mitchell, "Carbon Democracy" (2009) 38:3 Economy and Society 399 at 400 [Mitchell, "Carbon Democracy"]. See also Timothy Mitchell, *Carbon Democracy: Political Power in the Age of Oil* (New York: Verso, 2011) at 206, 250–253. For a similar analysis applicable to the Albertan political context, see Laurie E Adkin, ed, *First World Petro-Politics: The Political Ecology and Governance of Alberta* (Toronto: University of Toronto Press, 2016).

energy. These modes are effected not only by arrangements of people, finance, and technical, scientific, and legal expertise, but also violence.[97] In particular, the oil and gas industry has played a significant role in shaping economic and political priorities and policies in oil states, including the range of potential policies for environmental protection. The industry as a whole has, moreover, shaped the recent history of much of the world. Oil remains the largest and most valuable product of the energy industry, and is the highest-traded commodity in the world.[98] The Global *Fortune* 500's top ten listed companies includes both oil producers and companies both dependent on and invested in oil, while the state-owned Saudi Aramco is larger still.[99] Oil fuels democracies and dictatorships alike, and oil products fuel over 90% of the world's transport.[100]

2. Oil and Gas Captures Canada

As discussed in chapter two, this relationship between the oil and gas industry and politics continues unabated today. As a former Canadian environment minister once remarked, "[t]here is no minister of the environment on Earth who can stop (the oil sands) from going forward, because there is too much money in it."[101] But money, while significant, is only part of the regulatory capture equation. In Canada, the petroleum industry's ability to define the nature of policy problems and to promote particular solutions is remarkable. Regarding environmental assessment, for example, the industry has not only lobbied successfully for

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[97] See Mitchell, "Carbon Democracy", *supra* note 96 at 401.
[98] See *The Economist*, "Breaking the Habit", *supra* note 86 at 2.
[99] See *ibid*.
[100] See *ibid*.
[101] Stéphane Dion, quoted in Haley, "Staples Trap to Carbon Trap", *supra* note 91 at 97, citing Robert Collier, "Fueling America: Oil's Dirty Future", *San Francisco Chronicle* (22 May 2005), online: <www.sfgate.com/green/article/FUELING-AMERICA-OIL-S-DIRTY-FUTURE-Canadian-2668998.php>.

its chosen reforms, it has also played and continues to play a leading role in drafting its preferred amendments to existing environmental legislation.[102] Canada's climate policies accordingly are largely about climate in name only. They are designed, instead, to further the special interests in continued oil and gas extraction and export. As a result, Canada is presently not on course to meet either its climate mitigation or sustainability commitments.[103] Worse still, Canada does not have a meaningful plan to do so. These are the consequences of capture.

Recent and ongoing examples of the petroleum industry's political influence in Canada abound. Consider the federal government's recent accession to the industry's objections to new regulations calling for reductions in methane emissions, which were the only regulations in Canada's climate policy regulating the emissions of this highly potent GHG. The oil and gas industry convinced the federal government to delay the date of compliance. As a result, they effectively obtained at least three additional years of unregulated – and therefore, legally limitless – pollution. Moreover, the industry continues to push for higher emission limits and less frequent inspections. Each of these concessions would undercut

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[102] See e.g. Jason MacLean, "Like Oil and Water? Canada's Administrative and Legal Framework for Oil Sands Pipeline Development and Climate Change Mitigation" (2015) 2 Extractive Industries & Society 785. For a classic but still relevant historical account, including a discussion of oil and gas development as a continuation of the staples theory of Canadian economic production, see John Richards & Larry Pratt, *Prairie Capitalism: Power and Influence in the New West* (Toronto: McClelland and Stewart Limited, 1979) at 11–12.

[103] See Commissioner of the Environment and Sustainable Development, *Perspectives on Climate Change Action in Canada – A Collaborative Report from Auditors General – March 2018* (27 March 2018), online: <www.oag-bvg.gc.ca/internet/English/parl_otp_201803_e_42883.html#hd2b> [Commissioner of the Environment and Sustainable Development, "A Collaborative Report"]; Commissioner of the Environment and Sustainable Development, "Report 2—Canada's Preparedness to Implement the United Nations Sustainable Development Goals" in *2018 Spring Reports of the Commissioner of the Environment and Sustainable Development* (24 April 2018), online: <www.oag-bvg.gc.ca/internet/English/att__e_43001.html> [Commissioner of the Environment and Sustainable Development, "Preparedness to Implement the SDGs"].

the public interest purpose of the regulations.[104] Meanwhile, the Alberta provincial government is reportedly underestimating total methane emissions levels from the upstream oil and gas sector by 25% to 50%, clearly suggesting the need for stronger, not weaker, federal and provincial emissions caps and monitoring.[105]

The federal government also recently weakened its regulations concerning the Laurentian Channel Marine Protected Area by reducing the size of the protected area by more than 33% of its original plotting in 2007, and by carving out a number of exceptions for offshore oil and gas exploration and drilling. The government conceded that it changed these regulations after fossil fuels lobbyists raised concerns with respect to limitations on potential future activities.[106] According to the World Wildlife Fund's lead specialist for oceans, the federal government has been much more willing to concede to industry interests and concerns than to listen to the scientists who are making the evidence-based

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[104] See Ed Whittingham & Diane Regas, "Trudeau Must Hold the Line on New Methane Rules", *The Globe and Mail* (11 June 2017), online: <www.theglobeandmail.com/report-on-business/rob-commentary/trudeau-must-hold-the-line-on-canadas-new-methane-rules/article35280646/>. The petroleum industry also opposed site-specific inspections while advocating in favour of indirect, satellite-based monitoring and self-regulated self-inspections, both of which would significantly weaken the enforcement of Canada's proposed regulations when and if they ultimately come into force: Carl Meyer, "Trudeau Government Says Canada will avoid Billions of Dollars in Losses from New Crackdown on Oilpatch Pollution", *National Observer* (26 April 2018), online: <www.nationalobserver.com/2018/04/26/news/trudeau-government-says-canada-will-recover-billions-dollars-new-crackdown-oilpatch>. For background information about the regulation of methane emissions in Canada, see Government of Canada, "About methane emissions" (no date), online: <https://www.canada.ca/en/environment-climate-change/services/climate-change/global-methane-initiative/about-methane-emissions.html>.

[105] See Matthew R Johnson et al, "Comparisons of Airborne Measurements and Inventory Estimates of Methane Emissions in the Alberta Upstream Oil and Gas Sector" (2017) 51:21 Environ Sci Technol 13008 at 13015.

[106] See Sigrid Kuehnemund quoted in James Wilt, "Industry Sways Feds to Allow Offshore Drilling in Laurentian Channel Marine Protected Area", *The Narwhal* (22 July 2017), online: <thenarwhal.ca/industry-sways-feds-allow-offshore-drilling-laurentian-channel-marine-protected-area/>.

recommendations about the standards of protection that are needed for the site.[107] It is hardly surprising, then, that Canada is failing to meet its international commitments under the UN Convention on Biodiversity.[108] This, in turn, undermines Canada's capacity to meaningfully contribute to the achievement of the UN's SDGs (goals 14 and 15 in particular, which concern, respectively, the conservation of oceans, seas, and marine resources, and terrestrial biodiversity).[109]

The most recent example of industry's political influence is the federal government's decision to scale back its planned national carbon price to appease particular carbon-intensive industries' competitiveness concerns.[110] Following what was described in the

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[107] *Ibid*. This example is by no means an outlier. See generally David Schindler, "Facts Don't Matter: Harper is Gone, but Pro-Development Governments Continue to Ignore Science", *Alberta Views* (10 July 2017), online: <albertaviews.ca/facts-dont-matter/>.

[108] See Gloria Galloway, "Canada Lags in Conservation Efforts", *The Globe and Mail* (24 July 2017), online: <www.theglobeandmail.com/news/politics/canada-lagging-behind-on-commitment-to-protect-lands-and-fresh-water-reportsays/article35779173/>.

[109] United Nations Department of Economic and Social Affairs, *Sustainable Development Goals*, online: <sustainabledevelopment.un.org/?menu=1300>. More recently, however, the federal government announced an ostensible ban on deep-sea mining and oil-and-gas drilling *within* marine protected areas. At the same time, concessions to industry remain. For example, existing oil and gas licenses will not be cancelled, and may be renewed in the future, effectively grandfathering currently active industry entities. Moreover, the government's ban does not prohibit drilling or other industrial activities in "marine refuge" areas. Rather, applications to drill and otherwise operate in such areas will be determined on a case-by-case impact assessment basis, which may allow detrimental development to occur notwithstanding the government's ban. See James Wilt, "Canada bans deep-sea mining, oil and gas drilling in marine protected areas", *The Narwhal* (26 April 2019), online: <https://thenarwhal.ca/canada-bans-deep-sea-mining-oil-and-gas-drilling-in-marine-protected-areas/>. Most recently as of this writing, the federal government proposed a regulation exempting exploratory offshore oil and gas drilling off the coast of Newfoundland and Labrador without having assessed the cumulative effects or climate impacts of the exemption: Government of Canada, "Ministerial Regulatory Proposal related to Offshore Exploratory Drilling East of Newfoundland and Labrador – Comment Period on Discussion Paper" (4 March 2020), online: <https://www.canada.ca/en/impact-assessment-agency/news/2020/03/ministerial-regulatory-proposal-related-to-offshore-exploratory-drilling-east-of-newfoundland-and-labrador-mdash-comment-period-on-discussion-paper.html.> In response, three environmental groups challenged the proposed regulation and its underlying regional study in Federal Court: Holly McKenzie-Sutter, "Ecology groups challenge 'flawed' assessment of N.L. oil and gas drilling", *CBC News* (14 May 2020), online: <https://www.cbc.ca/news/canada/newfoundland-labrador/court-challenge-of-oil-gas-exploration-1.5570060>.

[110] See Shawn McCarthy, "Ottawa to Dramatically Scale Back Carbon Tax on Competitiveness Concerns", *The Globe and Mail* (1 August 2018), online: <www.theglobeandmail.com/business/industry-news/energy-and-resources/article-ottawa-to-dramatically-scale-back-carbon-tax-on-competitiveness/>.

media as "a closed-door meeting with industry officials",[111] Environment and Climate Change Canada issued new regulatory guidelines lowering the percentage of emissions on which the largest emitters will have to pay a carbon price of $20 per tonne as of the already-delayed date of January 2019.[112] Under the government's initially proposed scheme, which it developed after consultations with a comparatively broader array of stakeholders (including academics), heavy-emitting companies (*i.e.*, whose facilities emit at least 50 kilotonnes of GHG equivalent per year) would pay the carbon price on approximately 30% of their emissions after receiving credits on emissions up to 70% of their specific industry average. Following further consultations with affected industries (but with no other stakeholders), that figure was reduced to 20% (meaning credits on emissions will now be allocated for up to 80% of the relevant industry average, including the mining, potash, pulp and paper, and oil refining industries). This rule change was accompanied by a further reduction to 10% of the industry average for so-called energy-intensive trade-sensitive industries, including cement, steel, iron, lime, and nitrogen.[113] As a result, the government has by way of these negative subsidies provided more relief to industry than any credible, independent analysis has deemed justifiable by the competitiveness concerns of carbon leakage (*i.e.*, emitters moving to other jurisdictions with comparatively weaker carbon

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[111] *Ibid.*

[112] For further background information regarding the design of the national carbon price, including its initial implementation schedule, see Environment and Climate Change Canada, News Release, "Government of Canada Announces Pan-Canadian Pricing on Carbon Pollution" (3 October 2016), online: <www.canada.ca/en/environment-climate-change/news/2016/10/government-canada-announces-canadian-pricing-carbon-pollution.html>. For technical details, see Government of Canada, "Technical Paper: Federal Carbon Pricing Backstop" (June 2017), online: <www.canada.ca/en/services/environment/weather/climatechange/technical-paper-federal-carbon-pricing-backstop.html>.

[113] See Yakabuski, *supra* note 40. For further details, see Canada, "Update on the Output-Based Pricing System: Technical Backgrounder" (27 July 2018), online: <www.canada.ca/en/services/environment/weather/climatechange/climate-action/pricing-carbon-pollution/output-based-pricing-system-technical-backgrounder.html>.

regulations).[114] This is yet another example *par excellence* of Stigler's theory of regulatory capture.

As introduced in chapter two, such examples of regulatory capture are disquieting, and disquietingly typical, in Canada. They help illustrate the social and political dynamics of carbon democracies and reflect an emerging – if not yet firmly established – consensus view of the way that carbon-intensive industries effectively shift energy and environmental regulations away from the broader public interest in climate change mitigation and environmental stewardship more generally towards their own special interests.[115]

Not only are these examples of capture consistent with Stigler's theory of regulatory capture, these examples of capture are achieved through the very tactics first described and advocated by the Powell Memo. The mechanisms by which carbon democracies are created and reproduced extend far beyond the by-now familiar tactics of lobbying, the revolving door circulating petroleum and other carbon-intensive industry representatives in and out of government regulatory agencies (*e.g.*, the former National Energy Board, and the Alberta Energy Regulator), and political campaign financing. As Adkin and her collaborators illustrate in their comprehensive account of Alberta's "first world petro-state",[116] a carbon democracy is achieved and sustained through the coordinated operation of very particular and highly stylized governance practices, including, as discussed in the

[114] See Isabelle Turcotte, "We Need to Hold the Line on Carbon Pricing: Digging into the Federal Government's Response to Industry Concerns" (7 August 2018), online (blog): *Pembina Institute* <www.pembina.org/blog/we-need-hold-line-carbon-pricing>.
[115] See e.g. Jenkins, "Political Economy Constraints" *supra* note 85; Murphy, *supra* note 85 at 94–99.
[116] Adkin, *supra* note 96 at 14. These tactics are further discussed in chapter two of this thesis.

previous chapter, (1) media campaigns[117] and public-relations campaigns,[118] (2) industry "grassroots community engagement" projects,[119] (3) community philanthropy,[120] and (4) industry funding for postsecondary educational institutions.[121]

Regulatory capture is thus an ongoing accomplishment. In the illustrative case of Alberta, the tar sands industry works to protect billions of dollars of investments and profits through political lobbying, political funding, public relations campaigns, local engagement activities, and collaborating with (and in some instances co-opting) the public education system.[122] Captured by these strategies, and chronically dependent on petroleum development revenues and jobs for its citizens,[123] successive Alberta governments have legitimized and protected tar sands projects.[124] The result – besides an ineffective environmental regulatory regime[125] – is the ideological identification of the petroleum's

[117] Angela V Carter, "The Petro-Politics of Environmental Regulation in the Tar Sands" in Adkin, *supra* note 96 at 169 [Carter, "Environmental Regulation in the Tar Sands"].
[118] See Keep Canada Working, "About Keep Canada Working", online: <keepcanadaworking.ca/about>.
[119] Carter, "Environmental Regulation in the Tar Sands", *supra* note 117 at 169.
[120] See *ibid*.
[121] See *ibid*.
[122] See Carter, "Environmental Regulation in the Tar Sands", *supra* note 117 at 168–170.
[123] This dependence neatly exemplifies Stigler's argument (discussed above) that governing political parties are vulnerable to industry capture because of their continuous need to maintain their organizational and electoral appeal. See Stigler, "Economic Regulation", *supra* note 8 at 12.
[124] See Carter, "Environmental Regulation in the Tar Sands", *supra* note 117 at 168–170.
[125] The most recent example as of this writing is the Alberta Energy Regulator's decision to suspend environmental monitoring requirements for oil and gas companies, including programmes that monitor soil, water, wildlife, firebreaks, and greenhouse gas emissions. The regulator explained that its decision resulted from oil and gas companies' claims that they are unable to meet environmental monitoring requirements while complying with COVID-19 public health orders. Neither the oil and gas industry nor the Alberta Energy Regulator explained, however, how oil and gas companies are able to carry on operations – which the provincial government previously deemed an essential service – while complying with COVID-19 public health orders. The contradiction is patent, and telling. Alberta's Official Opposition Leader, Rachel Notley, characterized the Alberta Energy Regulator's decision as "utterly idiotic" and a "cynical and exploitative" use of the pandemic that will damage the oil and gas industry's reputation by turning Alberta into the "Wild West of environmental protection." See Emma Graney, "Alberta Energy regulator suspends environmental monitoring requirements for oil and gas companies", *The Globe and Mail* (22 May 2020), online: <https://www.theglobeandmail.com/business/article-alberta-energy-regulator-temporarily-suspends-environmental/>. The comments of Alberta's Minister of Energy, Sonya Savage, confirm this interpretation. According to Savage: "Now is a great time to be building a pipeline because you can't have

industry's private interest with the broader public interest. This identification is reflected and further reproduced by popular slogans such as "Alberta *is* energy,"[126] "what's good for oil is good for Alberta,"[127] and "Alberta's oil sands are the lifeblood of our economy."[128]

This rhetorical strategy also operates at the federal level in Canada. It is repeatedly reflected and reproduced by the current Liberal government's oft-repeated slogan that the "environment and the economy go hand in hand". In announcing the approval of the controversial Trans Mountain pipeline expansion, which will inarguably expand oil sands production and Canada's GHG emissions,[129] Prime Minister Justin Trudeau remarked that

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protests of more than 15 people. Let's get it built": The Canadian Press, "Alberta minister says it's a 'great time' to build a pipeline because COVID-19 restrictions limit protests against them", *The Globe and Mail* (25 May 2020), online: <https://www.theglobeandmail.com/canada/alberta/article-alberta-minister-says-its-a-great-time-to-build-a-pipeline-because/>. Nor was this an offhand remark. It is entirely consistent with Alberta's Bill 1, *Critical Infrastructure Defence Act,* 2020, Second Session, 30th Legislature, 69 Elizabeth II (Alberta), which, once enacted, will effectively prohibit and penalize protests adjacent to pipelines, refineries and processing plants, mines, among several other sites deemed to be "essential infrastructure." The Bill was enacted and came into force on June 17, 2020: *Critical Infrastructure Defence Act,* SA 2020 cC-32.7.

[126] Randolph Haluza-DeLay & Angela V Carter, "Social Movements Scaling Up: Strategies and Opportunities in Opposing the Oil Sands Status Quo" in Adkin, *supra* note 96 at 484 [emphasis in original].

[127] Kevin Taft, *Oil's Deep State: How the Petroleum Industry Undermines Democracy and Stops Action on Global Warming—in Alberta, and in Ottawa* (Toronto, ON: James Lorimer & Company Ltd., Publishers, 2017) at 205.

[128] As Adkin, *supra* note 96 notes at 21, this ideological identification is not unique to Alberta:

> That identification of the interests of oil producers with the interests of the citizenry as a whole—one both actively promoted by governments and (the same) corporations and passively internalized by citizens as consumers of downstream products and as automobile owners—operates as powerfully in Alberta as it does in most parts of the USA.

[129] See Mark Jaccard, "Trudeau's Orwellian Logic: We Reduce Emissions by Increasing Them", *The Globe and Mail* (20 February 2018), online: <www.theglobeandmail.com/opinion/trudeaus-orwellian-logic-reduce-emissions-by-increasing-them/article38021585/> [Jaccard, "Trudeau's Orwellian Logic"].

"responsible resource development can go hand in hand with strong environmental protection."[130]

3. *The Consequences of Capture*

The federal government's approval of an expanded oil sands pipeline as part and parcel of its climate change policy was characterized by one energy economist as "Orwellian" – the curious logic that Canada can only reduce its GHG emissions by approving the construction of new oil pipelines and thereby expanding production from Alberta's oil sands, the fastest growing source of Canada's GHG emissions and the primary reason why Canada is not on track to meeting its emissions reduction target for 2030 under the UN Paris Agreement.[131] Unsurprisingly, the Commissioner of the Environment and Sustainable Development's 2018 Report on Climate Action in Canada reached the following conclusion:

> Canada's auditors general found that most governments in Canada were not on track to meet their commitments to reducing greenhouse gas emissions and were not ready for the impacts of a changing climate. On the basis of current federal, provincial, and territorial policies and actions, Canada is not expected to meet its 2020 target for reducing greenhouse gas emissions. *Meeting Canada's 2030 target will require substantial effort and actions*

[130] Office of the Prime Minister of Canada, "Prime Minister Justin Trudeau's Pipeline Announcement" (29 November 2016), online: <pm.gc.ca/eng/news/2016/11/30/prime-minister-justin-trudeaus-pipeline-announcement> [Office of the Prime Minister of Canada, "Pipeline Announcement"].

[131] Jaccard, "Trudeau's Orwellian Logic", *supra* note 129. The contradictions of Canada's climate policy are discussed in detail in chapter one, and further in chapter five, of this thesis. See also Jason MacLean, "Alberta's Support of the National Climate Plan is Nice, but Hardly Necessary", *Maclean's* (24 February 2018), online: <www.macleans.ca/news/canada/albertas-support-of-the-national-climate-plan-is-nice-but-hardly-necessary/>; Jason MacLean, "The Trans Mountain Saga as a Public Policy Failure", *Policy Options* (13 April 2018), online: <policyoptions.irpp.org/magazines/april-2018/trans-mountain-saga-public-policy-failure/>. See also *Paris Agreement,* being an Annex to the *Report of the Conference of the Parties on its Twenty-First Session, Held in Parties from 30 November to 13 December 2015 – Addendum Part Two: Actions Taken by the Conference of the Parties at its Twenty-First session, 29 January 2016,* Decision 1/CP.21, CP, 21st Sess, FCCC/CP/2015/10/Add.1 at 21-36, online (pdf): UNFCCC <unfcc.int/resource/docs/2015/cop21/eng/10a01.pdf>.

> *beyond those currently planned or in place. Most Canadian governments have not assessed and, therefore, do not fully understand what risks they face and what actions they should take to adapt to a changing climate*.[132]

The Commissioner of the Environment and Sustainable Development reached a substantially similar – and equally unsurprisingly – conclusion with respect to Canada's progress towards implementing the UN SDGs.[133] In September 2015, the 193 member states of the General Assembly of the UN, including Canada, unanimously adopted the resolution "Transforming our world: the 2030 Agenda for Sustainable Development."[134] The 2030 Agenda contains 17 aspirational goals (SDGs) for achieving socially, economically, and environmentally sustainable development worldwide. The Commissioner's Spring 2018 audit focused on whether the federal government was prepared to implement the UN 2030 Agenda for Sustainable Development. The Commissioner concluded that the government has "not adequately prepared to implement the United Nations' 2030 Agenda for Sustainable Development."[135] At the conclusion of the Commissioner's audit, she found that "there was no governance structure and limited national consultation and engagement on the 2030 Agenda. There was no implementation plan with a system to measure, monitor, and report on progress nationally."[136]

This stark conclusion ought to be startling, but in light of the oil and gas industry's capture of Canadian climate and sustainability policies (and environmental law more generally

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[132] Commissioner of the Environment and Sustainable Development, "A Collaborative Report", *supra* note 103 [emphasis added].
[133] Commissioner of the Environment and Sustainable Development, "Preparedness to Implement the SDGs", *supra* note 103.
[134] *Ibid*.
[135] *Ibid*.
[136] *Ibid*.

still), it follows rather logically. Economic concerns – and privatized special interests in particular – consistently trump environmental aspirations in Canada. The result is a body of feckless environmental laws and policies.

The problem the oil and gas industry poses for democracy is not limited, then, to the already difficult fact that the ways that citizens of states like Canada have become accustomed to eating, travelling, housing, and consuming other goods and services are dependent on very large amounts of energy derived from oil and other fossil fuels, and are therefore unsustainable. Yet more problematic is the possibility that the regulatory regime that aided and abetted the development of the fossil fuels era may not be adaptable to the urgent and unprecedented challenge of transitioning toward a new, sustainable era based on renewable and otherwise carbon-neutral energy.[137]

The root problem, the primary obstacle standing in the way of Canada meeting its climate change commitments under the UN Paris Agreement and contributing to the UN SDGs, therefore, is the oil and gas industry's capture, not only of Canada's environmental laws, regulations, and policies, but also its capture of Canada's *collective imagination* of what its climate and sustainable policy options should and *could* be. Commenting on Canada's recent decision to reduce the stringency of its carbon price, one mainstream media commentator effectively apologized for the government's backsliding by asserting that "Canada's short- and medium-term competitiveness cannot be overlooked" while making

[137] See Mitchell, "Carbon Democracy", *supra* note 96 at 400–401.

no further mention of Canada's climate commitments.[138] But still the best illustration of Canada's oil-infused environmental imagination belongs to Prime Minister Justin Trudeau, who added in his announcement approving the Trans Mountain pipeline expansion that "I have said many times that there isn't a country in the world that would find billions of barrels of oil and leave it in the ground while there is a market for it."[139]

Canadian environmental law scholars have long lamented this lack of policy imagination. As Wood, Tanner, and Richardson observed, Canada has not only consistently failed to imagine new and innovative environmental policies, but it has also failed to import innovative ideas from other jurisdictions: "The real problem therefore is not the lack of legal tools but a domestic failure of policy imagination."[140] But it is not so much that Canada *lacks* imagination as it is that Canada's imagination for innovative environmental laws and policies has been captured and co-opted by the special interests of "[t]hat political juggernaut, the petroleum industry".[141]

Merely calling attention to this kind of capture, however, will do little to change Canada's current regulatory trajectory. The petroleum industry's capture of Canadian environmental

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[138] Yakabuski, *supra* note 40. Or consider yet another journalistic apology. Comparing Canada and Germany, Gary Mason suggested in 2019 that "as it turns out, we may not be any more a climate straggler than those governments regarded as being more serious and reformist on this front": Gary Mason, "Canada lags on climate action. But we're in good (bad) company", *The Globe and Mail* (4 October 2019), online: <https://www.theglobeandmail.com/opinion/article-canada-is-a-climate-laggard-but-were-in-good-bad-company/>.
[139] Office of the Prime Minister of Canada, "Pipeline Announcement", *supra* note 130.
[140] Wood, Tanner & Richardson, *supra* note 1 at 1039. See also Mark S Winfield, "An Unimaginative People: Instrument Choice in Canadian Environmental Law and Policy" (2008) 71 Sask L Rev 79 at 80–81.
[141] Stigler, "Economic Regulation", *supra* note 8 at 3.

law and policy must be countered. This calls for a new model of law reform, a model that, to begin with, must avoid the "Catch-22" of capture, which is addressed next.

II. THE CATCH-22 OF CAPTURE

Posing the question of what can be done about lobbying in the United States, one commentator creatively suggested that the "House and Senate offices could officially partner with local universities, particularly public policy and law schools. Professors could serve as expert advisers" to elected officials.[142] This reform would attempt to push policymaking in a smarter, more evidence-based direction. Practically, it would provide policymakers with the expertise to stand up to industry experts.[143]

This proposal is compelling on its face. Its principle strength, as compared to many other reform programs, is that it seeks to directly engage the otherwise-captured political process, rather than somehow circumvent the political process altogether because that process has become subject to special-interest capture.[144] And that would be true if this proposal *fully* embraced politics. But like so many other policy reforms, it hinges on the political agency of institutions – in this example, the US House of Representatives and Senate – that are already subject to varying levels of capture, meaning their political agency is already constrained. This often precludes the very possibility of actually enacting the proposed

[142] Drutman, *supra* note 52 at 233–34.
[143] See *ibid* at 236. For a substantially similar reform proposal, see Lindsey & Teles, *supra* note 3 at 161-164, who recommend increasing regulatory agency staff sizes and remuneration rates in order to assemble and retain in-house regulatory expertise capable of countering industry lobbyists informational advantage. As promising as these proposals are, they are contingent (at least initially) on the agency of already captured regulatory bodies, which plainly accounts for why such rather obvious reforms are rarely proposed or implemented.
[144] See Drutman, *supra* note 52 at 236.

reforms in the first place. This "Catch-22" of reforming regulatory capture likewise limits otherwise creative reform proposals, including the proposal that the – again, already captured – US Congress hire independent experts to advocate for and against a range of viewpoints on proposed legislative and regulatory proposals, at a fraction of the cost commanded by industry lobbyists, and stage debates among them.[145] As one observer of such proposals to escape capture and reform the regulatory process in the American congressional context explains, to try to enact such reforms is to run up directly against an already captured and deeply entrenched political regime, a regime which serves its incumbents – if not their constituents – very well. Consequently, the cynics greatly outnumber the genuine supporters of meaningful regulatory reform in Washington.[146] Put another way, if a reform proposal hinges on the free and voluntary initiative of otherwise captured legislators and administrative officials, the proposal is unlikely to succeed. If legislators and administrative officials possessed sufficient regulatory resources and enjoyed independence from their industry captors so as to launch needed reforms and effectively escape from captivity, there would be no need for reforms at all; legislator and administrators would already have already freed themselves or avoided capture in the first place.[147] This is the Catch-22 of regulatory capture reform.

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[145] See Zephyr Teachout, "Original Intent: How the Founding Fathers Would Clean Up K Street", (2009) 11 *Democracy Journal*, online: <democracyjournal.org/magazine/11/original-intent/>.

[146] See Robert G Kaiser, *So Much Damn Money: The Triumph of Lobbying and the Corrosion of American Government* (New York: Knopf, 2009) at 358.

[147] An historical example may help to clarify this Catch-22 logic. In 1873, Friedrich Engels rejected the idea of a general workers' strike as a political instrument by likening it to ineffectual plans for the "holy month," a nationwide suspension of work proposed by the Chartist movement in the 1840s. In Engels' estimation, workers lacked the resources and organization to carry out a general strike. If they actually possessed such resources and organization, a general strike would be unnecessary in the first place – the workers would already be powerful enough to overthrow the state. See Friedrich Engels, "The Bakuninists at Work" in Karl Marx & Friedrich Engels, eds, *Revolution in Spain* (London, UK: Lawrence & Wishart, 1939 (originally published in *Der Volkstaat*, 31 October and 5 November 1873).

The Canadian legislative and regulatory context has been characterized in substantially similar terms. An experienced commentator and practitioner of public affairs in Canada argues that representative government

> has given way to a world in which the prime minister's courtiers talk to a handful of senior Cabinet ministers, a few carefully selected deputy ministers, lobbyists, former public servants turned consultants, heads of friendly associations, and some CEOs of larger private firms. *This permeates all aspects of government—even regulation.*[148]

The interesting but flawed reform proposals briefly canvassed above do rightly concentrate, however, on the significant informational advantage possessed and wielded by industry groups. Industries' superior financial resources (especially industries as concentrated as the petroleum industry) allow them to significantly shape what counts as relevant and useful evidence in the policymaking process (including the ability to complicate otherwise straightforward issues affecting the public interest). While strict limits (or even an outright ban) on corporate contributions to electoral campaigns would be a welcome development, this alone would not diminish industries' and their lobbyists' capacity to use their informational advantage to influence policymaking and regulatory decisionmaking.[149] This is because the political environment in most policy and regulatory

[148] Donald J Savoie, *What Is Government Good At? A Canadian Answer* (Montreal, QC: McGill-Queens University Press, 2015) at 266 [emphasis added]. As a case in point, see Mike De Souza, "High-Ranking Federal Officials Sped Up Trans Mountain Review after Phone Call from Kinder Morgan's Ian Anderson", *National Observer* (18 April 2018), online: <www.nationalobserver.com/2018/04/18/news/high-ranking-federal-officials-sped-trans-mountain-review-after-phone-call-kinder>.
[149] See Lindsey & Teles, *supra* note 3 at 133, 139.

areas is "profoundly biased toward those with the resources to invest" in useful, practicable public policy information.[150]

This bias, in turn, produces not only particular policies and regulations tailored to the special interests of industry sectors, but just as importantly, it also produces an *absence* of viable public interest policy and regulatory alternatives in those sectors. As one observer illustratively argues in respect of the 2008 financial crisis:

> No coherent alternative model had been developed, and no effort had been made to build a constituency for financial reform. While we [in the United States] had think tanks keeping tabs on various aspects of the economy, from the federal budget to the labor market, no one was systematically watching the development of super-complicated financial institutions, noting the risk posed by financial derivatives and *promoting alternatives*.[151]

Substitute the terms "environment" and "climate change" for the terms "economy" and "financial derivatives," and the result yields an apt account of the lack of policy imagination displayed by Canada discussed in part I. The absence of compelling environmental law and policy alternatives, particularly alternatives capable of attracting broad appeal, is patent in Canada today.

By way of anecdotal illustration, consider the following account of an environmentalist's "quandary on pipelines",[152] relating in the following terms an environmentalist's change

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[150] *Ibid.*
[151] Mark Schmitt, "Machinery of Progress", *The American Prospect* (18 December 2009), cited in Lindsey & Teles, *supra* note 3 at 135 [emphasis added].
[152] Adrienne Tanner, "The Environmentalist's Quandary on Pipelines", *The Globe and Mail* (27 April 2018), online: <www.theglobeandmail.com/canada/british-columbia/article-the-environmentalists-quandary-on-pipelines/>.

of mind about his opposition to the Trans Mountain pipeline expansion: "I know this sounds traitorous, but I think progressive activists should back off action against the Trans Mountain pipeline if it threatens the establishment of a national carbon tax."[153] This environmentalist's difficult conversion to the cause of approving new oil pipelines and long-term fossil fuels infrastructure in order to *reduce* GHG emissions was "governed by fears that killing the pipeline will spell the return of less environmentally conscious provincial and federal conservative governments."[154] Better, this fearful environmentalist concluded, "to mitigate the risk of [oil pipeline] spills as best we can, say yes to the pipeline and support a nationwide carbon tax, which will go further to reduce greenhouse gasses."[155] This is tortured logic, to be sure, but a logic understandably borne of the lack of a credible environmental law and policy framework capable of generating, deliberating on, and choosing among credible alternatives in the public interest.[156] So paradoxically captured is Canada's environmental law and policy imagination that a climate change policy that does not somehow appease the oil and gas industry appears, not only impracticable, but *unthinkable*.

An additional piece of recent anecdotal evidence from the United States further illustrates this paradox. Two former US senators turned oil and gas industry lobbyists proposed a

[153] *Ibid*.
[154] *Ibid*.
[155] *Ibid.* This imagined compromise, of course, was arrived at prior to the federal government's decision to reduce the stringency (and therefore the effectiveness) of its national carbon price. The compromise is now an even worse bargain from a climate-mitigation perspective.
[156] For an insightful treatment of the interrelationships among energy, culture, and discourse, see Imre Szeman, Jennifer Wenzel & Patricia Yaeger, eds, *Fueling Culture: 101 Words for Energy and Environment* (New York: Fordham University Press, 2017).

federal carbon tax of US$40 per tonne.[157] On its own, this price point would be insufficient to reduce GHG emissions in line with the United States' GHG-reduction commitments under the Paris Agreement (from which the United States has triggered its formal withdrawal),[158] but it might still be considered as at least a start, and far better than no price at all. But the Senators-turned-lobbyists did not simply propose a carbon tax. Rather, they proposed a compromise: a federal carbon tax in exchange for (1) the outright repeal of the Obama-era Clean Power Plan, which would allow the federal Environmental Protection Agency (EPA) to regulate and reduce carbon emissions;[159] and (2) a grant of federal- and state-level immunity to emitters from tort liability for their contributions to climate change and its costs. This would effectively reverse the polluter-pays principle and shift the financial burden of adapting to climate change (the costs of which are estimated as being in the trillions of dollars) from private emitters to the public.

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[157] See Trent Lott & John Breaux, "Here's How to Break the Impasse on Climate", *The New York Times* (20 June 2018), online: <www.nytimes.com/2018/06/20/opinion/climate-change-fee-carbon-dioxide.html>.

[158] The United States triggered its formal withdrawal from the Paris Agreement on November 4, 2019, which will become effective on November 20, 2020. Regarding carbon pricing, for a comprehensive analysis of carbon pricing levels in relation to GHG emissions reduction targets, see Carbon Pricing Leadership Coalition, *Report of the High-Level Commission on Carbon Pricing* (29 May 2017) at 3, online: <www.carbonpricingleadership.org/report-of-the-highlevel-commission-on-carbon-prices/>. See also Richard S Tol, "The Social Cost of Carbon" (2011) 3:1 Annual Review of Economics 419 (recommending a carbon price of US$70); Jeffrey Ball, "Why Carbon Pricing Isn't Working: Good Idea in Theory, Failing in Practice", *Foreign Affairs* (July/August 2018), online: <www.foreignaffairs.com/articles/world/2018-06-14/why-carbon-pricing-isnt-working>. The ideal carbon price may vary to some extent depending on a country's particular suite of climate policies and regulations, and where the cost is subject to politically binding constraints, other second-best carbon abatement strategies must also be pursued in addition to a continuously increasing carbon price. On this latter point, see Mark Jaccard, Mikela Hein & Tiffany Vass, "Is Win-Win Possible? Canada's Government Achieve Its Paris Commitment … and Get Re-Elected?" (20 September 2016) School of Resource and Environmental Management, Simon Fraser University, online (pdf): <http://rem-main.rem.sfu.ca/papers/jaccard/Jaccard-Hein-Vass%20CdnClimatePol%20EMRG-REM-SFU%20Sep%2020%202016.pdf >. More generally, see Mark Jaccard, *The Citizen's Guide to Climate Success: Overcoming Myths that Hinder Progress* (New York: Cambridge University Press, 2020).

[159] See Natural Resources Defense Council, "What Is the Clean Power Plan?" (29 September 2017), online: *National Resources Defense Council* <www.nrdc.org/stories/how-clean-power-plan-works-and-why-it-matters>.

In response to environmentalists' criticisms,[160] particularly the counterargument that there is no necessary connection between a carbon tax and a waiver of liability for fossil fuel companies, [161] a US Congressman spoke out in favour of the proposed deal. The congressman's rhetoric is instructive. First, in an attempt to diminish criticism of oil companies, he stated that "[b]eating up on [them]" makes for "cheap applause."[162] He also characterized tort liability lawsuits against oil companies (which are presently being filed in courts across the United States) as unlikely to succeed or have any effect on carbon emissions.[163] Most tellingly, the congressman argued that convincing oil companies to "acquiesce" to a carbon tax would go a long way toward successfully enacting the tax. If that means passing on what the congressman characterizes as a few "long-shot lawsuits," then the congressional calculus favours the trade-off. [164] Not unlike the Canadian environmentalist conflicted about pipelines described above, it does not occur to this congressman to challenge the regulatory power wielded by the fossil fuel industry; rather, he treats the industry almost as if it were sovereign. As such, no climate policy without its acceptance is even thinkable. However, no climate policy acceptable to today's fossil fuel industry is worth the trouble.

That said, unlike our conflicted environmentalist, there are good reasons to surmise that the congressman is not arguing in good faith. For one, if tort lawsuits against emitters are

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[160] See e.g. Lee Wasserman & David Kaiser, "Beware of Oil Companies Bearing Gifts", *The New York Times* (25 July 2018), online: <www.nytimes.com/2018/07/25/opinion/carbon-tax-lott-breaux.html>.
[161] See *ibid.*
[162] Scott Peters, "Time for a Carbon Tax", Letter to the Editor, *The New York Times* (3 August 2018), online: <www.nytimes.com/2018/08/03/opinion/letters/carbon-tax-litigation-oil-companies.html>. Peters, a California Democrat, was a member of the US House Energy and Commerce Committee's Subcommittee on Energy, and of the bipartisan Climate Solutions Caucus, at the time he expressed this argument.
[163] See *ibid*.
[164] *Ibid.*

such long shots, why worry about them at all, much less make immunity from them a condition precedent for support of a carbon tax? Second, and more important, the congressman uncritically accepts and represents that a carbon tax of US $40 per tonne would constitute an effective GHG-reduction policy. This ignores the fact that Exxon, at the same time that it was ostensibly supporting this proposal, was also publicly announcing its plans to produce 25% more oil by the year 2025.[165] It is safe to surmise that Exxon, like many other major GHG emitters, is utilizing an internal (or "shadow") price on carbon for its own internal cost accounting purposes,[166] and that the shadow price at which Exxon can remain profitable is well above US$40 per tonne. On closer inspection, the proposal proffered by the oil and gas industry's lobbyists and its captured supporters in the US Congress is plainly contrary to the public interest. The information presented to the public in its support is incomplete and misleading at best.

The best response to such biased, partial, and misleading information and expertise is better, independent, transparent, and tested information and expertise. Such information and expertise, however, tends not to be generated internally by public policymaking and regulatory bodies. Neither can such bodies already subject to industry influence and capture be reasonably relied on to reform their own internal incentives and processes (recall Stigler's analysis of the captured Interstate Commerce Commission). In order to circumvent the "Catch-22" of regulatory capture and counter industries' substantial

[165] See Kevin Crowley, "Exxon Doubles Down on Oil: As Rivals Embrace Renewables, the Energy Giant is Betting on Continued Crude Demand", *Bloomberg Businessweek* (15 June 2018), online: <www.bloomberg.com/news/articles/2018-06-15/exxon-doubles-down-on-oil>.
[166] For an analysis of internal or "shadow" carbon prices, see e.g. Jason MacLean, "Trudeau's Carbon Price Clever Politics, Not Credible Climate Policy", *Policy Options* (14 October 2016), online: <policyoptions.irpp.org/magazines/october-2016/trudeaus-carbon-price-clever-politics-not-credible-climate-policy/> [MacLean, "Trudeau's Carbon Price"].

informational advantage, academics in relevant fields of expertise (and in collaboration across disciplines) should take it upon themselves to actively assist regulators in pushing back against industry experts and thereby pushing regulation in a smarter direction in the public interest. The critical question is how best to do so? What mode of academic knowledge production and dissemination is best suited to contributing to this democratic mandate? Drawing on lessons that can be learned from Canada's recent environmental regulatory review process, I proceed in the next part of this chapter to canvass existing approaches and then argue for an emerging model of knowledge production and mobilization capable of generating viable policy and regulatory alternatives that can attract broad popular appeal. This last point – the necessity of attracting broad popular appeal – is critical. The argument advanced below is *not* that academic expertise alone is capable of countering regulatory capture. As discussed in the introduction of this chapter, only a broad, countervailing democratic movement will be capable of countering the enormous economic and political power of the fossil fuel industry (along with its tributary carbon-intensive industries).[167] The argument pursued below focuses on how academics can best assist in catalyzing such a movement.

[167] Writing in *The New York Times* about how to counter California's continued subservience to the oil and gas industry, the noted environmental author and advocate Bill McKibben rightly observed that "in the end, it's up to the rest of us to ensure that he [California Governor Jerry Brown], and the California Legislature and leaders everywhere, do the right thing. *A large movement of citizens is the only power that can match the financial majesty of the oil industry*": See Bill McKibben, "Free California of Fossil Fuels" *The New York Times* (8 August 2018), online: <www.nytimes.com/2018/08/08/opinion/fires-california-fossil-fuels.html> [emphasis added].

III. Countering Capture: Lessons from Canada's Environmental Regulatory Review Process

A. Solutions from Canadian Scholars 1.0

From an environmental protection and sustainability perspective, the era of Prime Minister Stephen Harper has been characterized as a "lost decade."[168] Toward the end of the Harper government's tenure, an audit performed by the Commissioner of the Environment and Sustainable Development concluded that in many key areas, the government lacked a clear plan to resolve the environmental issues likely to arise out of future economic development.[169] Regarding the government's longstanding promise to regulate Canada's petroleum industry, the Commissioner further observed that the government had only consulted on such regulations privately, through a small working group including one province (Alberta) and selected oil and gas industry representatives.[170]

In response to this regulatory lacuna, over 60 Canadian scholars mobilized to collaboratively propose a pathway to a low-carbon economy. This new network, called Sustainable Canada Dialogues (SCD),[171] explained in its first report, "Acting on Climate Change: Solutions from Canadian Scholars," that a thoughtful and systematic discussion

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[168] Winfield, "A New Era of Environmental Governance", *supra* note 88 at 36; Jason MacLean, Meinhard Doelle & Chris Tollefson, "Polyjural and Polycentric Sustainability Assessment: A Once-in-a-Generation Law Reform Opportunity" (2016) 30:1 J Envtl L & Prac 35 at 36.

[169] See Canada, Officer of the Auditor General of Canada, *Commissioner of the Environment and Sustainable Development Releases Fall 2014 Report* (7 October 2014), online: <www.oag-bvg.gc.ca/internet/English/mr_20141007_e_39911.html> [Officer of the Auditor General of Canada, "Fall 2014 Report"].

[170] See *ibid*. Incidentally, in respect of the Harper government's approach to environmental assessment, the Commissioner also expressed her concern that "some significant projects may not be assessed" (*ibid*). This concern was then and remains telling; its significance is discussed below in the conclusion of this chapter.

[171] Sustainable Canada Dialogues, "About Sustainable Canada Dialogues" (2019), online: <www.sustainablecanadadialogues.ca/en/scd>.

of policy options was long overdue in Canada. SCD's initial goal was to inspire and inform ambitious GHG-emissions reductions before December 2015 and the 2015 Paris Climate Conference.[172] The collective made a number of policy and regulatory recommendations based on the peer-reviewed scholarship of its members. The recommendations SCD provided ranged from pricing carbon to making low-carbon electricity production part of federal and provincial climate action plans, to rapidly adopting low-carbon transportation strategies throughout Canada, to integrating land use and energy infrastructure planning in climate mitigation policies, to encouraging the a low-carbon transformation of the building sector, to safeguarding biodiversity and water quality, to supporting sustainable fisheries, forestry, and agricultural practices, to implementing more participatory and open governance institutions.[173]

However, there was little to no apparent take-up of these thoroughly researched evidence-based policy proposals by the (outgoing) Harper government. The Trudeau government, for its part, has since implemented a price on carbon emissions (see the discussion in Part II) and has proposed a fuel-efficiency standard and reforms to the national building code, but none of these policies reaches the level of ambition recommended by SCD.

There are a number of possible explanations for this, including perhaps the most obvious that, despite the brief national media attention paid to SCD's first report following its public

[172] Sustainable Canada Dialogues, "Acting on Climate Change: Solutions from Canadian Scholars" (18 March 2015) at 8, online (pdf): <www.sustainablecanadadialogues.ca/files/PDF_DOCS/SDC_EN_30marchlr.pdf> [SCD, "Acting on Climate Change"].
[173] See *ibid* at 28, 30, 33–34, 36–37, 45–46, 50.

launch in the spring of 2015, neither the Harper government nor the federal Liberal Party was sufficiently aware of SCD's recommendations.

There are, however, at least two other possible – and more likely – reasons why SCD's recommendations did not achieve the traction they deserve. The first is that the recommendations, despite being clearly and cogently crafted as well as accessibly communicated, assumed the form of policy aspirations rather than concrete policy proposals (the carbon price proposal being a partial exception). These were not so much concrete alternatives to the policies in place as they were more general strategic directions and policymaking guidelines. These are instructive, but perhaps not as readily useful or amenable (without more detail) to short-to-medium-term implementation, particularly in the context of a captured policy domain.

The second plausible explanation for the lack of traction achieved by SCD's recommendations is acknowledged – although not in so many words – in SCD's own discussion of oil and gas production in Canada. Working with 2012 figures, SCD's 2015 report noted that oil and gas production was responsible for more than three times the GHG emissions of the rest of Canada's industry.[174] Naturally, SCD recommended that Canada integrate the oil and gas production sector into the government's climate policies.[175] More specifically, SCD recommended the elimination of all direct and indirect subsidies to the petroleum industry[176] Canada first promised to do just that in 2009, but not only has it yet

[174] See *ibid* at 33.
[175] See *ibid* at 7, 33, 40.
[176] See *ibid.*

failed to do so, in 2016 the federal government locked-in subsidies to the liquefied natural gas (LNG) industry until (at least) 2025.[177] In the short-to-medium term, SCD recommended that Canada develop a clear regulatory framework consistent with a transition to a low-carbon society and economy.[178] To help achieve these goals, SCD's report suggested that the federal and provincial governments *could orient the oil and gas industry*.[179]

Would that it were so easy. Reasonable – urgent, even[180] – as these recommendations remain, their articulation alone is insufficient to guarantee their implementation, especially in the Canadian context, where the petroleum industry has oriented the government, not vice versa, and such recommendations are thus caught up in the Catch-22 of regulatory capture reform discussed above. Nevertheless, the independent establishment of SCD as an arm's length academic network capable of generating the evidentiary basis for alternative policies and regulations in the public interest of mitigating climate change and facilitating the transition to sustainability represents a *necessary first step* in developing an academic law reform model capable of countering capture.

To better understand how this academic law reform model can be developed further, it is useful to examine academics' participation in Canada's post-Paris environmental regulatory review process. The level of academic – along with civil society – participation in this post-2015 environmental regulatory review process was enormous, representing

[177] See MacLean, "Trudeau's Carbon Price", *supra* note 166.
[178] See SCD, "Acting on Climate Change", *supra* note 172 at 33.
[179] See *ibid.*
[180] See e.g. Christiana Figueres, "Three Years to Safeguard Our Climate" (2017) 546 Nature 593.

quite possibly the highest level of such participation over the past 25 years in Canada.[181] And yet, this unprecedented level of engagement yielded little if any enhancement of Canada's environmental regulatory processes. The significant public-interest importance of this regulatory review and its ultimate failure merits a close analysis in its own right, and the analysis that follows will seek to clarify the reasons for its failure. In doing so, this analysis will also help to illustrate the comparative strengths and weaknesses of different modes of academic participation in public policymaking, and will serve as the basis of this chapter's proposal of a novel, iterative approach capable of contributing to a countervailing democratic response to regulatory capture.

B. Building Common Ground: A New Vision for Impact Assessment in Canada

Following its election in 2015, the federal Liberal government commenced a review of a number of environmental regulatory processes, foremost among them its environmental assessment processes.[182] The government's particular focus on environmental assessment aligned with the critical governance role that regulatory process has played and continues to play in Canada as a forum to resolve conflicts surrounding energy development, environmental protection, and quite often the intersecting rights and interests of Indigenous peoples.[183] Reflecting this importance, in 2016 the Minister of the Environment and

[181] I am grateful to an anonymous peer reviewer of the earlier version of this chapter as an academic article for making this observation based on that reviewer's own lengthy experience in the field of Canadian environmental law reform.
[182] The government also conducted reviews intended to modernize the National Energy Board and restore lost protections to the *Fisheries Act*, RSC 1985, c F-14 and the *Navigation Protection Act*, RSC 1985, c N-22. See Government of Canada, "Environmental and Regulatory Reviews: Discussion Paper" (June 2017), online (pdf): <www.canada.ca/content/dam/themes/environment/conservation/environmental-reviews/share-your-views/proposed-approach/discussion-paper-june-2017-eng.pdf> [Government of Canada, "Discussion Paper"].
[183] See Winfield, "A New Era of Environmental Governance", *supra* note 88 at 11.

Climate Change established an expert panel to review and make recommendations to strengthen Canada's environmental assessment processes. After conducting extensive public hearings across the country and consulting broadly with affected stakeholders, including Indigenous groups, industry representatives, environmental assessment consultants, ENGOs, and concerned citizens, the expert panel released its final report, *Building Common Ground: A New Vision for Impact Assessment in Canada*,[184] in the spring of 2017.

The expert panel made a number of important, considered recommendations. In particular, the panel concluded that environmental assessments (or "impact assessments" in the panel's parlance) can and should play a pivotal role in supporting Canada's efforts to mitigate climate change.[185] The panel further recommended that environmental assessment processes should base recommendations about whether a given economic activity or project ought to proceed on that activity's or project's contribution to sustainability. As the panel explained, its proposed sustainability-based impact assessment framework was designed to yield outcomes that integrate and promote – on balance – the environmental, health, social, cultural, and economic pillars of sustainability.[186] Moreover, the panel placed considerable emphasis on ensuring that such climate-based and sustainability-based assessments translate into transparent, evidence-based decisions.[187]

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[184] Expert Panel for the Review of Environmental Assessment Processes, "Building Common Ground: A New Vision for Impact Assessment in Canada" (2017), online: <www.canada.ca/en/services/environment/conservation/assessments/environmental-reviews/environmental-assessment-processes/building-common-ground.html>.
[185] See *ibid* at 7.
[186] See *ibid* at 4–5.
[187] See *ibid* at 5.

While the expert panel's sustainability-based approach was widely supported by academics and scientists, its approach was met with skepticism and pointed criticism by industry representatives and supporters.[188] These industry critics declaimed that a sustainability-based approach to energy projects would "have the effect of 'ensur[ing] that nothing will get built'"[189] and that such sweeping decisions ought to be made transparently.[190]

The governance processes recommended by the expert panel, however, would have been remarkably transparent, had they been implemented. In fact, the panel's championing of transparency was a direct response to submissions made by members of the public and other stakeholders throughout the panel's public hearings and consultations across Canada.[191] An analysis of the written submissions made to the panel shows that the government and industry were the only two stakeholder constituencies that did not support a more transparent environmental assessment process; industry representatives were also opposed to increased independence as between industrial proponents and government regulators in respect of decisionmaking.[192] All other stakeholders – that is, Indigenous groups, the general public, academics and scientists, and ENGOs – were virtually unanimous in their support of a more transparent and scientific-evidence-based environmental decisionmaking process. The analysis of the submissions concluded that reforming federal environmental assessment was both politically and scientifically

[188] See Jason MacLean et al, "A Plan that Promotes Environmental Sustainability", *Policy Options* (30 May 2017), online: <policyoptions.irpp.org/magazines/may-2017/plan-promotes-environmental-sustainability/>.
[189] *Ibid*.
[190] See *ibid*.
[191] See *ibid.*
[192] See Aerin L Jacob et al, "Cross-Sectoral Input for the Potential Role of Science in Canada's Environmental Assessment" (2018) 3 FACETS 512.

defensible.[193] Thus, the expert panel's recommendations reflected the strong public interest in greater transparency and use of independent science in environmental decisionmaking. Had those recommendations been implemented, they would have simultaneously shone a light on and substantially improved how these critically important decisions are made.

C. Consultation, Captured

But it was not to be. In June 2017, almost immediately following the release of the expert panel's final report and its critical reception by industry and mainstream media, the federal government released its "Environmental and Regulatory Reviews" discussion paper.[194] While the government's new discussion paper made cursory and generic reference to the expert panels and parliamentary committees that heard submissions from a broad range of stakeholders across Canada, including industry representatives, Indigenous peoples, provincial and territorial authorities, academics and research scientists, and concerned citizens,[195] it failed to mention, let alone discuss, the detailed recommendations made by the environmental assessment expert panel that the government had convened. Rather, the government's discussion paper set out a number of broad principles and aspirations absent specific detail or direction, at least insofar as climate change mitigation and sustainability were concerned. By seeking feedback on the newly proposed approach[196] nominally set out in the discussion paper, despite the discussion paper having set out no discernable approach to speak of, the government effectively resiled from the sustainability-based

[193] See *ibid* at 525.
[194] Government of Canada, "Discussion Paper", *supra* note 182.
[195] See *ibid* at 4.
[196] See *ibid* at 7.

recommendations made by the expert panel. This unexpected move prompted considerable concern among academics, scientists, and environmental advocates that the government was no longer committed to serious action on climate change and sustainability. Moreover, and tellingly, the government's discussion paper intimated present and future support for key industry requests for greater certainty and efficiency. The discussion paper's brief treatment of environmental assessment processes concluded with the following statement:

> **One project – One assessment**
>
> Our approach remains committed to building on what is working well, while seeking to attract and grow investment. In support of this objective, we are considering:
>
> - *Maintaining **legislated project assessment timelines** to provide clarity and predictability*
> - *Providing authority to approve **exceptions to legislated timelines** (e.g. for cooperative assessments with provinces)*
> - *A new early engagement and planning phase to identify issues early and provide clarity on **requirements for the assessment and regulatory phase***
> - ***Maintaining a Project List** to retain clarity on when a federal assessment is required*
> - *A **single government agency** to deliver process integrity and consistency for major projects*
> - *Continued focus on **single window for federal coordination** (e.g. ensuring alignment of assessment and follow-on permitting)*[197]

Even if interpreted charitably at face value, it is impossible to make the case that these commitments are compatible with the objectives of promoting environmental protection, climate change mitigation, the transition to sustainability, or any of the other public interests identified as part of the government's environmental regulatory review process.

[197] *Ibid* at 19 [emphasis in original].

The priorities signaled by a commitment to "one project, one assessment" include economic growth and investment along with procedural and decisionmaking predictability, certainty, and efficiency, none of which is meaningfully – if at all – connected to environmental protection and sustainability.[198] One of the signal insights of Canadian environmental law scholarship is that *duplication* (*e.g.*, overlapping federal and provincial assessment processes) actually improves environmental and public health outcomes.[199] This is especially so in respect of major natural resource extraction projects.[200]

But when interpreted through the conceptual lens developed by Stigler to detect regulatory capture – to look, as precisely and carefully as possible, at who gains and who loses, and by how much[201]– it becomes clear that the priorities advanced under the theme of "one

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[198] Rather, these are precisely the priorities of industry. They track, virtually point by point, the priorities enumerated by the Canadian Energy Pipeline Association (CEPA) in its official response to the expert panel's environmental assessment recommendations. CEPA explained that it recommended (to the expert panel) that environmental assessment processes "should avoid duplication, outline clear accountabilities, be based on transparent rules and processes, ensure procedural certainty *for project proponents*, allow meaningful participation and balance the need for timeliness and inclusiveness. CEPA *is alarmed at the sweeping recommendations contained in the Expert Panel for Review of Environmental Assessment Processes Final Report, Building Common Ground: A New Vision for Impact Assessment in Canada*". See Canadian Energy Pipeline Association, "Response to the Expert Panel Review of Environmental Assessment Processes Final Report, Building Common Ground: A New Vision for Impact Assessment in Canada" (5 May 2017), online (pdf): <cepa.com/wp-content/uploads/2017/06/CEPA-response-to-Expert-Panel-Report-Final.pdf> [emphasis added]. The national law firm Osler, Hoskin & Harcourt LLP, which represents companies in the oil and gas as well as the mining sectors, offered a critique of the expert panel's recommendations in substantially similar terms, emphasizing that any reforms to Canada's environmental assessment processes should consider the impacts to the competitiveness of Canada's resource industries: "Ignoring the economic leg of the sustainability stool is not helpful to informed decision-making." Yet the firm makes no mention whatsoever of any other leg – environmental, social, cultural, health – of Canada's sustainability stool. See Shawn Denstedt & Sander Duncanson, "Expert Report on Environmental Assessment Gives Rise to More Uncertainty" (12 April 2017), online (pdf): <www.osler.com/en/resources/regulations/2017/expert-report-on-environmental-assessment-gives-ri>.

[199] See Wood, Tanner & Richardson, "Whatever Happened to Canadian Environmental Law?", *supra* note 1 at 1020.

[200] As the Federal Court recently recognized in 2017, the *Canadian Environmental Assessment Act, 2012* was a regime designed "to 'promote cooperation and coordinated action between federal and provincial governments'" and major resource extraction projects "will likely have impacts on areas of both provincial and federal responsibility." See *Taseko Mines Limited v Canada (Environment)*, 2017 FC 1100 at paras 159–60.

[201] See Stigler, "Supplementary Note", *supra* note 8 at 140.

project, one assessment" precisely track the express industry concerns and demands for a speedy approach to project assessment that is even more streamlined than the Harper-era *Canadian Environmental Assessment Act, 2012*.[202] The focus on broad and inclusive sustainability championed by the federal government's independent expert panel was quickly and quietly replaced by a focus on even tighter timelines to complete environmental assessments, including less time for public input and Crown consultation with Indigenous communities. In order to speed our natural resources to market, the expert panel's recommendations of strategic and regional sustainability-based assessments were replaced with a framework that envisages the much narrower assessment lens of a single regulatory window operated by a single government agency on a project-by-project basis.[203] Industry had successfully captured the government's environmental regulatory review process.

D. Solutions from Canadian Scholars 2.0

Following the release of the government's disquieting discussion paper, a small group of environmental assessment scholars collaborated on an ad hoc response.[204] Their response,

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[202] See *Canadian Environmental Assessment Act, 2012,* SC 2012, c 19, s 52. For an analysis of the changes introduced in this legislation, see Meinhard Doelle, "CEAA 2012: The End of Federal EA as We Know it?" (2012) 24 J Envtl L & Prac 1. See generally Alan Bond et al, "Impact Assessment: Eroding Benefits through Streamlining?" (2014) 45 Impact Assessment Rev 46.

[203] To gain a fuller understand how much of a departure the government's discussion paper was from the expert panel's final recommendations, and from a sustainability-based model of assessment more generally, see Anna Johnston, "Imagining EA 2.0: Outcomes of the 2016 Federal Environmental Reform Summit" (2016) 30:1 J Envtl L & Prac 1.

[204] See Martin Olszynski et al, "Sustainability in Canada's Environmental Assessment", *Policy Options* (5 September 2017), online: <policyoptions.irpp.org/magazines/september-2017/sustainability-in-canadas-environmental-assessment-and-regulation/> [Olszynski et al, "Sustainability in Canada's Environmental Assessment"]. For the authors' full submission to the federal government, see Martin Olszynski et al, "Strengthening Canada's Environmental Assessment and Regulatory Processes: Recommendations and

which stemmed from their academic research on environmental assessment processes in particular and Canadian environmental law more generally, was premised on the need to meet the following broad objectives: (1) effectively respond to the endemic ineffectiveness of federal environmental laws; (2) simultaneously promote environmental protection, economic opportunity, and socioeconomic equality; (3) generate credible and reliable evidence capable of supporting governmental decisionmaking in the public interest; and (4) respect the Rule of Law and thereby counter the long-entrenched bias toward short-term economic and political gain.[205]

More specifically, this ad hoc academic response to the government's discussion paper argued that sustainability, operationalized as the achievement of long-lasting and mutually reinforcing benefits arising out of the interaction of environmental, economic, social, cultural, and health considerations,[206] must be at the core of the government's approach to assessing and approving economic projects in Canada.[207]

In this respect, issuing a report based on thorough academic scholarship advancing arguments about the nature and general direction of public policy, these academics' response to the regulatory lacuna created after the government resiled from the expert panel's recommendations is substantially similar in *form* to the establishment and the first report of SCD, discussed above. But this ad hoc, episodic response to the government goes further, and takes an iterative and necessary step toward an academic law reform model

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Model Legislation for Sustainability" (18 August 2017), online: <t.co/6WxDKmclBE> [Olszynski et al, "Model Legislation for Sustainability"]. Disclosure: I contributed to this project as a co-author.

[205] See Olszynski et al, "Sustainability in Canada's Environmental Assessment", *supra* note 204 at 18.

[206] See Olszynski et al, "Model Legislation for Sustainability", *supra* note 204 at 18.

[207] See *ibid* at 16.

capable of countering capture. Specifically, these academics' ad hoc report drew upon Canadian case studies to demonstrate, contrary to the claims made by some industry representatives, that sustainability is a workable legal concept capable of providing government, industry, Indigenous peoples, and the public with the level of guidance and regulatory certainty required of a modern regulatory system.[208] And, more pragmatic still, they provided concrete examples of what the new legislative provisions could look like,[209] not only in respect of environmental assessment, but also for the *Fisheries Act*[210] and the *Navigation Protection Act*.[211] Their model legal definition of the sustainability basis of project assessments provides as follows:

> **Sustainability**
>
> The scope of sustainability considerations covers positive and adverse effects in five broad pillar areas—environmental, economic, social, cultural, and health—plus their interactions, with particular emphasis on long-term effects and lasting wellbeing. Progress towards sustainability requires improvements in:
>
> - Socio-ecological system integrity;
> - Livelihood sufficiency;
> - Intragenerational equity;
> - Intergenerational equity;
> - Resource maintenance and efficiency;
> - Transparent and democratic governance;
> - Precaution, prevention, and adaptive design and management; and
> - Immediate and long-term integration of gains in all these aspects of sustainability.[212]

[208] See *ibid* at 19.
[209] See *ibid* at 18, 20.
[210] See *supra* note 182.
[211] See *ibid*.
[212] Olszynski et al, "Model Legislation for Sustainability", *supra* note 204 at 18.

Further, the academics acknowledge that trade-offs among some of these requirements will sometimes be unavoidable, and that the preferred approach to sustainability in such cases is to seek to minimize trade-offs while maximizing the requirements' mutually reinforcing benefits.[213] The academics' report proceeded to provide a precise definition of sustainability trade-offs, establish a sustainability trade-off rule, and apply that rule to environmental assessment processes.[214]

These academics' ad hoc response thus accomplishes two necessary tasks rarely, if ever, attempted by academic work concerned with public interest policy and regulation captured by regulated industry interests: (1) it directly counters criticisms voiced by industry interests in respect of, and in opposition to, public interest regulations – in other words, it directly counters the petroleum industry's information and expertise advantage with better information and expertise; and (2) it mimics a standard and effective tactic employed by many industry representatives by not only suggesting a desired legislative approach, but by also providing alternative legislation in a usable, legal form.

Despite submitting and presenting their report to the federal government, including the Minister of the Environment and Climate Change, the academics' ad hoc contribution, not unlike SCD's first report, appears to have been largely if not entirely ignored. Predominantly tracking the broad principles and guidelines set out in the government's

[213] See *ibid.*
[214] See *ibid* at 20. The authors' report explains that the significance of a trade-off rule to an assessment regime is "to assist in determining when it may be appropriate to accept negative effects on some aspect of sustainability as a cost of achieving positive effects in another aspect." For example, "a trade-off may be allowed if there are no practical options for mitigating the negative effects of an economic undertaking, and there is no reasonable alternative that would entail less regrettable trade-offs" (*ibid*).

June 2017 discussion paper, the government introduced Bill C-69 in early 2018, which included a proposed new federal *Impact Assessment Act*.[215] Regrettably, the federal government's proposed impact assessment (*i.e.*, environmental assessment) legislation offers little prospect of meaningful law reform in the public interest.[216] In particular, the Bill was silent on the need for independent, peer-reviewed science (as opposed to the traditional reliance on proponent-provided science).[217] The Bill scarcely mentioned Canada's commitments under the Paris Agreement or the 2030 Sustainable Development Agenda, and, more problematically, provides no guidance about how those commitments are to factor into the assessment of economic projects.[218] Ultimate project approvals, rather than being based on a legal sustainability test, are to be determined on a highly discretionary ministerial "public interest" basis,[219] in respect of which the Bill offered no mechanism to appeal or otherwise review either the decision or its basis.[220] Overall, the Bill retained much of the Harper-era (and petroleum-industry-friendly) legislative regime it was designed to replace and remedy, the *Canadian Environmental Assessment Act, 2012*.[221]

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[215] Bill C-69*, An Act to enact the Impact Assessment Act and the Canadian Energy Regulator Act, to amend the Navigation Protection Act and to make consequential amendments to other Acts,* 1st Sess, 42nd Parl, 2018, online: <www.parl.ca/DocumentViewer/en/42-1/bill/C-69/first-reading>. The bill's proposed new impact assessment legislation came into force in August, 2019: *Impact Assessment Act,* SC 2019, c 28, s1.
[216] See e.g. Chris Tollefson, "Environmental Assessment Bill is a Lost Opportunity", *Policy Options* (14 February 2018), online: <policyoptions.irpp.org/magazines/february-2018/environmental-assessment-bill-is-a-lost-opportunity/>.
[217] See *ibid*. See also Alana R Westwood et al, "The Role of Science in Contemporary Canadian Environmental Decision Making: The Example of Environmental Assessment" (2019) 52:1 UBC L Rev 243; Erin K Sexton et al, "Canada's mines pose transboundary risks" (2020) 386 Science 376.
[218] See *ibid*.
[219] See *ibid*.
[220] See Meinhard Doelle, "Bill C-69: The Proposed New Federal Impact Assessment Act (IAA)" (9 February 2018), online (blog): *Environmental Law News* <blogs.dal.ca/melaw/2018/02/09/bill-c-69-the-proposed-new-federal-impact-assessment-act/>.
[221] See *ibid.* See also the analysis provided by the Canadian Environmental Law Association showing that the *Impact Assessment Act* is substantially the same as the *Canadian Environmental Assessment Act, 2012*,

That Bill C-69 reflected the government's own June 2017 discussion paper, which itself reflected industry criticisms of the expert panel's recommended approach to environmental assessment, should hardly be surprising by this point. Even a group of academics' commendably pragmatic response to industry's attack on the principle of independent, transparent, and sustainability-based assessment was bound to fall on deaf political ears. Recall, tellingly, the second broad objective those scholars identified as a priority of Canadian environmental laws, that those laws must promote lasting and mutually supporting environmental protection, social justice, *and economic opportunities*. Their otherwise laudable proposals were silent – as is most academic work produced in the field of Canadian environmental law – with respect to the latter priority of economic development. But the contest over regulation, as Stigler's foundational theory of regulation shows, is not only about ideas, or the substantive merits of competing policy proposals. Regulatory capture is also facilitated by the maintenance and support of popular electoral appeal, not just during elections, but also throughout the political cycle as a matter of workaday governance and administrative processes.

More recently, questioning the electoral-politics nostrum that politicians need new ideas, Nobel economist and *New York Times* columnist Paul Krugman argues that, even in respect

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and cannot be said to be an improvement: Richard Lindgren, "Canada's Impact Assessment Act: Myth vs. Fact" (23 July 2018), online (blog): *Canadian Environmental Law Association* <www.cela.ca/IAA-myth-vs-fact>. The Bill was also severely criticized from an Indigenous rights and interests perspective. See e.g. Sara Mainville, "The Ghost of the Harper OmniBus Legislation Continues on with Bill C-69" (9 February 2018), online (blog): *Olthuis Kleer Townsend – LLP* <www.oktlaw.com/ghost-harper-omnibus-legislation-continues-bill-c-69/>. Indeed, the Bill appears to have been roundly despised by all of its stakeholders, including industry, which appeared uncomfortable with even the passing but nonetheless non-binding consideration of sustainability. The Bill may well be a unique case of legislation that is the product of both regulatory capture and public-interest-based electoral politics, as well as a failed attempt to please all stakeholders at once. Further exploration of this particular point is beyond the scope of the analysis here, but see Damien Gillis, "Justin Trudeau's Two-Faced Climate Game", *The New York Times* (2 May 2018), online: <www.nytimes.com/2018/05/02/opinion/trudeau-climate-kinder-morgan-pipeline.html>.

of complex regulatory matters like environmental protection, the basic tools (*i.e.*, direct regulation in some cases, taxes or tradable licenses in others) "are well understood and have worked well in many cases." Krugman emphasizes that, "[w]hat we need most is an effective political majority willing to act on what we already know."[222] This deliberately provocative challenge[223] gestures toward an academic law and policy reform model that has the potential to counter capture by solving for this more nuanced political challenge: The development of laws, policies, and regulations that are not only substantively superior to those preferred and obtained by regulated industries, but are also capable of attracting majoritarian political support. Economic opportunities (*e.g.*, job creation, foreign direct investment and royalties, indirect investments and contributions) will naturally figure predominantly in this equation and must be incorporated into academic responses to regulatory capture of environmental laws and policies. This critical component is discussed next.

E. Solutions from Canadian Scholars 3.0

Canadian environmental law scholars' participation in various phases of Canada's environmental regulatory review process reflects both the standard academic response to instances of regulatory capture, effectively naming and shaming it (solutions from Canadian scholars 1.0), along with episodic, ad hoc approaches that attempt to circumvent the Catch-22 of reforming regulatory capture by directly competing with industry interests

[222] Paul Krugman, "Politicians Don't Need New Ideas", *The New York Times* (2 May 2018), online: <www.nytimes.com/2018/05/02/opinion/politicians-dont-need-new-ideas.html>.
[223] *Ibid.* Krugman, for the record, does not argue that new ideas are irrelevant to policy. His point, rather, is that political coalition-building is even more important, and more difficult, and therefore more of a priority for public policy reformers.

in the contest to influence public policy and regulations (solutions from Canadian scholars 2.0). Both approaches have generated a number of valuable insights and have improved our understanding of the limitations of Canadian environmental law and policy, and the kinds of reforms that are required. Documenting and problematizing capture, and making capture intelligible to the broader public, remain indispensable aspects of generating popular political support for policy reforms in the public interest. Both approaches, moreover, remain relatively rare in environmental law scholarship as compared to the predominant approach of "liberal environmentalism" (discussed below), and are thus all the more laudable. But neither approach has yet succeeded in resolving the root cause of those limitations, the obstacle precluding reforms in the public interest. Until we do so, our analyses and policy proposals in respect of Canada's climate change commitments under the Paris Agreement and in respect of the UN SDGs will remain "academic" in the worst, most pejorative meaning of the term.

However, a third iterative and potentially paradigm-changing approach (3.0) is emerging. Growing out of the SCD scholarly network is an innovative action-research initiative comprised of "Low-Carbon Energy Transition Learning Projects".[224] Structured as a transdisciplinary network of Canadian climate scholars, private-sector renewable energy producers, host communities, and Natural Resources Canada (a federal government ministry, colloquially known as NRCan), SCD's low-carbon energy transition research seeks to (1) initiate transformative low-carbon energy transition learning projects, (2)

[224] For more information about the low-energy transition learning projects currently under way by the members of SCD and its partners, see Dialogues on Sustainability, "Work in Progress", online: *Sustainable Canada Dialogues* <www.sustainablecanadadialogues.ca/en/scd/workinprogress>.

facilitate co-learning among experiment participants to broaden and scale up low-carbon energy initiatives in Canada, and (3) promote the co-design of evidence-based climate change and sustainability policies capable of enabling Canada to meet its Paris Agreement and SDG commitments.[225] Initial participants (in addition to SCD scholars and NRCan representatives) include the Government of Prince Edward Island, XPND Capital (a private investment firm), the City of Toronto Solid Waste Management Services, SaskPower (a Crown-owned electrical utility), Valard Construction, First Nations Power Authority, and a number of remote Indigenous and Northern host communities.[226]

The City of Toronto's waste-to-renewable-natural-gas project, for example, seeks to scale up bio-methane upgrading technology to transform raw biogas (produced from processing green recycling bin organic waste) into renewable natural gas. The City aims to expand this project from one to four waste management sites and produce approximately 65 million cubic metres of renewable natural gas per year, the equivalent GHG emissions reduction of taking 35,000 cars off the road annually. Moreover, once injected back into the natural gas pipeline, renewable natural gas can be used to fuel vehicles and provide electricity or heat to homes and businesses. This is part of what is called a closed-loop approach (*e.g.*,

[225] See Rosenbloom et al, "Transition Experiments", *supra* note 10 at 377-380.
[226] See Catherine Potvin, "Statement of Work (SOW) – NRCan's Long-Term Economic and Policy Research Agenda" (2018) [unpublished, archived at McGill University (on file with the authors)] [Potvin, "NRCan's Long-Term Economic and Policy Research Agenda"]. See also SCD's internal report to Natural Resources Canada: Catherine Potvin et al, "A Framework to Evaluate Low-Carbon Energy Transitions Learning Projects" (September 2018), online (pdf): *Sustainable Canada Dialogues* <www.sustainablecanadadialogues.ca/pdf_2018/SCD_Evaluation_Report_with_appendices.pdf >.

the organic waste collection trucks will ultimately be powered by the waste they collect) and is a part of the City of Toronto's efforts to develop a circular economy.[227]

The initial – and still ongoing – phase of this collaboration is instructive. In 2018 NRCan launched its Long-Term Economic and Policy Research Agenda.[228] The Canadian Federal Budget 2018 expressed an intention to fulfill Canada's commitment under the Paris Agreement to reduce GHG emissions and transition to a low-carbon economy.[229] This transition will require the implementation of a mix of different clean energy sources to meet national energy demands. What that precise and changing mix will look like in the short, medium, and long term, however, is presently unknown. Informed policy and carefully crafted regulations will be crucial to moving away from the current, business-as-usual trajectory in a way that addresses clean energy goals but also maximizes economic benefits, maintains competitiveness and innovation, and considers environmental and social impacts.[230] The purpose of NRCan's policy-research agenda is to co-develop with Canadian scholars and renewable-energy stakeholders an analytic framework to systematically select and evaluate a set of low-carbon-energy transition projects by field-testing their feasibility.[231] The conclusion of this initial phase will – ideally – meaningfully

[227] See generally City of Toronto, "Backgrounder: City of Toronto's Waste-to-Renewable-Natural-Gas Project" (20 July 2018), online: <www.toronto.ca/home/media-room/backgrounders-other-resources/backgrounder-waste-to-renewable-natural-gas-project/>.
[228] Potvin, "NRCan's Long-Term Economic and Policy Research Agenda", *supra* note 226.
[229] See Government of Canada, *Equality + Growth – A Strong Middle Class* (27 February 2018), online (pdf): www.budget.gc.ca/2018/docs/plan/budget-2018-en.pdf. For a summary of the budget's provisions relating to the government's climate commitments, see e.g. Isabelle Turcotte, "Budget 2018 builds on last year's commitment to climate change" (28 February 2018), *Pembina Institute* (blog), online: <https://www.pembina.org/blog/budget-2018-builds-on-last-years-commitment>.
[230] See Potvin, "NRCan's Long-Term Economic and Policy Research Agenda", *supra* note 226.
[231] See *ibid.*

inform the federal government's policy and regulatory options, including future budgetary outlays, in the medium term.

Although still in its preliminary stages, SCD's low-carbon energy transition research complements formal economic models of the potential of carbon pricing and other clean-energy regulations under political constraints. Those models suggest – but fall short of empirically demonstrating – that encouraging the near-term deployment of clean energy can yield a number of public policy benefits. Such benefits include potential economies of scale, where scaling up a local experiment is possible; continuous learning by doing; and, not the least of these, the creation of a clean-energy political constituency with a strong interest in its own growth. Taken together, these developments may translate into politically durable climate policies at multiple levels of governance.[232] The keys to creating climate-policy durability will be to: (1) improve economic opportunities for stakeholders from multiple sectors, including communities, businesses, public bodies, and nongovernmental organizations; and (2) contribute to greater sustainability and widely dispersed low-carbon co-benefits. Put another way, low-carbon energy experiments will be successful insofar as they contribute to transformative – not merely incremental – socio-technical change and a just transition to sustainability.[233]

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[232] Jenkins & Karplus, "Carbon Pricing", *supra* note 85 at 32.

[233] But see Daniel Rosenbloom, Brendan Haley & James Meadowcroft, "Critical Choices and the Politics of Decarbonization Pathways: Exploring Branching Points Surrounding Low-Carbon Transitions in Canadian Electricity" (2018) 37 Energy Research & Soc Science 22 at 33. They argue that low-carbon transition pathways in and of themselves will not resolve perennial tensions surrounding centralization versus decentralization, conservation versus expansion, economic development versus environmental performance, and so on. However, there is no reason why these tensions and trade-offs cannot be continuously renegotiated as a part of low-carbon transition experiments themselves, particularly if the priorities of transformative and just socio-technical change are foregrounded. Of course, this is easier said than done, and will often fall to academics in particular to advocate.

SCD's low-carbon energy transition research likewise aligns with the applied research agenda of identifying and communicating the tangible "co-benefits" of addressing climate change: Economic development and enhanced community resilience. As discussed in the conclusion of chapter two, emerging climate change communication research suggests that climate policies framed as having co-benefits motivate pro-environmental action and commitment to a degree that is on par with the normative pre-commitment that climate change is important, and does so independent of that normative pre-commitment.[234] Thus, individuals "convinced" of the importance of addressing climate change as well as individuals who are "unconvinced" are equally likely to be motivated to actually act on climate change through citizenship, consumerism, and making financial donations when they learn of the integrated economic and local communitarian co-benefits of climate change policies.[235] Those identifying as "unconvinced" about the importance of climate change appear to be especially influenced by the prospect of economic development co-benefits.[236]

As a model of academic law and policy reform, the approach embodied by (but not limited to) SCD's low-carbon energy transition research also tracks our understanding of the theory and practice of regulatory capture. It is capable of meeting and exceeding regulatory industries' informational and expertise advantage vis-à-vis their public regulators. It is also

[234] See Paul G Bain et al, "Co-Benefits of Addressing Climate Change Can Motivate Action Around the World" (2016) 6 Nat Clim Change 154 [Bain et al "Co-Benefits"]. See also Jason MacLean, "The Problem with Canada's Gradual Climate Policy", *Policy Options* (26 October 2018), online: <policyoptions.irpp.org/magazines/october-2018/the-problem-with-canadas-gradual-climate-policy/>. The potential of the co-benefits approach in the Canadian climate policy context is discussed further in chapters five and six of this thesis.
[235] Bain et al "Co-Benefits", *supra* note 234 at 155-156.
[236] *Ibid.*

capable – *potentially*, over time – of meeting and exceeding regulated industries' ability to provide governments with the means of maintaining electoral appeal and support while governing by co-developing public policies that attract broad democratic appeal. The aim of this academic role in public policymaking is not only to counter regulatory capture, ambitious a task as that is, but also to *supplant* regulated industries and their representatives in the policymaking and regulatory process by attending to the public dimensions of policy and regulation and their broader political attractiveness. Under this model of academic law and policy reform, academics cease attempting merely to *inform* policies and regulations from the outside. Instead, they seek to partner with regulators and proponents whose projects are in the public interest (and who compete with those industries that have captured regulation), thereby entrenching independent and methodologically robust knowledge production in the public policy and regulatory process itself. In this sense, the approach embodied by SCD's low-carbon energy transition research builds on and adds a new dimension to otherwise "actionable science," or science that targets a specific knowledge gap in a specific decisionmaking context.[237] Even insofar as actionable scientific research seeks to collaborate with government agencies, as well as affected stakeholders, SCD's focus on additionally partnering with industry proponents – *e.g.*, renewable energy proponents – whose dominant competitors have captured regulators is not only novel, but crucial to countering those competitors' capture of public policies and regulations.

[237] See e.g. Margaret A Palmer, "Socioenvironmental Sustainability and Actionable Science" (2012) 62:1 BioScience 5; Paul Beier et al, "A How-To Guide for Coproduction of Actionable Science" (2017) 10:3 Conservation Letters 288.

Of course, no academic model is perfect, and the preliminary model sketched above is no exception. Three caveats in particular merit discussion. First is the stubborn fact of political economy. Academics alone cannot hope to match the massive financial power of the oil and gas industry, or other carbon-intensive industrial sectors. To suggest otherwise would be to understate the gravity of the very problem – regulatory capture – calling for greater academic participation in public policymaking in the first place. Nevertheless, it is important to recall the lessons of Stigler's theory of regulation and the tactics outlined in the Powell Memo. Industries capture regulation not only (or even primarily) with money, but also by providing legislators and administrative officials with useful, actionable knowledge. While the petroleum industry and its ilk maintain a financial advantage, they hardly have a monopoly over politically useful knowledge. If more academics orient their research programmes towards public policymaking, they can begin to replace one of industry's principal processes of influencing law and policy. While this alone does not guarantee that legislators and administrative officials will choose to collaborate with such policy-minded academics, such academics should not expect to be taken seriously if they continue to merely complain about the perversions of regulatory capture from the sidelines. By approaching policymakers with proposals to help coproduce politically useful knowledge, academics may find themselves increasingly welcome in the precincts of law and policymaking.

The second caveat is that regulatory capture is just as likely to occur within a green economy framework as it has in our current natural-resources-extractivism economic framework; the very urgency of hastening the transition to a low-carbon economy may

even make some form of regulatory capture not only possible, but likely.[238] And of course, co-optation of sustainability discourse is always a possibility – Canadians need only recall the Harper-era discourse of "Responsible Resource Development"[239] or, for that matter, the current Trudeau-era mantra of the environment and the economy going hand in hand. The same fate could befall the "co-benefits" climate policy model. The evaluative aspect of academic engagement in public policymaking, the focus of the first phase of SCD's low-carbon energy transition research discussed above, is therefore critical. Evaluative assessments of public policy pilot projects must continue to focus on ensuring that policy initiatives are directed toward transformative and *just* socio-technical changes, and not the reproduction of entrenched interests, even if those interests turn out to be green.

The third caveat is the still preliminary and relatively untested nature of the proposed model, both conceptually and in the specific form of SCD's low-carbon energy transition research. How can we know whether this model will work? What makes it better than Solutions from Canadian Scholars 1.0 or 2.0?

The lack of success of models 1.0 and 2.0 is evident. Notwithstanding the likely unprecedented level of academic and civil society engagement in the recently concluded federal environmental regulatory review process, the result was dismal. The legislative proposals arising out the review process make marginal, incremental, and at best technical

[238] See e.g. Michael B Gerrard, "Legal Pathways for a Massive Increase in Utility-Scale Renewable Generation Capacity" (2017) 47 Environmental L Reporter 10591 (arguing for expedited environmental assessments and approvals for renewable energy projects).
[239] Winfield, "A New Era of Environmental Governance", *supra* note 88 at 13.

improvements to a suite of regulatory processes that Canadians already appear not to trust, not unreasonably.

How to explain this particular law-reform failure? While a comprehensive answer is not possible here, academics' and ENGOs' reticence to directly call out and challenge the federal government's capture by the oil and gas industry and related carbon-intensive sectors surely figures prominently. Most academic and civil society participants in the review process adopted an excessively deferential and diplomatic posture, ostensibly, to preserve their access to and participation in the review process, and the chance – however slim – that accompanies access and participation of making modest, marginal improvements to the government's approach without challenging the underlying assumptions of the approach itself. Indeed, the comparatively more radical Solutions from Canadian Scholars 1.0 and 2.0 described above hardly registered in the regulatory review process, largely because the review process had already been captured.

The more diplomatic mode of environmental advocacy and scholarship that attended the regulatory review process, however, is hardly novel. It has been described repeatedly as "liberal environmentalism" and held up as one of the principal reasons that environmental law and policy both domestically and internationally has continually failed to contribute to meaningful – *transformative* – environmental outcomes.[240] Liberal environmentalism

[240] See e.g. Steven Bernstein, *The Compromise of Liberal Environmentalism* (New York: Columbia University Press, 2001). For a preliminary application of this concept to Bill C-69 and Canadian environmentalists' otherwise surprising defence of the Bill's proposed legislation, the *Impact Assessment Act*, see Jason MacLean, "Kill Bill C-69—It Undermines Efforts to Tackle Climate Change", *The Conversation* (25 October 2018), online: <theconversation.com/kill-bill-c-69-it-undermines-efforts-to-tackle-climate-change-105118>.

advocates for environmental protection that is predicated on the maintenance of a liberal political order and capitalist – and extractivist – economy.[241]

In this context, "Solutions from Canadian Scholars 3.0" and ideally its subsequent iterations both builds on and advances beyond models 1.0 and 2.0 because of its willingness to take up the underlying challenge of sustainability described in the introduction of this chapter: To articulate and advocate for fundamentally different goals for our society, including a fundamentally different economic model in which maintenance of ecological integrity is a precondition to – not a predicate of – all economic development.[242] By seeking to counter regulatory capture in this foundational manner, model 3.0 also directly addresses the growing structural power of capital and corresponding weakening of countervailing constituencies in Canada.[243]

Preliminary or not, however, model 3.0 generally and SCD's low-carbon energy transition research in particular are arguably not only promising, but necessary. Low-carbon energy transition and related policy-learning projects are occurring at an increasing rate globally; the literature describing them is already vast and diverse.[244] There is an urgent need, as a matter of both scholarship and policymaking, to identify and link the "best practices" in the realm of climate actions and government policies at multiple levels of governance. The

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[241] See *ibid*.
[242] See Wood, Tanner & Richardson, "Whatever Happened to Canadian Environmental Law?", *supra* note 1 at 1039–40.
[243] See the scholarly literature cited in *supra* note 91.
[244] See e.g. Jochen Markard, Rob Raven & Bernhard Truffer, "Sustainability Transitions: An Emerging Field of Research and its Prospects" (2012) 41:6 Research Policy 955; Sander Chan et al, "Reinvigorating International Climate Policy: A Comprehensive Framework for Effective Nonstate Action" (2015) 6:4 Global Policy 466; Thomas Hale, "'All Hands on Deck': The Paris Agreement and Nonstate Climate Action" (2016) 16:3 Global Environmental Politics 12; Jason MacLean, "Rethinking the Role of Non-State Actors in International Climate Governance" (2020) 16:1 Loy U Chi Intl L Rev 21.

model of direct and evaluative academic participation in such policymaking efforts set out in this chapter is one ideally suited to this critical task.

IV. Conclusion: Capture, Continued

Regarding the inherent inconsistency of climate policymaking pursuant to the UN Paris Agreement observed at the level of the UN Intergovernmental Panel on Climate Change (IPCC), where climate science and climate politics continue to conflict and diverge,[245] one IPCC participant has argued that if climate policy advisors really want to make the world a better place, they will have to deal with the political world as it really is, and not with policymakers' idealized self-representations, let alone the oversimplified assumptions about political action used in so many textbooks and models.[246]

And yet, prevailing understandings of the interface of law, policy, and climate science continue to labour under what is a functionalist and unrealistic textbook model of the regulatory cycle.[247] In this oversimplified cycle, a specific policy objective is established (*e.g.*, reduce GHG emissions) to inform decisionmaking and rulemaking (*e.g.*, set a carbon price), after which it is implemented. *Ideally*, decisions and their consequences are then evaluated, and the evaluation results cycle back to redesign to improve the original

[245] For a detailed description of the tensions between climate science and its mistranslation by politicians as part of the IPCC reporting process, see Geoff Mann & Joel Wainwright, *Climate Leviathan: A Political Theory of Our Planetary Future* (New York: Verso, 2018) at 61–67.
[246] See Oliver Geden, "The Paris Agreement and the Inherent Inconsistency of Climate Policymaking" (2016) 7 Wiley Interdisciplinary Rev Climate Change 790 at 795 [Geden, "The Inherent Inconsistency of Climate Policymaking"].
[247] See e.g. Jonathan Moore et al, "Towards Linking Environmental Law and Science" (2018) 3 FACETS 375.

objective and its implementation.[248] Science policy advice, under this oversimplified and idealized model, proceeds on the assumption that policymakers' and regulators' primary interest resides in improving policy and regulatory performance.[249] Whereas in reality, which is far messier and combative, most academics and scientific advisors lack the granular understanding of how policy and regulations are actually not only captured but also (mis)conceived and incompletely and improperly implemented.[250] Nor, crucially, as discussed throughout this chapter, do academics and scientists tend to account for – or respond directly to – the consideration that policymakers and regulators pay to industry demands and electoral concerns.

In a world of regulatory capture and the incoherent policies and regulations that capture yields – a world, in other words, where simply producing and presenting the best available evidence is far from sufficient – the key task at hand for policy-focused academics is one of critical self-reflection and methodological adaptation.[251] This means critically re-evaluating how we analyze laws and policies, including the prospects for their reform, and then iteratively modifying our research methods accordingly. This chapter represents one such attempt to practice this policy-engaged approach to academic scholarship on climate change policy.

And yet, in the current policy and regulatory context in Canada concerning our commitments under the Paris Agreement and the UN 2030 Sustainable Development

[248] See *ibid*.
[249] See Geden, "The Inherent Inconsistency of Climate Policymaking", *supra* note 246 at 792.
[250] See *ibid* at 795.
[251] See Bonnie L Keeler et al, "Society is Ready for a New Kind of Science—Is Academia?" (2017) 67:7 BioScience 591.

Agenda, the predominant academic approach to policy analysis is to continue to labour under the simplified conception of the public policy and regulatory cycle, making technocratic recommendations aimed at incremental improvements at the margins of already captured legislation. For example, when Bill C-69 was discussed in detail by academic and ENGO-based witnesses giving evidence about the Bill's deficiencies and proposing marginal, technical improvements before the Parliamentary Standing Committee on Environment and Sustainable Development, the federal government appeared to have had already decided – outside the formal regulatory review process – that *in situ* oil sands projects that use steam to release deeply deposited bitumen would be exempt from the Bill's proposed *Impact Assessment Act.*[252] One ENGO representative characterized this regulatory exemption as "a federal abdication of responsibility"[253] and proceeded to explain – as if, by this point, any explanation were truly needed – that the federal government's language was "almost identical to a request made by the Canadian Association of Petroleum Producers".[254] Here it is helpful to recall the Commissioner of the Environment and Sustainable Development's concern, registered in 2014, that under federal environmental assessment rules amended by the Harper government, in close consultation with the petroleum industry, "some significant projects may not be assessed."[255]

[252] See Mia Rabson, "Selected Oilsands Projects May Avoid New Environmental Assessment Rules", *CBC News* (27 April 2018), online: <www.cbc.ca/news/politics/oil-sands-exempt-assessment-rules-1.4639525> [Rabson, "Selected Oilsands Projects"].
[253] *Ibid*.
[254] *Ibid.*
[255] Commissioner of the Environment and Sustainable Development, "Fall 2014 Report", *supra* note 169.

"It fits a pattern," the ENGO representative continued in respect of the then-newly-proposed *in situ* exception, "of industry attempting to delay, stall, block or water down regulations and legislation *and they've been fairly successful at it thus far*."[256]

If by "thus far" our understandably frustrated ENGO representative meant "throughout much if not the entire history of Canadian environmental law and regulation," then industry has been fairly successful indeed. The critical question is whether and how academics focused on environmental protection and sustainability can critically reflect on their methodologies and fashion new ways of responding to this corrosive form of regulatory capture. This chapter has attempted to critically assess prevailing – and largely ineffective – academic approaches to capture, and to propose a new model potentially capable of directly countering capture. Contrary to the predominant narrative that policy-focused academics should not try to actively influence policymaking and regulatory processes lest they compromise their supposed neutrality,[257] if academics do not bring their methodological rigour and integrity to bear on the root causes of the public policy issues they study, they run the risk of producing knowledge that is "academic" in the most pejorative – and perhaps deserved – sense of the term. Given the stakes in the climate policy context, anything less amounts to an abdication of professional privilege and responsibility.

[256] Rabson, "Selected Oilsands Projects", *supra* note 252 [emphasis added].
[257] See e.g. Oliver Geden, "Climate Advisers Must Maintain Integrity" (2015) 521 Nature 27. But see David C Rose, "Five Ways to Enhance the Impact of Climate Science" (2014) 4 Nat Clim Change 522.

This concludes Part I of the thesis. The three chapters in Part I have sought to illuminate the "black box" of Canadian climate law and policy in the post-Paris-Agreement era. In these chapters I have advanced the argument that Canada's inaction and ineffectiveness in response to climate change is a result of the oil and gas industry's (and other carbon-intensive interests') capture of Canadian environmental law, policy, and regulation. Indeed, regulatory capture explains not only Canada's climate inaction, but also its peculiarly impoverished policy imagination, including the ideological identification of the broad public interest with the private, special interests of carbon-intensive economic actors, rendering Canada a "carbon democracy." Whether academics and environmental advocates can usher in a new form of climate law and policymaking remains very much an open question. If such a new law-and-policy model is to succeed, it will depend largely on Canadians themselves, and will be driven primarily by bottom-up, polycentric efforts to align Canadian public policy priorities with the imperatives of climate science. This is the focus of Part II of the thesis, *below*.

PART II

Environmental law is a means to an end, not an end in itself.[1]

In the three chapters making up the second Part of this thesis I take up the challenge expressed in chapter three of critically re-evaluating how law scholars tend to analyze Canadian climate policies, laws, and regulations. Those policies, laws, and regulation are at once means and ends, inextricably bound up together as complexes of legal doctrines, normative values, and political priorities. The task of understanding and reforming Canadian climate policy is not, however, to artificially extricate narrowly cast questions of law and treat them as if they come into being and operate – if they come into being and operate at all – in a formalist legal vacuum. The task, rather, is to understand policies, laws, and regulations as mutually constructing and reconstructing each other. In the chapters in this Part of the thesis I accordingly examine, not only case law, doctrine, and formal legal submissions, but also the charges and justifications that public officials proffer in the news media as well as the law-and-policy discourses of a wide variety of stakeholders, including Indigenous peoples, industry players and representatives, ENGOs, climate scientists, public opinion pollsters, and political pundits.

Specifically, in chapter four[2] I examine the "crude politics" – pun intended – underlying the challenges to (1) the federal government's carbon-pricing framework, (2) British

[1] Stepan Wood, Georgia Tanner & Benjamin J Richardson, "Whatever Happened to Canadian Environmental Law?" (2010) 37:3 Ecology LQ 981 at 1039-1040.
[2] An earlier version of this chapter was published in the *University of New Brunswick Law Journal*: Jason MacLean, "The Crude Politics of Carbon Pricing, Pipelines, and Environmental Assessment" (2019) 70 UNBLJ 129.

Columbia's proposed regulation of the flow and potential spills of heavy crude oil within its borders, and (3) the federal government's Bill C-69 and its then-proposed-and-now-enacted *Impact Assessment Act*. I argue that the constitutional law and law reform arguments advanced in respect of carbon pricing, pipeline approvals and regulations, and environmental assessment processes are inescapably political.

In chapter five[3] I analyze the advisory opinions of the Saskatchewan and Ontario courts of appeal in respect of the federal government's *Greenhouse Gas Pollution Pricing Act*. I argue that the courts' opinions reflect and reinforce Canadians' ambivalence about climate change and, critically, the country's assuredness that "business as usual" is a rational and responsible law and policy response.

With chapter six[4] I conclude the thesis by critically examining arguments made in favour of constitutionalizing a right to a healthy environment as a means of responding to climate change. I argue that advocates of constitutionalized environmental rights (1) greatly exaggerate the transformative potential of case-by-case litigation, (2) pay insufficient attention to the bottom-up, normative foundations of effective public policies, and (3) grossly underestimate – and fail to attend to – the political price tag of constitutional

[3] An earlier version of this chapter was published in the *Saskatchewan Law Review*: Jason MacLean, "Climate Change, Constitutions, and Courts: The *Reference re Greenhouse Gas Pollution Pricing Act* and Beyond" (2019) 82 Sask L Rev 147.
[4] An earlier version of this chapter was published in the *Ottawa Law Review*: Jason MacLean, "You Say You Want an Environmental Rights Revolution? Try Changing Canadians' Minds Instead (of the *Charter*)" (2018) 49:1 Ott L Rev 183.

amendments. I conclude that environmental advocates should prioritize the bottom-up drivers of greater public engagement in polycentric environmental governance.

4 THE CRUDE POLITICS OF CARBON PRICING, PIPELINES, AND ENVIRONMENTAL ASSESSMENT

> *Therefore, whilst the unity and consolidation connected with Legislative Unity was obtained on the one hand, due care and attention to the local matters interesting to each Province were provided for by the preservation of local parliaments, and those powers were so arranged as to prevent any conflict or struggle which might lead to any difficulty between the several sections.*[1]

> *The Attorney General submits that the Court should not be swayed by arguments about the importance of climate change in today's world…. Maintaining the jurisdictional balance of the division of powers is always more important.*[2]

In the fall of 2018 the United Nations Intergovernmental Panel on Climate Change (IPCC) issued a special report on the climate science and policy implications of 1.5 ºC or higher of global warming above the pre-industrial norm.[3] Its conclusions are disturbing. There are significant climate and sustainability differences between holding warming to 1.5 ºC as opposed to merely below 2 ºC; the latter being the original primary target of the Paris Agreement on climate change, the former originally being the Agreement's more ambitious, aspirational target.[4] Rapid, systemic, and unprecedented changes to

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[1] Charles Tupper, "Union of the Colonies" (10 April 1865), *Macdonald-Laurier Institute* (blog), online: https: < https://www.macdonaldlaurier.ca/union-colonies-speech-honourable-provincial-secretary-charles-tupper-april-10-1865/>. For the provenance of this quotation, see Charles Tupper, *Speech of the Honourable Provincial Secretary On the Union of the Colonies* (Halifax, NS: Queen's Printer in Nova Scotia, 1865), online: < https://archive.org/details/cihm_50788/page/n11/mode/2up>.

[2] *Reference re Greenhouse Gas Pollution Pricing Act*, 2019 SKCA 40 (Factum of the Attorney General of Saskatchewan at para 50 [Attorney General of Saskatchewan, "Saskatchewan's Carbon Pricing Factum"]). See also Dwight Newman, "Wrecking the Federation to save the Planet", *C2C Journal* (3 April 2019), online: <https://www.c2cjournal.ca/2019/04/wrecking-the-federation-to-save-the-planet/>.

[3] United Nations Intergovernmental Panel on Climate Change, "Special Report: Global Warming of 1.5 ºC" (November 2018), online (pdf): <https://www.ipcc.ch/site/assets/uploads/sites/2/2019/05/SR15_SPM_version_report_LR.pdf> [IPCC, "Global Warming of 1.5 ºC"].

[4] *Paris Agreement, being an Annex to the Report of the Conference of the Parties on its twenty-first session, held in Paris from 30 November to 13 December 2015 — Addendum Part two: Action taken by the Conference of the Parties at its twenty-first session*, 29 January 2016, Dec 1/CP.21, CP, 21st Sess, UN Doc

international and local socioeconomic systems are required to hold warming to 1.5 ºC and stave off the most disruptive consequences of climate change.

The consequences of climate change, of course, are no longer exclusively the concern of future generations; the planet, including Canada, is already contending with climate change and its costs. According to the Canadian installment[5] of the Lancet's global project[6] tracking climate change's public health impacts, climate change is contributing to increased wildfires, extreme heat events, unstable Arctic ice conditions, changes in Lyme disease distribution, and adverse impacts on food insecurity and mental health across Canada. The Canadian Public Health Association argues that the delayed response to climate change over the past 25 years has jeopardized human life and livelihoods. While these effects will disproportionately impact the most vulnerable in our society, every community will be affected, and present emissions pathways are heading toward levels of warming and associated climatic changes that will very likely exceed our ability to adapt.[7]

However, neither climate change nor sustainability is a binary, either/or phenomenon; a range of outcomes is possible. Similarly, the direction and pace of emissions pathways are highly contingent on policy choices. The International Energy Agency's (IEA) 2018 world energy outlook underscores this point. Regarding the "huge gap" between the IEA's

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FCCC/CP/2015/10/Add.1 at 21–36, online (pdf): <https://unfccc.int/resource/docs/2015/cop21/eng/10a01.pdf> [Paris Agreement].

[5] Lancet Countdown, Canadian Medical Association, & Canadian Public Health Association, "Lancet Countdown 2018 Report: Briefing for Canada's Policymakers" (November 2018), online (pdf): <http://www.lancetcountdown.org/media/1418/2018-lancet-countdown-policy-brief-canada.pdf> [Canadian Public Health Association, "Lancet Countdown 2018"].

[6] Nick Watts et al, "The 2018 report of the *Lancet* Countdown on health and climate change: shaping the health of nations for centuries to come" (2018) 392:10163 The Lancet 2479, online: <https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)32594-7/fulltext>.

[7] Canadian Public Health Association, "Lancet Countdown 2018", *supra* note 5.

"current policies scenario" (*i.e.*, "business as usual") and its "sustainable development scenario," whereby accelerated clean energy transitions put the world on track to meet the goals related to climate change, universal access to energy, and clear air, the IEA notes that "[n]one of these potential pathways is preordained; all are possible. *The actions taken by governments will be decisive in determining which path we follow*."[8]

What path will Canada follow? Canada's rhetoric aside, as established in the chapters in Part I of this thesis Canada remains more a climate laggard than leader. Were the world to adopt Canada's current greenhouse-gas-reduction ambitions as a global benchmark, for example, the world would be on pace for a staggering 5.1 ºC of warming by the end of the century.[9]

In this chapter, I attempt to unpack a particularly problematic paradox of Canadian climate policy following the adoption of the Paris Agreement: Namely, the simultaneous acknowledgement of the need to act urgently and ambitiously on climate change, on the one hand, and on the other hand the decision – taken over and over again – to delay meaningful action by disputing narrow but largely settled questions of jurisdiction and regulatory responsibility while steadfastly supporting and subsidizing *expanded* fossil fuels production and export. These disputes delay and distract us from the kinds of complex and

[8] International Energy Agency, "World Energy Outlook 2018: Executive Summary" (2018) at 1, online: <https://www.iea.org/weo2018/> [emphasis added] [IEA, "World Energy Outlook 2018"].
[9] Yann Robiou du Pont & Malte Meinshausen, "Warming assessments of the bottom-up Paris Agreement emissions pledges" (2018) 9:4810 Nature Communications 1 at 5. This should not necessarily be taken as an indictment of either the bottom-up architecture of the Paris Agreement (discussed in chapter one of this thesis) or the flexible and cooperative nature of Canada's Pan-Canadian Framework on Clean Growth and Climate Change policy, including its implementing legislation, the *Greenhouse Gas Pollution Pricing Act*, which is discussed in the next part of this chapter and in further detail in chapter five. The challenge is how to enhance the ambition of each, which is ultimately a normative and political question.

controversial policy choices that we need to debate and decide. Delay courts – quite literally – disaster.

This chapter unfolds as follows. In the first part, I examine the constitutional challenge to the federal government's carbon-pricing framework referred to the Saskatchewan Court of Appeal by the Saskatchewan provincial government. By examining the inconsistent and misleading legal submissions advanced by both Saskatchewan and Ottawa, I argue that this judicial reference, formally and ostensibly focused on constitutional law, serves to effectively mask the underlying ineffectiveness of each of these government's climate change policies.

In part II of the chapter, I examine British Columbia's referral to the BC Court of Appeal of a series of interrelated constitutional law questions about the province's proposed regulation of the flow and potential spills of heavy crude oil within its borders, and the federal government's assertion of its paramount jurisdiction over the approval and regulation of interprovincial pipelines. Once again, I argue that these governments' legal submissions – and their public pronouncements – about their jurisdiction over matters of environmental protection belie the underlying ineffectiveness of their actual environmental policies and regulations.

In part III of the chapter, I attempt to bring these tensions and contradictions into even clearer relief by examining the controversy over the federal government's tabling of Bill C-69 and the bill's proposed *Impact Assessment Act*. I argue that the law-reform dispute over the bill masked its true deficiency: Its failure to meaningfully contribute to climate

change mitigation and sustainability. I conclude the chapter by discussing the need to prioritize the interdisciplinary analysis of the *political* barriers to urgent and ambitious climate policy.

My argument in this chapter is that the constitutional law and law reform arguments made in respect of carbon pricing, pipeline approvals and regulations, and environmental assessment processes are *inescapably political*. On the one hand, legal arguments about the "pith and substance" of each are necessarily normative and ineluctably bound up in competing ideologies, values, and public policy perspectives on Canada's social and economic priorities. On the other hand, those same legal "pith and substance" arguments are being "weaponized," not out of genuine, good faith disagreements over legal doctrine, but as indirect, collateral attacks on the very prospect of urgent and ambitious climate change policymaking.[10]

My focus, in other words, is simultaneously concentrated on the economic and environmental politics of constitutional law, and the constitutional law of economic and environmental politics; either approach on its own is insufficient to make sense of Canada's "crude politics" of carbon pricing, pipelines, and environmental assessment.[11] By drawing

[10] A preliminary version of this argument in response to the Saskatchewan Court of Appeal's advisory opinion on the constitutionality of the federal government's carbon-pricing framework is suggested in Jason MacLean, Nathalie Chalifour & Sharon Mascher, "Work on climate, not weaponizing the Constitution", *The Conversation* (8 may 2019), online: <https://theconversation.com/work-on-climate-not-weaponizing-the-constitution-116710> [MacLean, Chalifour & Mascher, "Work on climate, not weaponizing the Constitution"]. The advisory opinions of the Saskatchewan Court of Appeal and the Ontario Court of Appeal, and to a lesser extent the Alberta Court of Appeal, are discussed in chapter five of this thesis.

[11] Nathalie Chalifour suggests, for example, that provincial objections to the federal government's carbon-pricing framework "appear to be at least partly driven by Parliament's choice of carbon pricing as a policy instrument." She further argues – and this is beyond dispute – that once the matter of jurisdiction is settled, the choice of instrument is a political one that is outside the constitutional analysis. I agree, and seek to

inspiration and guidance from the legal-pluralist theory-cum-methodology utilized with so much illumination by Macdonald and Wolfe in their magisterial analysis of the relationship obtaining between the Constitution and Canada's changing national policies,[12] I examine extant case law and doctrine, formal legal submissions, the statements of public officials in the news media, and the law-and-policy discourse of a wide variety of stakeholders in order to show that the carbon pricing, pipeline approvals and regulations, and environmental assessment process are inextricably bound up in our understandings and invocations of constitutional law doctrines and law reform disputes, and vice versa. The result is endemic climate action distraction and delay that we can no longer afford.

I. Not Your Father's Federalism: The Resistance to Carbon Pricing

In 2018, Parliament passed the *Greenhouse Gas Pollution Pricing Act*.[13] The *GGPPA* implements the federal government's Pan-Canadian Approach to Pricing Carbon Pollution plan[14] issued in 2016, which arose out of a First Ministers meeting convened earlier in 2016

extend Chalifour's brilliant doctrinal analysis to show that *all* of the putatively legal arguments surrounding not only carbon pricing but also pipeline approvals and regulations as well as environmental assessment processes are political and fall outside the traditional boundaries of doctrinal constitutional analysis. See Nathalie J Chalifour, "Jurisdictional Wrangling over Climate Policy in the Canadian Federation: Key Issues in the Provincial Constitutional Challenges to Parliament's *Greenhouse Gas Pollution Pricing Act*" (2019) 50:2 Ottawa L Rev 197 at 27 [Chalifour, "Jurisdictional Wrangling over Climate Policy"].

[12] Roderick A Macdonald & Robert Wolfe, "Canada's Third National Policy: The Epiphenomenal or the Real Constitution" (2009) 59:4 UTLJ 469. In chapter one of this thesis I discuss Macdonald and Wolfe's national policy theory and method at length and apply it to Canada's climate change policies and decisions following the Paris Agreement.

[13] *Greenhouse Gas Pollution Pricing Act,* being Part 5 of the *Budget Implementation Act, 2018, No 1,* SC 2018, c 12. The long title of the *Act* is *An Act to mitigate climate change through the pan-Canadian application of pricing mechanisms to a broad set of greenhouse gas emission sources and to make consequential amendments to other Acts* [*GGPPA*].

[14] Canada, Environment and Climate Change Canada, "Pan-Canadian Approach to Pricing Carbon Pollution" (Ottawa: ECCC, 3 October 2016), online: <https://www.canada.ca/en/environment-climate-change/news/2016/10/canadian-approach-pricing-carbon-pollution.html>.

by the government – resulting in the Vancouver Declaration[15] – before the government signed the Paris Agreement on climate change.[16]

Pursuant to the First Ministers' agreement expressed in the Vancouver Declaration to cooperatively collaborate on a national approach to climate change policy, the Working Group on Carbon Pricing Mechanisms was established. The Working Group's consensus-based final report – supported initially by each of the provinces and territories – concluded that pricing carbon is among the most efficient policy approaches to reducing greenhouse gas emissions. Pricing carbon allows industries and individual consumers to identify how they will reduce their own emissions, and encourages innovation to find new ways to do so.[17] Based on the Working Group's conclusion, the federal government's Pan-Canadian Approach to Pricing Carbon Pollution asserted that "economy-wide carbon pricing is the most efficient way to reduce emissions, and by pricing pollution, will drive innovative solutions to provide low-carbon choices for consumers and businesses."[18] On this basis the government established the pan-Canadian Benchmark for carbon pricing.[19] The Benchmark established carbon pricing as a foundational component of Canada's national climate policy. Specifically, the Benchmark embodies the policy objective of ensuring "that carbon pricing applies to a broad set of emissions throughout Canada with increasing

[15] Canadian Intergovernmental Conference Secretariat, "Vancouver Declaration on Clean Growth and Climate Change" (3 March 2016), online: <https://pm.gc.ca/eng/news/2016/03/03/communique-canadas-first-ministers>.
[16] See Catherine Cullen, "Justin Trudeau Signs Paris Climate Treaty at UN, Vows to Harness Renewable Energy", *CBC News* (22 April 2016), online: <https://www.cbc.ca/news/politics/paris-agreement-trudeau-sign-1.3547822>.
[17] Environment and Climate Change Canada, *Working Group on Carbon Pricing Mechanisms: Final Report* (Gatineau, QC: ECCC, 2016), online: <http://publications.gc.ca/pub?id=9.822040&sl=0>.
[18] *Ibid.*
[19] *Ibid.*

stringency over time to reduce GHG emissions."[20] The Benchmark further provides that the federal government will implement a "backstop" carbon pricing system in provincial and territorial jurisdictions that fail to implement regulations that align with the Benchmark, or where a province or territory requests the government's backstop.[21]

In May 2017 the federal government released a technical paper outlining the operation of the Benchmark and the backstop.[22] The technical paper, along with the government's additional documents Guidance on the Pan-Canadian Carbon Pollution Pricing Benchmark[23] and Supplemental Benchmark Guidance,[24] set out the two complementary components of the backstop: (1) a fuel charge; and (2) an Output-Based Pricing System.[25]

The *GGPPA* was enacted in June 2018 and implements the foregoing policy commitments and mechanisms: Part 1 of the *Act* implements the fuel charge; Part 2 implements the

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[20] Canada, Environment and Natural Resources, "Supplemental benchmark guidance" (Ottawa: ENR, 20 December 2017), online: <https://www.canada.ca/en/services/environment/weather/climatechange/pan-canadian-framework/guidance-carbon-pollution-pricing-benchmark/supplemental-benchmark-guidance.html> [Government of Canada, "Supplemental benchmark guidance"].
[21] *Ibid.*
[22] Canada, Environment and Climate Change Canada, "Technical Paper on the Federal Carbon Pricing Backstop" (Ottawa: 18 May 2017), online (pdf): <https://www.canada.ca/content/dam/eccc/documents/pdf/20170518-2-en.pdf> [Government of Canada, "Technical Paper on Carbon Pricing Backstop"].
[23] Canada, Environment and Natural Resources, "Guidance on the pan-Canadian carbon pollution pricing benchmark" (Ottawa: ENR, 16 January 2018), online: <https://www.canada.ca/en/services/environment/weather/climatechange/pan-canadian-framework/guidance-carbon-pollution-pricing-benchmark.html>.
[24] Government of Canada, "Supplemental benchmark guidance", *supra* note 20.
[25] Government of Canada, "Technical Paper on Carbon Pricing Backstop", *supra* note 22. The government also published a document called "Carbon Pricing: Regulatory Framework for the Output-Based Pricing System" explaining that the aim of the system is to minimize adverse impacts on economic competitiveness and "carbon leakage" (emitters moving to jurisdictions with relatively less stringent carbon regulations) for emissions-intensive, trade-exposed industrial facilities while retaining the carbon price signal and incentive to reduce greenhouse gas emissions. See Canada, Environment and Natural Resources, "Carbon pricing: regulatory framework for the output-based pricing system" (Ottawa: ENR, 21 January 2018), online: <https://www.canada.ca/en/services/environment/weather/climatechange/climate-action/pricing-carbon-pollution/output-based-pricing-system.html>.

Output-Based Pricing System and an excess-emissions charge for large industrial emitters. Parts 1 and 2 of the *GGPPA* apply in provinces and territories that do not implement a sufficiently stringent carbon-pricing regime relative to the federal government's Benchmark.[26]

The fuel charge under Part 1 applies to 22 kinds of greenhouse-gas-emitting fuels that are produced, delivered, or used in Canada, including common fuels such as gasoline, diesel, and natural gas, as well as less common fuels such as methanol and coke oven gas; the subject fuels and their corresponding charges are set out in Schedule 2 of the *GGPPA*. The charge rate represents $20 per tonne of CO_2e from each fuel in 2019, rising to $50 per tonne of CO_2e in 2022.[27] Part 1 also sets out exemptions, including gasoline and diesel used by farmers for farming, and industrial facilities subject to the Output-Based Pricing System under Part 2 of the *GGPPA*.[28]

Part 2 of the *GGPPA* administers the Output-Based Pricing System applicable to large industrial emitters, or those statutorily "covered facilities" whose emissions exceed a minimum industry-specific threshold. Initially, covered facilities are those that emit 50 kilotonnes of CO_2e or more annually.[29] Moreover, instead of paying the fuel charge under Part 1, industrial emitters that fall under the definition of covered facilities must pay compensation for the portion of their emissions that exceed the prescribed industrial-sector limit. Subject to the future development of supporting regulations, as discussed in chapter

[26] *GGPPA, supra* note 13.
[27] *Ibid* at Schedule 2, Table 2, Item 6.
[28] *Ibid* at s 36.
[29] *Ibid* at s 169 at Schedule 3.

three most sectors' output-based standard will be set at 80% of the sector's average greenhouse gas emissions intensity; a subset of trade-exposed sectors will be subject to a standard set at 90% of average emissions intensity.[30] Accordingly, in normal sectors, covered facilities will provide compensation only for emissions that exceed 80% of their specific sector's average; in highly trade-exposed sectors, facilities will provide compensation only for emissions that exceed 90% of their specific sector's average.[31] Although these thresholds have received relatively little attention to date, owing largely to the disproportionate amount of attention paid to the ongoing legal dispute over constitutional jurisdiction, they are plainly favourable to heavy industrial emitters of greenhouse gas emissions. They also squarely contravene Canada's commitment under the Paris Agreement to undertake *economy-wide* – as opposed to sector-by-sector – reductions in greenhouse gas emissions.[32]

In the fall of 2018, the federal government announced the result of its Benchmark stringency assessments of provincial and territorial climate policies: The fuel charge under Part 1 of the *GGPPA* would initially apply in Saskatchewan, Ontario, Manitoba, New Brunswick, the Yukon, and Nunavut (the latter two at their own request) beginning in April 2019; the Output-Based Pricing System under Part 2 will apply in Ontario, Manitoba, New Brunswick, Prince Edward Island, the Yukon, Nunavut (the latter four at their own request), and – partially – Saskatchewan.[33]

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[30] *Ibid* at s 174.
[31] *Ibid* at ss 174, 175, 184, Schedule 4.
[32] Paris Agreement*, supra* note 4 at art 4.4.
[33] Part 2 will apply to the emissions not covered by Saskatchewan's own planned output-based system, which will cover large industrial facilities that collectively account for approximately 11% of the

Before many of the foregoing regulatory policies were specifically established, the province of Saskatchewan referred a constitutional challenge to the *GGPPA* to its Court of Appeal.[34] The province's reference was dubbed the "Saskatchewan strategy," and is part of what *Maclean's* magazine rather notoriously characterized as "the resistance" to the federal government's carbon-pricing plan.[35]

Notwithstanding the pronouncements of media and political pundits, it ought to be considered trite law that the federal government has ample jurisdiction to regulate greenhouse gas emissions.[36] The government may do so under its criminal law power, its taxation power, and its residual peace, order, and good governance (POGG) jurisdiction over matters of national concern.[37] In the reference initiated by Saskatchewan before the Saskatchewan Court of Appeal, the federal government relied on POGG and, in the alternative, its taxation power.[38] In its oral submissions before the Court, counsel for the Attorney General of Canada emphasized that rising greenhouse gas emissions – and

province's greenhouse gas emissions. Because Saskatchewan's plan excludes electricity generation and natural gas transmissions pipelines, Part 2 will apply to facilities in those sectors that emit 50 kilotonnes or more of CO_2e annually.

[34] Saskatchewan, News and Media, "Province Challenges Federal Government's Ability to Impose a Carbon Tax" (Regina: NM, 25 April 2018), online: <https://www.saskatchewan.ca/government/news-and-media/2018/april/25/carbon-tax-case>.

[35] Paul Wells, "Just try them: Powerful conservative leaders from across the country are suddenly united against Justin Trudeau's carbon tax plan. And they're spoiling for a fight", *Maclean's* (1 December 2018), online: <http://archive.macleans.ca/article/2018/12/1/just-try-them>.

[36] See e.g. Nathalie J Chalifour, "Canadian Climate Federalism: Parliament's Ample Constitutional Authority to Legislate GHG Emissions through Regulations, a National Cap and Trade Program, or a National Carbon Tax" (2016) 36 Nat'l J Const L 331.

[37] *Ibid.* But see Eugénie Brouillet & Bruce Ryder, "Key Doctrines in Canadian Legal Federalism" in Peter Oliver, Patrick Macklem & Nathalie Des Rosiers, eds, *The Oxford Handbook of the Canadian Constitution* (New York: Oxford University Press, 2017) 415; Jean LeClair, "The Elusive Quest for the Quintessential National Interest" (2005) 38:2 UBC L Rev 353; Kai D Sheffield, "The Constitutionality of a Federal Emissions Trading Regime" (2014) 4:1 Western J Leg Studies 1.

[38] *Reference re Greenhouse Gas Pollution Pricing Act*, 2019 SKCA 40 (Factum of the Attorney General of Canada at paras 65–68 [Attorney General of Canada, "Canada's Carbon Pricing Factum"].

climate change more generally – are a matter of national concern that the provinces are incapable of addressing on their own.[39]

The federal government also argued that its carbon-pricing Benchmark applies nationally; neither Saskatchewan nor any other province is singled out.[40] When asked by the Court during oral arguments why Ottawa opted for only a "half measure" and declined to set a single national carbon price, counsel for the Attorney General of Canada explained that the federal government's establishment of a national Benchmark against which each province and territory is assessed respects the provinces' jurisdiction to enact their own legislation.[41] As the Attorney General of Canada expressed this balance in its written submissions, "[t]he legislation at issue encourages the provinces to come up with a made-in-the-province solution, but responds to provincial inaction."[42]

This is the core of the federal government's constitutional argument: Its carbon-pricing plan accords with the interpretive principle of "cooperative federalism."[43] At the same time, however, the federal government's cooperative approach does not mean that provinces can choose not to cooperate where the federal government's jurisdiction is already established, an additionally trite principle of constitutional law that Saskatchewan elsewhere readily accepts.[44] As the Attorney General of Canada argued in respect of the

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[39] Justin Giovannetti, "Federal lawyers say provinces aren't able to manage greenhouse gas levels alone", *The Globe and Mail* (14 February 2019), online: <https://www.theglobeandmail.com/canada/article-lawyers-say-provinces-arent-able-to-manage-greenhouse-gas-levels/>.
[40] *Ibid.*
[41] *Ibid*.
[42] Attorney General of Canada, "Canada's Carbon Pricing Factum", *supra* note 38 at para 101. Support for this position is found in the majority reasons for decision in *R v Hydro-Québec,* [1997] 3 SCR 213 at paras 131, 153 [*Hydro-Québec*].
[43] Attorney General of Canada, "Canada's Carbon Pricing Factum", *supra* note 38 at paras 100–103, 105.
[44] See the text associated with *infra* notes 59–65.

federal government's jurisdiction to regulate greenhouse gas emissions, it is well-settled law that it may do so under its criminal law power.[45]

Saskatchewan is thus no more constitutionally entitled to choose not to cooperate with the federal government on regulating greenhouse gas emissions than it is free to withhold cooperation on any other matter under federal jurisdiction. Indeed, the very *lack* of provincial cooperation in such matters further supports the recognition of Parliament's exercise of jurisdiction. As Hogg explained in his commentary on the Supreme Court of Canada's decision in *Munro v National Capital Commission,*[46] the failure of either Quebec or Ontario to cooperate in the development of the national capital region would have – absent federal intervention – deprived all Canadians of the symbolic value of a suitable national capital. Indeed, the Court in *Munro* took judicial notice of the fact that the zoning of the national capital region was only undertaken by the federal government *after* its unsuccessful efforts to secure the cooperation of Quebec and Ontario.[47] The parallel to the carbon-pricing reference is clear.

Saskatchewan insisted, however, that its judicial reference is not about greenhouse gas emissions and climate change, but rather, the nature and future of federalism in Canada. Before the Saskatchewan Court of Appeal, the province's written submissions to this effect

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[45] Attorney General of Canada, "Canada's Carbon Pricing Factum", *supra* note 38 at para 101, citing *Syncrude Canada Ltd v Canada (Attorney General),* 2016 FCA 160, and *Hydro-Québec, supra* note 42. For further background on the application of Parliament's criminal law power to the regulation of greenhouse gas emissions, see Sharon Mascher, "Prime Minister Trudeau You've Got the Power (the Criminal Law Power): *Syncrude Canada Ltd v Canada* and Greenhouse Gas Regulation" (21 June 2016), *ABlawg.ca* (blog), online (pdf): <https://ablawg.ca/wp-content/uploads/2016/06/Blog_SM_Syncrude_FCA_June2016.pdf>.

[46] *Munro v National Capital Commission,* [1966] SCR 663.

[47] Peter Hogg, *Constitutional Law of Canada,* loose-leaf (2006-Rel 1) 5th ed (Toronto: Carswell, 2007) at 17.3(b), 17–14.

bordered on the absurd: "In fact, regulations with respect to the release of carbon (*i.e., smoke*) into the atmosphere have existed for centuries and have always been considered to be a local matter."[48] In support of its analogy between smoke resulting from fires and the burning of coal, on the one hand, and on the other hand the emission of carbon dioxide and other greenhouse gases resulting from everyday industrial and individual consumer activities (and the local regulation of the same), Saskatchewan cited the British *Smoke Nuisance Abatement (Metropolis) Act* of 1853 along with a single academic article on the social movement for smoke abatement in 19th century Britain.[49]

Regrettably, it appears that the Attorney General of Saskatchewan failed to appreciate the history lesson offered by its sole academic source. In the article exploring the 19th century social movement for smoke abatement in Britain relied on by the province, the article's author offers the following conclusions, which I quote at length in order to underscore the degree to which they fail to offer any support for Saskatchewan's historical claim about the rightful *local* level of smoke abatement regulation:

> Despite the powers given to local governments to curtail commercial smoke pollution, the general verdict by the 1880s was that *little improvement had resulted*.
>
> […]
>
> *Parliament passed laws giving local authorities the power to act*; the local authorities, forced to confront the polluters at close quarters in the councils and courts, *wavered and passed*

[48] Attorney General of Saskatchewan, "Saskatchewan's Carbon Pricing Factum", *supra* note 2 at para 24 [emphasis added].
[49] *Smoke Nuisance Abatement (Metropolis) Act,* 16&17 Vict (1853) c 128; Carlos Flick, "The Movement for Smoke Abatement on 19th Century Britain" (1980) 21:1 Technology and Culture 29 [Flick, "Smoke Abatement on 19th Century Britain"], cited by the Attorney General of Saskatchewan, "Saskatchewan's Carbon Pricing Factum", *supra* note 2 at para 24, n 22.

> *responsibility back to the central government*. In the end, little abatement was achieved.[50]

In any event, perhaps the ineffectiveness of local carbon – "*i.e.*, smoke"[51] – regulation in 19th century Britain is as beside the point as it would otherwise appear insofar as Saskatchewan insisted that its judicial reference was not about climate change policy at all, but rather federalism: "The Attorney General [of Saskatchewan] submits that the Court should not be swayed by arguments about the importance of climate change in today's world…. Maintaining the jurisdictional balance of the division of powers is always more important."[52]

In its oral submissions before the Court of Appeal, the Attorney General of Saskatchewan reiterated this curious position, maintaining that "the government of Saskatchewan is not made up of a bunch of climate-change deniers […] and recognizes that climate change is a serious issue that has to be addressed and that effective measures are required to deal with greenhouse gas emissions."[53] Having said that, however, the Attorney General proceeded to argue that unless the Court strikes down the *GGPPA*, "the federation, over time, will wither and cease to exist."[54]

I characterize this argument as "curious" (charitably) for two reasons; the first, which should be obvious, is the conclusively established existential threat that climate change

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[50] Flick, "Smoke Abatement on 19th Century Britain", *supra* note 49 at 37, 50 [emphasis added].
[51] Attorney General of Saskatchewan, "Saskatchewan's Carbon Pricing Factum", *supra* note 2 at para 24.
[52] *Ibid* at para 50.
[53] Counsel for the Attorney General of Saskatchewan, quoted in Justin Giovannetti, "Federal carbon tax violates Canada's founding principles, Saskatchewan's lawyers argue", *The Globe and Mail* (14 February 2019), online: <https://www.theglobeandmail.com/canada/article-federal-carbon-tax-violates-canadas-founding-principles-saskatchewan/>.
[54] *Ibid.*

poses to humanity and countless other species, while the second requires a little more unpacking. Both are telling.

First, the presumably obvious argument: Climate change is an existential threat to human and much non-human life on Earth.[55] The *original* division of federal and provincial legislative powers in Canada formalized in 1867, leaving aside for the moment the *settled* interpretive principle that those powers evolve as our society changes, will be of little importance if we fail to mitigate climate change and avoid its most catastrophic consequences. Surely the Attorney General of Saskatchewan does not believe that the original constitutional division of powers is more important than effectively mitigating climate change. Yet that was the thrust of its submissions before the Saskatchewan Court of Appeal.

Second, upon a little unpacking of Saskatchewan's interpretation of the constitutional division of powers in *other* cases, it becomes clear that its commitment to an originalist interpretation in the carbon price reference is entirely insincere, and has more to do with crude politics than constitutional law.

Beginning with its factum before the Saskatchewan Court of Appeal in the carbon-pricing reference, the Attorney General of Saskatchewan advanced the following originalist interpretation of the constitutional division of powers:

> It is the Attorney General's position that under our Constitution the federal government has no authority to second guess provincial

[55] See e.g. IPCC, "Global Warming of 1.5 ºC", *supra* note 3.

> decisions with respect to matters within provincial jurisdiction. Such a position is fundamentally at odds with the very nature of our federation. It represents the federal government taking a big brother or an "Ottawa knows best" role *which was never envisioned by the framers of our Constitution* and which strikes at the very *bedrock foundations* of our Constitution.[56]

The Attorney General of Saskatchewan further argued that "the historical evidence supports the view that Canada was intended to be a federal state with a strong federal government and with strong provincial governments, each intended to act independently within the realms of their respective jurisdictions."[57]

However, as an Intervener before the Supreme Court of Canada in the interprovincial beer case of *Comeau,* [58] the Attorney General of Saskatchewan advanced an altogether antithetical legal argument. The province characterized the case before the Court as follows: "This appeal confronts the Court with an approach to constitutional interpretation best described as 'originalist,' deployed to overturn decisions of this Court and the Judicial Committee [of the Privy Council] in foundational cases on the scope of section 121 and the trade and commerce power."[59]

Moreover, citing approvingly the position of the Honourable Ian Binnie, who was no constitutional originalist as a justice of the Supreme Court of Canada, the Attorney General of Saskatchewan proceeded to argue in *Comeau* that "[t]he historical records of Canada's

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[56] Attorney General of Saskatchewan, "Saskatchewan's Carbon Pricing Factum", *supra* note 2 at para 13 [emphasis added].
[57] *Ibid* at para 29.
[58] *R v Comeau,* 2018 SCC 15 [*Comeau*].
[59] *R v Comeau,* 2018 SCC 15 (Factum of the Attorney General of Saskatchewan at para 2) [Attorney General of Saskatchewan, "*Comeau* intervention factum"].

confederation are notoriously poor".[60] Yet more problematic, the Attorney General of Saskatchewan argued, the use of original intent as an interpretive method "renders the law inherently uncertain, and new historical evidence (or, more likely, new interpretations or inferences from the same body of pre-existing evidence) could redesign the architecture of our federation in every case."[61]

Accordingly, the Attorney General of Saskatchewan advised the Supreme Court in *Comeau* thus: "Despite careful appreciation for historic extrinsic evidence, this Court has issued many abjurations against 'originalism,' a doctrine which is 'flatly inconsistent' with purposive interpretations…. Both the Courts and the partners of Confederation have tended to the 'living tree.'"[62]

The inconsistency of the Attorney General of Saskatchewan's *methodological approach* to constitutional interpretation in *Comeau* as compared to its submissions before the Saskatchewan Court of Appeal in the carbon-pricing reference is nothing short of astonishing. Neither can the province's inconsistency be explained away by the different parts and provisions of the Constitution at issue in each of these cases. The arguments about constitutional interpretation advanced by Saskatchewan are flatly inconsistent and irreconcilable. Nor can the Province's legal positions be explained away as mere examples of the kinds of strategic and self-interested choices routinely made by litigants. Given the Attorney General's responsibility to promote justice and protect the public interest, and

[60] *Ibid* at para 13, citing Hon Ian Binnie, "Constitutional Interpretation and Original Intent" in Grant Huscroft & Ian Brodie, eds, *Constitutionalism in the Charter Era* (Toronto: LexisNexis, 2004) at 370–372.
[61] Attorney General of Saskatchewan, "*Comeau* intervention factum", *supra* note 59 at para 13 [citations omitted].
[62] *Ibid* at paras 17–18 [citations omitted].

given the stakes of the carbon-pricing reference (namely, Canada's ability to effectively respond to the existential threats posed by climate change), the Province's selective and self-serving approach to constitutional interpretation is cynical and irresponsible.

Yet the province's inconsistency does not end there. In the judicial reference before the BC Court of Appeal concerning the regulation of "heavy oil," which is discussed below in the next part of this chapter, the Attorney General of Saskatchewan intervened in order to support Ottawa's position that the federal government's jurisdiction to approve and regulate interprovincial undertakings, no matter how disproportionately provincial the potential environmental effects of such undertakings, is paramount and plenary. According to the Attorney General of Saskatchewan in the "Heavy Oil" reference,

> Saskatchewan supports federal environmental regulation of inter-provincial works and undertakings. Saskatchewan recognises the need for rigorous federal environmental review of such projects. That too is an important part of the federal jurisdiction*: to ensure environmental protection in the interests of all Canadians*, *with respect to projects, that affect all Canadians*.
>
> […]
>
> The federal government has *exclusive jurisdiction* over the environmental issues relating to the operation of the [Trans Mountain] pipeline and the product being shipped, as part of the *national regulatory framework over all aspects* of an inter-provincial undertaking.[63]

The Attorney General of Saskatchewan additionally acknowledged in the BC Heavy Oil reference that a "key area" of "federal environmental jurisdiction" relates to, among other

[63] *Reference re Environmental Management Act (British Columbia),* 2019 BCCA 181 (Factum of the Attorney General of Saskatchewan at v) [emphasis added].

things, its criminal law power.[64] Saskatchewan then proceeded to affirm the already-settled issue of the federal government's constitutional jurisdiction to regulate greenhouse gas emissions under its criminal law power by admitting that "a cooperative and consultative approach by the federal government does not mean that the province has jurisdiction to regulate the environmental aspects of matters within federal jurisdiction."[65]

Now that is hardly your father's federalism.

Saskatchewan's kaleidoscopic approach to constitutional interpretation may be summed up thus: Original intent is relevant – and legally fatal – to the regulation of greenhouse gas emissions and climate change, but not to the trade and commerce power, to which original intent has no application whatsoever; provinces may not regulate the environmental aspects of interprovincial oil pipelines, which are subject to the federal government's national regulatory framework, but provinces can ignore the federal government's national regulatory framework for climate change mitigation (indeed, the future of the federation depends on it); Ottawa "knows best" when the issue is the environmental review of interprovincial oil pipelines, but Ottawa inappropriately plays the role of "big brother" when it tries to establish a pan-Canadian carbon-pricing framework.

[64] *Ibid* at para 15.
[65] *Ibid* at para 18. A peer reviewer of an earlier version of this chapter as an academic article raised the potential counter-argument that Saskatchewan's position with respect to jurisdiction over interprovincial undertakings is consistent with its more traditional understanding of federalism and, as such, aligns with its position in the carbon pricing reference. This counter-argument must be rejected, however, because it altogether ignores the irreconcilable inconsistency of Saskatchewan's position regarding the scope of the federal government's jurisdiction to regulate in respect of environmental protection – limited, if not non-existent in respect of GHG emissions, but ample and exclusive in respect of interprovincial pipelines. The concern underlying these irreconcilable positions is political, not doctrinal.

In an opinion-editorial defending Saskatchewan's constitutional challenge to the federal government's carbon-pricing plan, Saskatchewan Premier Scott Moe declared that "our province will never stand down to the Trudeau carbon tax."[66] While such rhetoric may regrettably make for good provincial politics, it is a poor proxy for responsible public policy. After all, the court challenge will eventually conclude with the Supreme Court of Canada having the final word. The matter of jurisdiction over the regulation of greenhouse gas emissions, already largely settled, will be settled (again), leaving Saskatchewan to finally reckon with the far more complex and controversial issue: How to wean itself off its economic and fiscal dependence on fossil fuels and transition to a sustainable, renewable-energy-based economy and society. No court opinion concerning legislative jurisdiction can contribute much – if anything – to this fateful reckoning.[67]

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[66] Scott Moe, "Why Saskatchewan is fighting the Trudeau carbon tax in court", *Regina Leader-Post* (11 February 2019), online: <https://leaderpost.com/opinion/columnists/scott-moe-why-saskatchewan-is-fighting-the-trudeau-carbon-tax-in-court>.

[67] Indeed, the Saskatchewan Court of Appeal's advisory opinion affirming the constitutionality of the *GGPPA* is almost entirely irrelevant from a climate-policy perspective. See *Reference Re Greenhouse Gas Pollution Pricing Act,* 2019 SKCA 40. While the majority's recognition of climate change as a major threat to Canada and the planet is welcome (if obvious), the court's recognition alone is likely to have little-to-no impact on climate and energy policymaking. Tellingly, *on the very same day* the Court of Appeal issued its 151-page advisory opinion (including both the reasons of the majority of the Court along with a dissenting opinion), Saskatchewan's premier immediately vowed to seek leave to appeal from the Court of Appeal's opinion to the Supreme Court of Canada. See Creeden Martell, "Saskatchewan premier plans to appeal carbon tax decision to Supreme Court", *CBC News* (3 May 2019), online: <https://www.cbc.ca/news/canada/saskatchewan/carbon-tax-saskatchewan-appeal-1.5121414>. The immediacy of the premier's announcement belies any reasonable interpretation of this dispute as being about a genuine disagreement over the fine points of constitutional law doctrine. The majority of the Court of Appeal itself recognized the true importance of the issue before it as being one of climate policy and not constitutional law when it explained (at para 144) that "[i]f it is necessary to apply established doctrine in a slightly different way to ensure both levels of government have the tools essential for dealing with something as pressing as climate change, that would seem to be entirely appropriate." For an initial analysis – both legal and political – of the Court of Appeal's opinion, see MacLean, Chalifour & Mascher, "Work on climate, not weaponizing the Constitution", *supra* note 10; a fuller analysis is provided in the next chapter of this thesis.

Ottawa, however, fares no better by comparison. As I discuss in the next part of this chapter, in contrast to its cooperative approach to environmental regulation offered in defence of its carbon-pricing framework, it simultaneously advanced a unilateral approach to the regulation of interprovincial crude oil pipelines, despite the disproportionate environmental risks borne by particular provinces and local Indigenous communities, let alone the outsized and unsustainable climate impacts of new pipelines and expanded oil sands production.

Meanwhile, as the federal government defended its jurisdiction to cooperatively implement a national price on carbon emissions before the Saskatchewan Court of Appeal, it misleads the courts and the country when it advances the overly-generalized claims that (1) "carbon pricing works"[68] and (2) its proposed carbon-pricing framework is capable of "making a significant contribution towards meeting Canada's *Paris Agreement* targets".[69] While the evidence is clear that in jurisdictions having a carbon price, carbon emissions are lower than they would otherwise be,[70] the federal government's claim nonetheless belies the more precise point that Canada's proposed pricing scheme starts at too low of a price and its price will not rise fast enough either to meet Canada's already unambitious emissions-reduction target under the Paris Agreement or to more meaningfully contribute to climate change mitigation. As the IPCC explains in its path-breaking special report on 1.5 ºC global warming, an effective carbon price will begin at a *minimum* of US$135 per tonne of CO_2e, and, depending on a series of other variables, an effective price might have to reach as high

[68] Attorney General of Canada, "Canada's Carbon Pricing Factum", *supra* note 38 at para 44.
[69] *Ibid* at para 43.
[70] *Ibid* at para 44.

as US$5,500.[71] The carbon-pricing reference serves only to distract from and delay Canada's far more complex and controversial public policy reckoning. I will return to this more foundational question in the conclusion of this chapter.

II. Crying Over Spilled Oil

The Trans Mountain pipeline system was originally constructed in 1953; it carries oil from Strathcona County, Alberta to a coastal marine terminal in Burnaby, British Columbia.[72] The Texas-based company Kinder Morgan originally owned the pipeline, but in 2018 the company's shareholders approved the sale of Trans Mountain to the Government of Canada.[73] Since 2012, Kinder Morgan had been seeking the approval of British Columbia and the federal government for its proposed $7.4-billion expansion of Trans Mountain (*i.e.*, "twinning" the pipeline by constructing an additional pipeline along the existing pipeline's route).[74] Trans Mountain's present capacity is approximately 300,000 barrels per day of

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[71] IPCC, "Global Warming of 1.5 ºC", *supra* note 3. For a discussion of the implications of the IPCC's special report for Canada's climate policy, see Jason MacLean, "The problem with Canada's gradual climate policy", *Policy Options* (26 October 2018), online: <http://policyoptions.irpp.org/magazines/october-2018/the-problem-with-canadas-gradual-climate-policy/> [MacLean, "Canada's gradual climate policy"]. For further discussion of Canada's proposed pricing framework in relation to the concept of the social cost of carbon, see Jason MacLean, "Trudeau's carbon price clever politics, not credible policy", *Policy Options* (14 October 2016), online: <http://policyoptions.irpp.org/fr/magazines/octobre-2016/trudeaus-carbon-price-clever-politics-not-credible-climate-policy/>. More generally, see also Carbon Pricing Leadership Coalition, *Report of the High-Level Commission on Carbon Prices* (Washington: International Bank for Reconstruction and Development and International Development Association & The World Bank, 2017), online (pdf): <https://static1.squarespace.com/static/54ff9c5ce4b0a53decccfb4c/t/59b7f2409f8dce5316811916/1505227332748/CarbonPricing_FullReport.pdf>.

[72] Canada, National Energy Board, "Trans Mountain Pipeline ULC – Trans Mountain Expansion Project", (Calgary: NEB, 2 August 2019), online: <https://www.neb-one.gc.ca/pplctnflng/trnsmntnxpnsn/index-eng.html> [NEB, "Trans Mountain Pipeline Expansion"].

[73] "Trans Mountain, Trudeau and First Nations: A guide to the political saga so far", *The Globe and Mail* (24 May 2019), online: <https://www.theglobeandmail.com/politics/article-trans-mountain-kinder-morgan-pipeline-bc-alberta-explainer/>.

[74] *Ibid.*

"batched" petroleum products, including crude, semi-refined, and refined oil.[75] If the expansion project is ultimately completed, Trans Mountain will have the capacity to transport approximately 890,000 barrels of oil per day, nearly a threefold increase.[76] Notably, the expanded pipeline will be designed to transport heavy, highly corrosive bitumen crude oil.[77]

Kinder Morgan submitted its expansion proposal to the National Energy Board (NEB) in 2013. In the spring of 2016, the NEB issued a report to the federal Cabinet recommending the project's approval subject to a number of technical conditions.[78] Soon thereafter, the federal Minister of Natural Resources convened a ministerial panel to further review the expansion proposal, particularly the concerns of Indigenous peoples and other Canadians situated along the pipeline's right of way and shipping route that may not have been fully considered under the NEB's original review.[79] Following the conclusion of the government's supplemental review in the fall of 2016, the Cabinet directed the NEB to issue a Certificate of Public Convenience and Necessity – effectively, an approval – pursuant to the *National Energy Board Act* for the Trans Mountain expansion project.[80]

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[75] Trans Mountain Corporation, "Product", online: <https://www.transmountain.com/product>.
[76] Trans Mountain Corporation, "Expansion Project", online: <https://www.transmountain.com/project-overview>.
[77] *Ibid.*
[78] NEB, "Trans Mountain Pipeline Expansion", *supra* note 72.
[79] *Ibid.*
[80] Canada, "Prime Minister Justin Trudeau's Pipeline Announcement" (29 November 2016), online: <https://pm.gc.ca/eng/news/2016/11/29/prime-minister-justin-trudeaus-pipeline-announcement>. The Trans Mountain expansion project was also subject to review by the Environmental Assessment Office (EAO) of British Columbia, and in December 2016 the EAO issued a summary report recommending that an Environmental Assessment Certificate be issued in respect of Trans Mountain subject to 37 conditions; in January 2017 the BC government issued the Certificate in accordance with the EAO's recommendations. The federal government's initial approval of the project would later be quashed, however, by the Federal Court of Appeal because (1) the NEB unreasonably concluded that Trans Mountain's expansion was

In early 2018, the BC provincial government announced its intention to develop additional regulatory measures to improve its "preparedness, response and recovery" relating to spills of heavy oil, including diluted bitumen, the grade of oil to flow through the expanded Trans Mountain pipeline.[81] The BC government explained that its proposed regulations would (1) ensure immediate and geographically-specific responses to heavy oil spills, whether from a pipeline or from the rail or truck transport of oil; (2) maximize the application of regulations to marine oil spills by complementing existing federal measures; (3) restrict the transportation of heavy oil following a spill until the behaviour and effects of spilled heavy oil can be better understood and managed; and (4) allow for compensation for the loss of public and cultural use of lands, resources, and public amenities resulting from spills of heavy oil.[82]

Following a pointed political reaction to British Columbia's proposal,[83] the province referred what was considered to be the most controversial of its proposed measures – its

unlikely to cause adverse environmental effects, and (2) the government failed to satisfy its constitutional duty to consult and accommodate affected Indigenous groups. See *Tsleil-Waututh Nation v Canada (Attorney General),* 2018 FCA 153 [*Tsleil-Waututh*]. As further discussed below in chapter five, the federal government approved the project again following an additional and compressed phase of consultation with Indigenous communities and a further but highly restrictive environmental assessment, and the Federal Court of Appeal ultimately upheld the government's approval on judicial review. A group of affected First Nations contested the federal government's further consultation process, which was upheld by the Federal Court of Appeal: *Coldwater et al v Canada (Attorney General) et al,* 2020 FCA 34. The Supreme Court of Canada subsequently denied the First Nations' application for leave to appeal: *Coldwater Indian Band et al v Canada (Attorney General) et al,* SCC Case File No 39111 (2 July 2020).

[81] BC Gov News, "Environment and Climate Change Strategy: Additional measures being developed to protect B.C.'s environment from spills" (30 January 2018), online: <https://news.gov.bc.ca/releases/2018ENV0003-000115> [BC Gov News, "Additional measures"]. For an initial analysis of BC's proposed measures, see Jason MacLean, "The Trans Mountain saga as a public policy failure", *Policy Options* (13 April 2018), online: <https://policyoptions.irpp.org/magazines/april-2018/trans-mountain-saga-public-policy-failure/>.

[82] BC Gov News, "Additional measures", *supra* note 81.

[83] For further background, see Jason MacLean, "The constitutional complexity of pipelines: It's as clear as bitumen", *The Globe and Mail* (5 February 2018), online: <https://www.theglobeandmail.com/opinion/the-constitutional-complexity-of-pipelines-its-as-clear-as-bitumen/article37849206/> [MacLean, "The constitutional complexity of pipelines"]; Jason MacLean, "Trans Mountain's only certainty – death and

authority to restrict the flow of heavy oil following a spill – as a constitutional question to the BC Court of Appeal.[84] British Columbia's "Order-in-council and Reference Question" asked whether its proposed amendment (see below) of the BC *Environmental Management Act*[85] is *intra vires* the legislative authority of British Columbia, and if so, whether its legislative amendment applied to hazardous substances brought into the province by means of interprovincial undertakings.[86] The reference question further asked whether existing federal legislation renders all or part of the proposed legislative amendment inoperative.[87]

British Columbia's proposed legislation provided, in relevant part, as follows. It set out a definition of "heavy oil" in well-established terms of gravity and viscosity, and added this defined term to a class of hazardous substances, the possession, charge, or control of which above certain minimum levels requires a provincial permit from the provincial director of waste management.[88] The legislation stipulated conditions for the issuance (with or without conditions attached), suspension, and cancellation of such "hazardous substance permits."[89] Permits may be cancelled or suspended if the permit-holder fails to comply with the conditions attached to the permit, which may include

> (a) conditions respecting the protection of human health or the environment, including conditions requiring the holder of the permit

carbon taxes", *Vancouver Sun* (17 April 2018), online: <https://vancouversun.com/opinion/op-ed/jason-maclean-trans-mountains-only-certainty-death-and-carbon-taxes> [MacLean, "Trans Mountain's only certainty"].

[84] BC Gov News, "Province submits court reference to protect B.C.'s coast" (26 April 2018), online: < https://news.gov.bc.ca/releases/2018PREM0019-000742> [BC Gov News, "Court reference"].

[85] *Environmental Management Act,* SBC 2003, c 53.

[86] BC Gov News, "Court reference", *supra* note 84.

[87] *Ibid.*

[88] *Ibid.*

[89] *Ibid.*

> (i) to implement and maintain appropriate measures to prevent a release of the substance,
>
> (ii) to implement and maintain appropriate measures to ensure that any release of the substance can be minimized in gravity and magnitude, through early detection and early response, and
>
> (iii) to maintain sufficient capacity, including dedicated equipment and personnel, to be able to be able to respond effectively to a release of the substance in the manner and within the time specified by the director;
>
> (b) conditions respecting the impacts of a release of the substance, including conditions requiring the holder of the permit
>
> (i) to respond to a release of a substance in the manner and within the time specified by the director, and
>
> (ii) to compensate, without proof of fault or negligence, any person, the government, a local government or a First Nations government for damages […].[90]

British Columbia premised its proposed legislation on two principal purposes: (1) the protection of British Columbia's environment (including the terrestrial, freshwater, marine, and atmospheric environment), human health and well-being, and the economic, social, and cultural vitality of BC communities; and (2) the implementation of the polluter pays principle.[91] In the same vein, British Columbia argued that its reference "is not about the desirability of interprovincial pipelines or about the undisputed federal authority to decide whether they should be built or operated (subject, of course, to entrenched rights, including under s. 35 of the *Constitution Act, 1982*)."[92] Rather, the province argued that its

[90] *Ibid.* British Columbia also expressed an intention to establish an independent scientific panel to help address the scientific uncertainties in respect of the behaviour of heavy oil when it is spilled in water.
[91] *Ibid.* For a detailed discussion of the adverse effects of heavy oil spills in oceans, estuaries, rivers, lakes, ponds, or on land, see *Reference re Environmental Management Act (British Columbia),* 2019 BCCA 181 (Factum of the Attorney General of British Columbia at paras 36-46) [Attorney General of British Columbia, "BC's Heavy Oil Factum"].
[92] Attorney General of British Columbia, "BC's Heavy Oil Factum", *supra* note 91 at para 134.

constitutional reference "is about the ordinary operation of principles of Canadian federalism to proposed amendments to an indisputably constitutional provincial environmental statute".[93]

Critics of the province's proposed regulations, however, spied an alternative – *political* – purpose. Then Alberta premier Rachel Notley reacted to British Columbia's announcement of its intention to develop the above regulations by stating "[t]he government of Alberta will not – we cannot – let this unconstitutional attack on jobs and working people stand."[94] Prime Minister Justin Trudeau reacted similarly by stating in a radio interview "[l]ook, we're in a federation. We're going to get that pipeline built."[95] Alan Ross, a lawyer who routinely acted for Kinder Morgan and who was lead counsel to the Canadian Energy Pipeline Association on the "Heavy Oil" reference before the BC Court of Appeal, argued that "[t]o the extent that this is meant to imperil Trans Mountain, there really is a very clear federal jurisdiction with respect to matters such as pipelines or railways that cross provincial borders and are federally regulated."[96] Fueling these reactions, of course, were the earlier political campaign remarks made by BC NDP leader John Horgan, who promised to use "every tool in the toolbox" to prevent the completion of the Trans Mountain expansion.[97]

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[93] *Ibid.*
[94] Quoted in MacLean, "The constitutional complexity of pipelines", *supra* note 83.
[95] *Ibid.*
[96] *Ibid.*
[97] See Andrew MacLeod, "Death of Kinder Morgan Project a Campaign Promise, Premier Says", *The Tyee* (10 April 2018), online: <https://thetyee.ca/News/2018/04/10/Death-Kinder-Morgan-Campaign-Promise/>. While such remarks are arguably inadmissible as evidence of legislative intent as part of a court's statutory interpretation (including the constitutional interpretation of legislation's "pith and substance"), it is equally true that such remarks cannot be unheard. On the evidentiary point, see *Tesla Motors Canada ULC v Ontario (Ministry of Transportation),* 2018 ONSC 5062 at para 58, citing *Reference re Upper Churchill*

Echoing and amplifying these claims, *The Globe and Mail*, Canada's national newspaper of record, alleged that British Columbia's regulatory proposal was little more than – pun presumably intended – a crude tactic in its "guerrilla war designed to subject Trans Mountain to a death by a thousand cuts."[98] In a subsequent editorial following Kinder Morgan's decision to suspend all nonessential spending on the Trans Mountain expansion and demand a guarantee from the federal government that the project would be approved, the *Globe* accused British Columbia of "naked hypocrisy."[99] After noting that the BC provincial government's opposition to the Trans Mountain expansion was based on the government's "stated desire to protect the environment",[100] the *Globe* observed – not incorrectly – that the province was at the same time "supporting the development of the province's natural-gas reserves, offering tax breaks to a $40-billion project that includes, wait for it, a new pipeline and a new tanker terminal on the B.C. coast."[101] British Columbia, in the *Globe's* estimation, was precipitating a constitutional crisis "in the name of environmental principles it only adheres to when it is in its political interest, but abandons when it sees a dollar in it."[102]

Water Rights Reversion Act, [1984] 1 SCR 297 at 318. Perhaps rendering this technical evidentiary point moot, however, was the "Confidence and Supply Agreement" concluded between the BC NDP and BC Green Party, under which, among other things, the caucuses of the two parties agreed to "employ every tool available to the new government" to stop the Trans Mountain project. See British Columbia, Legislative Assembly, *Official Report of Debates*, 41-3, Issue 104 (14 March 2018) at 3534 (Hon G Heyman).

[98] Globe editorial, "Trudeau must stand up to B.C.'s crude tactics", *The Globe and Mail* (1 February 2018), online: <https://www.theglobeandmail.com/opinion/editorials/globe-editorial-trudeau-must-stand-up-to-bcs-crude-tactics/article37825229/>.

[99] Globe editorial, "Trans Mountain is now an economic and constitutional disaster", *The Globe and Mail* (8 April 2018), online: <https://www.theglobeandmail.com/opinion/editorials/article-globe-editorial-bc-governments-pipeline-hypocrisy-could-come-back/>.

[100] *Ibid.*

[101] *Ibid*.

[102] *Ibid.*

In light of these competing interpretations, how should the BC Court of Appeal have resolved the province's "Heavy Oil" reference?

The province's legal position relied in large part on the ruling of the BC Supreme Court in *Coastal First Nations v British Columbia (Environment)*.[103] In *Coastal First Nations,* the Court affirmed the right – indeed, the *responsibility* – of provinces to regulate the territorially-based impacts of economic projects, even if those projects constitute federal undertakings (in *Coastal First Nations*, the project was the controversial Northern Gateway oil pipeline proposal). The province placed significant weight on the following explanation provided by the Court: "To disallow any provincial regulation over the project because it engages a federal undertaking would significantly limit the province's ability to protect social, cultural and economic interests in its lands and waters. It would go against the current trend in the jurisprudence favouring, where possible, co-operative federalism."[104]

The principle of cooperative federalism was similarly utilized by the Federal Court to uphold *federal* jurisdiction in respect of an environmental assessment of an open-pit copper and gold mine situated entirely in British Columbia.[105] In *Taseko Mines Limited v Canada (Environment),* the Court held that "a project of such magnitude as the one considered in

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[103] *Coastal First Nations v British Columbia (Environment),* 2016 BCSC 34 [*Coastal First Nations*]. For an initial discussion of the application of this decision to the Trans Mountain pipeline expansion, see Chris Tollefson & Jason MacLean, "Here is why B.C. must do its own review of the Trans Mountain pipeline", *The Globe and Mail* (23 May 2017), online: <https://theglobeandmail.com/opinion/why-bc-must-do-its-own-review-of-the-trans-mountain-pipeline/article35095482/>.

[104] *Coastal First Nations, supra* note 103 at para 53, quoted in BC Gov News, "Court reference", *supra* note 84. See also *Rogers Communication v Châteauguay*, [2016] 1 SCR 467 at para 38: when "courts apply the various constitutional doctrines, they must take into account the principle of co-operative federalism, which favours, where possible, the concurrent operation of statutes enacted by governments at both levels" [*Rogers Communication*].

[105] *Taseko Mines Limited v Canada (Environment),* 2017 FC 1100 [*Taseko Mines*]. The leading case on cooperative federalism is *Canadian Western Bank v Alberta,* [2007] 2 SCR 3 [*Canadian Western Bank*].

the present case will likely have impacts on areas of both provincial and federal responsibility."[106] This decision accords not only with the interpretive principle of cooperative federalism, but also with the contextual constitutional analysis the Supreme Court of Canada has taken to environmental protection legislation. The Court has recognized that environmental protection is a matter of "superordinate importance" not assigned expressly or exclusively to either the federal or provincial heads of power.[107] The Court's constitutional interpretation of environmental protection legislation is further premised on the recognition that "our common future, that of every Canadian community, depends on a healthy environment."[108] More specifically, given that the impacts of environmental harms and pollution are diffuse, pervasive, cumulative, and have long-term implications, the Supreme Court of Canada has decided that "the Constitution should be so interpreted as to afford both levels of government ample means to protect the environment while maintaining the general structure of the Constitution."[109]

Moreover, as the Supreme Court of Canada observed in *Comeau* (discussed in the previous part of this chapter), the scope of federal authority granted over interprovincial economic matters must be carefully circumscribed so as not to invalidate "[a]gricultural supply management schemes, public health-driven prohibitions, *environmental controls*, and

[106] *Taseko Mines, supra* note 105 at para 160.
[107] *Hydro-Québec, supra* note 42 at para 85.
[108] *114957 Canada Ltée (Spraytech, Société d'arrosage) v Hudson (Town),* [2001] 2 SCR 241 at para 1.
[109] *Hydro-Québec, supra* note 42 at para 116, citing *Friends of the Oldman River Society v Canada (Minister of Transport),* [1992] 1 SCR 3.

innumerable comparable regulatory measures that incidentally impede the passage of goods crossing provincial borders".[110]

Based on these foundational precedents, British Columbia argued that the true pith and substance of its proposed heavy oil spill regulations was to protect the province's environment falling under its broad power over property and civil rights under s 92(13), supplemented by its authority over matters of a local or private nature under s 92(16) and its responsibility to manage public lands under 92(5) of the *Constitution Act, 1867*.[111]

British Columbia also argued that provincial environmental legislation may have "incidental effects" outside the province's jurisdiction, including effects on interprovincial undertakings.[112]

British Columbia further argued that its regulations were validated by the "double aspect" doctrine, whereby both the federal and provincial governments may adopt valid legislation in respect of a single matter.[113] Its proposed regulations did not seek to prevent the

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[110] *Comeau*, *supra* note 58 at para 3 [emphasis added]. While *Comeau* concerned the scope of s 121 of the *Constitution Act, 1867*, the Court's reasoning is equally applicable to the interpretation of the division of powers under ss 91 and 92.
[111] Attorney General of British Columbia, "BC's Heavy Oil Factum", *supra* note 91 at para 84.
[112] *Ibid* at paras 87–88.
[113] *Ibid* at paras 93–96, citing *Canadian Western Bank, supra* note 105 at para 30. Here it is important to note that the Supreme Court of Canada's decision in *Rogers Communication, supra* note 104, does not pose an obstacle to British Columbia's reliance on the double aspect doctrine. As Nathalie Chalifour shows, *Rogers Communication* does not limit the ambit of the double aspect doctrine. Rather, the Court declined to apply the doctrine in *Rogers Communication* because it found that the pith and substance of the municipal measure in question concerned radio-communications, a matter that cannot be assigned to a provincial head of power and is therefore incapable of having a double aspect. British Columbia's "Heavy Oil" regulations, by contrast, are distinguishable because their pith and substance concerned environmental protection, a matter over which federal and provincial jurisdiction is shared. Only in the event of an operational core conflict between otherwise valid federal and provincial laws will paramountcy displace the double aspect doctrine. See Chalifour, "Jurisdictional Wrangling over Climate Policy", *supra* note 11.

construction or operation of any interprovincial undertaking, the province argued (notwithstanding the campaign rhetoric of premier Horgan that appeared to suggest otherwise), and there is no precedent suggesting that only the federal government may enact environmental protection regulations in relation to the accidental discharges of an interprovincial undertaking such as the Trans Mountain pipeline.[114]

British Columbia further argued that the federal government cannot invoke the doctrine of interjurisdictional immunity in respect of its proposed regulations. While the federal government has legislative authority over "Lines of Steam or other Ships, Railways, Canals, Telegraphs, and other works and Undertakings connecting the Province with any other or others of the Provinces, extending beyond the Limits of the Province" under ss 91(29) and 92(10)(a) of the *Constitution Act, 1867*, there is no precedent stipulating that *discharges* from any such undertakings are within the core of the federal government's power.[115] On the contrary, courts have consistently held that interprovincial undertakings are not immune from provincial environmental protection laws.[116] In light of the Supreme Court of Canada's promotion of cooperative federalism generally and its contextual constitutional approach to environmental protection legislation specifically, British Columbia argued that it is appropriate to permit multiple levels of government to regulate

[114] Attorney General of British Columbia, "BC's Heavy Oil Factum*", supra* note 91 at para 96. In the alternative, British Columbia argued that its proposed regulations were saved by the ancillary powers doctrine because they are rationally and functionally related to the larger and constitutionally valid legislative scheme to which they are to be added: see paras 98–102.
[115] *Ibid* at para 105.
[116] *Ibid*, citing *Regina v TNT Canada Inc* (1986), 58 OR (2d) 410 (ONCA), and *Ontario v Canadian Pacific Ltd,* [1995] 2 SCR 1031.

the resources over which they have jurisdiction, and to allow any conflicts to be resolved through the application of the doctrine of paramountcy.[117]

Regarding the federal government's paramountcy argument, British Columbia argued that it too must fail. The province's proposed heavy oil spill regulations are either duplicative or establish higher environmental standards in respect of potentially conflicting federal provisions.[118] This is insufficient to establish federal paramountcy, a situation where compliance with one jurisdiction's laws amounts to defiance of another's.[119] Permissive federal legislation or action – such as its *conditional* approval of the Trans Mountain pipeline expansion – is not frustrated for paramountcy purposes by provincial legislation that restricts the scope of the federal permission.[120]

British Columbia's arguments were compelling, at least *on their face*; they resided comfortably within the Supreme Court of Canada's cooperative federalism and environmental protection jurisprudence. What was arguably the province's most compelling legal argument is also telling politically. As the Supreme Court of Canada observed in *Canadian Western Bank,* Parliament holds in reserve the ultimate legal power to make absolutely clear its intention to immunize aspects falling within federal authority under the doctrine of paramountcy.[121] The federal government's decision *not* to do so in

[117] *Ibid* at para 122.
[118] *Ibid* at para 129.
[119] *Ibid* at para 127, citing, *inter alia*, *Saskatchewan (Attorney General) v Lemare Lake Logging Ltd.,* [2015] 3 SCR 419.
[120] *Ibid* at para 130, citing *Quebec (Attorney General) v Canadian Owners and Pilots Association*, [2010] 2 SCR 536 at para 66.
[121] *Ibid* at para 121, citing *Canadian Western Bank, supra* note 105 at para 45.

respect of the Trans Mountain pipeline tells us more about its *political* position than it does about its legal powers.

Indeed, what is striking about the federal government's position in the Heavy Oil reference is its abandonment of the cooperative approach to environmental-cum-economic policy and regulation that it proudly trumpets in the Saskatchewan carbon-pricing reference.[122] The government's opening statement in the Heavy Oil reference, by contrast, expressed a view of the matter that is markedly unilateral and surprisingly shorn of its environmental implications:

> After promising to use "every tool" in its legislative "toolbox" to stop the expansion of the Trans Mountain Pipeline, the Government of British Columbia received legal advice that it would be unconstitutional for it to do so. The BC Government then developed a proposed regulatory regime that prohibits heavy oil shipment increases unless the Provincial Government, in its discretion, issues an authorization permit. Concerned that this regime would also be found *ultra vires* or inapplicable to federally-regulated undertakings like the Trans Mountain Pipeline, the BC Government now asks the Court to opine on its constitutionality before the legislation is enacted.[123]

The federal government's legal argument was threefold: (1) the true pith and substance of British Columbia's heavy oil spill regulations – despite their express purpose of environmental protection – is a colourable and ultimately *ultra vires* attempt to regulate

[122] And elsewhere as well. In *Comeau* for example, the Supreme Court of Canada notes that the Attorneys General that intervened in the case concerning the scope of s 121 of the *Constitution Act, 1867,* including among others both Canada and Saskatchewan, argued in favour of a narrow interpretation of s 121 in order "to give governments expansive scope to impose barriers on goods crossing their borders" as a "natural consequence of their position that 'cooperative federalism' is a distinct foundational principle for constitutional interpretation". See *Comeau, supra* note 58 at para 87.
[123] *Reference re Environmental Management Act (British Columbia),* 2019 BCCA 181 (Factum of the Attorney General of Canada at iii [Attorney General of Canada, "Canada's Heavy Oil Factum"].

interprovincial oil transportation;[124] (2) even if the regulations were *intra vires* the province, the regulations would be inapplicable to interprovincial undertakings like Trans Mountain by virtue of the doctrine of interjurisdictional immunity because the regulations significantly impair the federal government's ability to regulate such undertakings;[125] and (3) the regulations are constitutionally inoperable by virtue of the paramountcy doctrine because they conflict with and frustrate existing federal legislation that is designed to comprehensively regulate the safe and efficient operation of interprovincial oil transportation systems.[126]

The federal government's narrowly-framed legal arguments were credible only if one accepts the government's speculative *political* premise, which is the basis for its artificial characterization of the issue as a dispute about jurisdiction over interprovincial oil transportation: "Regulating the *nature* and *volume* of goods that flow through interprovincial undertakings is at the core of Canada's power under s. 92(10)(a) of the *Constitution Act, 1867*."[127] However, the means by which the federal government casts aspersions on British Columbia's Heavy Oil regulations as political and thus constitutionally colourable can also be turned on the government's central argument.

Repeating statements made by premier Horgan and other members of the BC NDP government, the federal government argued that "[t]he only way to make sense of the provisions is to appreciate them against the backdrop of the BC Government's true

[124] *Ibid.*
[125] *Ibid.*
[126] *Ibid.*
[127] *Ibid* at para 100 [emphasis added].

purpose: to block the TMX Project."[128] As a matter of politics, this may well be true. As a matter of law, however, it is speculative at best. As speculation, it is no more revealing of British Columbia's "true purpose" than the equally speculative and yet entirely reasonable explanation that, having received a legal opinion to the effect that the province could not constitutionally block the completion of the Trans Mountain pipeline expansion itself, the province pursued its second-best regulatory option: "to ensure (as far as reasonably possible) that no harm will be done to persons or property in BC by the (storage or) carriage of Heavy Oil, and that if such harm does occur, there will be adequate and accessible funds to mitigate, remediate and compensate."[129]

Moreover, apart from any political machinations at play, British Columbia's proposed regulations have a sound scientific basis. The NEB's recommendation and the federal Cabinet's approval of the Trans Mountain pipeline expansion ignored the existence of established and troublesome gaps in the scientific understanding of how diluted bitumen behaves in cold-water environments.[130] According to an assessment of the peer-reviewed scientific knowledge about bitumen and marine environments, there is a "relative paucity of information on the ecological consequences of spill response methods".[131] The NEB's own reconsideration of the marine ecosystem impacts of the Trans Mountain pipeline

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[128] *Ibid* at para 91.
[129] Attorney General of British Columbia, "BC's Heavy Oil Factum", *supra* note 91 at para 89.
[130] See MacLean, "Trans Mountain's only certainty", *supra* note 83; Thomas Sisk, "Science is a casualty of the Trans Mountain pipeline debate", *Vancouver Sun* (16 April 2018), online: <https://vancouversun.com/opinion/op-ed/thomas-sisk-science-is-a-casualty-of-the-trans-mountain-pipeline-debate>.
[131] Stephanie J Green et al, "Oil sands and the marine environment: current knowledge and future challenges" (2017) 15:2 Front Ecol Environ 74 at 79. Green et al conclude overall (at 74) that "[r]egulations to protect marine environments are hindered by a lack of available science and require holistic, ecosystem-based frameworks to assess cumulative and co-occurring stresses."

expansion preliminarily recommended that the federal government "should review and update federal marine shipping oil spill response requirements," and added that this review should consider (1) "updating response organization standards"; (2) "response planning methodologies"; (3) "public reporting by response organizations to promote transparency of information"; (4) "inclusion of Indigenous peoples and local communities in response planning"; and (5) "a requirement for additional response resources on all ocean-going vessels." [132] The NEB's preliminary, draft recommendations made pursuant to its reconsideration of its own deficient review of the Trans Mountain project (more on this below) does not even consider spill-prevention and spill-response concerns and methodologies relating to estuaries, rivers, lakes, ponds, or land. Political or not, British Columbia's Heavy Oil spill regulations can nevertheless be taken at face value as being grounded in and motivated by legitimate scientific concerns.[133]

Relatedly, the federal government's legal strategy in the Heavy Oil reference of making repeated reference to the BC government's public and political comments about the Trans Mountain pipeline, besides being an incomplete means of establishing the true purpose of the legislation in question,[134] also shines a decidedly less-than-flattering light on the NEB,

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[132] Canada, National Energy Board, "Trans Mountain Pipeline ULC (Trans Mountain) Application for the Trans Mountain Expansion Project (Project), National Energy Board (Board) reconsideration of aspects of its Recommendation Report as directed by Order in Council P.C. 2018-1177 (Reconsideration) MH-052-2018, Procedural Direction No. 4 – Affidavits and written argument-in-chief, including comments on draft conditions and recommendations" (Calgary: NEB, February 2019) at 39, online (pdf): <http://www.neb-one.gc.ca/pplctnflng/mjrpp/trnsmntnxpnsn/trnsmntnxpnsnrprt-eng.pdf>.

[133] Nor is the federal government's oft-cited (by itself) "Oceans Protection Plan" an effective counter to the established gaps in scientific knowledge about how to understand and effectively respond to spills of diluted bitumen. The Federal Court of Appeal in *Tsleil-Waututh* described the 11-page plan as "inchoate" and at an "early planning" stage. See *Tsleil-Waututh, supra* note 81 at paras 471, 661.

[134] See the caselaw cited at *supra* note 97. But see *Rogers Communication, supra* note 104 at para 36, where the Supreme Court of Canada explains that the purpose of a law or regulatory measure is determined by examining both intrinsic evidence (such as the preamble of a statute, or the general purposes stated in the resolution authorizing a measure) and extrinsic evidence, "such as that of the circumstances in which

on whose presumptive expertise and effectiveness the federal government relied extensively in its written submissions before the BC Court of Appeal.[135] The federal government noted, for example, that the *National Energy Board Act* was "the primary federal legislative enactment that regulates the interprovincial transportation of petroleum by pipeline. It ensures that federally-regulated pipelines are designed, constructed, operated and abandoned in a manner that is *safe for the public and the environment*."[136] After providing a lengthy recounting of the establishment of the NEB in 1959 and the key provisions of its controlling legislation, the federal government proceeded to describe how the *Pipeline Safety Act* "modernized the *NEB Act* in 2016."[137] The federal government quoted approvingly remarks made by the Minister of Natural Resources Canada to the effect that the purpose of introducing the *Pipeline Safety Act* was to find "new and better ways to improve our *world-class* regulatory system" and "ensure that we have a world-class, in fact, elements of it are *world-leading*, pipeline safety system."[138]

All of which is marshaled by the federal government to support its key argument in the BC Heavy Oil reference: "The *NEB's role as Canada's national energy regulator* would be seriously undermined if provinces could, under the guise of environmental legislation,

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the measure was adopted" (citations omitted). That said, the facts in *Rogers Communication* are once again distinguishable from the circumstances surrounding the introduction of the "Heavy Oil" regulations. In *Rogers Communication*, the Court found that the only conclusion possible was that the purpose of the municipal measure was to prevent Rogers from installing its radio-communication antenna system on a particular property (at para 44). Notwithstanding the BC premier's political rhetoric about stopping the Trans Mountain pipeline expansion, the environmental-protection purpose of the "Heavy Oil" regulations is credible, and finds support in the reasons for decision of the BC Supreme Court in the case of *Coastal First Nations, supra* note 103 at para 53.

[135] Attorney General of Canada, "Canada's Heavy Oil Factum", *supra* note 123 at paras 4-6, 8, 10, 13, 15, 17–34, 39–42, 107, 114–131.

[136] *Ibid* at para 17 [emphasis added].

[137] *Ibid* at para 123.

[138] *Ibid* [emphasis added].

stymie Canada's national energy policy and impose a patchwork of regulations based on the political ideologies of particular provincial governments."[139]

So much for cooperative federalism.

The federal government's emphasis on the role played by the NEB is profoundly puzzling in light of the government's own very public acknowledgement that the NEB had lost the trust of Canadians and was in need of reform – reform, I hasten to add, extending far beyond the enactment of the *Pipeline Safety Act*. After all, as late as 2014, the NEB refused to consider the climate change impacts of pipelines and the continued development of the oil sands.[140] Following its election in 2015, the new federal Liberal government conducted a systematic review of the NEB and called for its modernization.[141] The expert panel

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[139] *Ibid* at 129 [emphasis added]. This argument was ultimately accepted by the BC Court of Appeal. According to the Court: "At the end of the day, the NEB is the body entrusted with regulating the flow of energy resources across Canada to export markets." See *Reference re Environmental Management Act (British Columbia),* 2019 BCCA 181 at para 104. Now that Bill C-69 has been enacted, however, the NEB no longer even exists, having been replaced by the Canadian Energy Regulator. The BC Court of Appeal's advisory opinion was endorsed by the Supreme Court of Canada: *Reference re Environmental Management Act,* 2020 SCC 1.

[140] *Forest Ethics Advocacy Association v National Energy Board,* 2014 FCA 88; for further background and analysis of the NEB's position on climate change, see Jason MacLean "Like Oil and Water? Canada's Administrative and Legal Framework for Oil Sands Pipeline Development and Climate Change Mitigation" (2015) 2 The Extractive Industries and Society 785. It should be noted that, as of this writing, neither the NEB nor the federal government appears to have conducted any analysis of how both its own and broader international efforts to avert the worst impacts of climate change will affect the long-term profitability of an expanded Trans Mountain pipeline. See Shawn McCarthy, "Lack of climate clarity threatens oil reserve values, report says", *The Globe and Mail* (17 January 2019), online: <https://www.theglobeandmail.com/business/article-canadian-oil-reserves-at-risk-from-policies-to-combat-global-warming/>; Shawn McCarthy & Bill Curry, "Ottawa sought insider industry analysis for Trans Mountain deal, documents reveal", *The Globe and Mail* (21 January 2019), online: <https://www.theglobeandmail.com/politics/article-ottawas-45-billion-acquisition-of-trans-mountain-pipeline-was-based/>. It has been disclosed, however, that the federal government may have *overpaid* for the expansion project by as much as $800 million. See John Paul Tasker, "Ottawa may have overpaid for Trans Mountain by up to $1B, parliamentary budget officer says", *CBC News* (31 January 2019), online: <https://www.cbc.ca/news/politics/trans-mountain-pbo-1.5000212> [Tasker, "Ottawa may have overpaid for Trans Mountain"].

[141] Expert Panel on the Modernization of the National Energy Board, "Forward Together: Enabling Canada's Clean, Safe, and Secure Energy Future: Report of the Expert Panel on the Modernization of the

convened by the Minister of Natural Resources reported, among other things, that "Canadians have serious concerns that the NEB has been 'captured' by the oil and gas industry, with many Board members who come from the industry that the NEB regulates, and who – at the very least appear to – have an innate bias toward [*i.e.,* in favour of] that industry."[142] It is crucial here to acknowledge that in respect of what was supposed to be an arms-length regulatory body, this is a damning indictment.

The expert panel's report accordingly recommended that, among other things, "the National Energy Board must align itself to the government's environmental (*particularly climate change*), energy, social, and economic policy goals."[143]

This recommendation was made in respect of the very same and as yet unreformed NEB whose review of the Trans Mountain pipeline expansion project not only failed to assess the project's cumulative greenhouse gas emissions and those emissions' impact on Canada's ability to meet its emissions-reduction pledges under the Paris Agreement, but also failed to assess the environmental effects of pipeline-related marine shipping under the *Canadian Environmental Assessment Act, 2012*.[144]

National Energy Board" (15 May 2017), online (pdf): <https://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/pdf/NEB-Modernization-Report-EN-WebReady.pdf>.

[142] *Ibid* at 7.

[143] *Ibid* at 12 [emphasis added].

[144] *Tsleil-Waututh, supra* note 80 at paras 765–766.

Unsurprisingly, perhaps, in light of the NEB's consistently poor and not-infrequently controversial conduct,[145] the federal government subsequently introduced Bill C-69, *An Act to enact the Impact Assessment Act and the Canadian Energy Regulator Act, to amend the Navigation Protection Act and to make consequential amendments to other acts*.[146] The *Canadian Energy Regulator Act* introduced by the bill would supersede (and now has) the *National Energy Board Act* and replace the NEB with a new administrative agency, the Canadian Energy Regulator.

This is all the federal government's own very public doing. Yet the federal government refused to acknowledge the patent inconsistency of criticizing, reviewing, and ultimately completely remaking the NEB and its governing legislative framework, on the one hand, while on the other hand redoubling its rhetorical reliance on the NEB's incomplete and inadequate review and recommendation of the Trans Mountain pipeline expansion project.

Indeed, and not a little ironically, the federal government exposed *itself* to the charge that it used every *political* tool in its toolbox to proceed with the Trans Mountain expansion project by publicly and emphatically repeating that it will ensure that the pipeline would get built, particularly in response to the decision of the Federal Court of Appeal's decision in *Tsleil-Waututh* quashing Cabinet's initial approval of the pipeline, not only because of the NEB's deficient and unreasonable marine impacts assessment, but also because the

[145] For a further analysis of the NEB and abuses of administrative discretion, see Jason MacLean, "Autonomy in the Anthropocene? Libertarianism, Liberalism, and the Legal Theory of Environmental Regulation" (2017) 40:1 Dal LJ 279 at 320–321.
[146] Bill C-69, *An Act to enact the Impact Assessment Act and the Canadian Energy Regulator Act, to amend the Navigation Protection Act and to make consequential amendments to other Acts,* 42-1 [*Bill C-69*]. The *Canadian Energy Regulator Act,* SC 2019, c 28, s 10, came into force on August 28, 2019.

federal government itself had failed to satisfy its constitutional duty to consult and accommodate affected Indigenous groups.[147] The Federal Court of Appeal held that the federal government failed to "engage, dialogue meaningfully and grapple with the concerns expressed to it in good faith by the Indigenous applicants so as to explore possible accommodations of these concerns."[148] In particular, the Court found that the government declined to make a genuine and sustained effort "to pursue meaningful, two-way dialogue."[149] Nor did the government give serious consideration to whether any of the findings arising out of the NEB's review of Trans Mountain were unreasonable or incorrect, or to amending or supplementing the NEB's recommended conditions, which it had ample and uncontroversial legal authority to do.[150]

Notwithstanding the federal government's subsequent approval of the Trans Mountain project, what really emerges from this dispute between the federal government and British Columbia over spilled oil, however, is the high hypocrisy of both governments' equally high-minded appeals to cooperation, reconciliation, and meaningful climate action. The reaction of the BC NDP Member of Parliament Nathan Cullen to the Parliamentary Budget Office's estimate that the federal government may have significantly overpaid for the Trans Mountain pipeline is apt. According to Mr. Cullen, the government needs to "stop this

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[147] *Tsleil-Waututh, supra* note 80 at para 754. See e.g. David George-Cosh, "Morneau vows Trans Mountain 'will be built' despite court ruling", *BNN Bloomberg* (30 August 2018), online: <https://www.bnnbloomberg.ca/morneau-says-trans-mountain-will-be-built-despite-court-ruling-1.1131151>

[148] *Tsleil-Waututh, supra* note 80 at para 754.

[149] *Ibid* at para 756.

[150] *Ibid* at para 757.

nightmare" and focus instead on investing in green technology and renewable resources.[151] And yet the federal government still shows no signs of doing so.[152]

Nor can it be said, however, that British Columbia is pursuing a consistent and meaningful policy in respect of either climate change mitigation or reconciliation with Indigenous peoples. While the present BC NDP government opposed the Trans Mountain expansion project, not only because of its heavy oil spill risks, but also because – or so it has claimed – the project is opposed by several Indigenous First Nations and communities and poses significant climate risks.[153]

Regarding reconciliation, BC premier John Horgan made the following comparison of his government to the federal government after the latter announced its intention to purchase the Trans Mountain pipeline: "Both governments have professed to embrace genuine reconciliation, and I'm not convinced you can necessarily do that when you're *disregarding the rights of Indigenous communities*."[154]

Regarding climate change policy, premier Horgan remarked in respect of the federal government's purchase of Trans Mountain that "I have difficulty understanding, as [Washington State] Governor Inslee does, how investing in *significant fossil fuel*

[151] Nathan Cullen, quoted in Tasker, "Ottawa may have overpaid for Trans Mountain", *supra* note 140.
[152] See e.g. MacLean, "Canada's gradual climate policy", *supra* note 71.
[153] See e.g. Andrew Weichel, "B.C. premier, Indigenous groups respond to Trans Mountain purchase", *CTV News Vancouver* (29 May 2018), online: <https://bc.ctvnews.ca/b-c-premier-indigenous-groups-respond-to-trans-mountain-purchase-1.3950261> [Weichel, "BC premier responds to Trans Mountain purchase"]; Mychaylo Prystupa, "Federal Ministers Argue Trans Mountain Expansion is Necessary Part of Climate Plan", *The Tyee* (21 March 2018), online: <https://thetyee.ca/News/2018/03/21/Trans-Mountain-Climate-Plan/> [Prystupa, "Trans Mountain Expansion is Necessary"].
[154] Weichel, "BC premier responds to Trans Mountain purchase", *supra* note 153 [emphasis added].

infrastructure, at a time when we're trying to reduce our dependence on that infrastructure source, makes any sense. For me, and for British Columbians, we're going to assert our jurisdiction."[155]

Yet the BC government has championed the construction of a natural gas liquefaction terminal in Kitimat, British Columbia, and a natural gas pipeline that will connect the terminal to hydraulic fracturing operations in and around Dawson Creek, British Columbia; the liquefaction terminal (LNG Canada) would convert the natural gas to liquefied natural gas (LNG); the natural gas pipeline is called the Coastal GasLink pipeline.[156]

The Coastal GasLink pipeline component of LNG Canada faced significant opposition from the hereditary leaders of the Wet'suwet'en First Nation;[157] while the pipeline has support from elected First Nations Band councilors, the territory is both unceded and unsurrendered, and pursuant to the Supreme Court of Canada's landmark decision in *Delgamuukw v British Columbia*, the legal title holders are the hereditary leaders, not Band-level leaders, whose jurisdiction pursuant to the *Indian Act* is limited to reserves.[158]

Andy Calitz, the CEO of LNG Canada, which is part of a larger consortium headed by Royal Dutch Sell, expressed little interest in the distinction between hereditary governance and Band-level governance: "I'm not convinced that it's possible for major infrastructure

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[155] Prystupa, "Trans Mountain Expansion is Necessary", *supra* note 153 [emphasis added].
[156] For project background and details, see LNG Canada, online: <https://www.lngcanada.ca/>. See also Brent Jang, "LNG Canada CEO vows to press ahead with gas project facing protests", *The Globe and Mail* (22 January 2019), online: <https://www.theglobeandmail.com/business/article-lng-canada-ceo-vows-to-press-ahead-with-gas-project-facing-protests/> [Jang, LNG Canada CEO vows to press ahead"].
[157] *Ibid*.
[158] *Delgamuukw v British Columbia,* [1997] 3 SCR 1010.

projects in British Columbia to get unanimous support. Our project is a case in point. The conversation about hereditary versus elected systems of governance, and which hereditary leaders speak for Indigenous people, is a conversation I will leave to other people to resolve."[159]

Premier Horgan's initial reaction to this governance dispute, however, seemed merely to restate the problem, if not beg the question entirely: "It is my view that LNG Canada has shown they understand the importance of consultation and meaningful reconciliation with First Nations, and that is why they have signed agreements with every First Nation along the corridor."[160]

How to reconcile the BC NDP government's incongruent position on reconciliation with First Nations? It is hard to improve upon the interpretation offered by an evidently exasperated reader of *The Globe and Mail*, who wrote the following letter to the paper's editor:

> For those confused about B.C. Premier John Horgan's stance on Indigenous consent regarding pipelines, I believe it to be as follows: LNG Canada directly affects his NDP government's finances and therefore does not require unanimous consent. Trans Mountain does not directly affect Mr. Horgan's government's finances, just Canada's, and therefore requires unanimous Indigenous consent.[161]

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[159] Jang, "LNG Canada CEO vows to press ahead", *supra* note 156.
[160] Richard Zussman, "B.C. Premier John Horgan expecting 'peaceful resolution' to natural gas pipeline protest", *Global News* (9 January 2019), online: <https://globalnews.ca/news/4831105/john-horgan-peaceful-resolution-pipeline-protest/>.
[161] Dan Petryk, "Another oh-so-Canadian pipeline mess. Plus other letters to the editor", *The Globe and Mail* (10 January 2019), online: <https://www.theglobeandmail.com/opinion/letters/article-jan-10-another-oh-so-canadian-pipeline-mess-plus-other-letters-to/>. Nor is this an isolated case. The BC government's

LNG Canada's climate impacts are equally difficult to square with British Columbia's commitments to reducing greenhouse gas emissions, including methane emissions, and its reliance on long-term fossil fuel infrastructure. It is estimated that LNG Canada's completion would render British Columbia's greenhouse gas emissions targets under its current climate change plan impossible to meet.[162] Moreover, like other jurisdictions, British Columbia has yet to resolve the natural gas sector's ongoing inability to prevent methane leaks and ensure that hydraulic fracturing does not contaminate local water supplies and contribute to public health problems.[163]

The jurisdictional knots that the federal government and the provincial governments of British Columbia and Saskatchewan (and others) continue to tie themselves into have little – if anything – to do with genuine disagreements about the division of powers under the Constitution. Nor can any of these governments legitimately ground their positions on pipelines – or carbon prices – in a genuine concern to act urgently and ambitiously on climate change, environmental protection, or reconciliation with Indigenous peoples. These governments' positions instead reflect an unabated commitment to an economic

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decision to approve the construction of Site C mega-dam to produce hydroelectricity has drawn significant criticism from Indigenous communities and environmental advocates. See e.g. David Schindler & Faisal Moola, "Opinion: Decision to approve Site C undermines reconciliation with Indigenous peoples and long-term action on climate change", *Vancouver Sun* (20 December 2017), online: <https://vancouversun.com/opinion/op-ed/opinion-decision-to-approve-site-c-undermines-reconciliation-with-indigenous-peoples-and-long-term-action-on-climate-change>.

[162] See e.g. Brent Jang, "B.C.'s climate targets will be impossible to reach if LNG Canada project goes ahead, critics say", *The Globe and Mail* (21 September 2018), online: <https://www.theglobeandmail.com/canada/british-columbia/article-bcs-climate-targets-will-be-impossible-to-reach-if-lng-canada/>; Justine Hunter, "Now it's the BC NDP's turn to square the circle on LNG and greenhouse-gas emissions", *The Globe and Mail* (16 September 2018), online: <https://www.theglobeandmail.com/canada/british-columbia/article-now-its-the-ndps-turn-to-square-the-circle-on-lng-and-greenhouse-gas/>.

[163] Karen Tam Wu, "LNG Canada's announcement presents big challenge to B.C.'s clean growth" (2 October 2018), *Pembina Institute* (blog), online: <https://www.pembina.org/media-release/lng-canada-fid>.

development policy rooted, not in the promotion of renewable energy, green technology, and a just transition toward sustainability, but rather in the extraction and exportation of non-renewable fossil fuels and other natural resources. This unsustainable policy commitment comes into even clearer view in the context of the controversy surrounding the reform of Canada's environmental assessment processes embodied by Bill C-69, dubbed by its industry critics as the "no pipelines bill,"[164] which is discussed in the next part of the chapter.

III. Kill Bill C-69 (the "no pipelines bill")

Bill C-69[165] was the surprisingly controversial (in some quarters) legislative response of the federal Liberal government to the widespread public perception that the regulatory framework for assessing the environmental impacts of economic projects in Canada is broken. I say "surprisingly" because, at first glance, the bill seemed to offer industrial project proponents everything they could wish for in terms of environmental assessment legislation. As the Deputy Minister of Environment and Climate Change Canada described it, Bill C-69's proposed (now enacted) *Impact Assessment Act* "provides a predictable,

[164] See Shawn McCarthy, "Senators challenge efficacy of Liberals' resource project assessment plan", *The Globe and Mail* (6 February 2019), online: <https://www.theglobeandmail.com/business/article-senators-challenge-efficacy-of-liberals-resource-project-assessment/> [McCarthy, "Senators challenge project assessment plan"].
[165] *Bill C-69*, *supra* note 146.

time-bound process, from early planning through to the decision, to ensure that companies know what to expect and when."[166]

Given these defining features, including assessment timeframes tighter than those provided by the *Canadian Environmental Assessment Act, 2012*,[167] environmental advocates were initially sharply critical of Bill C-69, whereas one major industry sector subject to the new bill strongly supported it. Those initial reactions are telling. The environmental nongovernmental organization, MiningWatch Canada, initially reacted to Bill C-69 – especially the bill's proposed *Impact Assessment Act* – in the following, highly skeptical terms: "the worst outcome for both sustainability and democracy would be a process that gives the government adequate credibility with enough specific sectors of the public to allow it to make and enforce decisions that may have nothing to do with sustainability and evidence, or climate commitments, or environmental protection, or Indigenous peoples' rights and livelihoods."[168]

Unsurprisingly, perhaps, in light of MiningWatch Canada's reaction to Bill C-69, the Mining Association of Canada, which represents and speaks on behalf of Canada's largest

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[166] Stephen Lucas, former Deputy Minister of Environment and Climate Change, quoted in McCarthy, "Senators challenge project assessment plan", *supra* note 164.

[167] *Canadian Environmental Assessment Act, 2012,* SC 2012, c 19, s 52. For a discussion of the legislative changes to the environmental assessment regime introduced by this Act in 2012, see Meinhard Doelle, "CEAA 2012: The End of Federal EA as We Know It?" (2012) 24 J Envtl L & Prac 1.

[168] Jamie Kneen, "Bill C-69: New Federal Environmental Review Laws Fall Short of Promises" (9 February 2018), *MiningWatch Canada* (blog), online: <http://www.miningwatch.ca/blog/2018/2/9/bill-c-69-new-federal-environmental-review-laws-fall-short-promises>. A substantially similar conclusion was reached by a consortium of environmental nongovernmental organizations, not only in respect of the federal government's new *Impact Assessment Act*, but also in respect of its overall performance in attempting to enhance environmental protection and related Indigenous rights and interests. See Ėquiterre et al, "Clock is Ticking: A Mid-Term Report Card on the Federal Government and its Work on the Environment" (May 2018), online (pdf): <https://equiterre.org/sites/fichiers/gvt_midterm_report_eng.pdf>.

mining companies, cautiously supported the bill. According to the Association, the bill's *Impact Assessment Act* will increase the likelihood of timelier decisions, reduce uncertainty, and enable federal, provincial, and Indigenous government collaboration to deliver on the perennial industry desire for "one project, one assessment."[169] Overall, the Association's view is that "if well implemented, Bill C-69 holds the promise of improving upon predecessor legislation [*CEAA, 2012*] for most mines and the status quo".[170]

The Mining Association's reasoning is hardly radical. Yet the Association's CEO, Pierre Gratton, reported receiving "hate mail" from opponents of the bill.[171] A number of industry organizations mobilized to lobby the Senate against the bill, including the Canadian Association of Petroleum Producers, the Chemistry Industry Association of Canada, the Association of Canadian Port Authorities, and the Canadian Energy Pipeline Association, which claims that if Bill C-69 were enacted, Canada would "never see another pipeline built."[172]

Perhaps the most pointed opposition to the bill was expressed by an astroturf organization that calls itself "Suits and Boots."[173] Of Suits and Boots' "10 Reasons to Kill Bill C-69 in

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[169] Pierre Gratton, "Bill C-69: a step forward for Canada's mining sector", *The Globe and Mail* (16 September 2018), online: <https://www.theglobeandmail.com/business/commentary/article-bill-c-69-a-step-forward-for-canadas-mining-sector/>. Mr. Gratton is the CEO of the Mining Association of Canada.
[170] *Ibid*.
[171] Gabriel Friedman & Geoffrey Morgan, "Bill C-69 fuels battle", *Financial Post* (16 February 2019) at C1.
[172] *Ibid*.
[173] The organization's website is https://suitsandboots.ca. For an initial reaction to Suits and Boots' claims about Bill C-69, see Martin Olszynski, "Bill C-69's detractors can blame Harper's 2012 omnibus overreach", *Calgary Herald* (26 September 2018), online: <https://calgaryherald.com/opinion/columnists/column-bill-c-69s-detractors-can-blame-harpers-2012-omnibus-overreach>.

Canada's Senate,"[174] three in particular provoked an alarmed response from environmental advocates and scholars, who, despite their earlier criticisms of the bill's failures to meaningfully promote climate change mitigation, sustainability, or reconciliation with Indigenous peoples, among other pressing objectives,[175] in an abrupt volte-face attempted to *defend* the bill against its industry critics.

Suits and Boots argued, for example, that Bill C-69 would furnish the Minister of the Environment and Climate Change with too much discretionary power to reject projects. Some of the bill's environmentalist defenders countered that the *Canadian Environmental Assessment Act, 2012* was even more discretionary, and that under the bill's new *Impact Assessment Act* the government would have to give detailed reasons for its project decisions.[176] In reality, however, because the Federal Court of Appeal has established such an excessively low bar for the standard of reasonableness of environmental assessment decisionmaking on judicial review,[177] the government need only document that it gave "some consideration"[178] to the *Impact Assessment Act's* public interest factors (about

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[174] *Ibid*.
[175] Meinhard Doelle, "Bill C-69: The Proposed New Federal Impact Assessment Act (IAA)" (9 February 2018), *Environmental Law News* (blog), online: <https://blogs.dal.ca/melaw/2018/02/09/bill-c-69-the-proposed-new-federal-impact-assessment-act/>; Chris Tollefson, "Environmental assessment Bill as a lost opportunity", *Policy Options* (14 February 2018), online: < https://policyoptions.irpp.org/magazines/february-2018/environmental-assessment-bill-is-a-lost-opportunity/>; Jason MacLean, "Kill Bill C-69 – it undermines efforts to tackle climate change", *The Conversation* (25 October 2018), online: <https://theconversation.com/kill-bill-c-69-it-undermines-efforts-to-tackle-climate-change-105118>.
[176] See e.g. the defence of Bill C-69 offered by Mark Winfield, Deborah Curran & Martin Olszynski, "How post-truth politics is sinking debate on environmental assessment reform", *The Conversation* (11 October 2018), online: <https://theconversation.com/how-post-truth-politics-is-sinking-debate-on-environmental-assessment-reform-104684> [Winfield, Curran & Olszynski, "Environmental assessment reform"].
[177] *Ontario Power Generation Inc v Greenpeace Canada* et al*,* 2015 FCA 186 at para 130 [*Ontario Power Generation*]. For a commentary on the decision, see Martin Olszynski & Meinhard Doelle, "*Ontario Power Generation Inc. v Greenpeace Canada*: Form over Substance Leads to a 'Low Threshold' for Federal Environmental Assessment" (23 September 2015), *ABlawg.ca* (blog), online (pdf): <https://ablawg.ca/wp-content/uploads/2015/09/Blog_MOandMD_Ontario-Power-Generation-Inc-_FCA_20Sept2015.pdf>.
[178] *Ontario Power Generation, supra* note 177 at para 130.

which more below). So long as the government formally ticks those statutory boxes, the courts will continue to defer to the government's discretionary policy decisions.[179]

Suits and Boots further argued that Bill C-69 was biased because it was introduced by the Minister of the Environment and Climate Change, while the bill's defenders counter that the Minister of Natural Resources was significantly involved throughout the bill's gestation (which is true), and that the bill reflected the results of two years of extensive public engagement and hearings (which is *untrue*).[180] Once again, the reality is more nuanced. After the expert panel on environmental assessment reform appointed by the federal government released its comprehensive final report based on its broad engagement with a diverse array of stakeholders across Canada,[181] the federal government immediately distanced itself from the expert panel's report in response to industry criticism (as discussed in detail above in chapter four).[182] The expert panel's recommendations are barely recognizable in Bill C-69's *Impact Assessment Act*. The bill *followed* two years of consultations, but it was neither *based on* nor *reflective of* those consultations.[183]

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[179] For an analysis of Canadian courts' tendency to excessively defer to governmental decisions in respect of environmental matters, see Jason MacLean & Chris Tollefson, "Climate-Proofing Judicial Review Post-Paris: Judicial Competence, Capacity, and Courage" (2018) 31:3 J Envtl L & Prac 245; Lynda Collins & Lorne Sossin, "In Search of an Ecological Approach to Constitutional Principles and Environmental Discretion in Canada" (2019) 52:1 UBC L Rev 293.

[180] Winfield, Curran & Olszynski, "Environmental assessment reform", *supra* note 176.

[181] Expert Panel for the Review of Environmental Assessment Processes, *Building Common Ground: A New Vision for Impact Assessment in Canada* (Ottawa, ON: Canadian Environmental Assessment Agency, 2017) (pdf) online: <https://www.canada.ca/content/dam/themes/environment/conservation/environmental-reviews/building-common-ground/building-common-ground.pdf>.

[182] Martin Olszynski et al, "Sustainability in Canada's environmental assessment", *Policy Options* (5 September 2017), online: <http://policyoptions.irpp.org/magazines/september-2017/sustainability-in-canadas-environmental-assessment-and-regulation/> [Olszynski et al, "Sustainability in environmental assessment"].

[183] The oil and gas industry's capture of the regulatory review process leading up to the tabling of Bill C-69 is discussed at length in chapter four of this thesis.

Finally, Suits and Boots argued that Bill C-69 would transform Canada's voluntary climate commitments into enforceable legal obligations that our trading partners could use against us. Relatedly, Conservative Senator Michael MacDonald described industry representatives' – and some of his fellow Senators' – concerns "that the complexity and detail and long prescriptive lists of factors to be considered in evaluating projects in this voluminous bill will enhance the risk of litigation that could drag on forever. This complexity and detail in the bill could not only kill viable projects, but will drive investment away from Canada."[184]

The mandatory factors to be considered in the bill's *Impact Assessment Act* are set out in sections 22 and 63 of the Act, which respectively provide as follows:

> **Factors – impact assessment**
>
> **22 (1)** The impact assessment of a designated project, whether it is conducted by the Agency or a review panel, must take into account the following factors:
>
> **(a)** the changes to the environment or to health, social or economic conditions and the positive and negative consequences of these changes that are likely to be caused by the carrying out of the designated project, including
>
> > **(i)** the effects of malfunctions or accidents that may occur in connection with the designated project,
> >
> > **(ii)** any cumulative effects that are likely to result from the designated project in combination with other physical activities that have been or will be carried out, and
> >
> > **(iii)** the result of any interaction between those effects;

[184] Conservative Senator Michael MacDonald, quoted in McCarthy, "Senators challenge project assessment plan", *supra* note 164.

(b) mitigation measures that are technically and economically feasible and that would mitigate any adverse effects of the designated project;

(c) the impact that the designated project may have on any Indigenous group and any adverse impact that the designated project may have on the rights of the Indigenous peoples of Canada recognized and affirmed by section 35 of the *Constitution Act, 1982*;

(d) the purpose and need for the designated project;

(e) alternative means of carrying out the designated project that are technically and economically feasible, including through the use of best available technologies, and the effects of those means;

(f) any alternatives to the designated project that are technically and economically feasible and are directly related to the designated project;

(g) Indigenous knowledge provided with respect to the designated project;

(h) the extent to which the designated project contributes to sustainability;

(i) the extent to which the effects of the designated project hinder or contribute to the Government of Canada's ability to meet its environmental obligations and its commitments in respect of climate change;

(j) any change to the designated project that may be caused by the environment;

(k) the requirements of the follow-up program in respect of the designated project;

(l) considerations related to Indigenous cultures raised with respect to the designated project;

(m) community knowledge provided with respect to the designated project;

(n) comments received from the public;

> **(o)** comments from a jurisdiction that are received in the course of consultations conducted under section 21;
>
> **(p)** any relevant assessment referred to in section 92, 93 or 95;
>
> **(q)** any assessment of the effects of the designated project that is conducted by or on behalf of an Indigenous governing body and that is provided with respect to the designated project;
>
> **(r)** any study or plan that is conducted or prepared by a jurisdiction – or an Indigenous governing body not referred to in paragraph (f) or (g) of the definition of *jurisdiction* in section 2 – that is in respect of a region related to the designated project and that has been provided with respect to the project;
>
> **(s)** the intersection of sex and gender with other identity factors; and
>
> **(t)** any other matter relevant to the impact assessment that the Agency or – if the impact assessment is referred to a review panel – the Minister requires to be taken into account.[185]

Before proceeding to the Act's mandatory "public interest" factors under section 63, notice that, in respect of the factors to be considered under section 22, the Agency or review panel, neither of which is the decisionmaker under the Act, must merely take the foregoing factors into account in conducting their assessments; they need not *base* their assessment on any one of these factors, let alone on *all* of them taken together.

In the same vein, the federal Cabinet's ultimate decision in respect of a project designated for assessment must be based on (1) the Impact Assessment Agency's report taking into account the section 22 factors, and (2) the Minister's consideration of the following public interest factors under section 63 of the *Impact Assessment Act*:

[185] Bill C-69, *Impact Assessment Act*, s 22, *supra* note 146.

Factors – public interest

63 The Minister's determination under paragraph 60(1)(a) in respect of a designated project referred to in that subsection, the Governor in Council's determination under section 62 in respect of a designated project referred to in that subsection, must be based on the report with respect to the impact assessment and a consideration of the following factors:

(a) the extent to which the designated project contributes to sustainability;

(b) the extent to which the adverse effects within federal jurisdiction and the adverse direct or incidental effects that are indicated in the impact assessment report in respect of the designated project are significant;

(c) the implementation of the mitigation measures that the Minister or the Governor in Council, as the case may be, considers appropriate;

(d) the impact that the designated project many have on any Indigenous group and any adverse impact that the designated project may have on the rights of the Indigenous peoples of Canada recognized and affirmed by section 35 of the *Constitution Act, 1982*; and

(e) the extent to which the effects of the designated project hinder or contribute to the Government of Canada's ability to meet its environmental obligations and its commitments in respect of climate change.[186]

Regarding these "public interest" factors guiding project approval decisions under the Act, three observations are pertinent. First, like the factors enumerated under section 22 of the Act, the public interest factors under section 63 guiding Cabinet's discretionary determinations of the public interest must be based, not directly on the enumerated factors themselves, but on a *consideration* of those factors. The distinction is subtle, but

[186] *Ibid* at s 63. Note that these provisions and those cited above have been carried over virtually unchanged from Bill C-69 to the *Impact Assessment Act*, which was enacted in June 2019 and came into force in August 2019.

significant. Given that Cabinet is the decisionmaker, its consideration of the factors will be paid considerable deference by reviewing courts,[187] particularly insofar as those factors disclose highly factual and polycentric policy issues, as environmental assessments characteristically do.[188]

Second, notice that the factors (a), (b), (d), and (e) enumerated under section 63 are also included in section 22. This effectively invites Cabinet to give *its own consideration* to each of these factors already considered by the assessment agency or panel, whose consideration will be reflected in its report, which Cabinet will also consider; this interpretation is supported by paragraph 63(c), which explicitly provides that the Minister or Cabinet may substitute its own view of the implementation of appropriate mitigation measures. While this certainly broadens the discretion of Cabinet, that discretion, contrary to industry concerns raised in respect of the Act, has overwhelmingly favoured project proponents throughout the history of Canadian environmental assessment legislation.[189] Moreover, there is little to no evidence capable of supporting industry's presumptive

[187] The leading case for this proposition is *Agraira v Canada (Minister of Public Safety and Emergency Preparedness),* [2013] 2 SCR 559. In *Agraira*, the Supreme Court of Canada held (at para 50) that the relevant Minister had considerable latitude in interpreting a statutory provision mandating decisions be made in the "national interest".

[188] See e.g. *Gitxaala Nation v Canada,* 2016 FCA 187 [*Gitxaala Nation*], leave to appeal refused, 2017 CarswellNat 263 (SCC). Writing for a unanimous Federal Court of Appeal, Stratas JA observed (at para 140) that "[i]n conducting its assessment [of the Northern Gateway oil pipeline project proposal], the Governor in Council has to balance a broad variety of matters, *most of which are more properly within the realm of the executive, such as economic, social, cultural, environmental and political matters*" [emphasis added]. According to Stratas JA at para 145, "[t]he standard of review for decisions such as this – discretionary decisions founded upon the widest considerations of policy and public interest – is reasonableness".

[189] See Olszynski et al*,* "Sustainability in environmental assessment", *supra* note 182.

concern that the winds of the government's discretion are about to change direction anytime soon.

Third, contrary to the claims of Suits and Boots, nothing in sections 22 and 63 of the Act make Canada's climate commitments legally binding. As Bill C-69's defenders observed, the requirement to *consider* Canada's climate commitments is "wobbly" at best.[190] As the Minister of the Environment and Climate Change (then Catherine McKenna) asserted in defence of the bill, ostensibly to allay the concerns of Canada's oil and gas industry, she would have approved the Trans Mountain pipeline expansion project under the new *Impact Assessment Act* set out in Bill C-69. According to Minister McKenna: "You can expect that it would have been approved. It's going to create good jobs. We need this project to go ahead."[191]

So much for Bill C-69 as the "no pipelines bill."

As the bill's about-face academic defenders argued, its legislation "represents incremental – not radical – changes to the regime that now exists."[192]

The trouble with this tepid defence is that it is entirely true. As the UN IPCC's special report on 1.5 ºC global warming released in 2018 makes clear, the time for incremental

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[190] Martin Olszynski, "Bill C-69's Detractors Can Blame Harper's 2012 Omnibus Overreach (Blog Edition)" (25 September 2018), *ABlawg.ca* (blog), online (pdf): <http://ablawg.ca/wp-content/uploads/2018/09/Blog_MO_Bill_C_69_Sept2018.pdf>.
[191] Minister Catherine McKenna, quoted in Zi-Ann Lum, "Kinder Morgan Pipeline Would Still Get Green Light Under New Rules", *Huffington Post* (8 February 2018), online: <https://www.huffingtonpost.ca/2018/02/08/kinder-morgan-pipeline-would-still-get-green-light-under-new-rules-mckenna_a_23356857/>.
[192] Winfield, Curran & Olszynski, "Environmental assessment reform", *supra* note 176.

changes has passed. The IPCC's report calls for rapid, systemic, and unprecedented changes in how governments, industries, and societies function in order to limit global warming to 1.5 ºC above the pre-industrial norm and thereby avoid the most catastrophic consequences of climate change.[193] While the industry and political critics of Bill C-69 appear to effectively deny that Canada has any responsibility to take aggressive and ambitious action on climate change,[194] let alone reconciliation with Indigenous peoples, the bill's ENGO and academic defenders appear not to understand the urgency of radically reorienting our regulatory processes toward greater sustainability and reconciliation. Rather, they remain rooted in the taken-for-granted staples ideology[195] shared by Canada's Prime Minister, who, as noted earlier in this thesis, remarked to an approving audience of oil and gas industry participants in Houston, Texas that "[n]o country would find 173 billion barrels of oil in the ground and just leave them."[196] In the conclusion of this chapter below I discuss the implications of this ideology for the future of Canada's climate and sustainability policies.

IV. Conclusion: Canada's Crude Crisis

As the year 2018 drew to a close, the discount at which the sour (sulphuric) and heavy Alberta oil sands bitumen crude – Western Canadian Select – typically trades relative to

[193] IPCC, "Global Warming of 1.5 ºC", *supra* note 3.
[194] See e.g. Gary Mason arguing that "Conservative political leaders in this country simply do not believe climate change is their problem to solve": Gary Mason, "Carbon-tax opponents don't let facts get in the way", *The Globe and Mail* (15 February 2019), online: <https://www.theglobeandmail.com/canada/article-carbon-tax-opponents-dont-let-facts-get-in-the-way/>.
[195] See chapter two of this thesis and the discussion of Canada as a carbon democracy.
[196] Prime Minister Justin Trudeau, quoted in Jeremy Berke, "No country would find 173 billion barrels of oil in the ground and just leave them", *Business Insider* (10 March 2017), online: http://www.businessinsider.com/trudeau-gets-a-standing-ovation-at-energy-industry-conference-oil-gas-2017-3>.

the sweeter and lighter North American benchmark – West Texas Intermediate – ballooned to an historic high, nearly CDN$50.[197] The discrepancy between the two market rates was likely due to a number of factors, including maintenance issues at some US oil refineries and the anticipation of the coming into force in 2020 of the International Maritime Organization's rule limiting the sulphur content of bunker fuels.[198] Canadian observers, however, emphasized the lack of oil transport capacity (rail and pipeline) relative to increasing levels of oil sands production.[199]

The mainstream media and prominent public figures characterized the abnormally high Canadian crude discount as a full-blown national economic crisis,[200] notwithstanding financial analyses such as the Royal Bank of Canada's assessment indicating that the "near-term impact to the Canadian economy is less than some may believe" (*i.e.*, no more than 0.4% of Canadian gross domestic product, and likely less).[201] Rather than calling for the oil-dependent economies of Alberta and Saskatchewan to diversify while at the bottom of the boom-bust cycle typical of volatile natural resource commodities, consistent with the policy analysis of the International Energy Agency,[202] the predominant Canadian response

[197] Kyle Bakx, "3 reasons why Alberta oil prices have sunk", *CBC News* (4 October 2018), online: <https://www.cbc.ca/news/business/alberta-wcs-wti-discount-differential-1.4849015>. While prices declined dramatically again in the spring of 2020, the cause then was the global COVID-19 pandemic, and this decline did not fundamentally alter the *discrepancy* between Canadian and US oil prices. Accordingly, pipeline capacity was not implicated in this latter price decline.
[198] *Ibid.* As of January 1, 2020, the limit for sulphur in fuel oil used on board ships operating outside designated emission control areas was reduced to 0.50% m/m (*i.e.,* mass by mass). See International Maritime Organization, "Sulphur 2020 – cutting sulphur oxide emissions" (2020), online: <http://www.imo.org/en/MediaCentre/HotTopics/Pages/Sulphur-2020.aspx>.
[199] *Ibid.*
[200] Dan Healing, "'This is very much a crisis': Prime Minister Justin Trudeau says of low Alberta oil price", *Global News* (22 November 2018), online: <https://globalnews.ca/news/4688063/trudeau-calgary-chamber-of-commerce-address/>.
[201] Royal Bank of Canada, "Lost in Transportation: Putting the discount on Canadian heavy oil in context" (9 May 2018), online (pdf): <http://www.rbc.com/economics/economic-reports/pdf/other-reports/WCS%20spread_May2018.pdf>.
[202] IEA, "World Energy Outlook 2018", *supra* note 8.

was to redouble calls for new oil pipeline construction. For example, Canada's leading newspaper, *The Globe and Mail*, characterized the problem and its solution thus: "Canada is living in an energy nightmare. The only solution is for Ottawa to focus on getting the Trans Mountain expansion approved in the shortest time possible",[203] climate change consequences be hanged. Remarkably, just as the carbon-pricing and Heavy Oil references were framed as being about the constitution, and just as Bill C-69 is framed was being about certainty, efficiency, and approving new pipelines, the crude crisis's climate policy implications were ignored entirely.

Early in 2019, the crude crisis having largely dissipated and returned to its normal level absent the addition of rail or pipeline capacity (although attributable in part to modest production cuts temporarily mandated by the Alberta government), direct calls for pipeline construction, along with indirect calls expressed as opposition to Bill C-69, the "no pipelines bill," continued unabated. Jason Kenney, the leader of the United Conservative Party of Alberta, promised that if elected in the province's spring 2019 election, he would adopt a much more combative approach against Ottawa, other provinces, and environmental advocates over the fate of new oil pipelines.[204] Kenney's argument was that the Trans Mountain expansion has been stalled in part because the governing provincial NDP party has not been aggressive enough.[205] Kenney argued that the federal government ought to constitutionally declare the Trans Mountain pipeline expansion to be in "the

[203] "Globe editorial: Alberta's disastrous oil price discount? Blame Canada", *The Globe and Mail* (23 November 2018), online: <https://www.theglobeandmail.com/opinion/editorials/article-globe-editorial-albertas-disastrous-oil-price-discount-blame-canada/>.
[204] James Keller, "UCP's Kenney vows to take tougher stand on pipelines than Notley's NDP", *The Globe and Mail* (17 February 2019), online: <https://www.theglobeandmail.com/canada/alberta/article-kenney-vows-to-take-tougher-stand-on-pipelines-than-notleys-ndp/>.
[205] *Ibid*.

general advantage of Canada."[206] Alberta's United Conservative Party's 2018 "Policy Declaration" similarly asserted that the Alberta government should "facilitate private sector pipeline, energy corridor and infrastructure developments that maximize value and opportunities in the extraction, utilization and export of Alberta's energy products."[207] The United Conservative Party's policy platform was silent, tellingly, on the issue of climate change.[208] In September 2019, the United Conservative Government in Alberta issued an Order in Council referring a question about the constitutional validity of the *Impact Assessment Act* to the Court of Appeal for Alberta.[209]

The continued support and subsidization of expanding oil and gas production extends beyond Canada. Demand for oil and gas continues to rise globally, and the industry is planning multi-trillion-dollar investments to meet it, far surpassing the global annual investment of approximately US$300 billion.[210] As *The Economist* magazine observes, echoing the IPCC's special report on 1.5 ºC global warming, the next decade will be critical for mitigating climate change. Further observing the failures of technological innovation, activist financial investors, enlightened corporate self-interest, and litigation commenced against major investor-owned oil companies to curb the production and consumption of

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[206] *Ibid.*
[207] United Conservative Party, "Policy Declaration 2018" at 8, online (pdf): <https://unitedconservative.ca/Content/UCP%20Policy%20Declaration.pdf>.
[208] Following his election as provincial premier in the spring of 2019, Kenney began publicly contemplating a constitutional challenge to Bill C-69. For further background, see John Paul Tasker, "Kenney warns of constitutional challenge if environmental assessment overhaul is passed as written", *CBC News* (2 May 2019), online: <https://www.cbc.ca/news/politics/kenney-court-bill-c69-senate-1.5119675>.
[209] Government of Alberta, OC 160/2019. As of this writing, the reference before the Alberta Court of Appeal is ongoing. See e.g. *Reference re Impact Assessment Act*, 2020 ABCA 202 (CanLII).
[210] "Crude awakening: ExxonMobil and the oil industry are making a bet that could end up wrecking the climate", *The Economist* (9-15 February 2019) at 9.

fossil fuels, *The Economist* resigned itself to the conclusion that "the burden must fall on the political system."[211]

Yet the political system in Canada does not provide grounds for optimism. As discussed in this chapter, the most prominent public policy issues relevant to fossil fuels and climate change – narrowly drawn legal disputes over carbon pricing, pipeline approvals, and project assessment more generally – serve only to distract from and delay the far more complex policy questions about how to reconcile demands for robust economic growth and ambitious climate change mitigation.[212] A stunningly candid – if also calculated – admission of the federal government's failure to date to meaningfully address climate change was recently expressed as a "non sequitur" in the widely reported resignation in early 2019 of Gerald Butts, the Principal Secretary and primary political advisor of the Prime Minister. According to Mr. Butts:

> I also need to say this (and I know it's a non sequitur). Our kids and grandkids will judge us on one issue above all others. That issue is climate change. I hope the response to it becomes the collective, non-partisan, urgent effort that science clearly says is required. *I hope that happens soon*.[213]

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[211] *Ibid.*

[212] See e.g. Nathalie Chalifour & Jason MacLean, "Courts should not have to decide climate policy", *Policy Options* (21 December 2018), online: <http://policyoptions.irpp.org/magazines/december-2018/courts-not-decide-climate-change-policy/>; Jason MacLean, "The carbon tax case is a dangerous political game", *The Globe and Mail* (13 February 2019), online: <https://www.theglobeandmail.com/business/commentary/article-the-carbon-tax-case-is-a-dangerous-political-game/>; MacLean, Chalifour & Mascher, "Work on climate, not weaponizing the Constitution", *supra* note 10.

[213] The Canadian Press, "Full text of Gerald Butts's resignation letter", *The Globe and Mail* (18 February 2019), online: <https://www.theglobeandmail.com/canada/article-full-text-of-gerald-buttss-resignation-statement/> [emphasis added].

Such is the paradox of Canadian climate policy: Despite the clear scientific and moral basis for urgent and ambitious action on climate change, we continue to delay meaningful action while we support and subsidize fossil fuel production.[214]

How to break this paradoxical and perverse cycle? This is *the question* that climate science, law, and policy research must answer, and soon.[215] Doing so will require interdisciplinary collaboration both among academics and practitioners at all levels of policy intervention, as argued in chapter four. Indeed, this urgent question calls for an entirely new field of its own.[216]

In the next chapter, I attempt to take an incremental but important step in this analytic direction by examining the advisory opinions of the Saskatchewan and Ontario courts of appeal in respect of the federal government's carbon-pricing legislation in light of the climate policy implications and imperatives of climate science. As I will attempt to show,

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[214] As of this writing, it has been over ten years since the federal government promised to eliminate subsidies to fossil fuel production and export in Canada, which are estimated to exceed $3 billion annually. So extensive is the extent of the Canadian government's subsidization of oil and gas activities, and so reluctant is the government to fully disclose the full extent of its subsidization of the industry while it defends its approach to mitigating climate change, over 20 months after the Auditor General of Canada observed that the government could not identify and itemize its non-tax-based support for the industry, the government has still yet to do so. See Carl Meyer, "'It's like pulling teeth': Catherine McKenna accused of stalling on fossil fuel subsidies", *National Observer* (14 February 2019), online: <https://www.nationalobserver.com/2019/02/14/news/its-pulling-teeth-catherine-mckenna-accused-stalling-fossil-fuel-subsidies>.

[215] The central importance and urgency of this question is illustrated, for example, by the theme of the tenth International Sustainability Transitions Conference, which was held in Canada for the first time in 2019, whose theme was the challenge of accelerating such transitions, especially in light of (1) the challenges faced by countries like Canada, Australia, and many developing states with substantial – and politically influential – export-oriented resource-extraction sectors, and (2) the need to integrate the experience and self-governance of Indigenous peoples into sustainability transitions research and policy. See also Jason MacLean, Meinhard Doelle & Chis Tollefson, "The Science, Law, and Politics of Canada's Pathways to Paris: Introduction to the *UBC Law Review's* Special Section on Canada and Climate Change" (2019) 52:1 UBC L Rev 225.

[216] See e.g. Thomas Sterner et al, "Policy design for the Anthropocene" (2019) 2:1 Nature Sustainability 14 at 20.

to examine these challenges as primarily concerning environmental or constitutional law is to overlook altogether their underlying normative currents. Put another way, if environmental law – including environmental law's constitutional dimensions – is a means to an end, these judicial opinions raise, intentionally or not, the following question: to what end?

5 CLIMATE CHANGE, CONSTITUTIONS, AND COURTS: THE *REFERENCE RE GREENHOUSE GAS POLLUTION PRICING ACT* AND BEYOND

> *Canada is in a national climate emergency which requires, as a response, that Canada commit to meeting its national emissions target under the Paris Agreement and to making deeper reductions in line with the Agreement's objective of holding global warming below two degrees Celsius and pursuing efforts to keep global warming below 1.5 degrees Celsius.*[1]

> *But challenges to the political doctrine arise in the Anthropocene when proposed solutions challenge the foundational myth.*[2]

On June 17, 2019, Canada declared a climate emergency. Canada is currently warming at twice the global average, and nearly three times the global average in the Arctic, one of the planet's potential tipping points capable of causing irreversible climate change.[3] Canada is already experiencing adverse impacts due to climate change. According to the Canadian installment[4] of a global research initiative[5] tracking climate change's public health impacts, climate change manifests itself in Canada in the form of increased wildfires, extreme heat events, increasing – and increasingly intense – precipitation and flooding,

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[1] House of Commons, 42nd Parliament, 1st Session, Sitting No 435, Vote No 1366 (17 June 2019). The motion was introduced by the Minister of the then Environment and Climate Change, Catherine McKenna and passed with 186 votes in favour against 63 opposed. The motion described climate change as a "real and urgent crisis, driven by human activity, that impacts the environment, biodiversity, Canadians' health and the Canadian economy." Notably, however, Green Party leader Elizabeth May was the only federal party leader in attendance during the debate regarding the motion. See Hannah Jackson, "National climate emergency declared by House of Commons", *Global News* (18 June 2019), online: <https://globalnews.ca/news/5401586/canada-national-climate-emergency/> [emphasis added].

[2] Amanda H Lynch & Siri Veland, *Urgency in the Anthropocene* (Cambridge, MA: The MIT Press, 2018) at 116 [emphasis added].

[3] Government of Canada, "Canada's Changing Climate Report – Executive Summary" (2019) at 5 [Government of Canada, "Canada's Changing Climate Report"]; Will Steffen et al, "Trajectories of the Earth System in the Anthropocene" (2018) 115:33 PNAS 8252.

[4] Canadian Public Health Association, "Lancet Countdown 2018 Report: Briefing for Canada's Policymakers" (November 2018), online (pdf): <www.lancetcountdown.org/media/1418/2018-lancet-countdown-policy-brief-canada.pdf> [Canadian Public Health Association, "Lancet Countdown 2018"].

[5] Nick Watts et al, "The 2018 report of the *Lancet* Countdown on health and climate change: shaping the health of nations for centuries to come" (2018) 392:10163 The Lancet 2476, online: <www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)32594-7/fulltext>.

unstable Arctic ice conditions, changes in Lyme disease distribution, and increasing food insecurity and adverse mental health impacts. Present greenhouse gas (GHG) emissions pathways are trending toward levels of warming and associated climatic changes that may exceed our ability to adapt.[6]

In October 2018, the United Nations Intergovernmental Panel on Climate Change (IPCC) released its Special Report on global warming of 1.5 ºC above the pre-industrial average.[7] Synthesizing the results of over 6,000 peer-reviewed climate science studies, the IPCC concluded that the mean global temperature is likely to climb 1.5 ºC above pre-industrial levels between the years 2030 and 2052 if the current rate of warming continues. Warming of 1.5 ºC – let alone 2 ºC, the upper bound of the Paris Agreement's temperature target – will likely produce a greater number of severe heat waves as well as more extreme storms and flooding. Warming *above* 1.5 ºC will likely expose approximately ten million people to permanent inundation, and hundreds of millions more will be susceptible to climate-related poverty. Malaria and dengue fever will increase, while maize, rice, and wheat crop yields will decline. At 2 ºC of warming, the consequences are graver still. Approximately 18 percent of insects, 16 percent of plants, and 8 percent of vertebrates will lose their habitats. The global annual catch from marine fisheries will decline by 3 million tonnes. Nearly all – 99 percent – of coral reefs will die off.[8] According to the IPCC's special report, "[p]athways limiting global warming to 1.5 ºC with no or limited overshoot would require

[6] Canadian Public Health Association, "Lancet Countdown 2018", *supra* note 4.
[7] UN IPCC, "Special Report: Global Warming of 1.5 ºC" (IPCC, 2018) [IPCC, "Global Warming of 1.5 ºC"].
[8] *Ibid*.

rapid and far-reaching transitions in energy, land, urban and infrastructure (including transport and building), and industrial systems."[9]

Building on the IPCC's groundbreaking special report, climate scientists have further established that in order to achieve a *tolerable* future climate, climate change mitigation efforts must increase substantially over the next decade.[10] But even if such efforts are taken – at present the evidence does not counsel optimism – they will not guarantee success. The risks associated with climate tipping points and varying levels of climate sensitivity mean that humanity has little if any room left for error: "immediate rapid growth in [carbon] abatement remains our safest course of action."[11]

Canada has an important responsibility to contribute to climate change mitigation through carbon abatement. Canada has significantly and disproportionately contributed to climate change, and it continues to do so as one of the world's leading GHG emitters in both absolute and per capita measures. Canada's oil reserves are the world's third largest; oil and gas extraction and its tributary industries account for approximately seven percent of

[9] *Ibid*. Similarly, the United Nations Environment Programme's (UNEP) annual emissions gap report for 2018 noted, after observing that global GHG emissions *increased* in 2017, that "[g]reen policies must set a direction for the whole economy, not for each sector separately." UNEP, "Emissions Gap Report 2018" (November 2018) at XXIII, online: <www.unenvironment.org/resources/emissions-gap-report-2018> [UNEP, "Emissions Gap Report 2018"].

[10] "Tolerable" in this context is defined as "a world where warming is limited to 2 ºC above pre-industrial levels or less in 2100": JR Lamontagne et al, "Robust abatement pathways to tolerable climate futures require immediate global action" (2019) 9:4 Nat Clim Change 290 at 291. See also Benjamin J Henley et al, "Amplification of risks of water supply at 1.5 ºC and 2 ºC in drying climates: a case study of Melbourne, Australia" (2019) 14 Environ Res Lett, https://doi.org/10.1088/1748-9326/ab26ef, arguing, at 1, that with "the diminishing opportunity of meeting the 1.5 ºC Paris target, our study highlights the need to accelerate greenhouse gas mitigation efforts to reduce risks to climate dependent water supply systems."

[11] *Ibid* at 293. See also Joeri Rogelj et al, "Estimating and tracking the remaining carbon budget for stringent climate targets" (2019) 571 Nature 335.

its gross domestic product (GDP) and a fifth of its exports.[12] Canada's oil and gas sector represents a large source of GHG emissions globally.[13] Moreover, the carbon intensity of Canada's crude oil production is among the highest in the world, ranking behind only Venezuela among major oil-producing countries.[14]

Yet Canada is waffling on climate action. Canada has long been more a climate laggard than leader. As noted earlier in this thesis, were the world to adopt Canada's initial and still-unchanged GHG emissions-reduction pledge under the Paris Agreement – a reduction of 30 percent from 2005 levels by 2030 – as a global benchmark, the world would be on pace for 5.1 ºC of warming by the end of the century.[15] And that estimate is based on the assumption that Canada will in fact meet its initial Paris Agreement pledge. The federal government's own GHG-emissions data show, however, that Canada is not on pace to do so.[16] A recent audit by Canada's Commissioner of the Environment and Sustainable

[12] Brooke Unger, "Special Report: Canada", *The Economist* (27 July 2019) at 7.
[13] John Liggio et al, "Measured Canadian oil sands $C0_2$ emissions are higher than estimates made using internationally recommended methods" (2019) Nature Communications 10:1863, https://doi.org/10:1038/s41467-019-09714-9. See generally Saphira AC Rekker et al, "Comparing extraction rates of fossil fuel producers against global climate goals" (2018) 8:6 Nat Clim Change 489; Dan Tong et al, "Committed emissions from existing energy infrastructure jeopardize 1.5 ºC climate target" (2019) 572 Nature 373.
[14] Mohammad S Masnadi et al, "Global carbon intensity of crude oil production" (2018) 361:6405 Science 851 at 852. Canada's crude oil carbon intensity closely follows that of Cameroon, Venezuela, and Algeria. Canada has a higher crude oil carbon intensity than all other OPEC countries as well as China, Russia, and the United States.
[15] Yann Robiou du Pont & Malte Meinhausen, "Warming assessments of the bottom-up Paris Agreement emissions pledges" (2018) 9:4810 Nature Communications 1 at 5. The authors of this assessment found that the Paris Agreement emissions-reduction pledges of Canada, China, and Russia are less ambitious than their hybrid common-but-differentiated responsibilities and respective capacities relative to even the *least* ambitious global emissions scenario available.
[16] Environment and Climate Change Canada, "Canadian Environmental Sustainability Indicators: Greenhouse gas emissions" (April 2019) [ECCC, "Canadian Environmental Indicators"]; Environment and Climate Change Canada, "Progress towards Canada's greenhouse gas emissions reduction target" (January 2019).

Development concluded that meeting Canada's 2030 target "*will require substantial effort and actions beyond those currently planned or in place*."[17]

It is in this climate science and policy context that Saskatchewan's – as well as Ontario's, Manitoba's, and Alberta's – constitutional challenge to the federal government's carbon-pricing legislation must be examined. The aim of this chapter is to critically assess the Court of Appeal for Saskatchewan's advisory opinion in the *Reference re Greenhouse Gas Pollution Pricing Act*, not merely in terms of constitutional law doctrine, but primarily in terms of the Canadian climate policy politics and priorities of which the Court's opinion is inescapably a part. Which raises the following question: What if Canadian federalism, particularly Canadian courts' particular interpretations of federalism, were to pose a true obstacle to effective climate action?

Or, to frame the question in an even more pointed way: What good is federalism, or even the Canadian constitutional order, if we are all dead?

I argue that the provincial challenges to the constitutional validity of the federal government's climate legislation – dubbed the "Saskatchewan Strategy" – have very little to do with constitutional law doctrine.[18] These challenges, rather, are a continuation of

[17] Commissioner of the Environment and Sustainable Development, *Perspectives on Climate Change Action in Canada—A Collaborative Report from Auditors General—March 2018* (27 March 2018), online: <www.oag-bvg.gc.ca/internet/English/parl_opt_201803_e_42883.html#hd2b> [emphasis added].

[18] For a general and historical analysis of how references have been used by Canadian governments for political purposes, see Kate Puddister, *Seeking the Court's Advice: The Politics of the Canadian Reference Power* (Vancouver: UBC Press, 2019). For a journalistic account of the origins of the "Saskatchewan Strategy," see Paul Wells, "Just try them: Powerful conservative leaders from across the country are suddenly united against Justin Trudeau's carbon tax plan. And they're spoiling for a fight", *Maclean's* (1 December 2018), online: <http://archive.macleans.ca/article/2019/12/1/just-try-them> [Wells, "Just try them"].

climate politics by other means, and serve only to delay and distract Canadians from the difficult public policy choices that the country must make to effectively contribute to climate change mitigation and transition to sustainability.

I further argue that the advisory opinions of the Courts of Appeal for both Saskatchewan and Ontario in respect of the *Greenhouse Gas Pollution Pricing Act* are similarly only ostensibly about jurisdiction and the division of federal and provincial powers. Their advisory opinions, rather, reflect and reinforce the country's ambivalence about climate change, and its assuredness – notwithstanding the cascading conclusions of climate science demonstrating otherwise – that "business as usual" is a rational and responsible path forward.

Finally, I argue that federalism is neither timeless, nor fixed in form, nor truly an obstacle to effective climate policymaking in Canada (were Canada ever to genuinely commit to effective climate policy action). If federalism were ever to truly conflict with Canada's genuine public policy commitments, it would soon fall into desuetude.

The rest of this chapter unfolds as follows. In the first part, I discuss the background to and the salient features of the *Greenhouse Gas Pollution Pricing Act*. I then proceed to critically examine the majority opinion of the Court of Appeal for Saskatchewan, particularly its unduly narrow construction of the *Act's* pith and substance, as well as the majority, concurring, and dissenting opinions of the Court of Appeal for Ontario. I argue that these judicial interpretations of the federal government's legislation seek to accommodate extant political and economic conditions in the language of legal precedent. I next discuss the

reemerging arguments in favour of recognizing, in one form or another, a foundational constitutional principle of environmental protection in order to further demonstrate that what is at stake in these challenges is not the constitutional law of climate politics, but rather the climate politics of constitutional law. In part II, I conclude by seeking to reorient the discussion back to its true ground, the contested priorities and politics of climate policy, and suggest an alternative path forward. In a brief postscript, I respectfully offer my opinion about how the Supreme Court of Canada should decide Saskatchewan's appeal.

I. Wrecking the Federation to Save the Planet? *Reference re Greenhouse Gas Pollution Pricing Act*

A. The *Greenhouse Gas Pollution Pricing Act*

As introduced above in chapter four, Parliament enacted the *Greenhouse Gas Pollution Pricing Act* in 2018.[19] This chapter explores the *GGPPA* in more detail in order to set the scene for a critical examination of the constitutional challenges leveled against it by Saskatchewan and Ontario. The *GGPPA* implements the federal government's Pan-Canadian Approach to Pricing Carbon Pollution plan issued in 2016.[20] The federal government's commitment to mitigating climate change by pricing and thereby reducing Canada's GHG emissions first arose out of the First Ministers' meeting it convened in 2016 shortly after the conclusion of the Paris Agreement. The First Ministers' meeting resulted

[19] *Greenhouse Gas Pollution Pricing Act,* being Part 5 of the *Budget Implementation Act, 2018, No 1,* SC 2018, c 12. The long title of the Act is *An Act to mitigate climate change through the pan-Canadian application of pricing mechanisms to a broad set of greenhouse gas emission sources and to make consequential amendments to other Acts* [*GGPPA*].

[20] Government of Canada, "Pan-Canadian Approach to Pricing Carbon Pollution" (3 October 2016), online: <https://www.canada.ca/en/environment-climate-change/news/2016/10/canadian-approach-pricing-carbon-pollution.html> [Government of Canada, "Pan-Canadian Approach"].

in the Vancouver Declaration on Clean Growth and Climate Change[21] and, formally, the *Pan-Canadian Framework on Clean Growth and Climate Change*.[22] In introducing the *Pan-Canadian Framework*, which was initially agreed upon by all but for the province of Saskatchewan, the federal government acknowledged that "[t]aking strong action to address climate change is critical and urgent" and that "[t]he international community has agreed that tacking climate change is an urgent priority."[23] Shortly thereafter Canada signed the Paris Agreement on climate change.[24]

Pursuant to the First Ministers' agreement expressed in the Vancouver Declaration to cooperatively collaborate on a national approach to climate change mitigation and adaptation policy, the federal government established a working group on carbon pricing mechanisms. Pricing carbon emissions allows industries and individuals to find innovative ways to reduce their own emissions.[25] Based on the working group's consensus-based final report, which was initially supported by all provinces and territories, the government's "Pan-Canadian Approach to Pricing Carbon Pollution" plan explains that "economy-wide

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[21] Canadian Intergovernmental Conference Secretariat, "Vancouver Declaration on Clean Growth and Climate Change" (Vancouver: 3 March 2016), online: <https://pm.gc.ca/eng/news/2016/03/03/communique-canadas-first-ministers>. The federal government also consulted with Indigenous leaders on its carbon-pricing and other climate policy plans, although some Indigenous leaders criticized the government for failing to treat Indigenous communities as full partners in Canada's climate policy framework: see John Paul Tasker, "Indigenous leaders boycott 'segregated' premiers meeting in Edmonton" (17 July 2017), online: *CBC News* <http://www.cbc.ca/news/politics/indigenous-leaders-first-ministers-meeting-1.4208336>.

[22] Environment and Climate Change Canada, *Pan-Canadian Framework on Clean Growth and Climate Change: Canada's Plan to Address Climate Change and Grow the Economy* (Gatineau: Environment and Climate Change Canada, 2016), online (pdf): *Government of Canada* <publications.gc.ca/collections/collection_2017/eccc/En4-294-2016-end.pdf>.

[23] *Ibid* at 1-2.

[24] See Catherine Cullen, "Justin Trudeau Signs Paris Climate Treaty at UN, Vows to Harness Renewable Energy" (22 April 2016), online: *CBC News* <https://www.cbc.ca/news/politics/paris-agreement-trudeau-sign-1.3547822>.

[25] Government of Canada, "Working Group on Carbon Pricing Mechanisms: Final Report" (2016).

carbon pricing is the most efficient way to reduce emissions, and by pricing pollution, will drive innovative solutions to provide low-carbon choices for consumers and businesses."[26]

Based on the working group's findings, the federal government established a pan-Canadian carbon-pricing "Benchmark."[27] The Benchmark further establishes carbon pricing as the foundational pillar of Canada's national climate change policy. More specifically, the Benchmark embodies the policy objective of ensuring "that carbon pricing applies to a broad set of emissions throughout Canada with increasing stringency over time to reduce GHG emissions."[28]

Crucially, the Benchmark provides that the federal government will establish a "Backstop" carbon-pricing system in provincial and territorial jurisdictions that either request it or otherwise fail to implement their own regulations that align with the carbon-pricing

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[26] Government of Canada, "Pan-Canadian Approach", *supra* note 20. Notably, Saskatchewan ultimately rejected the federal government's proposed carbon-pricing regime, and declined to adopt the *Pan-Canadian Framework on Clean Growth and Climate Change.* Instead, the province issued its own climate change strategy, *Prairie Resilience: A Made-in-Saskatchewan Climate Change Strategy*, which does not impose a price on GHG emissions. For a critical assessment of Saskatchewan's climate plan, including its significant lack of ambition and stringency, see Saskatchewan Environmental Society, "'*Prairie Resilience*' is Not Enough: The Saskatchewan Environmental Society's Response to The Saskatchewan Government's Climate Change Plan" (December 2018), online: <http://environmentalsociety.ca/prairie-resilience-is-not-enough/>. See also Murray Mandryk, "Prairie Resilience plan does not offer enough focus on reducing GHG emissions", *Regina Leader Post* (12 April 2019), online: <https://leaderpost.com/opinion/columnists/prairie-resilience-plan-does-not-offer-enough-focus-on-reducing-ghg-emissions>; Carol Kroeger, "Opinion: True prairie resilience needed to fight climate change", *Regina Leader Post* (20 June 2019), online: <https://leaderpost.com/opinion/columnists/prairie-resilience-plan-does-not-offer-enough-focus-on-reducing-ghg-emissions>.

[27] Government of Canada, "Pan-Canadian Approach", *supra* note 20.

[28] Government of Canada, "Supplemental benchmark guidance" (20 December 2017), online: *Government of Canada* <https://www.canada.ca/en/services/environment/weather/climatechange/pan-canadian-framework/guidance-carbon-pollution-pricing-benchmark/supplemental-benchmark-guidance.html>.

Benchmark.[29] The Backstop includes two principal components: (i) a fuel charge, and (ii) an Output-Based Pricing System.[30]

Enacted in June 2018, the *GGPPA* implements these carbon-pricing mechanisms: Part 1 of the *GGPPA* implements the fuel charge, and Part 2 implements the Output-Based Pricing System and an excess-emissions charge for large industrial emitters. Operating as a federal Backstop, Parts 1 and 2 of the *GGPPA* apply in those provinces and territories their either request or fail to establish a carbon-pricing framework – be it in the form of a direct price or a cap-and-trade emissions-permit system – as stringent as the federal government's Benchmark.[31] Provinces and territories remain otherwise free to pursue their own climate change policies, including the regulation of GHG emissions, within their territorial jurisdictions.

The fuel charge under Part 1 of the *GGPPA* applies to 22 kinds of GHG-emitting fuels that are produced, delivered, or consumed in Canada, including common fuels such as gasoline, diesel, and natural gas, as well as less-common fuels such as methanol and coke oven gas; these subject fuels and their corresponding charges are set out in Schedule 2 of the *GGPPA*. The charge rate represents $20 per tonne of carbon-dioxide equivalent in respect of each fuel in 2019, increasing to $50 per tonne in 2022.[32] Part 1 of the *GGPPA* also sets out

[29] *Ibid*.
[30] Environment and Climate Change Canada, "Technical Paper on Federal Carbon Pricing Backstop" (18 May 2017), online: *Government of Canada* <https://www.canada.ca/en/services/environment/weather/climatechange/technical-paper-federal-carbon-pricing-backstop.html>.
[31] *GGPPA, supra* note 19 at ss 166(3), 189(2).
[32] *Ibid* at Schedule 2, Table 2, Item 6.

exemptions, including gasoline and diesel used by farmers for farming, and industrial facilities subject to the Output-Based Pricing System under Part 2 of the *GGPPA*.[33]

Part 2 of the *GGPPA* establishes the Output-Based Pricing System applicable to large industrial emitters, statutorily "covered facilities" whose GHG emissions exceed a minimum industry-specific threshold. Covered facilities are those – initially – that emit 50 kilotonnes of carbon-dioxide equivalent or more annually.[34] Covered facilities, which are exempt from the fuel charge under Part 1 of the *GGPPA*, pay compensation for the portion of their emissions exceeding the prescribed industrial-sector limit. Subject to the ongoing development of the *GGPPA's* supporting regulations, most sectors' output-based standard will be set at 80 percent of the sector's average GHG-emissions intensity; a subset of especially trade-exposed sectors will be subject to a standard set at 90 percent of their average emissions intensity.[35] Accordingly, covered facilities in most industrial sectors will only pay compensation for their emissions exceeding 80 percent of their sector's average; in highly trade-exposed sectors, covered facilities will only pay compensation for their emissions exceeding 90 percent of their sector's average.[36]

In 2018, the federal government completed its initial Benchmark stringency assessments of provincial and territorial climate policies. Based on those assessments, which were carried out in conjunction with the provinces and territories, the federal government concluded that the fuel charge under Part 1 of the *GGPPA* will apply in Saskatchewan,

[33] *Ibid* at s 36.
[34] *Ibid* at s 169, Schedule 3.
[35] *Ibid* at s 174.
[36] *Ibid* at ss 174-175, 184, Schedule 4.

Ontario, Manitoba, New Brunswick, the Yukon, and Nunavut (the latter two jurisdictions at their own request) as of April 1, 2019; following Alberta's decision under its then newly elected premier Jason Kenney to rescind the fuel-charge component of its own emissions-pricing regime, the federal government announced that Part 1 of the *GGPPA* will also apply in that province as of January 1, 2020.[37] The federal government further concluded that the Output-Based Pricing System under Part 2 of the *GGPPA* will apply in Ontario, Manitoba, New Brunswick, Prince Edward Island, the Yukon, Nunavut (the latter two at their own request), and Saskatchewan, but only partially in that province.[38]

Before most of the foregoing regulatory processes were finalized, the province of Saskatchewan referred the following question concerning the constitutional validity of the *GGPPA* to the Court of Appeal for Saskatchewan: "The *Greenhouse Gas Pollution Pricing Act* was introduced into Parliament on March 28, 2018 as Part 5 of Bill C-74. If enacted, will this Act be unconstitutional in whole or in part?"[39] The province's reference is a key part of what Jason Kenney dubbed as the "Saskatchewan Strategy" and what *Maclean's* magazine rather notoriously characterized as "the resistance" to the federal government's carbon-pricing plan.[40] Ontario, Manitoba, and Alberta soon followed Saskatchewan's lead.[41] The Court of Appeal for Saskatchewan was the first court to issue an advisory

[37] See Heide Pearson, "Alberta launches promised constitutional challenge of federal carbon tax", *Global News* (20 June 2019), online: <https://globalnews.ca/news/5412786/alberta-constitutional-challenge-federal-carbon-tax/> [Pearson, "Alberta launches constitutional challenge"].
[38] Part 2 of the *GGPPA* will apply to emissions not covered by Saskatchewan's own planned output-based system, which will cover large industrial facilities that collectively account for approximately 11 percent of the province's GHG emissions. Because Saskatchewan's plan excludes electricity generation and natural gas transmission pipelines, Part 2 of the *GGPPA* will apply to facilities in those sectors that emit more than 50 kilotonnes or more of carbon-dioxide equivalent annually.
[39] OIC 194/2018.
[40] Paul Wells, "Just try them", *supra* note 18.
[41] Ontario referred substantially the same question to its Court of Appeal as did Saskatchewan: "Is the *Greenhouse Gas Pollution Pricing Act,* Part 5 of the *Budget Implementation Act, 2018, No. 1,* SC 2018, c.

opinion on the constitutionality of the *GGPPA*, which is discussed in the next section below.[42]

B. The Majority Opinion: A Narrowly Construed National Concern

A three-to-two majority of the Court of Appeal for Saskatchewan concluded that the *GGPPA* "is not unconstitutional either in whole or in part."[43] The majority agreed that the federal government has the constitutional authority to impose a price on GHG emissions under the national concern branch of its residual Peace, Order and Good Government (POGG) power. Climate change, as the majority acknowledged, "is a global problem and,

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12, unconstitutional in whole or in part?" (Province of Ontario, OIC 1014/2018). Manitoba, by contrast, commenced its challenge to the *GGPPA* by way of an application for judicial review in the Federal Court: Steve Lambert, "Manitoba files separate court challenge of federal carbon tax, seeks judicial review", *The Globe and Mail* (24 April 2019), online: <https://www.theglobeandmail.com/canada/article-manitoba-files-separate-court-challenge-of-federal-carbon-tax-seeks/>. Following Manitoba's application, Alberta referred a constitutional challenge to the *GGPPA* to the Court of Appeal for Alberta: Pearson, "Alberta launches constitutional challenge", *supra* note 37. See Province of Alberta, Order in Council, OC 112/2019 (20 June 2019), which frames the reference question to the Court of Appeal for Alberta as follows: "Is the Greenhouse Gas Pollution Pricing Act (Canada) unconstitutional in whole or in part?" Quebec also announced an intention to also challenge the *GGPPA*: Konrad Yakabuski, "Québec's move to challenge federal carbon tax is about more than provincial rights", *The Globe and Mail* (9 July 2019), online: <https://www.theglobeandmail.com/business/commentary/article-quebecs-move-to-challenge-federal-carbon-tax-is-about-more-than/>.

[42] The Court of Appeal for Ontario issued its advisory opinion on June 28, 2019: *Reference re Greenhouse Gas Pollution Pricing Act,* 2019 ONCA 544 [*Ontario Reference re GGPPA*]. In what follows I will also discuss relevant aspects of the Ontario Court's decision insofar as they help to illuminate the Saskatchewan Court's analysis as well as the broader issues explored in this chapter. A more comprehensive analysis of the Ontario decision, however, is beyond the scope of this chapter. Finally, I further note that a 4-1 majority of the Court of Appeal for Alberta found the *GGPPA* unconstitutional: *Reference re* Greenhouse Gas Pollution Pricing Act, 2020 ABCA 74 [*Alberta Reference re GGPPA*]. Briefly, Fraser JA (joined by Watson and Hughes JJA) concluded that the *GGPPA* is unconstitutional because it does not fall under any enumerated federal head of power or the federal government's residual POGG power. Wakeling JA concurred, while Feehan JA dissented, arguing that the *GGPPA* was a constitutional exercise of the national concern branch of POGG. For a more detailed summary of the Alberta Court of Appeal's reasons, see Martin Olszynski, Nigel Bankes & Andrew Leach, "Alberta Court of Appeal Opines That Federal Carbon Pricing Legislation Unconstitutional" (17 March 2020), *ABlawg.ca* (blog), online: <https://ablawg.ca/2020/03/17/alberta-court-of-appeal-strikes-down-federal-carbon-pricing-legislation-on-constitutional-grounds/>. I will return to the Alberta Court of Appeal's advisory opinion, if only briefly, *below*.

[43] *Reference re Greenhouse Gas Pollution Pricing Act,* 2019 SKCA 40 at para 210 [*Saskatchewan Reference re GGPPA*].

accordingly, it calls for a global response."[44] The Court further observed that "the obvious reality is that GHG emissions do not respect provincial boundaries."[45] Canada cannot participate effectively in the global response to climate change "if not all provincial jurisdictions are prepared to implement GHG emissions pricing regimes – regimes that, on the basis of the record before the Court, are an essential aspect of successful GHG mitigation plans."[46]

However, the majority of the Court rejected the federal government's alternative argument that the *GGPPA* is a constitutionally valid tax, an argument that was actually conceded by the province despite the fact that the federal government did not advance it with any vigor.[47] Neither Part 1 nor Part 2 of the *GGPPA* is designed for the primary purpose of raising revenue for general purposes. In the majority's view, "the primary purpose of the Part 1 fuel charge is not to raise revenue for general purposes. Rather, the fuel charge is the centerpiece of a regulatory plan to increase the cost of GHG emissions and thereby mitigate them."[48] Similarly, "the excess emissions charge [under Part 2 of the *GGPPA*] is not intended to raise revenues for general purposes."[49] As the majority observes, if all covered

[44] *Ibid* at para 156.
[45] *Ibid* at para 154.
[46] *Ibid* at para 156.
[47] I am grateful to Nathalie Chalifour for this point. See also Stewart Elgie & Nathalie Chalifour, "Saskatchewan's highest court ruled in favour of carbon pricing – and it wasn't really close on key issues", *The Globe and Mail* (17 May 2019), online: <https://www.theglobeandmail.com/opinion/article-saskatchewans-highest-court-ruled-in-favour-of-carbon-pricing-and/> [Elgie & Chalifour, "Saskatchewan's highest court ruled in favour of carbon pricing"]. More generally, for a comprehensive and cogent analysis of the federal government's "ample" jurisdiction to legislate in respect of GHG emissions, see Nathalie J Chalifour, "Canadian Climate Federalism: Parliament's Ample Constitutional Authority to Legislate GHG Emissions through Regulations, a National Cap and Trade Program, or a National Carbon Tax" (2016) 36 Nat'l J Const L 331.
[48] *Ibid* at para 88; Nathalie J Chalifour, "Drawing Lines in the Sand: Parliament's Jurisdiction to Consider Upstream and Downstream Greenhouse Gas (GHG) Emissions in Interprovincial Pipeline Project Reviews" (2018) 23:1 Rev Const Studies 129; Nathalie J Chalifour & Laurel Besco, "Taking Flight: Federal Action to Mitigate Canada's GHG Emissions from Aviation" (2017) 48:2 Ott L Rev 577.
[49] *Ibid* at para 96.

facilities under Part 2 of the *GGPPA* emit fewer emissions than their applicable sectoral average, no compensation of any sort is payable. According to the majority, "[t]his is not the statutory profile of a tax, i.e., of a levy that has a *primary purpose* of raising revenue for general purposes."[50]

The majority of the Court readily accepted (1) the existential necessity of reducing GHG emissions,[51] (2) the indispensible part that pricing GHG emissions can play in reducing GHG emissions,[52] and (3) that the federal government and the provinces and territories all have important roles to play in regulating GHG emissions.[53] Consequently, its central preoccupation in the *Reference* was to effectively delimit the federal government's power to address the national and international dimensions of climate change without ousting the provinces' and territories' jurisdiction to regulate in respect climate change's local aspects.[54]

This concern, including the manner in which Saskatchewan and the federal government framed their arguments in the *Reference*, appears to have substantially influenced the majority's determination of the *GGPPA's* pith and substance.[55] The majority begins its pith-and-substance analysis by considering the broad international environmental law context in which the *GGPPA* was enacted, including the United Nations Framework

[50] *Ibid* [emphasis original]. The majority further rejected the additional arguments in favour of the *GGPPA's* constitutional validity advanced by certain of the intervenors, including the federal government's general trade and commerce power (at paras 166-173), treaty powers (at paras 174-177), criminal law power (at paras 178-199), the emergency branch of POGG (at paras 200-202), and section 35 of the *Constitution Act, 1982* (at paras 203-204).
[51] *Ibid* at para 4.
[52] *Ibid* at para 147.
[53] *Ibid* at para 7. The
[54] *Ibid* at para 10.
[55] *Ibid* at para 112.

Convention on Climate Change ratified by Canada in 1992, the Kyoto Protocol, the Copenhagen Accord, and the Paris Agreement. According to the majority, "[a]ll had the same central objective, i.e., the limitation of global GHG emissions. The [*GGPPA*] is the product of Canada's efforts to meet its [climate change] commitments under the *Paris Agreement*."[56]

The majority proceeds by further considering the *GGPPA's* relevant legislative history, which, the majority concludes, reveals that the purpose of the *GGPPA* is "to ensure minimum national standards of price stringency for GHG emissions."[57] The majority next examines the Preamble of the *GGPPA* itself, which merits quotation in full:

> Whereas there is broad scientific consensus that anthropogenic *greenhouse gas emissions contribute to global climate change*;
>
> Whereas recent anthropogenic emissions of greenhouse gases are at the highest level in history and *present an unprecedented risk to the environment, including its biological diversity, to human health and safety and to economic prosperity*;
>
> Whereas impacts of climate change, such as coastal erosion, thawing permafrost, increases in heat waves, droughts and flooding, and related risks to critical infrastructures and food security *are already being felt throughout Canada and are impacting Canadians*, in particular the Indigenous peoples of Canada, low-income citizens and northern, coastal and remote communities;

[56] *Ibid* at para 119.
[57] *Ibid* at para 120. In the majority's view, the *GGPPA's* relevant legislative history includes the Vancouver Declaration's reference to the use of carbon pricing to mitigate climate change, the final report of the federal government's working group on carbon pricing mechanisms, the Pan-Canadian Approach to Carbon Pricing plan's conclusion that carbon pricing is the most efficient way to reduce GHG emissions and its proposal of a pan-Canadian Benchmark approach, and the federal government's technical documentation regarding the carbon-pricing Backstop and its supplemental guidance on the Benchmark.

Whereas Parliament recognizes that it is the *responsibility of the present generation to minimize impacts of climate change on future generations*;

Whereas the United Nations, Parliament and the scientific community have identified *climate change as an international concern which cannot be contained within geographic boundaries*;

Whereas Canada has ratified the United Nations Framework Convention on Climate Change, done in New York on May 9, 1992, which entered into force in 1994, and the objective of that Convention is the stabilization of greenhouse gas concentrations in the atmosphere at a level that would *prevent dangerous anthropogenic interference with the climate system*;

Whereas Canada has also ratified the Paris Agreement, done in Paris in December 12, 2015, which entered into force in 2016, and the aims of that Agreement include holding the increase in the global average temperature to well below 2ºC above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5ºC above pre-industrial levels, *recognizing that this would significantly reduce the risks and impacts of climate change*;

Whereas the Government of Canada is *committed to achieving Canada's Nationally Determined Contribution – and increasing it over time – under the Paris Agreement by taking comprehensive action to reduce emissions across all sectors of the economy*, *accelerate clean economic growth and build resilience to the impacts of climate change*;

Whereas it is recognized in the Pan-Canadian Framework on Clean Growth and Climate Change that *climate change is a national problem that requires immediate action by all governments in Canada as well as by industry, non-governmental organizations and individual Canadians*;

Whereas greenhouse gas emissions pricing is a core element of the Pan-Canadian Framework on Clean Growth and Climate Change;

Whereas behavioural change that leads to increased energy efficiency, to the use of cleaner energy, to the adoption of cleaner technologies and practices and to innovation is *necessary for effective action against climate change*;

> Whereas the pricing of greenhouse gas emissions *on a basis that increases over time* in an appropriate and efficient way to create incentives for that behavioural change;
>
> Whereas greenhouse gas emissions pricing reflects the "polluter pays" principle;
>
> Whereas some provinces are developing or have implemented greenhouse gas emissions pricing systems;
>
> Whereas the absence of greenhouse gas emissions pricing in some provinces and a lack of stringency in some provincial greenhouse gas emissions pricing systems could contribute to *significant deleterious effects on the environment*, including its biological diversity, on human health and safety and on economic prosperity;
>
> And whereas it is necessary to create a federal greenhouse gas emissions scheme to ensure that, taking provincial greenhouse gas emissions pricing systems into account, greenhouse gas emissions pricing applies broadly in Canada;
>
> Now, therefore, Her Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows[.][58]

The majority quotes only selectively from the *GGPPA's* Preamble, however, beginning with the clause stipulating that GHG-emissions pricing is a core element of the *Pan-Canadian Framework on Clean Growth and Climate Change*, and then proceeding to emphasize the importance of the broad application of GHG-emissions pricing across Canada.[59]

The majority further emphasizes that the *GGPPA* neither dictates specific levels of GHG-emissions reductions nor directly imposes a GHG-emissions price throughout Canada. In the majority's view, the *GGPPA* "serves only as a backstop in the sense that it defers to the

[58] *GGPA, supra* note 19, at Preamble [emphasis added].
[59] *Saskatchewan Reference re GGPPA, supra* note 43 at para 121.

regulatory efforts of the provinces and comes into play only when those efforts do not meet minimum standards."[60] The majority accordingly concludes "it is appropriate to describe the purpose of the *Act* as a whole as being the establishment of minimum national standards of price stringency for GHG emissions."[61]

The majority acknowledges that its interpretation of the *GGPPA*'s pith and substance constitutes "a rather tight or narrow formulation of the matter in question."[62] But it justifies its narrow construction by invoking the spectre of "the potentially disruptive impact of the national concern doctrine on the balance of federalism".[63]

The majority proceeds with its application of POGG's national concern branch to the *GGPPA* by considering whether the establishment of minimum national standards of GHG-emissions price stringency has "a singleness, distinctiveness and indivisibility" capable of distinguishing this purpose from matters of provincial jurisdiction.[64] In answering this question in the affirmative, the majority acknowledges the "obvious reality" that GHG emissions do not respect provincial boundaries, provinces may only legislate in respect of GHG emissions *intra-provincially*, and that the significance of the failure of individual

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[60] *Ibid* at para 122.
[61] *Ibid* at para 123. The minority, meanwhile, defines the pith and substance of the *GGPPA* "in broad policy terms […] to establish a benchmark GHG emissions price with the aim of modifying behaviour and incentivising industry to mitigate anthropogenic GHG emissions" (*ibid* at para 245). The Court of Appeal for Ontario offered *three* additional and competing interpretations of the *GGPPA'*s purpose: (i) "establishing minimum national standards to reduce greenhouse gas emissions" (*Ontario Reference re GGPPA, supra* note 42 at para 77 *per* the majority opinion of Strathy CJO and MacPherson and Sharpe JJA); (ii) "establishing minimum national greenhouse gas emissions pricing standards to reduce greenhouse gas emissions" (*ibid* at para 166 *per* the concurring opinion of Hoy ACJO); and (iii) "reducing GHG emissions" (*ibid* at para 213 *per* the dissenting opinion of Huscroft JA).
[62] *Saskatchewan Reference re GGPPA, supra* note 43 at para 140.
[63] *Ibid* at para 143.
[64] *Ibid* at para 149, citing *R v Crown Zellerbach Canada Ltd.,* [1988] 1 SCR 401, the leading case concerning the national concern branch of the federal government's POGG power.

provinces to price GHG emissions at a minimal level of stringency will play out, not only provincially, but also nationally and globally.[65]

At the same time, however, the majority cautions that recognizing a matter as falling under the national concern branch of POGG must not impact provincial jurisdiction so much as to disrupt the "fundamental distribution of legislative powers envisioned by the Constitution."[66] In the majority's view, its admittedly narrow characterization of the *GGPPA*'s pith and substance strikes the appropriate balance because

> limiting federal jurisdiction to the matter of the establishment of minimum national standards of price stringency leaves plenty of room for provincial action in relation to GHG emissions. *Unlike recognizing Parliamentary authority over GHG emissions generally or over the cumulative dimensions of GHG emissions*, this approach does not put at risk the constitutional validity of provincial initiatives to price GHGs, either through carbon taxes [*sic*] or cap-and-trade systems.[67]

Notably, as the majority explains earlier in its opinion, the *GGPPA*'s nuances and qualifications do not undermine its pith and substance because "a GHG pricing system must be able to *accommodate the underlying economic and other realities* of the

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[65] *Saskatchewan Reference re GGPPA, supra* note 43 at paras 154-156. The majority opinion of the Court of Appeal for Ontario goes even further in this regard, noting that while the three territories and the four Atlantic provinces collectively contribute less than 10 percent of Canada's GHG emissions, they will experience the effects of climate change in a manner that is out of proportion to their contributions. According to the majority, "as a practical matter and indeed as a legislative matter, there is nothing these provinces and territories can do to address the emission of GHGs by their geographic neighbours and constitutional partners. *Without a collective national response, all they can do is prepare for the worst*" (*Ontario Reference re GGPPA, supra* note 42 at para 20 [emphasis added]).
[66] *Saskatchewan Reference re GGPPA, supra* note 43 at para 162.
[67] *Ibid* at para 161 [emphasis added].

circumstances in which it operates."[68] Just as notably, the Court declines to explain why this is so.

In an earlier, preliminary analysis of the Court of Appeal's majority and minority opinions, a number of my environmental law colleagues and I criticized the majority's interpretation of the *GGPPA's* pith and substance as being unduly narrow.[69] We argued that the majority's interpretation of the *GGPPA* confuses the means (carbon pricing) for the end (reducing GHG emissions). In our initial reading of the *GGPPA,* we argued that establishing a minimum carbon-price Backstop throughout Canada is the federal government's chosen *means* for achieving the end goal of reducing GHG emissions.[70]

Yet that is not quite complete, either. The most accurate interpretation of the *GGPPA* – as revealed by its expansive Preamble, its legislative history, and its anticipated practical effects – is that its purpose is to contribute to other national and international efforts to

[68] *Ibid* at para 123 [emphasis added].
[69] Jason MacLean, Nathalie Chalifour & Sharon Mascher, "Work on climate, not weaponizing the Constitution", *The Conversation* (8 May 2019), online: <https://theconversation.com/work-on-climate-not-weaponizing-the-constitution-116710> [MacLean, Chalifour & Mascher, "Work on climate"]. But see Elgie & Chalifour, "Saskatchewan's highest court ruled in favour of carbon pricing", *supra* note 47, who argue that the majority's interpretation allowing the provinces to enact their own climate laws tailored to their own economies so long as they meet national minimum requirements is an example of "the classic approach to Canadian federalism that has been used for decades."
[70] MacLean, Chalifour & Mascher, "Work on climate", *supra* note 69. We further argued that the majority substantially overstated the implications of recognizing a broad federal power to legislate and regulate in respect of GHG emissions. In matters of shared federal-provincial jurisdiction such as environmental protection, federal and provincial laws can co-exist – even in respect of matters of national concern – under the double aspect doctrine so long as there is not a genuine operational conflict. For a more in-depth analysis of the application of the double aspect doctrine to the *GGPPA*, see Nathalie J Chalifour, "Jurisdictional Wrangling over Climate Policy in the Canadian Federation: Key Issues in the Provincial Constitutional Challenges to Parliament's *Greenhouse Gas Pollution Pricing Act*" (2019) 50:2 Ottawa L Rev 197.

mitigate climate change by *means* of establishing a *gradually-rising* minimum carbon-price Backstop throughout Canada.[71] The distinction is subtle, but significant.

The majority's interpretative error of confusing means and ends is one commonly made in respect of environmental laws and policies, and is referred to as "goal substitution."[72] Goal substitution occurs when one or more policy mechanisms – be it a law, a regulation, a guideline – is effectively redefined as being the ultimate policy goal itself. For example, most developed countries, including Canada, utilize environmental assessment processes whose goal is not to prevent various forms of environmental damage, but rather to inform economic decisionmaking and ensure that such decisionmaking complies with a variety of procedures, standards, and timelines which, in and of themselves, neither guarantee nor necessarily promote environmental protection.[73] Technical compliance is effectively substituted for environmental protection as the goal of environmental assessment legislation, much to the detriment of the environment.

Laws and policies addressing climate change are especially susceptible to goal substitution because of climate change's inherent, "super wicked" complexity. Climate change is

[71] Of all the submissions made by the parties and intervenors before the Courts of Appeal for Saskatchewan and Ontario, the Canadian Environmental Law Association's (CELA) characterization of the *GGPPA*'s purpose is the closest to the formulation I advance here. As described in the reasons of the Court of Appeal for Ontario, CELA argued that the *GGPPA*'s purpose is "mitigating climate change by imposing fuel charges or emissions levies on GHG emissions sources to induce them to reduce GHG emissions" (*Ontario Reference re GGPPA, supra* note 42 at para 186.
[72] See e.g. Lynch & Veland, *supra* note 2 at 67-69.
[73] See e.g. Robert B Gibson, Meinhard Doelle & A John Sinclair, "Fulfilling the Promise: Basic Components of Next Generation Environmental Assessment" (2016) 29 J Envtl L & Prac 257; see also Jason MacLean, Meinhard Doelle & Chris Tollefson, "Polyjural and Polycentric Sustainability Assessment: A Once-in-a-Generation Law Reform Opportunity" (2016) 30: 1 J Envtl L & Prac 35.

characterized as a super wicked public policy problem because, most basically, it is caused by an interaction of social and natural processes.[74]

Climate change is all the more complex, however, because of the "enormous interdependencies, uncertainties, circularities, and conflicting stakeholders implicated by any effort to develop a solution."[75] And any such solution is further complicated by three additional exacerbating features that are immediately relevant to the discussion here: (1) time is not costless, so the longer it takes to address climate change, the more costly and economically disruptive its solutions become; (2) among those in the best position to mitigate climate change are not only those who have contributed to climate change, but also those who have the least incentive to act urgently and ambitiously to mitigate it; and (3) there is no global lawmaking body with the jurisdictional authority and the institutional capacity to match the global nature of the problem.[76]

Goal substitution tends to have the effect of obscuring these political and economic complexities of climate change and its potential solutions.[77] It may even be precisely because of this distortive tendency that goal substitution is endemic in respect of environmental issues: Goal substitution performs a valuable sort of political and economic work.[78] The majority's tenuous rationale for its narrow construction of the *GGPPA's* pith

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[74] See e.g. Jesse Sayles et al, "Socio-ecological network analysis for sustainability sciences: a systematic review and innovative research agenda for the future" (2019) 14 Environ Res Lett 093003.
[75] Richard J Lazarus, "Super Wicked Problems and Climate Change: Restraining the Present to Liberate the Future" (2009) 94 Cornell L Rev 1153 at 1159.
[76] *Ibid* at 1160-1161. For a discussion of how these processes play out in Canadian climate policymaking, see the discussion in chapter three of this thesis.
[77] Lynch & Veland, *supra* note 2 at 68.
[78] Another way of understanding goal substitution in respect of environmental law and policy is to see it as a (suboptimal) solution of sorts to what Elizabeth Fisher helpfully defines as "hot situations" in which "the agreed frames, legal and otherwise, for how we understand and act in the world are in a constant state of

and substance – notwithstanding the *GGPPA*'s own far more expansive expression of its legislative purpose – as the establishment of minimum national standards of price stringency for GHG emissions is a case in point, and bears repeating here: "a GHG pricing system must be able to *accommodate the underlying economic and other realities of the circumstances in which it operates*."[79]

Not only is it unclear why carbon pricing must "accommodate" underlying economic and other realities, it is in fact quite clear that this is *not* the case. The ultimate purpose of mitigating climate change through the means of pricing GHG emissions, among other law and policy mechanisms,[80] is to *change* Canada's *underlying economic reality*, not "accommodate" it. As the *GGPPA*'s Preamble expressly explains, mitigating climate change requires the acceleration of "clean economic growth"; the "adoption of cleaner technologies and practices"; "innovation"; and the creation of "incentives for that behavioural change."[81]

And as the *GGPPA* also makes perfectly clear, the anticipated results of these behavioural changes – the increasing use of clean energy, the adoption of cleaner technologies, and overall energy efficiency – are "*necessary for effective action against climate change*."[82]

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flux and contestation": Elizabeth Fischer, "Environmental Law as 'Hot' Law" (2013) 25:3 Journal of Environmental Law 347 at 347-348.

[79] *Saskatchewan Reference re GGPPA, supra* note 43 at para 123 [emphasis added].

[80] To cite just one example here, in 2019 Canada concluded a memorandum of agreement with the US state of California – by most measures the world's fifth-largest economy – to reduce vehicle emissions and to promote the use of electric, zero-emissions vehicles. For further details see Brandie Weikle, "Canada and California sign deal to cut vehicle emissions", *CBC News* (26 June 2019), online: <https://www.cbc.ca/news/business/canada-california-vehicle-emissions-1.5190619>.

[81] *GGPPA, supra* note 19 at Preamble.

[82] *Ibid* [emphasis added].

The true purpose of the *GGPPA* is thus necessarily far more expansive, far more economically disruptive, and *possibly* – but not *necessarily* – far more constitutionally intrusive than merely establishing minimum carbon-pricing standards throughout Canada. The true purpose of the *GGPPA* as the key pillar of the federal government's climate change law-and-policy framework is to encourage gradual but ultimately fundamental changes to how Canadians produce and consume energy in order to contribute to the mitigation of climate change locally, nationally, and internationally.

This is not to suggest that the true purpose of the *GGPPA* is somehow subversive or illegitimate. Recall the UN IPCC's special report on the implications of 1.5 ºC global warming, particularly the report's conclusion that *rapid, unprecedented, and systematic changes* in how governments, industries, and societies function are required to limit global warming to 1.5 ºC above the pre-industrial average.[83] Viewed through the lens of the IPCC's report and climate science more generally, neither the *GGPPA* nor Canada's overall climate policy framework – including Canada's Paris Agreement target – is nearly as rapid nor as systematic as it needs to be in order to be effective.[84]

[83] IPCC, "Global Warming of 1.5ºC", *supra* note 7. For a discussion of the implications of the IPCC's special report for Canadian climate change policy, see Jason MacLean, Meinhard Doelle & Chris Tollefson, "The Science, Law, and Politics of Canada's Pathways to Paris: Introduction to *UBC Law Review's* Special Section on Canada and Climate Change" (2019) 52:1 UBC L Rev 227 [MacLean, Doelle & Tollefson, "The Science, Law, and Politics of Canada's Pathways to Paris"].

[84] See generally Jason MacLean, "The problem with Canada's gradual climate policy", *Policy Options* (26 October 2018), online: <https://policyoptions.irpp.org/magazines/october-2018/the-problem-with-canadas-gradual-climate-policy/>. For a discussion of the *GGPPA* in relation to Canada's GHG emissions-reduction commitments, see the discussion in chapter four of this thesis.

In fact, the majority might be forgiven for misunderstanding – if misunderstand it did[85] – the scope and ambition of the *GGPPA* given the federal government's own waffling on climate and energy policy. Perhaps the most telling illustration of the federal government's feckless approach to climate policy is its decision in June 2019 to reapprove the threefold expansion of the Trans Mountain oil pipeline less than 24 hours after the government declared a national climate change emergency in the House of Commons (see Fig. 3, *below*). The juxtaposition of one day declaring a climate change emergency and the next day approving a long-term fossil-fuel infrastructure project (including the commitment of billions of dollars in government financing) that will facilitate increased production in Alberta's oil sands, Canada's largest and fastest-growing source of GHG emissions,[86] adds a new dimension to the "Orwellian" doublespeak of Canada's climate and energy policymaking.[87] The approval of the Trans Mountain expansion, if it ultimately becomes operational, will effectively preclude Canada from meeting its 2030 GHG-emissions-reduction commitment under the Paris Agreement.[88]

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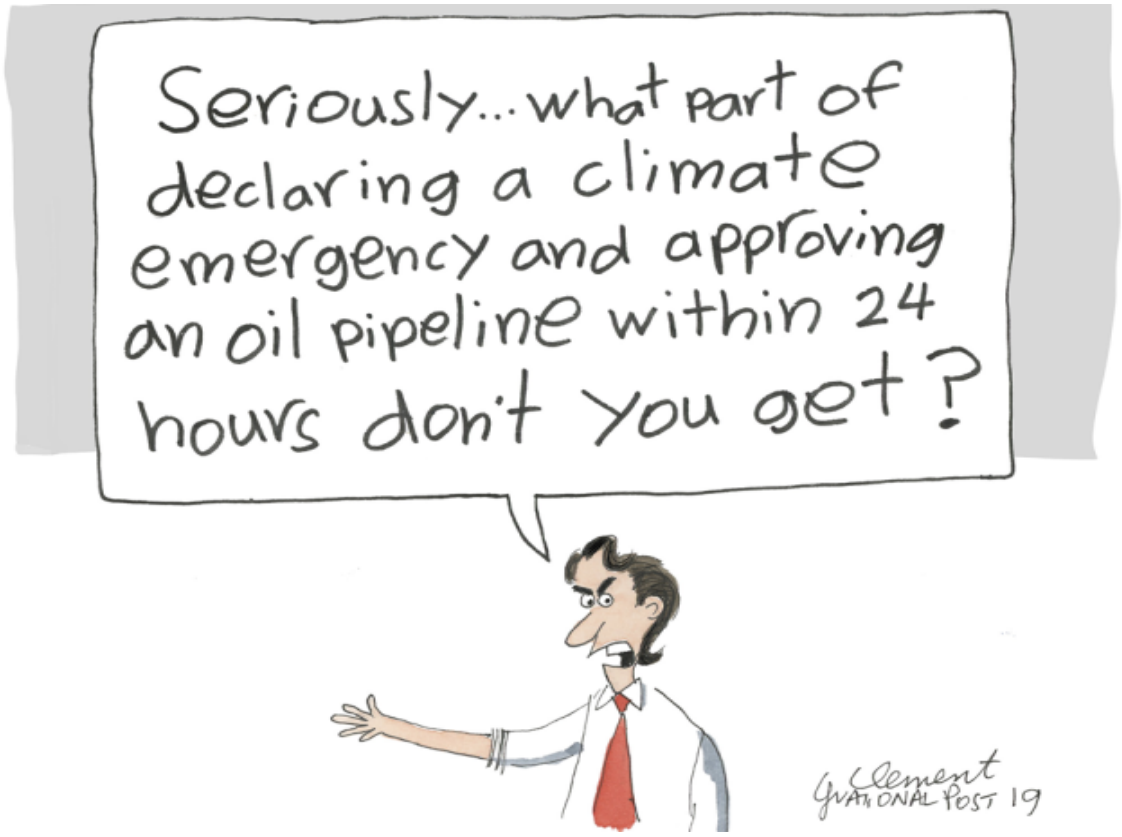
[85] In his dissenting opinion in the *Ontario Reference re GGPPA, supra* note 42 at para 211, Huscroft JA characterized the Saskatchewan majority's interpretation of the *GGPPA*'s pith and substance as a mistaken description of "the means or technique Parliament has chosen to give effect to the *Act's* ultimate purpose, rather than a characterization of the *Act's* dominant feature." Huscroft JA, as noted above, views the ultimate purpose of the *GGPPA* as "reducing GHG emissions" (at para 213), which would in his view impermissibly "constitute a massive shift in lawmaking authority from provincial legislatures to the Parliament of Canada."

[86] ECCC, "Canadian Environmental Indicators", *supra* note 16 at 7-8. See also Environmental Defence & Stand.Earth, "Canada's Oil & Gas Challenge: A Summary Analysis of Rising Oil and Gas Industry Emissions in Canada and Progress Towards Meeting Climate Targets" (2018) at 9, online: (pdf) <https://www.stand.earth/sites/default/files/Canadas_Oil%2BGas_Challenge.pdf>.

[87] Mark Jaccard, "Trudeau's Orwellian logic: We reduce emissions by increasing them", *The Globe and Mail* (20 February 2018, online: <https://www.theglobeandmail.com/opinion/trudeaus-orwellian-logic-reduce-emissions-by-increasing-them/article38021585/>. For a more in-depth analysis of this paradoxical policy approach, see the discussion in chapter two of this thesis as well as Jason MacLean, "Manufacturing Consent to Climate Inaction: A Case Study of *The Globe and Mail's* Pipeline Coverage" (2019) 42:2 Dal LJ 283.

[88] See Markus Hecker & Jackie Dawson, "Canada's Paris-pipeline paradox", *The Conversation* (4 June 2018), online: <https://theconversation.com/canadas-paris-pipeline-paradox-97636>.

Fig. 3. Declaring a Climate Emergency and Approving a Pipeline[89]



While this juxtaposition postdates the Court of Appeal for Saskatchewan's opinion in the *GGPPA Reference*, it is entirely consistent with the current federal government's and previous federal governments' policy-cum-communications strategy in respect of climate change mitigation and natural resource extraction and export: Support and significant subsidization of the latter, symbolic gestures toward the former.[90] Or, as the federal government itself rationalized its decision to re-approve the Trans Mountain expansion

[89] Editorial Cartoon, *National Post,* 19 June 2019. Courtesy of Gary Clement and the National Post, a division of Postmedia Network Inc.
[90] This policy and communications strategy is chronicled and analyzed in detail in chapter one of this thesis.

project (TMX): "The TMX project will help turn the traditional resources Canada has today into the clean economy of the future."[91]

Moreover, if the federal government's approval of the Trans Mountain expansion is paradoxical, hypocritical even, given its (symbolic) declaration of a national climate emergency, its hypocrisy appears to be shared by many Canadians. In a 2019 poll of 4,500 eligible voters in Canada, while approximately two-thirds of Canadians consider mitigating climate change to be top priority, nearly half (49 percent) of those surveyed expressed an unwillingness to pay more than $100 per year in taxes – the equivalent of less than $9 per month – to do so; 16 percent would be willing to pay between $100 and $500 per year, while only seven percent were willing to pay between $500 and $1000 per year; approximately one-third (32 percent) of those surveyed said they were unwilling to pay anything at all.[92]

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[91]Government of Canada, "The Government's decision" (18 June 2019), online: <https://www.canada.ca/en/campaign/trans-mountain/the-decision.html>. It is likely the case that the federal government's approval of Trans Mountain was promised to the Alberta provincial government under former premier Rachel Notley as a *quid pro quo* for Alberta's support of the *Pan-Canadian Framework on Clean Growth and Climate Change*. This hardly excuses the federal government's decision, but it does underline the underlying *political* nature of these only-ostensibly legal disputes, including the outsize and perverse influence of the fossil fuel industry lobby and right-wing governments over Canadian climate policy. See e.g. Jason MacLean, "Alberta's support of the national climate plan is nice, but hardly necessary", *Maclean's* (24 February 2018), online: <https://www.macleans.ca/news/canada/albertas-support-of-the-national-climate-plan-is-nice-but-hardly-necessary/>.

[92] Éric Grenier, "Canadians are worried about climate change, but many don't want to pay taxes to fight it: Poll", *CBC News* (18 June 2019), online: <https://www.cbc.ca/news/politics/election-poll-climate-change-1.5178514>. Grenier wryly observes in his report on the poll's results that an annual subscription to Netflix's most basic plan costs $120 per year. Yet another separate and contemporaneous poll found that nearly 70 percent of Americans want the United States to take "aggressive" action to prevent climate change, but only a third of those surveyed would support an extra tax of US$100 per year to support such action. See Valerie Volcovici, "Americans demand climate action (as long as it doesn't cost much) – Poll", *Reuters* (26 June 2019), online: <https://uk.reuters.com/article/uk-usa-election-climatechange-poll/americans-demand-climate-action-poll-idUKKCN1TR181?utm_campaign=Carbon%20Brief%20Daily%20Briefing&utm_medium=email&utm_source=Revue%20newsletter>.

A separate but contemporaneous survey of 1,001 Canadians further confirms and sheds further light on these priorities.[93] Survey participants were asked a series of questions about (1) the desirability and feasibility of continued economic growth, both in itself and in conjunction with adverse ecological impacts, (2) the potential of technological solutions to environmental problems, and (3) the interdependence of humans and nature. Based on their responses, the participants fell into three groups, which the survey's authors defined as the "Assured," the "Ambivalent," and the "Concerned." The "Assured" (41.1 percent) expressed optimism toward the potential of technology and the prospect of indefinite economic growth. The "Ambivalent" (36.3 percent) did not express strong views on any issue. The "Concerned" (22.6 percent) expressed a higher level of environmental concern, acknowledged the unsustainability of "business as usual," and rejected the feasibility of indefinite economic growth.[94]

Read in this light, the Court of Appeal for Saskatchewan's majority opinion in the *GGPPA Reference* is best understood, not as a *mistakenly* narrow and goal-substituted interpretation of the *GGPPA*'s purpose, but instead as a purposive exercise in effectively reading down the *GGPPA* in order to at once reflect and accommodate the underlying –and, it bears repeating, *unsustainable* – economic and political status quo in Canada, including, not least, a conservative interpretation of federalism.

[93] Maria Fernanda Tomaselli et al, "What do Canadians think about economic growth, prosperity and the environment?" (2019) 161 Ecological Economics 41.
[94] *Ibid* at 41.

This is not to suggest, however, that the majority of the Court fails to take climate change seriously. On the contrary, as the majority states in what is arguably the most revealing paragraph of its opinion, "it is important to remember what lies behind the legal issues before the Court. The record indicates climate change has emerged as a major threat, not just to Canada, but to the planet itself."[95] The majority proceeds by rehearsing the oft-quoted and subsisting principle that the Constitution is "a living tree capable of growth and expansion within its natural limits"[96] and that it must be interpreted in a manner that "is fully responsive to emerging realities."[97] Applying the "living tree" interpretive principle to federal climate change legislation, the majority, in a phrase immediately – but perhaps prematurely – shared and applauded by Canadian environmental law scholars and advocates across the country, asserts that "[i]f it is necessary to apply established doctrine in a slightly different way to ensure both levels of government have the tools essential for dealing with something as pressing as climate change, that would seem to be entirely appropriate."[98] The majority adds that the "choices of whether and how to use the tools available to Parliament or a legislature will, of course, be made by elected officials, not by judges."[99]

These remarks are as misleading as they are telling. They are misleading because, although the *initial* choice to use a tool such as carbon pricing certainly resides with elected officials and not judges, judges can and do influence *whether* and *how* those tools will ultimately

[95] *Saskatchewan Reference re GGPPA, supra* note 43 at para 144.
[96] *Ibid,* citing *Edwards v Attorney-General for Canada* (1929), [1930] AC 124 (PC) at 136 [*Edwards*].
[97] *Saskatchewan Reference re GGPPA*, *supra* note 43 at para 144 citing *R v Hydro-Québec,* [1997] 3 SCR 213 at para 86.
[98] *Saskatchewan Reference re GGPPA*, *supra* note 43 at para 144.
[99] *Ibid*.

be used.[100] Narrowly and minimally intrusively, in the majority advisory opinions of both the Saskatchewan and Ontario appellate courts; or not at all, in the dissenting opinions of both courts, at least not in the *GGPPA*'s present form.[101] Courts do not – and should not – lead the way in terms of public policy development, but in constitutional democracies like Canada's they nonetheless wield considerable power in shaping those policies.

The majority's remarks about applying legal doctrine in a slightly different way are also telling. While climate change may be a major and pressing threat, in the majority's estimation climate change is neither so major nor so pressing as to warrant anything more than a "slightly different" application of constitutional law doctrine. Climate change, as the majority rightly accepts, will "[w]ithout additional mitigation efforts beyond those in place today […] lead to high to very high risk of severe, widespread and irreversible impacts globally."[102] The majority deserves some credit for its judicial recognition of this critically important – but also well-established – fact. Nevertheless, in the majority's view the risks posed by climate change still do not authorize "Parliament to intrude so deeply into areas of provincial authority that the balance of federalism would be upset."[103] In this respect, the majority of the Court of Appeal for Saskatchewan is –consciously or not – in lockstep with both the federal government's and much of the Canadian public's assuredness that

[100] Subject, of course, to the political decision to repeal a legislative tool. The federal Conservative Party, for example, promised to repeal the *GGPPA* as well as the federal government's proposed clean fuel standard if elected in the fall 2019 federal election.
[101] The narrow interpretations given to the pith and substance of the *GGPPA* by the majority of the Court of Appeal for Saskatchewan, and by both the majority and the concurring opinions of the Court of Appeal for Ontario, speak to the *how*; the dissenting opinions in both courts, which, had they commanded a majority, would have spoken—if only in an advisory manner—to the *whether*. Moreover, the Supreme Court of Canada will have the final word on the interpretation and constitutional validity of the *GGPPA*.
[102] *Saskatchewan Reference re GGPPA*, *supra* note 43 at para 16(h).
[103] *Ibid* at para 10.

business as usual – economically, politically, and legally – will suffice to address the threat of climate change.

But what if Canadian federalism, particularly Canadian courts' particular interpretation of federalism as a constitutional principle, were to pose an obstacle to effective climate change action? This is hardly a fanciful hypothetical, particularly in light of the Court of Appeal for British Columbia's recent and unanimous advisory opinion that British Columbia's proposed heavy oil regulations are *ultra vires* the province's jurisdiction and must bow to the federal government's paramount jurisdiction to approve and regulate interprovincial oil pipelines.[104] Neither is it a particularly radical proposition that federalism, while certainly not the but-for *cause* of climate change, is nonetheless *complicit* in the natural resource extraction and export activities that have historically contributed and that continue to contribute disproportionately to climate change.[105] Nor can it be argued that Canadian federalism has yet done anything to *prevent* or otherwise mitigate climate change (whether that is its job or not).[106] Canada's enduring and endemic failure

[104] *Reference re Environmental Management Act (British Columbia),* 2019 BCCA 181 [*BC Reference re Heavy Oil*]. While the impugned and invalidated provincial regulations at issue in this reference concern the environmental management of spills of heavy crude oil (including anticipated spills from the Trans Mountain pipeline), they could just as well have addressed the provincial climate impacts of GHG emissions. The particular judicial interpretation of federalism advanced by the Court of Appeal for British Columbia, its own internal logic and legalistic merits aside, is inarguably complicit in increasing development in Alberta's oil sands, GHG emissions, and climate change should Trans Mountain ever become operational.

[105] See e.g. Martti Koskenniemi, "Imagining the Rule of Law: Rereading the Grotian 'Tradition'" (2019) 30:1 EJIL 17 at 27, arguing that the "rule of law" has surely been complicit in creating and perpetuating ever-growing global inequality. For an analysis of the ways in which the Canadian Constitution and its interpretations have throughout Canada's history have reflected and reinforced underlying priorities of political economy, see Roderick A Macdonald & Robert Wolfe, "Canada's Third National Policy: The Epiphenomenal or Real Constitution" (2009) 59:4 UTLJ 469 [Macdonald & Wolfe, "Canada's Third National Policy"].

[106] On the contrary, particular interpretations of federalism in Canada have consistently been used to forestall meaningful environmental action, including climate action. See e.g. Kathryn Harrison, *Passing the Buck: Federalism and Canadian Environmental Policy* (Vancouver: UBC Press, 1996). As to the question of whether it is – or has ever been – federalism's job to prevent or mitigate climate change, see the

to achieve sustainability may even stem from the absence of an ecological ethic in its Constitution.[107]

There can be no doubt that federalism is capable of being interpreted in such a way as to pose an impediment to effective climate action. As Huscroft JA observes in his dissenting opinion in the *Ontario Reference re GGPPA,* "GHGs are generated by virtually every [economic] activity regulated by provincial legislation, including manufacturing, farming, mining, as well as personal daily activities including home heating and cooling, hot water heating, driving, and so on".[108] Now, if it were truly the case that we must "destroy the federation to save the planet,"[109] must not federalism give way, at least to the extent necessary to respond to this existential threat? Huscroft JA frames this dilemma, and his own categorical, *ipse dixit* response to it, in the following terms:

> I appreciate that federalism concerns seem arid when the country is faced with a major challenge like climate change. As long as something gets done, it may seem unimportant which level of

discussion below of unwritten constitutional principles, including that of federalism as well as the proposed unwritten constitutional principle of ecological sustainability.

[107] Jean Leclair, for example, argues for a renewed approach to constitutional interpretation in relation to environmental protection. While a state's sovereignty may be jurisdictionally defined as "a monopoly to decide," Leclair argues that in a conflict between humanity and nature, it will ultimately be nature that has the last word. See Scott Surphlis, "The Federation: Is Canadian Federalism Fit to Meet the Challenges of the Future?", *The Public Policy & Governance Review* (17 January 2018), online: <https://ppgreview.ca/2018/01/17/the-federation-is-canadian-federalism-fit-to-meet-the-challenges-of-the-future/>.

[108] *Ontario GGPPA Reference, supra* note 42 at para 227. Unwittingly, Huscroft JA reinforces UNEP's argument that "[g]reen policies must set a direction for the whole economy, not for each sector separately": UNEP, "Emissions Gap Report 2018", *supra* note 9. Writing for the majority of the Alberta Court of Appeal, Fraser JA's characterization of the purpose of the *GGPPA* does much the same. She finds that the purpose of the *GGPPA* is "the regulation of GHG emissions": *Alberta Reference re GGPPA, supra* note 42 at para 211. She later observes (at para 273) that the *GGPPA* "can be used to control every aspect of development from inception to post-production."

[109] This is the phraseology of Saskatchewan's lead legal counsel in the Saskatchewan *Reference,* Mitch McAdam, quoted in Dwight Newman, "Wrecking the Federation to Save the Planet", *C2C Journal* (3 April 2019), online: <https://www.c2cjournal.ca/2019/04/wrecking-the-federation-to-save-the-planet> [Newman, "Wrecking the Federation"].

> government does it. But federalism is no constitutional nicety; it is a defining feature of the Canadian constitutional order *that governs the way in which even the most serious problems must be addressed*, and it is the court's obligation to keep the balance of power between the levels of government in check.[110]

Maintaining that balance of power, in Huscroft JA's view, trumps the enactment of the *GGPPA*: "federal authority over GHG emissions would constitute a massive shift in lawmaking authority from provincial legislatures to the Parliament of Canada."[111]

While Huscroft JA's formulation unhelpfully begs the question of how to legislatively address climate change in Canada, his formulation also raises another question: What good is federalism, or even the Canadian constitutional order, if we are all dead? In the next part of this chapter I will first suggest a preliminary (but unsatisfactory) answer to this question by briefly canvassing reemerging arguments in favour of a foundational and potentially all-encompassing unwritten constitutional principle of ecological sustainability. I will then conclude the chapter with a hopefully more satisfactory discussion of the public policy currents underlying what is ultimately not a legal question of constitutional interpretation, but rather a normative question of political economy to which we must attend.

C. Unwritten Constitutional Principles: Federalism versus Ecological Sustainability?

In the Quebec secession reference, the Supreme Court of Canada asserted that the text of the Canadian Constitution is informed and sustained by underlying principles, or "the vital

[110] *Ontario Reference re GGPPA, supra* note 42 at para 198 [emphasis added].
[111] *Ibid* at para 227.

unstated assumptions upon which the text is based."[112] After acknowledging that the Canadian Constitution is primarily a written constitution, "the product [then] of 131 years of evolution", the Court asserted that underlying the text "is an historical lineage stretching back through the ages".[113]

The unwritten principles the Court considered most germane to the resolution of Quebec's secession reference included federalism, democracy, constitutionalism and the rule of law, and respect for minority rights.[114] The Court declined to specifically trace the historical lineage of these principles, but on even the most cursory examinations of Canadian and British history it is hardly controversial to suggest that these principles are of a relatively recent vintage. Which, of course, is of a piece with the Court's assertion that "observance of and respect for these principles is essential to the *ongoing process of constitutional development and evolution of our Constitution* as a 'living tree'".[115]

Regarding the unwritten constitutional principle of federalism, the Court observed that federalism is inherent in the structure of our constitutional arrangements, and has "from the beginning been the lodestar by which the courts have been guided."[116] The Court further acknowledged that, "[l]ess obviously, perhaps, *but certainly of equal importance*, *federalism is a political and legal response to underlying social and political realities*."[117]

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[112] *Reference re Secession of Quebec,* [1998] 2 SCR 217 at para 49 [*Secession Reference*].
[113] *Ibid* at para 49.
[114] *Ibid* at para 49.
[115] *Ibid* at para 52, citing *Edwards, supra* note 96 at 136 [emphasis added].
[116] *Secession Reference, supra* note 112 at para 56.
[117] *Ibid* at para 57 [emphasis added].

And yet, notwithstanding the Supreme Court of Canada's articulation of constitutional principles as ever evolving and responsive to changing social and political circumstances, Saskatchewan, Ontario, and all ten of the judges of the appellate courts for Saskatchewan and Ontario who opined on the *GGPPA*'s constitutional validity insist upon a stunted interpretation of federalism, rooted in an earlier, simpler time and forever fixed in form. Recall Huscroft JA's forceful framing of federalism as "the defining feature of the Canadian constitutional order that governs the way in which even the most serious problems *must* be addressed".[118] But what if our interpretation of federalism – or even federalism, full stop – is no longer an effective response to our underlying social and political realities?

In a similar vein, Dwight Newman argued in an earlier analysis of the issues raised in the Saskatchewan *Reference* that

> [t]he timeless rules of federalism properly resist the transitory whims of governments and interest groups. And that is again what is at stake in the carbon tax challenge: competing and conflicting visions over whether constitutional disputes should be decided primarily based on the prevailing policy preferences of the age, or on age-old constitutional jurisdictional principles.[119]

[118] *Ontario Reference re GGPPA, supra* note 61 at para 198 [emphasis added].
[119] Newman, "Wrecking the Federation", *supra* note 109. This formulation inverts, I think, what is truly at stake in the provincial challenges to the *GGPPA*, which are better understood as political policy disputes disingenuously cloaked in constitutional terms. Professor Newman is much closer to the mark when he observes that "the contending parties in the carbon tax reference *were obviously in court because of fundamentally differing views on critical policy issues*" (*ibid* [emphasis added]). Exactly right: fundamentally differing views about climate policy, and not about the constitutional law doctrine of federalism. Interestingly, Huscroft JA makes much the same point when he observes in his dissenting opinion in the Ontario *Reference* that while action or inaction by any one province could undermine other jurisdictions' efforts to price carbon, "this does not speak to provincial inability to address the GHG problem; it is, instead a reflection of legitimate political disagreement on a

Utilizing constitutional principle to anchor a backward-looking policy priority in favour of the status quo, however, is a strategic move equally capable of being adapted and utilized by proponents of progressive, forward-looking policy priorities. As one scholar formulated this move over twenty years ago in the not-dissimilar context of the US Constitution and climate change, "[t]he dogmas of the quiet past are inadequate for the stormy present and future. As our circumstances are new, we must think anew, and act anew."[120]

Unsurprisingly, given the climate policy impasse in developed federations like Canada and the United States, arguments advancing the recognition in one form or another of a foundational constitutional principle of environmental protection and ecological sustainability are once again reemerging.[121]

Lynda Collins argues, for instance, that such recognition would be perfectly consistent with the Supreme Court of Canada's understanding of unwritten constitutional principles. Her argument unfolds as follows: (1) sustainability is the lifeblood both of society and the

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matter of policy, and in particular the suitability of carbon pricing as a means of reducing GHG emissions in a particular province" (*Ontario Reference re GGPPA, supra* note 42 at para 231).

[120] Bruce Ledewitz, "Establishing a Federal Constitutional Right to a Healthy Environment in Us and in Our Posterity" (1998) 68 Miss LJ 565 at 627. The ultimate source of this eloquent phrase is of course Abraham Lincoln, the 16th President of the United States. But see JB Ruhl, "The Metrics of Constitutional Amendments: Any Why Proposed Environmental Quality Amendments Don't Measure Up" (1999) 74 Notre Dame L Rev 245.

[121] See e.g. Lynda Collins & Lorne Sossin, "In Search of an Ecological Approach to Constitutional Principles and Environmental Discretion in Canada" (2019) 52:1 UBC L Rev 293; Lynda Collins, "The Unwritten Constitutional Principle of Ecological Sustainability: A Lodestar for Canadian Environmental Law?" (5 June 2019), *IACL-AIDC Blog* (blog), online: <https://blog-iacl-aidc.org/unwritten-constitutional-principle-of-ecological-sustainability-a-lodestar-for-canadian-environmental-law>[Collins, "The Unwritten Constitutional Principle of Ecological Sustainability"]; Hope M Babcock, "The Federal Government Has an Implied Moral Constitutional Duty to Protect Individuals from Harm Due to Climate Change: Throwing Spaghetti against the Wall to See What Sticks" (2019) 45:4 Ecology Law Quarterly 735 [Babcock, "Throwing Spaghetti against the Wall"]; Sam Kalen, "An Essay: An Aspirational Right to a Healthy Environment" (2016) 34 UCLA J Envtl L & Pol'y 156; Martha C Nussbaum, "Climate Change: Why Theories of Justice Matter" (2013) 13 Chi J Int'l L 469.

Constitution; (2) sustainability is therefore a vital unstated assumption underlying both the Canadian state and its Constitution; and (3) environmental protection is judicially and socially recognized as fundamental to Canadian society. Collins further argues that, although the Supreme Court of Canada has not yet recognized an unwritten constitutional principle in respect of the environment or sustainability, it has nonetheless described environmental protection in commensurate terms. The Court summarized its own holdings in respect of environmental protection in its decision in *British Columbia v Canadian Forest Products*:

> As the Court observed in *R. v. Hydro-Québec* […], legal measures to protect the environment "relate to a public purpose of *superordinate importance*" […] In *Ontario v. Canadian Pacific Ltd.* […] "stewardship of the natural environment" was described as *a fundamental value* […] Still more recently, in *114957 Canada Ltée (Spray-Tech, Société d'arossage) v. Hudson (Town)* […] the Court reiterated, at para. 1:
>
> > Our common future, that of every Canadian community, depends on a healthy environment […] This Court has recognized that "(e)veryone is aware that individually and collectively, we are responsible for preserving the natural environment […] environmental protection [has] emerged as a *fundamental value* in Canadian society" [.][122]

To Collins, "[i]t seems clear from the relevant caselaw that ecological sustainability merits constitutional protection and is almost certainly latent within our existing unwritten

[122] *British Columbia v Canadian Forest Products,* [2004] 2 SCR 74 at para 7 [emphasis added]. An intervenor in the *BC Reference re Heavy Oil, supra* note 104, urged the BC Court of Appeal to recognize an unwritten constitutional principle of ecological sustainability and to invoke that principle in order to uphold provincial environmental legislation that overlaps with federal legislation, particularly where, in the case of the federal government's approval and regulation of interprovincial oil pipelines, the federal legislation does not promote environmental protection or sustainability. However, the BC Court of Appeal declined to discuss this argument, as did the Supreme Court of Canada in its endorsement of the BC Court of Appeal's opinion.

constitution."[123] In addition to assisting courts in resolving division of powers and *Charter* cases regarding the environment, including climate change, Collins argues that, "most importantly, the recognition of ecological sustainability as a foundational principle (indeed, *the* foundational principle) of our constitution could help to inform crucial legal analysis and public debates about environmental decision-making in the twenty-first century."[124]

Hope Babcock makes virtually the same argument in respect of the US Constitution. She argues that interpreting the US Constitution so as to include a norm of environmental protection – whether in the form of a duty or a right – is entirely consistent with its interpretive history and practice, which has allowed the constitutional text to be read in a way that incorporates other basic, socially accepted norms.[125] For Babcock, the environmental-protection norm's "basic nature, which makes it a predicate to the public enjoying many of its rights under the Constitution, and the growing public consensus about the unanswered threat posed by climate change create support for its inclusion in the Constitution."[126]

The provincial challenges to the federal government's *GGPPA* and each of the opinions provided by the Saskatchewan and Ontario courts of appeal plainly illustrate, however, that the growing public consensus about the unanswered threat posed by climate change has yet to grow broad or deep enough to register a corresponding change in either the public's or

[123] Collins, "The Unwritten Constitutional Principle of Ecological Sustainability", *supra* note 121
[124] *Ibid* [emphasis original].
[125] American constitutional law scholar Mark Tushnet contends, for example, that "the interpretive resources of American constitutional interpretation are sufficiently rich to support essentially any proposition about what the Constitution permits, requires, or prohibits": Mark Tushnet, "Constitutional Workarounds" (2009) 87 Tex L Rev 1499 at 1504 [Tushnet, Constitutional Workarounds"].
[126] Babcock, "Throwing Spaghetti against the Wall", *supra* note 121 at 786.

the judiciary's view of our constitutional arrangements, let alone our broader social and economic structures. Judicial recognition at this specific juncture of an unwritten constitutional principle of ecological sustainability would amount to the kind of "constitutional workaround" that, because it could readily be characterized as yielding results inconsistent with the Constitution, "might have a slightly seedy resonance."[127] It would also preempt the far more important and foundational public policy work still required to convince Canadians of the science-based imperative of transforming their economy and society in order to mitigate and adapt to climate change. Put simply: Canadians are just not there yet. Premature judicial recognition of a constitutional principle of ecological sustainability at this juncture would be out of step with public opinion, and would likely have the effect, not of galvanizing greater grassroots climate action and further informing our climate policies, but of rallying deeper populist opposition.

Viewed in this light, judicial recognition at this otherwise critical juncture of an unwritten constitutional principle of ecological sustainability would not only (or even most importantly) amount to a constitutional workaround, it would amount to a *political* workaround. In fact, that is precisely what is driving the argument for its recognition in the first place. As Babcock explains, the threat that climate change poses to continued human existence "is sufficiently substantial to warrant a constitutional reaction *given the failure of the federal government to address it adequately*."[128] But this is a failure of captured democratic politics, not the Constitution.

[127] Tushnet, "Constitutional Workarounds", *supra* note 125 at 1506.
[128] Babcock, "Throwing Spaghetti against the Wall", *supra note* 121 at 737 [emphasis added].

The gravamen of the *GGPPA* references in Saskatchewan and Ontario thus has much more to do with how one understands the policy implications of the threat posed by climate change than how one views constitutional law doctrine. Drawing on the consensus findings of climate change science, I have previously argued and continue to argue that endemic climate policy inaction, as well as insufficiently urgent and ambitious climate policy action, risks "catastrophic consequences".[129] Consequently, I cannot credit the "timeless rules of federalism"[130] if those rules, which are anything but timeless, were to pose a genuine obstacle to effective climate policy in Canada.

By contrast, Dwight Newman has characterized carbon pricing in Canada as "a transient policy objective" while attributing "hyperbolic climate change alarmism" to ENGOs such as the David Suzuki Foundation and Environmental Defence, both of which intervened in the Saskatchewan *Reference* and both of which collaborate closely with climate change scientists and other scholars.[131] Given Newman's policy perspectives, which he asserts but does not explain, perhaps it is not surprising that he would view the province's federalism argument in a more favourable light.

Commenting further on the oral argument of the *Reference*, Newman observed that "[o]ne intervenor raised the spectre of 'rising oceans' increasing the risk of floods in landlocked Timbuktu."[132] It was Saskatchewan, however, that first invoked the city of Timbuktu (which is located in the African country of Mali) in its written reply submissions, and not,

[129] See e.g. MacLean, Doelle & Tollefson, "The Science, Law, and Politics of Canada's Pathways to Paris", *supra* note 83 at 228.
[130] Newman, "Wrecking the Federation to Save the Planet", *supra* note 109.
[131] *Ibid*.
[132] *Ibid*.

as Newman incorrectly alleges, an intervenor. Saskatchewan's reference to Timbuktu is curious, but also revealing:

> [T]he extent to which GHG emissions harm the world, they do so on a basis of global aggregate. The greenhouse effect of a megaton of emissions from Saskatchewan upon British Columbia, for example, is no different than it is on Timbuktu. Equally, the greenhouse gas effect of a megaton of emissions from Saskatchewan upon British Columbia is no different from one emitted in Timbuktu. And the effect on Saskatchewan in both examples is exactly the same as every other part of the world.[133]

In response to this claim, which is plainly contrary to both established and emerging climate science,[134] intervenors in the *Reference* addressed the province's reference to Timbuktu by specifically observing that the city of 54,000 people, despite being landlocked, is situated just north of the Niger River in what is one of the world's most climate-vulnerable regions.[135] According to the Notre Dame Global Adaptation Initiative, which ranks countries as to their climate vulnerability and capacity to adapt, Mali is classified as being extremely vulnerable to climate change while having the least level of capacity to adapt. Among a long list of risks, Mali is especially vulnerable to climate-

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[133] Attorney General of Saskatchewan, "Reply Factum of the Attorney General of Saskatchewan" (29 November 2018), Court of Appeal No CACV3239 at para 21.

[134] See e.g. Sonia I Seneviratne et al, "The many possible climates from the Paris Agreement's aim of 1.5 ºC warming" (2018) 558 Nature 41 at 41, demonstrating that global warming will result "in vastly different outcomes at regional scales, owing to variations in the place and location of climate change and their interactions with society's mitigation, adaptation and vulnerabilities to climate change; Patrick W Keys et al, "Anthropocene risk" (2019) 2 Nature Sustainability 667 at 667, defining Anthropocene risks as exhibiting, among other things, "complex, cross-scale interactions, ranging from local to global, from short-term to deep time (millennia or longer), potentially involving Earth-system tipping points" [Keys et al*,* "Anthropocene risk"]; Tomonori Sato & Tetsu Nakamura, "Intensification of hot Eurasian summers by climate change and land-atmosphere interactions" (2019) 9:10866 Scientific Reports, https://doi.org/10.1038/s41598-019-47291-5. A comprehensive list of examples would go on far too long, so basic and well-established is this principle.

[135] Climate Justice et al*,* "Factum of the Intervenor Climate Justice et al*"* (24 January 2019), Court of Appeal File No CACV3239 at para 18, citing David Maenz, "Affidavit of Dr David Maenz" (16 December 2018), Court of Appeal File No CACV3239 at para 7.

change-induced flooding and water supply issues, child malnutrition, and projected deaths from climate-change-induced diseases.[136]

Of course, one need only look to the Government of Canada's own 2019 report on Canada's changing climate to readily observe differential spatial impacts of climate change, including *within* Canada itself.[137]

What is revealing about Saskatchewan's unsupportable claim about the climate impacts of GHG emissions is its blithe ignorance of and indifference to basic climate change science. While Saskatchewan's provincial government may well believe that climate change is serious, not unlike the Courts of Appeal for Saskatchewan and Ontario, it does not appear to believe climate change is serious *enough* to meaningfully engage with its law and policy implications, including the task of reimagining and transforming once orthodox but now unsustainable social institutions and constructs.[138]

By contrast, more than 11,000 scientist signatories from all over the world reiterated in 2019 "a clear and unequivocal declaration that a climate emergency exists on planet Earth" and that "[m]itigating and adapting to climate change *entails transformations in the ways we govern, manage, feed, and fulfill material and energy requirements*."[139]

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[136] See Notre Dame Global Adaptation Initiative (ND-GAIN), online: <https://gain.nd.edu/>.
[137] Government of Canada, "Canada's Changing Climate Report", *supra* note 3.
[138] See e.g. Louis J Kotzé, "Rethinking global environmental law and governance in the Anthropocene" (2014) 32 Journal of Energy and Natural Resources Law 121; Eric Biber, "Law in the Anthropocene Epoch" (2017) 106 Geo LJ 1; Thomas Sterner et al, "Policy design for the Anthropocene" (2019) 2 Nature Sustainability 14.
[139] William J Ripple, Christopher Wolf & Thomas M Newsome, "World Scientists' Warning of a Climate Emergency" 70:1 BioScience 8 [emphasis added]. See also William J Ripple et al, "World Scientists'

Similarly, in arguing for the need to reimagine our multilateral international development and aid institutions in order to help mitigate climate change, Kenneth Rogoff, a former chief economist of the International Monetary Fund (IMF) and now a professor of economics at Harvard University, recently observed that, "[i]gnorant presidents aside, most serious researchers see the risk of catastrophic climate change as perhaps the greatest existential threat facing the world in the 21st century."[140] Most serious researchers, perhaps, but certainly not most governments.

The true gravamen of the constitutional challenges to carbon pricing in Canada is thus climate science and policy, not the Constitution. Put another way, *what is at stake in these challenges is not the constitutional law of climate politics, but rather the climate politics of constitutional law.* Federalism is neither timeless nor fixed in form nor, in the end, truly an obstacle to effective climate policymaking. In both Canada and the United States, environmental federalism has at least occasionally operated iteratively, whereby either the federal government or the provinces and states (including their municipalities) have enacted environmental regulation, triggering a response from the other level of government.[141]While this is certainly not the norm, it nevertheless establishes that it is possible, and that its relatively rare occurrence is a matter of politics, not law.

Warning to Humanity: A Second Notice" (2017) 67:12 BioScience 1026, which was endorsed by 15,364 scientist signatories from 184 countries.

[140] Kenneth Rogoff, "The case for a World Carbon Bank", *The Globe and Mail* (8 July 2019), online: <https://www.theglobeandmail.com/business/commentary/article-the-case-for-a-world-carbon-bank/>.

[141] For a discussion of how this kind of iterative federalism has the potential to reap the benefits of both devolution and centralization, see Ann E Carlson, "Iterative Federalism and Climate Change" (2009) 103 Northwestern L Rev 109. For an account of how federalism can facilitate climate action in Canada, see Nathalie J Chalifour, "Making Federalism Work for Climate Change: Canada's Division of Powers Over Carbon Taxes" (2008) 22:2 Nat J Const L 119.

In the Supreme Court of Canada's notable decision in *Spraytech*, for example, the Court drew on the interpretive principle of subsidiarity to uphold a by-law enacted by a municipality – the Town of Hudson, Quebec – restricting pesticide use, notwithstanding the existence of both federal and provincial legislation concerning pesticide regulation.[142] The Court cited approvingly the recommendation of the United Nations World Commission on the Environment and Development – known as the Brundtland Commission – that "local governments [should be] empowered to *exceed*, *but not to lower*, national norms."[143] Tellingly, 37 other municipalities in Quebec alone had already enacted by the year 2000 by-laws restricting pesticide use.[144] The Court's view of federalism, including both the permissibility and the desirability of a "tri-level regulatory regime" in respect of pesticide regulation,[145] simply reflected the underlying scientific understanding and normative public policy priorities of Canadians, just as constitutional interpretations have always tended to reflect Canada's underlying policy commitments.[146] If federalism were ever to somehow truly conflict with Canada's public policy commitments, it would soon fall into desuetude. Federalism, not unlike environmental law, is a means-end complex, not an end unto itself.

II. Conclusion: Fiddling While Regina Burns

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[142] *114957 Canada Ltée (Spraytech, Société d'arrosage) v Hudson (Town),* 2001 SCC 40 [*Spraytech*].
[143] *Ibid* at para 3, citing the United Nations General Assembly Preparatory Committee for the United Nations Conference on Environment and Development, Report of the Economic Commission for Europe on the Bergen Conference, Annex I, *Bergen Ministerial Declaration on Sustainable Developments*, A/CONF.151/PC/10, August 6, 1990 at 220 [emphasis added].
[144] See John Swaigen, "The Hudson Case: Municipal Powers to Regulate Pesticides Confirmed by Quebec Courts" (2000) 34 CERL (NS) 162 at 174.
[145] *Spraytech, supra* note 142 at 39.
[146] For a brilliant account of this relationship between public policy and constitutional understanding throughout Canadian history see Macdonald & Wolfe, "Canada's Third National Policy", *supra* note 105.

We are at the coalface of climate policymaking in Canada. Yet we are consumed with – and distracted by – ongoing constitutional wrangling over a piece of climate legislation, which, although not entirely without potential, is plainly inadequate for its express task.[147]

The provincial constitutional challenges comprising the "Saskatchewan Strategy" invite us to examine the *GGPPA* solely through the legal lens of the Constitution. In this chapter I have endeavoured to show, however, that these challenges are patently political in nature. Notwithstanding the parties' and the courts' *formal* preoccupation with competing legal doctrines and interpretive principles, the unduly narrow constructions of the *GGPPA*'s purpose given by the majorities of the Saskatchewan and Ontario courts versus the more expansive – if not entirely accurate – interpretations issued by the dissenting judges of those courts disclose, not genuine differences of legal opinion about the formal boundaries of federal and provincial jurisdiction, but rather a public policy disagreement about how to best accommodate the status quo – legal, political, and economic – in the face of the growing threat of climate change. In the result, as a polity we are regrettably no richer in our understanding of how to craft effective climate policies for having grappled with these judicial opinions. Our governments and courts are fiddling while Regina burns.

Or consider the Saskatchewan *Reference* – the opening gambit of the "Saskatchewan Strategy" – in its more conventionally political context. The Court of Appeal for Saskatchewan publicly released its advisory opinion in respect of the *Reference* at 12pm

[147] In terms of relative policy ambition, compare the *GGPPA* to the resolution tabled in the US House of Representatives calling on the federal government to create a "Green New Deal": H Res 109 – Recognizing the duty of the Federal Government to create a Green New Deal, 116th Congress (2019-2020), online: <https://www.congress.gov/bill/116th-congress/house-resolution/109/text>. The *GGPPA* is accommodating; the Green New Deal is a blueprint for a new political economy.

CST on May 3, 2019; the Court released its opinion to the parties, including the Saskatchewan provincial government, two hours earlier, as is customary. By 12:03pm *of the same day*, Saskatchewan's premier Scott Moe had already announced unequivocally that the province would appeal the decision of its own Court of Appeal to the Supreme Court of Canada.[148] In those short two hours between receiving the decision and announcing to the news media the province's decision to appeal, what specific legal error did Premier Moe and the province's constitutional lawyers identify in the majority's 210-paragraph opinion? What is the fine point of law in dispute? Which particular principle of constitutional law rightly commands the time and resources of Canada's Supreme Court to clarify for the benefit of the country?[149]

Those questions, regrettably, are rhetorical. The benefits of Saskatchewan's appeal are obvious, and obviously political: An appeal further *delays* the development of credible climate policy in the province – after all, it is fighting the good fight for its jurisdiction to do so, even though its jurisdiction is not in doubt or jeopardy;[150] an appeal further *distracts* attention away from the province's lack of credible climate and energy policy[151] – as the

[148] See Creeden Martell, "Saskatchewan premier plans to appeal carbon tax decision to Supreme Court", *CBC News* (3 May 2019), online: <https://www.cbc.ca/news/canada/saskatchewan/carbon-tax-saskatchewan-appeal-1.5121414>.

[149] By way of comparison, a group of close to a dozen law scholars took the better part of three days to discuss and debate the meaning and merits of the Court's majority and dissenting opinions, consisting of 477 paragraphs in total, and agree upon the text of a short and *preliminary* analysis. See MacLean, Chalifour & Mascher, "Work on climate", *supra* note 69.

[150] *Saskatchewan Reference re GGPPA, supra* note 43 at para 122.

[151] Saskatchewan's GHG emissions increased by 53 percent (23.6 $MtCO_2e$) between 1990 and 2005, and then again by an additional 14 percent (9.9 $MtCO_2e$) between 2005 and 2017, due to corresponding increases in activity in the oil and gas, mining, and transportation sectors. See ECCC, "Canadian Environmental Indicators", *supra* note 16 at 11-12, 23. This despite the fact that the province has Canada's highest solar-energy potential in addition to significant wind-power potential. The Canada Energy Regulator compiles national energy data, which are available online: <https://www.cer-rec.gc.ca/nrg/sttstc/lctrct/index-eng.html>.

chief executive of the Saskatchewan Chamber of Commerce observed, "energy policy is largely directionless amid Saskatchewan's constitutional challenge";[152] and in the likely eventuality that Saskatchewan's appeal to the Supreme Court of Canada proves unsuccessful, the result will incite supporters of the "Saskatchewan Strategy" to criticize, not the province's government, but the (unelected) justices of the court.[153]

No matter what the Supreme Court decides in 2021,[154] however, its decision will not substantively inform climate policymaking in Canada. Even if the Supreme Court were to go so far as to recognize an unwritten constitutional principle of ecological sustainability, it would nevertheless fall to policymakers on the ground to work out what that means and how to put it into practice in Canada in the year 2021 and beyond. Unwritten constitutional principle of ecological sustainability or not, *timeless rules of federalism or not,* that is the task at hand.

We simply do not have the time or the margin for error to continue climate politics through the courts. This claim is neither hyperbolic nor alarmist. It is, rather, a basic and uncontroversial implication of our new epoch, the Anthropocene, whose risks are systemic,

[152] Matthew McClearn, "What the death of Ontario's green energy dream can teach other provinces about the challenges ahead", *The Globe and Mail* (1 June 2020), online: <https://www.theglobeandmail.com/business/article-what-the-death-of-ontarios-green-energy-dream-can-teach-other/>.
[153] See e.g. Nathalie Chalifour & Jason MacLean, "Courts should not have to decide climate policy", *Policy Options* (21 December 2018), online: http://policyoptions.irpp.org/magazines/december-2018/courts-not-decide-climate-change-policy/>; Jason MacLean, "The carbon tax case is a dangerous political game", *The Globe and Mail* (13 February 2019), online: <https://theglobeandmail.com/business/commentary/article-the-carbon-tax-case-is-a-dangerous-political-game/>.
[154] The Supreme Court has, as of this writing rescheduled oral argument regarding the *Reference* for September 22-23, 2020 (SCC Case File No 38663).

nonlinear, and rapidly changing in the face of continuing and compounding exploitative human activity.[155]

Postscript

As a matter of scholarly convention, no doctrinal analysis worth its salt discussing a case pending before the Supreme Court of Canada should conclude before presuming to advise the Court how it ought to decide. Here, however, I have undertaken what still counts as an unconventional legal analysis, one that puts legal orthodoxy in its place and looks ahead to the more pressing business of reimagining law and policymaking for a new age's unprecedented challenges.[156]

Given that the Court *must* decide Saskatchewan's appeal,[157] I respectfully urge the Court to do so summarily from the bench. But not before admonishing both levels of government for their lack of action and imagination, and encouraging all Canadians to rise to the occasion.

The next and final chapter of the thesis seeks to complete this argument. Whereas this chapter has endeavoured to show that the provincial challenges to the federal government's *Greenhouse Gas Pollution Pricing Act* reflect, not the constitutional law of climate politics,

[155] Keys et al, "Anthropocene risk", *supra* note 134.
[156] See e.g. Eric Biber, "Law in the Anthropocene Epoch" (2017) 106 Geo LJ 1; Louis J Kotzé, "Earth system law for the Anthropocene: rethinking environmental law alongside the Earth system metaphor" (2020) 11:1-2 Transnational Legal Theory 75; Jason MacLean, "Curriculum Design for the Anthropocene: Review of Meinhard Doelle & Chris Tollefson, *Environmental Law: Cases and Materials,* Third Edition", MJSDL (forthcoming fall 2020).
[157] *Supreme Court Act,* RSC 1985, c S-26 at s 36.

but rather climate politics continued through constitutional law, chapter six directly examines the case for constitutionalizing environmental rights, and argues instead for greater public participation in polycentric environmental governance.

6 YOU SAY YOU WANT AN ENVIRONMENTAL RIGHTS REVOLUTION: TRY CHANGING CANADIANS' MINDS INSTEAD (OF THE *CHARTER*)

> *Only where the state is also understood as a social institution do its legal forms lend themselves to the pursuit of a common good other than organization by reciprocity. Re-creating an element of shared commitment in our political life ought therefore be at the top of any agenda for regulatory reform.*[1]

Recall that according to data collected by the World Meteorological Organization, the atmospheric concentration of carbon dioxide (CO_2) concentration first reached 400 parts per million (ppm) in 2015, and then again in 2016, then the Earth's hottest year on record,[2] and will likely remain above 400 ppm "for many generations."[3] The citizens' environmental organization 350.org takes its name from the research of renowned climate scientist James Hansen. As discussed throughout this thesis, Hansen argued in 2008 that humanity should aim to cap the concentration of CO_2 in the atmosphere at 350 ppm in order to avoid dangerous and irreversible climate tipping points, which are further associated with a 2 °C increase in global temperature above the pre-industrial norm.[4] Further recall that Hansen has subsequently argued that even 2 °C global warming is "dangerous."[5] Hansen and his colleagues warned that "we have a global emergency. Fossil

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[1] Roderick A Macdonald, "Understanding Regulation by Regulations" in I Bernier & A Lajoie, eds, *Regulations, Crown Corporations and Administrative Tribunals* (Toronto: University of Toronto Press, 1985) at 139.

[2] Jugal K. Patel, "How 2016 Became Earth's Hottest Year on Record", *The New York Times* (18 January 2017), online: <https://www.nytimes.com/interactive/2017/01/18/science/earth/2016-hottest-year-on-record.html>.

[3] World Meteorological Organization, "Globally Averaged CO_2 Levels Reach 400 parts per million in 2015", World Meteorological Organization, (24 October 2016), online: <http://public.wmo.int/en/media/press-release/globally-averaged-co2-levels-reach-400-parts-million-2015>.

[4] James E Hansen et al, "Target atmospheric CO_2: Where should humanity aim?" (2008) 2 Open Atmos Sci J 217. See also https://350.org/.

[5] James Hansen et al, "Ice melt, sea level rise and superstorms: evidence from paleoclimate data, climate modeling, and modern observations that 2 °C global warming could be dangerous" (2016) 16 Atmospheric Chemistry & Physics 3761 at 3801.

fuel CO_2 emissions should be reduced as rapidly as possible."[6] It is difficult to overstate the importance of this finding and its implications for how we assess existing and proposed climate laws and policies.

Following the hope – or perhaps hype?[7] – engendered by the Paris Agreement,[8] however, both the initial commitments and the actual policies of the Agreement's 196 signatory countries fall far short of meeting the global community's aspiration of limiting global warming well below 2 °C – and no more than 1.5 °C – above the pre-industrial norm.[9] The Paris Agreement target translates into a finite and severely constrained planetary carbon budget. To have a 50% chance of limiting warming to 1.5 °C by the year 2100 and a-

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[6] *Ibid*.

[7] See e.g. Jody Warrick & Chris Mooney, "196 Countries Approve Historic Climate Agreement", *Washington Post* (12 December 2015), online: <https://www.washingtonpost.com/news/energy-environment/wp/2015/12/12/proposed-historic-climate-pact-nears-final-vote/>; Coral Davenport, "Nations Approve Landmark Climate Accord in Paris", *The New York Times* (13 December 2015), online: <http://www.nytimes.com/2015/12/13/world/europe/climate-change-accord-paris.html?_r=0>; Fiona Harvey, "Paris Climate Change Agreement: The World's Greatest Diplomatic Success", *The Guardian* (14 December 2015), online: <http://www.theguardian.com/environment/2015/dec/13/paris-climate-deal-cop-diplomacy-developing-united-nations>; Eric Reguly & Shawn McCarthy, "Paris climate accord marks shift toward low-carbon economy", *The Globe and Mail* (12 December 2015), online: <http://www.theglobeandmail.com/news/world/optimism-in-paris-as-final-draft-of-global-climate-deal-tabled/article27739122/>; Union of Concerned Scientists, "Global Action on Historic Climate Change Agreement Expected in Paris" (12 December 2015), online: <http://www.ucsusa.org/news/press_release/global-action-on-historic-climate-change-agreement-expected-in-paris-0651#.V752y4Xbanc>; Anne-Marie Codur, William Moomaw & Jonathan Harris, "After Paris: The New Landscape for Climate Policy", Global Development and Environment Institute, Tufts University, Climate Policy Brief No. 2 (February 2016) at 1, online: <www.ase.tufts.edu/gdae/Pubs/climate/ClimatePolicyBrief2.pdf>; Thomas L Friedman, "Paris Climate Accord is a Big, Big Deal", *The New York Times* (16 December 2015), online: <http://www.nytimes.com/2015/12/16/opinion/paris-climate-accord-is-a-big-big-deal.html>.

[8] *Paris Agreement*, being an Annex to the *Report of the Conference of the Parties on its twenty-first session, held in parties from 30 November to 13 December 2015 – Addendum Part two: Action taken by the Conference of the Parties at its twenty-first session*, 29 January 2016, Decision 1/CP.21, CP, 21st Sess., FCCC/CP/2015/10/Add.1 at 21-36, online: UNFCCC <http://unfccc.int/resource/docs/2015/cop21/eng/10a01.pdf> ["Paris Agreement"].

[9] Johan Rockström et al, "A roadmap for rapid decarbonization: Emissions inevitably approach zero with a 'carbon law'" (2017) 355:6331 Science 1269; see also Joeri Rogelj et al, "Paris Agreement climate proposals need a boost to keep warming well below 2 °C" (2016) 534 Nature 631.

greater-than-66% chance of meeting the 2 °C target, global carbon emissions must peak by the year 2020.[10]

Under the Paris Agreement, as discussed throughout this thesis Canada has committed to reducing its greenhouse gas (GHG) emissions by 30% from its 2005 level by 2030.[11] It is important to recall, however, that this target was originally set by the former Harper government and submitted as Canada's initial independently determined national contribution (INDC) during the United Nations Framework Convention on Climate Change (UNFCC) negotiation process that culminated in the 2015 Paris Agreement.[12] The Liberal Party, before it subsequently formed the next federal government in the fall of 2015, criticized the Harper target as unambitious and even "fake."[13] Nevertheless, the subsequent Trudeau government adopted the Harper target as its own, suggesting that it was quite ambitious after all.[14] Scientifically, however, it is decidedly less than ambitious, and inconsistent with the Paris Agreement targets.[15]

Making matters worse, recall that Canada is not on track to meet even its already unambitious GHG reduction target. According to Environment and Climate Change Canada, Canada is presently on pace to emit *at least* 30% *more* GHGs in 2030 than it

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[10] *Ibid*.
[11] Laura Payton, "Liberals back away from setting tougher carbon targets", *CTV News* (18 September 2016), online: <http://www.ctvnews.ca/politics/liberals-back-away-from-setting-tougher-carbon-targets-1.3075857#_gus&_gucid=&_gup=twitter&_gsc=ocMiVmd>.
[12] *Ibid.*
[13] *Ibid.*
[14] *Ibid.*
[15] See e.g. Alina Averchenkova & Sini Maitikainen, "Assessing the consistency of national mitigation actions in the G20 with the Paris Agreement" (London: Grantham Research Institute on Climate Change and the Environment, London School of Economics, 2016), online: <http://www.lse.ac.uk/GranthamInstiturte/wp-content/uploads/2016/11/Averchenkova-and-Matikainen-2016.pdf> [Averchenkova & Maitikainen, "Assessing the Consistency of National Mitigation Actions"].

emitted in 2005.[16] "It remains to be seen," one Canadian environmental advocacy group observed in response to the government's report, "whether the government is serious about meeting its targets."[17]

Such doubts are amplified by the federal government's ongoing support for and approval of the construction of new oil pipelines in order to expand exploitation of Alberta's oil sands.[18] As noted earlier in this thesis, Prime Minister Trudeau once remarked to an oil and gas industry conference in Texas that "[n]o country would find 173 billion barrels of oil in the ground and just leave them."[19] Unsurprisingly, Mr. Trudeau received a standing ovation.[20] Tellingly, he has not resiled from this position.

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[16] Environment and Climate Change Canada, "Canadian Environmental Sustainability Indicators: Progress Towards Canada's Greenhouse Gas Emissions Reduction Target" (Ottawa: Government of Canada, 2017), online: <www.ec.gc.ca/indicateurs-indicators/default.asp?lang=en&n=CCED3397-1>.

[17] Dale Marshall, National Program Manager, Environmental Defence, quoted in Alex Ballingall, "Environment Canada report says we are on pace to miss emissions target", *Toronto Star* (27 March 2017), online: <https://www.thestar.com/news/canada/2017/03/27/environment-canada-report-says-we-are-on-pace-to-miss-emissions-target.html>. See also Shawn McCarthy, "Carbon prices must rise to meet Canada's 2030 greenhouse-gas targets: officials", *The Globe and Mail* (31 March 2017), online: <http://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/carbon-prices-must-rise-to-meet-2030-ghg-targets-officials/article34510739/>.

[18] For an analysis of this paradoxical policy approach, see in particular the discussion in chapter two of this thesis. See also Jason MacLean, "The misleading promise of 'balance' in Canada's climate change policy," *Policy Options* (29 March 2016), online: <http://policyoptions.irpp.org/magazines/march-2016/the-misleading-promise-of-balance-in-canadas-climate-change-policy/>.

[19] Jeremy Berke, "No country would find 173 billion barrels of oil in the ground and just leave them", *Business Insider* (10 March 2017), online: http://www.businessinsider.com/trudeau-gets-a-standing-ovation-at-energy-industry-conference-oil-gas-2017-3>; see also Andrew Leach, "Is Justin Trudeau a hypocrite on climate change?", *The Globe and Mail* (24 April 2017), online: <http://www.theglobeandmail.com/report-on-business/rob-commentary/is-justin-trudeau-a-hypocrite-on-climate-change/article34797080/>. Examples of political priorities favouring economic development over environmental protection abound in Canada. See e.g. Camille Bains, "BC Liberals cite jobs as top election issue, NDP pledges climate action", *The Globe and Mail* (1 May 2017), online: <http://www.theglobeandmail.com/news/british-columbia/bc-liberals-cite-jobs-as-top-election-issue-ndp-pledges-climate-action/article34867571/>. For a fuller analysis, see the discussion in chapter one of this thesis.

[20] *Ibid.*

"With these various political landslips intruding into climate policy and its implementation at such a critical juncture for climate mitigation efforts," argued the Editorial Board of the leading climate change science journal *Nature Climate Change*, "the environment has probably never been more in need of championing *even if we need to think carefully about how that is done*".[21] "Environmental advocacy and education at this politically tumultuous time", the journal's editorial continues, "is certainly needed to keep the climate and environment front and centre in the minds of the public and their politicians."[22]

The critical question remains how best to accomplish this objective. A growing body of research suggests that interventions based on the assumption that informing people about environmental impacts and their anthropogenic causes will inspire pro-environmental behaviour are not effective, particularly if people do not already value environmental

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[21] "Political swings and roundabouts", Editorial, (2017) 7:4 Nat Clim Change 305 [emphasis added] [Nature Climate Change, "Political swings and roundabouts"]. While the journal's editorial focused on the climate change implications of executive orders of the Trump administration in the United States, its analysis is no less applicable to the subsisting Canadian political context. Moreover, there is no meaningful conceptual distinction between the complexity of addressing climate change and the complexity of addressing environmental problems more generally. Both are equally beset by "enormous interdependencies, uncertainties, circularities, and conflicted stakeholders implicated by any effort to develop a solution": Richard J Lazarus, "Super Wicked Problems and Climate Change: Restraining the Present to Liberate the Future" (2009) 94:5 Cornell L Rev 1153 at 1159 [Lazarus, "Super Wicked Problems"]. For an analysis of the continuum of complexity of climate change and environmental problems more generally in Canada, see Jason MacLean, Meinhard Doelle & Chris Tollefson, "The Past, Present, and Future of Canadian Environmental Law: A Critical Dialogue" (2015) 1:1 Lakehead LJ 79 at 87-90 [MacLean, Doelle & Tollefson, "The Past, Present, and Future of Canadian Environmental Law"].

[22] *Ibid.* That was 2017. At this writing in the spring of 2020, the editorial board of *The Economist* newspaper framed the challenge thus: "The harm from climate change will be slower than the [COVID-19] pandemic but more massive and longer-lasting. If there is a moment for leaders to show bravery in heading off that disaster, this is it. They will never have a more attentive audience": "Countries should seize the moment to flatten the climate curve", *The Economist* (21 May 2020), online: <https://www.economist.com/leaders/2020/05/21/countries-should-seize-the-moment-to-flatten-the-climate-curve>. This, of course, presumes political leaders are willing. Compare *The Economist* newspaper's uncritical presumption with the contemporaneous pandemic pronouncement of Alberta's Energy Minister Sonya Savage: "Now is a great time to be building a pipeline because you can't have protests of more than 15 people. Let's get it built": The Canadian Press, "Alberta minister says it's a 'great time' to build a pipeline because COVID-19 restrictions limit protests against them", *The Globe and Mail* (25 May 2020), online: <https://www.theglobeandmail.com/canada/alberta/article-alberta-minister-says-its-a-great-time-to-build-a-pipeline-because/>.

protection in the first place.[23] Given the urgency of addressing climate change mitigation and related issues of environmental protection and sustainability, "we need to ask whether it is necessary to change people's beliefs about anthropogenic climate change, *or whether it is more important to convince people to engage in and support pro-climate behaviours and policies, irrespective of their beliefs.*"[24]

Put another way, strategy matters. Time is short: We must rapidly decarbonize and immediately accelerate the transition to sustainability. Meanwhile, resources – political, economic, and epistemic – are scarce. While localized democratic experimentalism remains a particularly promising approach to crafting environmental policies and regulations in the Anthropocene,[25] we must also begin to critically assess proposed approaches to enhancing environmental protection and charting pathways to carbon neutrality.[26] Notwithstanding the shared pro-environmental commitment of countless activists and academics, there also exists a remarkable range of contested approaches to vindicating this common objective, whereby "contestable choices for climate futures are woven into the technical elaboration of alternative pathways."[27] Were it not for the confounding crises of time and scarce resources (further including human capital and energy), this messy pluralism of theory and practice would otherwise be a boon to

[23] "Politics of climate change belief", Editorial, (2017) 7:1 Nat Clim Change 1 [Nature Climate Change, "Politics of climate change belief"]; see also Jan Willem Bolderdijk et al, "Values Determine the (In)Effectiveness of Informational Interventions in Promoting Pro-Environmental Behavior" (2013) 8 PLoS ONE e83911, online: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0083911>.
[24] *Ibid*; see also Dan M Kahan & Katherine Carpenter, "Out of the lab and into the field" (2017) 7:4 Nat Clim Change 309 [Kahan & Carpenter, "Out of the lab and into the field"].
[25] See e.g. Jason MacLean, "Autonomy in the Anthropocene? Libertarianism, Liberalism, and the Legal Theory of Environmental Regulation" (2017) 40:1 Dal LJ 273.
[26] Silke Beck & Martin Mahony, "The IPCC and the politics of anticipation" (2017) 7:4 Nat Clim Change 311 at 312 (arguing that the assessment of potential pathways to meeting the Paris Agreement targets "must take into account political context and implications in a systematic way") [Beck & Mahony, "The IPCC"].
[27] Beck & Mahoney, "The IPCC", *supra* note 26 at 312.

environmental activism and scholarship instead of an increasingly apparent constraint on coordinated collective action.[28]

This chapter critically and systematically assesses the argument advanced by a number of prominent environmental activists and academics that constitutionalizing – or even merely *attempting* to constitutionalize[29] – environmental rights is a strategically effective means of enhancing environmental protection, including climate change mitigation and the promotion of sustainability.[30] This is not, however, merely a question of constitutional law, although the analysis will in the end have something important to say about the vitally important nature of constitutional law theory and interpretation. Rather, it is foremost a question of the efficacy of a proposed pathway to a collective climate future. The Intergovernmental Panel on Climate Change's (IPCC) crucially important post-Paris-Agreement mandate is to develop *performative* solutions to climate change, pathways and scenarios that not only represent possible futures, but also help bring certain futures into being.[31] Pathways, in this framework, are "political interventions that can define the

[28] For an analysis of this collective action problem vis-à-vis industry lobbying and regulatory capture, see the discussion in chapters two and three of this thesis. See also Jason MacLean, "Striking at the Root Problem of Canadian Environmental Law: Identifying and Escaping Regulatory Capture" (2016) 29 J Envtl L & Prac 111 [MacLean, "Striking at the Root Problem of Canadian Environmental Law"].

[29] See e.g. Lynda M Collins, "Safeguarding the *Longue Durée*: Environmental Rights in the Canadian Constitution" (2015) 71 SCLR (2d) 519 at 539 (arguing that "[w]hile constitutional amendment is a difficult path in Canada, these benefits arguably justify the journey") [Collins, "Environmental Rights in the Canadian Constitution"].

[30] For an initial sketch of the argument developed in further detail and scope below, see Jason MacLean, "Greening the *Charter*? Why trying to constitutionalize a right to a healthy environment is misguided", *CBA National* (2017), online: <http://nationalmagazine.ca/Articles/February-2017/Greening-the-Charter-Why-trying-to-constitutionali.aspx> [MacLean, "Greening the *Charter*"]. For a critique based on libertarian legal theory as opposed to legal pluralism, see Bruce Pardy, "A Right to Clean Air? Constitutional protection for the environment may leave people out of luck", *Literary Review of Canada* 20:2 (March 2012) 26, online: <http://reviewcanada.ca/magazine/2012/03/a-right-to-clean-air/>.

[31] See Jeff Tollefson, "Climate-panel chief Hoesung Lee wants focus on solutions", *Nature News & Comment* (13 October 2015), online: <https://www.nature.com/news/climate-panel-chief-hoesung-lee-wants-focus-on-solutions-1.18556>.

freedom of action and spectrum of choices in the future by determining the often-irreversible path of developments."[32] It is in this high-stakes, polycentric framework that this chapter will assess the argument in favour of what some have called "the environmental rights revolution."[33] Could the addition of a new constitutional right to a healthy environment – any more than the addition of new scientific facts about the causes and consequences of climate change – bring about the urgently needed shift in public values and political priorities? More specifically, could a constitutional right to a healthy environment expand the capacity and potential of environmental governance to respond to the proliferating effects of unsustainability and build new pathways to more viable and desirable futures?[34]

The rest of this chapter unfolds as follows. In the first part, I examine the international law origins of the environmental rights revolution argument, and then critically assess the performance of constitutionalized environmental rights in Latin American countries – Argentina, Brazil, and Ecuador – that are often cited as exemplars of this revolution; I also examine the case of the US state of Pennsylvania. I argue in this part that the evidence does not support the proposition that extant constitutionalized environmental rights promote greater environmental protection. In the second part, I turn to the Canadian context and

[32] Beck & Mahony, "The IPCC", *supra* note 27 at 312.
[33] See e.g. David Richard Boyd, *The Environmental Rights Revolution: A Global Study of Constitutions, Human Rights, and the Environment* (Vancouver: UBC Press, 2012) [Boyd, *The Environmental Rights Revolution*]; David Richard Boyd, *The Right to a Healthy Environment: Revitalizing Canada's Constitution* (Vancouver: UBC Press, 2012); Dinah Shelton, ed, *Human Rights and the Environment* (Cheltenham, UK: Edward Elgar Publishing, 2011); Lynda M Collins, "Are We There Yet? The Right to Environment In International and European Law" (2007) 3:2 MJSDL 119; John Lee, "The Underlying Legal Theory to Support a Well-Defined Human Right to a Healthy Environment as a Principle of Customary International Law" (2000) 25 Colum J Envtl L 283.
[34] This formulation is inspired by Robert Gibson's work on sustainability assessment. See Robert B Gibson, "Opportunities: Finding best openings for influential applications" in Robert B Gibson, ed, *Sustainability Assessment: Applications and Opportunities* (New York: Routledge, 2017) at 252.

analyze the potential creation and implementation of a constitutionalized environmental right in its particular legal, political, and economic context. I argue that the nature of constitutionalizing a right to a healthy environment in Canada is inescapably political, and not an independent matter of constitutional law. However, I further argue that politics is not only an obstacle to constitutionalizing environmental rights, but that it also presents opportunities for promoting climate change mitigation and sustainability pathways. I conclude the chapter by prioritizing greater public participation in polycentric environmental governance.

I. You Say You Want a Revolution (in Environmental Rights)

In arguing the case for an amendment to the Canadian Constitution adding an explicit right to a healthy environment, Collins claims that the 1972 *Stockholm Declaration*[35] ushered in "a stunning level of success in domestic constitutional systems around the world. The *vast majority of constitutions* that have been enacted or amended in the last four decades include some form of explicit constitutional recognition of the environmental rights of individuals, the environmental responsibilities of government, or both."[36] Globally, Collins notes, "more than 90 states have constitutionalized some form of environmental right, variously described as the right to a healthy, ecologically balanced, safe, or wholesome environment."[37] If one includes states that have "constitutionalized environmental rights through the interpretation of other rights (*e.g.,* the right to life) or through incorporation of

[35] *Declaration of the United Nations Conference on the Human Environment,* 5-16 June 1972, 11 I.L.K. 1416, online: United Nations Environmental Programme <http://www.un-documents.net/unchedec.htm> [*Stockholm Declaration*].
[36] Collins, "Environmental Rights in the Canadian Constitution", *supra* note 29 at 537 [emphasis added].
[37] *Ibid.*

international or regional human rights instruments, the number of nations that accord constitutional protection to environmental rights and/or obligations is 147 (out of a total of 193 U.N. members states)."[38]

Before proceeding to look closer at the putative effects of constitutional environmental rights on pro-environmental policies, however, it is important to pause for a moment to look a little more closely at what effect the 1972 *Stockholm Declaration* has had on international – *i.e.,* transboundary – environmental protection, including climate change mitigation. In particular, Principle 21 of the *Stockholm Declaration,* which has long been considered the "cornerstone of international environmental law,"[39] addresses both the exploitation of natural resources by sovereign states and the prevention of transboundary environmental harm. Specifically, Principle 21 provides that

> States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own natural resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.[40]

In an influential article entitled "The Myth and Reality of Transboundary Environmental Impact Assessment,"[41] John Knox argues that the predominant narrative about the

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[38] *Ibid* at 537-538.
[39] See e.g. Philippe Sands, *Principles of International Environmental Law* (Manchester: Manchester University Press, 1995) at 190; David Wirth, "The Rio Declaration on Environment and Development: Two Steps Forward and One Back, or Vice Versa?" (1995) 29 Ga L Rev 599 at 620.
[40] *Stockholm Declaration*, Principle 21, *supra* note 35.
[41] John H Knox, "The Myth and Reality of Transboundary Environmental Impact Assessment" (2002) 96:2 Am J Intl L 291.

Stockholm Declaration's cornerstone principle of transboundary harm prevention belongs to what Daniel Bodansky earlier described as the "myth system" of international environmental law: A collection of ideas often considered part of customary international law that are in fact contradicted by actual state practice.[42] These ideas, Bodansky argues, "represent the collective ideals of the international community, which at present have the quality of fictions or half-truths."[43] Or as Oscar Schachter aptly puts it, "[t]o say that a state has no right to injure the environment of another seems quixotic in the face of the great variety of transborder environmental harms that occur every day."[44]

The mythical, or essentially declaratory, nature of international environmental law counsels skepticism in response to claims such as Collins' that "the right to a healthy environment has achieved a stunning level of success in domestic constitutional systems around the world."[45] If Principle 21 of the *Stockholm Declaration* – the *cornerstone* principle of international environmental law – has largely failed to transform state practice and prevent transboundary environmental harm, it is difficult to maintain that the *Stockholm Declaration's* novel enunciation of a right to enjoy – and a responsibility to promote – a healthy environment has bent the arc of sovereign state practice toward pro-environmental policies and practices, including constitutionalized environmental

[42] Daniel Bodansky, "Customary (and Not So Customary) International Environmental Law" (1995) 3 Indiana Journal of Global Legal Studies 106 at 116 [Bodansky, "Customary International Environmental Law"].
[43] *Ibid.* See also Stepan Wood, "Book Review: Transboundary Harm in International Law Lessons From the Trail Smelter Arbitration" (2007) 45:3 Osgoode Hall LJ 637.
[44] Oscar Schachter, "The Emergence of International Environmental Law" (1991) 44 Journal of International Affairs 457 at 463 [Schachter, "The Emergence of International Environmental Law"]. Canadian state practice certainly contradicts Principle 21. See e.g. Erin K Sexton et al, "Canada's mines pose transboundary risks" (2020) 386 Science 376.
[45] Collins, "Environmental Rights in the Canadian Constitution", *supra* note 29 at 537.

protections. Indeed, it is difficult if not impossible to reconcile the stunning success that environmental rights have reportedly enjoyed in domestic constitutional systems – 147 out of 193 U.N. member states, on Collins' account[46] – with "the great variety of transborder environmental harms that occur every day"[47] and the indisputable and ever-accumulating scientific evidence that "the environment has probably never been more in need of championing".[48]

How to explain this dramatic discrepancy? Bodansky rightly observes that "[l]awyers tend to be good, not at empirically studying behavior, but rather interpreting and utilizing texts – for example, cases, statutes, treaties, and resolutions. And, in writing about 'customary' international law, this is exactly what international lawyers do."[49] According to Bodansky, "[a] perusal of any work on customary international environmental law confirms that this methodology is the rule, not the exception."[50]

This analytic tendency makes David Boyd's work on environmental rights all the more groundbreaking. In his books *The Environmental Rights Revolution* and *The Right to a Healthy Environment,* Boyd attempts a comprehensive empirical analysis of the explicit constitutionalization (*i.e.,* through enactment or amendment) of environmental rights, and

[46] *Ibid* at 538.
[47] Schachter, "The Emergence of International Environmental Law", *supra* note 44.
[48] Nature Climate Change, "Political swings and roundabouts", *supra* note 21.
[49] Bodansky, "Customary International Environmental Law", *supra* note 42 at 113. As argued in further detail below, Canadian constitutional law scholars also fit this description. For an analysis of this analytic tendency, see Roderick A Macdonald & Robert Wolfe, "Canada's Third National Policy: The Epiphenomenal or the Real Constitution?" (2009) 59 UTLJ 469.
[50] Bodansky, "Customary International Environmental Law", *supra* note 42 at 114.

argues that such explicit constitutionalization produces pro-environmental policies and performance.[51] According to Boyd,

> The empirical evidence paints a bright green picture. Countries with constitutional environmental provisions have stronger environmental laws, more rigorous enforcement, and increased public participation. More importantly, these countries have smaller ecological footprints (both globally and regionally), perform better on comprehensive indices of environmental performance, and have made superior progress in reducing air pollution and tackling climate change.[52]

In a subsequent quantitative analysis of the effects of constitutional environmental rights on environmental outcomes, Jeffords and Minkler conclude that their results support Boyd's "comprehensive, largely qualitative study."[53] They also note, however, that their measures of the legal enforceability and stringency of constitutional environmental rights (CER) provisions "are perhaps a bit too simple. In future specifications, we will have to consider the differences in keyword categories to see if some are more important than others in providing the CER provision *with legal teeth*." [54] The authors candidly acknowledge that their analysis does not account for important economic, sociodemographic, and legal factors at the country level, including "a country's legal origins, governmental and non-governmental organizations tasked with protecting the environment, type of government, *natural resource endowments*, aspects of international

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[51] Boyd, *The Environmental Rights Revolution, supra* note 33.
[52] David R Boyd, "Governing the Environment", *Literary Review of Canada* 20:2 (March 2012), online: <http://reviewcanada.ca/magazine/2012/03/a-right-to-clean-air/> [Boyd, "Governing the Environment"].
[53] Chris Jeffords & Lanse Minkler, "Do Constitutions Matter? The Effects of Constitutional Rights Provisions on Environmental Outcomes", University of Connecticut Department of Economics Working Paper Series, Working Paper 2014-16 (July 2014), online: <https://ideas.repec.org/p/uct/uconnp/2014-16.html> [Jeffords & Minkler, "Do Constitutions Matter?"].
[54] *Ibid* at 17.

trade, and statutory law, regulation, and court decisions."[55] Moreover, the authors concede that their measures are more general than specific and, in certain important and revealing instances, indirect rather than direct.[56]

These are far from minor concessions. In a an empirical *legal* analysis of the effects of a variety of constitutional rights, Chilton and Versteeg demonstrate that where constitutional rights do in fact influence government policy, they tend to do so by facilitating the establishment of *organizations – e.g.,* political parties and unions – with both the incentives and the *means* to protect their interests. In this way certain constitutional rights *appear* to be self-enforcing.[57] The political, economic, and social effects of constitutional rights, in other words, cannot be properly understood without taking close account of their lived, institutional context.[58] As Jeffords and Gellers acknowledge, further research, including

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[55] *Ibid* [emphasis added]. For further methodological details regarding this study, see Christopher R Jeffords, "An Economist's Musings on Constitutions and the Environment", online: (2013) 54 Alumni News, Department of Economics, Indiana University of Pennsylvania at 2 <http://www.theglobeandmail.com/opinion/editorials/ottawa-changes-its-mind-on-undrip-but-it-is-taking-a-risk/article34815894/>.

[56] *Ibid* at 8: The authors note that "because we are examining the potential effects of CER provisions, which by their nature are general, we need a general outcome measure as well." Elsewhere (at 9, n 16), the authors explain that being a state party to the United Nations International Covenant on Economics, Social, and Cultural Rights (ICESCR) "implies accession/ratification of the ICESCR, both of which imply the covenant has (in part or in full) been integrated into the law of the country." This is plainly incorrect, and even in cases where the inference is justified, it says nothing about the effective level of enforcement that the covenant in question enjoys. The Canadian government's hot and cold and hot again embrace of the principle of free, prior, and informed consent (FPIC) under the United Nations Declaration on the Rights of Indigenous Peoples is a contemporaneous case in point. See e.g. "Globe editorial: Ottawa changes its mind on UNDRIP, but it is taking a risk", Editorial, *The Globe and Mail* (25 April 2017), online: <http://www.theglobeandmail.com/opinion/editorials/ottawa-changes-its-mind-on-undrip-but-it-is-taking-a-risk/article34815894/>.

[57] Adam S Chilton & Mila Versteeg, "Do Constitutional Rights Make a Difference?" (2016) 60:3 American Journal of Political Science 575. This analysis does not include constitutional environmental provisions, however.

[58] See e.g. Chris Jeffords & Joshua C Gellers, "Constitutionalizing Environmental Rights: A Practical Guide" (2017) Journal of Human Rights and Practice 1 [Jeffords & Gellers, "Constitutionalizing Environmental Rights"]. For an intriguing analysis of this issue from a law reform perspective, see Nathalie Des Rosiers, "Rights Are Not Enough: Therapeutic Jurisprudence Lessons for Law Reformers" (2015) 18:3 Touro L Rev 443.

case studies, is required to address the various limitations and qualifications of the existing empirical research. In particular, analyses of the effects of constitutional environmental provisions must acknowledge and address "*the realities and constraints inherent to different legal and political contexts*. Further implementation and subsequent analysis is necessary in order to better understand *the conditions under which environmental rights achieve their intended objectives*."[59] As indicia of the determinants of pro-environmental government policies, the presence versus absence of a constitutional environmental right along with arbitrary textual variations in the framing of constitutional environmental rights are simply far too general to be compelling; they are more noise than signal.[60]

These methodological shortcomings are perhaps nowhere more evident than in environmental rights advocates' trumpeting of the Latin American experience with constitutionalizing environmental rights. According to Boyd, for instance, "[t]here are major regional differences in the extent to which the constitutional right to a healthy environment is exerting influence. *The most far-reaching changes have taken place in Latin America"*.[61] On the basis of recent enactments and amendments, Boyd cites the experiences of countries such as Argentina, Brazil, Colombia, Costa Rica, and Ecuador as countries at the "top of the list" when it comes to "creative ideas at the convergence of constitutions, human rights, and environmental protection".[62]

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[59] Jeffords & Gellers, "Constitutionalizing Environmental Rights", *supra* note 58 at 8-9 [emphasis added].
[60] See Nate Silver, *The Signal and the Noise: Why So Many Predictions Fail—but some Don't* (New York: Penguin, 2012).
[61] Boyd, *The Environmental Rights Revolution, supra* note 33 at 282 [emphasis added].
[62] *Ibid*.

Upon closer examination, however, the putative effects of newly constitutionalized environmental provisions in Latin American countries are difficult to discern.[63] Argentina is a case in point. Boyd contrasts Canada's efforts to clean up and conserve the Great Lakes with Argentina's efforts to clean up the severely polluted 64-kilometre Matanza-Riachuelo River, which runs through Buenos Aires and is one of the most polluted ecosystems in Latin America.[64] Boyd notes that politicians in both countries repeatedly reneged on commitments to reduce industrial pollution in these vital ecosystems.[65] As of 2012, Canada had invested less than $10 million annually to restore the Great Lakes, which is but a fraction of the required level of investment.[66] By contrast, Boyd and other environmental rights advocates celebrate a 2008 decision of the Argentina Supreme Court[67] that relies on the right to a healthy environment added to the Argentine constitution in 1994.[68] The Court's decision, Boyd argues, "triggered a crackdown on polluters, a multi-billion dollar infrastructure upgrade and a dramatic increase in environmental monitoring. *Constitutional recognition of the right to a healthy environment has ushered in a new era of accountability in Argentina*."[69]

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[63] For an initial sketch of this analysis, see MacLean, "Greening the *Charter*", *supra* note 30.
[64] "Argentinian Supreme Court's Pioneering Judgment on Environmental Rights" (2017), *FuturePolicy.org* (blog), online: <http://www.futurepolicy.org/equity-and-dignity/rights-and-responsibilities/argentinian-supreme-courts-pioneering-judgement-on-environmental-rights/>. See also Javier Auyero & Débora Alejandra Swistun, *Flammable: environmental suffering in an Argentine shantytown* (Oxford: Oxford University Press, 2009).
[65] Boyd, "Governing the Environment", *supra* note 52.
[66] *Ibid.*
[67] Supreme Court, Buenos Aires, 8 July 2008, *Mendoza et al v The National State of Argentina et al* (2008) (Argentina).
[68] Section 41 of the Federal Constitution of Argentina (1994) includes "the right of all inhabitants to enjoy an environment which is healthy, balanced and suitable for human development.
[69] Boyd, "Governing the Environment", *supra* note 52 [emphasis added]. David Suzuki, a leading environmental rights activist in Canada, has similarly lauded this decision of the Supreme Court of Argentina. See David Suzuki, "We can make Canada's reality match its image" (5 December 2013), *Science Matters* (blog), online: <http://www.davidsuzuki.org/blogs/science-matters/2013/12/we-can-make-canadas-reality-match-its-image/>.

Recent evidence concerning the actual impact of the Court's ruling, however, paints anything but a green picture. In a status hearing before the Supreme Court in 2016, Argentina's government indicated that since 2008 it has spent $5.2 billion on the clean up of the Matanza-Riachuelo.[70] According to a report prepared and filed with the Court in 2016 by the Matanza-Riachuelo Basin Authority (Acumar), the official government agency in charge of the clean up, "[t]he Riachuelo river is still serving the function of drainage for the economic and human activities in the city of Buenos Aires and a large part of the Greater Buenos Aires [region], as it has for the last 200 years."[71] In what has been called "Argentina's Never-Ending Environmental Disaster",[72] each year more than 90,000 tons of heavy metals and other toxic substances are dumped into the river, the basin of which is home to approximately six million people.[73] According to Acumar, the Matanza-Riachuelo is "not just highly polluted, *but it continues to be contaminated*."[74]

How to explain the dramatic discrepancy between the high hopes engendered by the Supreme Court's 2008 decision and its patent failure to improve the conditions of the Matanza-Riachuelo? Raúl Estrada Oyuela offers a localized explanation. Estrada is a member of the Association of La Boca, the neighbourhood where the Riachuelo flows into

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[70] Daniel Gutman, "Argentina's Never-ending Environmental Disaster", *Inter Press Service* (11 February 2017), online: <http://www.ipsnews.net/2017/02/argentinas-never-ending-environmental-disaster/>.
[71] *Ibid*.
[72] *Ibid*.
[73] *Ibid.*
[74] *Ibid.* See also Fabiana Frayssinet, "It Takes More than Two to Tango – or to Clean up Argentina's Riachuelo River", *Inter Press Service* (13 August 2014), online: <http://www.ipsnews.net/2014/08/it-takes-more-than-two-to-tango-or-to-clean-up-argentinas-riachuelo-river/> [Frayssinet, "It Takes More than Two to Tango"]. See also Teresa Kramarz, "Using the Courts to Protect the Environment in Argentina: Accountability Pitfalls When Judges Have the Last Word" (2018) 2:1 Case Studies in the Environment 1. Notably, Kramarz argues that when the Court's decision and retention of supervisory jurisdiction failed to clean up the river basin, local residents were left with no way to hold the judiciary accountable for its failure in respect of what has since become an aggravated environmental and public health crisis.

the Rio de la Plata, and a former diplomat who was Chairman of the Committee of the Third Conference of the Parties to the UNFCC, which finalized the negotiation of the United Nations Kyoto Protocol on climate change in 1997. In Estrada's view, "there is a lack of will to tackle the main problem, which is the pollution of the water, soil and air, because that would mean affecting the interests of the industries, which of course would have to make investments if they were forced to switch to a clean production system."[75]

Estrada's view is echoed by Andrés Nápoli, director of the non-governmental organization Environment and Natural Resources Foundation (FARN), which intervened in the case concerning the Matanza-Riachuelo before Argentina's Supreme Court in 2008. According to Nápoli, the lack of progress is due to "the huge web of political and economic interests in Buenos Aires."[76] In 2014, Nápoli further observed that "[t]here are vulnerable people living along the banks of streams, or next to polluting industries. *Six years after the Supreme Court ruling we still don't know exactly who are at risk*."[77]

The never-ending environmental disaster of Argentina's Matanza-Riachuelo is a case in point regarding the conceptual and methodological shortcomings of analyzing constitutional provisions and judicial decisions in isolation from their broader political and

[75] *Ibid.* This conflict of interest among affected stakeholders is an illustration of Lazarus' insight about the super wicked complexity of environmental problems, including but not limited to climate change, which is itself a result of a specific form of air – carbon dioxide – pollution, a classic environmental problem. Lazarus, "Super Wicked Problems", *supra* note 21.
[76] Frayssinet, "It Takes More than Two to Tango", *supra* note 74.
[77] *Ibid.* It is important to note, however, that there is no suggestion that the concomitant presence of constitutionalized economic rights such as the right to property in Argentina or any other Latin American state is responsible for the ineffectiveness of constitutionalized environmental rights, which might suggest that such a constitutionalized environmental right would flourish in Canada because of the absence of constitutionalized economic rights here. To the contrary, Boyd argues that "the nations where courts are actively enforcing the right to a healthy environment are generally more active in enforcing social and economic rights"; Boyd, *The Environmental Rights Revolution*, *supra* note 33 at 128.

economic enforcement contexts, but regrettably it is not an isolated case in Argentina. According to an investigation conducted by the *Washington Post*, for instance, Indigenous communities are at risk of being left both waterless and poorly compensated after international mining companies – including a Canadian-Chilean venture named Minera Exas – have extracted lithium from the ground in their communities.[78] Meanwhile, and more broadly, an analysis of the consistency of G20 countries' climate change mitigation actions with their Paris Agreement commitments reveals that Argentina's past and present actions on climate change are – just as Canada's own actions are – "largely inconsistent with meeting the key requirements of the Paris Agreement."[79] Contrary to the repeated but unsupported assertions of environmental rights advocates, the existence of a constitutionalized right to a healthy environment in Argentina has not ushered in a new era of environmental accountability in respect of either its most enduring or its newly emerging environmental problems.

Brazil is a case equally heralded by environmental rights advocates and equally illustrative of the limits of the environmental rights argument. "Brazil has had its ups and downs when it comes to protecting the environment", observed the leading science journal *Nature* in 2016, "*but on paper, at least, many of the country's policies are admirably green. The right to an 'ecologically balanced environment' is even enshrined in the Brazilian*

[78] Todd C Frankel & Peter Whoriskey, "Tossed Aside in the 'White Gold' Rush: Indigenous people are left poor as tech world takes lithium from under their feet", *Washington Post* (19 December 2016), online: <https://www.washingtonpost.com/graphics/business/batteries/tossed-aside-in-the-lithium-rush/>. See also "El Salvador's Historic Mining Ban", Editorial, *The New York Times* (1 April 2017), online: <https://www.nytimes.com/2017/04/01/opinion/sunday/el-salvadors-historic-mining-ban.html?_r=0>.
[79] Averchenkova & Maitikainen, "Assessing the Consistency of National Mitigation Actions", *supra* note 15.

constitution."[80] This constitutional provision, however, has not proven much of an obstacle to the efforts of a loose coalition of agricultural and industrial interests to undermine the government's authority – and constitutional obligation – to protect the environment.[81] In 2012, for instance, this coalition influenced the introduction of legislation to weaken Brazil's 1965 *Forest Code*, itself once considered a landmark environmental law governing forested lands across the country.[82] More than 20 legislative proposals were tabled in 2017 before Brazil's Congress designed to loosen environmental regulations, including a proposed constitutional amendment that would ensure approval of economic development projects once the project proponents themselves have submitted their own environmental impact analyses.[83] The proposals are designed to effectively eliminate governmental environmental assessment, notwithstanding the government's constitutional obligation maintain an ecologically balanced environment.[84]

Nor is Brazil presently on track to meeting its climate change mitigation commitments under the Paris Agreement.[85] Brazil's "National Policy on Climate Change" covers only

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[80] "Don't bypass Brazil's environmental protections", Editorial, (2016) 539 Nature 139 [emphasis added].
[81] *Ibid.*
[82] *Ibid.*
[83] Jeff Tollefson, "Brazil debates loosening environmental protections: Barrage of proposals would allow developers to sidestep environmental reviews" (2016) 539 Nature 147. See also Chris Arsenault, "Brazil, home of the Amazon, rolls back environmental protection", *Reuters* (15 May 2017), online: <http://www.reuters.com/article/us-brazil-politics-environment/brazil-home-of-amazon-rolls-back-environmental-protection-idUSKCN18B21P>, observing that "Brazil has embarked on the biggest roll back of environmental protections in in two decades".
[84] See e.g. Denis Abessa, Ana Farmá & lucas Bureaem, "The systematic dismantling of Brazilian environmental laws risks losses on all fronts" (2019) 3 Nature Ecology & Evolution 510. See also Lucas Ferrante & Philip M Fearnside, "Brazil's new president and 'ruralists' threaten Amazonia's environment, traditional peoples and the global climate" (2019) 46:4 Environmental Conservation 261. The latest relevant development in Brazil at this writing is a law-reform proposal, Bill 2633, which enables settlers to lay claim to public land without sanction. See Benedict Probst et al, "Impact of a large-scale tilting initiative on deforestation in the Brazilian Amazon" (2020), online doi: <https://doi.org/10.1038/s41893-020-0537-2.>
[85] Averchenkova & Maitikainen, "Assessing the Consistency of National Mitigation Actions", *supra* note 16.

the period until 2020 and uses a business-as-usual baseline rather than the more ambitious and stringent 2005 baseline used in setting its GHG reduction target under the Paris Agreement.[86]

But perhaps the most celebrated case in the so-called Latin American environmental rights revolution proffered by environmental rights advocates is Ecuador. In 2008 Ecuador approved a new constitution that, among other things, gave nature the "right to exist, persist, maintain and regenerate its vital cycles, structure, functions and its processes in evolution" and mandated that the government take "precaution and restriction measures in all the activities that can lead to the extinction of species, the destruction of the ecosystems or the permanent alteration of the natural cycles."[87]

Local Ecuadorian environmental activists note, however, that for all the hope accompanying the "Rights of Nature" provisions in Ecuador's new constitution, "there are shortcomings and contradictions with the laws *and the political reality on the ground*."[88] In particular, Ecuador has proceeded with oil drilling in the Yasuní National Park, one of the world's most bio-diverse regions, along with open-pit mining in El Condor Mirador,

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[86] *Ibid.* See also Jan Rocha, "Brazil Risks 'International Pariah' Status with Deep Cuts to Amazon Monitoring", *Climate News Network* (23 April 2017), online: <http://theenergymix.com/2017/04/23/brazil-risks-international-pariah-status-with-deep-cuts-to-amazon-monitoring/>.

[87] Andrew C Revkin, "Ecuador Constitution Grants Rights to Nature" (29 September 2008), *Dot Earth* (blog), online: <https://dotearth.blogs.nytimes.com/2008/09/29/ecuador-constitution-grants-nature-rights/>. See Constitution of the Republic of Ecuador, online: <http://pdba.georgetown.edu/Constitutions/Ecuador/english08.html>.

[88] See e.g. Cyril Mychalejko, "Ecuador's Constitution Gives Rights to Nature", *UpsideDownWorld* (27 September 2008), online: <https://www.opednews.com/populum/page.php?f=Ecuador-s-Constitution-Giv-by-Cyril-Mychalejko-080925-102.html> [emphasis added].

home to multiple endemic species.[89] In order to satisfy the applicable case law and not contravene the country's constitutional Rights of Nature, the Ecuadorian government merely promised to perform environmental studies.[90] And in order to ensure that no Indigenous communities are harmed, the government simply redrew its tribal territory maps, moving the Taromenane and Tagaeri tribes off of oil-rich areas.[91]

In Ecuador, there are two competing conceptions on how to achieve what is called *Buen Vivir* (living well): The extractive position and the conservationist position.[92] The extractive position views natural resources as a means to *Buen Vivir,* whereas the conservationist position promotes respect for nature as part of the search for alternative pathways to achieving *Buen Vivir*.[93] As illustrated above, government policy in Ecuador has thus far followed the extractive approach, whereby the government has opted for the extraction and commercialization of largely state-owned natural resources in order to ensure fiscal balance and support poverty reduction.[94] As former President – and a key

[89] Percy Olson, "A Constitutional Analysis of Drilling for Oil in Ecuador" (23 March 2014), *Michigan Journal of Environmental & Administrative Law* (blog), online: <http://www.mjeal-online.org/a-constitutional-analysis-of-drilling-for-oil-in-ecuador/>.
[90] *Ibid*.
[91] *Ibid.* See also Nick Miroff, "In Ecuador, oil boom creates tension", *Washington Post* (16 February 2014), online: <https://www.washingtonpost.com/world/in-ecuador-oil-boom-creates-tension/2014/02/16/f790d2f4-8f6d-11e3-878e-d76656564a01_story.html?utm_term=.07d5947b72b0>.
[92] Jorge Guardiola & Fernando García-Quero, "Nature & *Buen Vivir* in Ecuador: The battle between conservation and extraction" (2014) 1:1 Alternautas 100.
[93] *Ibid* at 101.
[94] *Ibid*. In fact, as Thea Riofrancos demonstrates, the rewriting of Ecuador's constitution and its government's avid promotion of extractive projects were intimately related, concomitant developments: Thea Riofrancos, "*Extractivismo* unearthed: a genealogy of a radical discourse" (2017) 31: 2-3 Cultural Studies 277.

architect of the Rights of Nature and *Buen Vivir* – Rafael Correa explained, Ecuadorians "cannot live as beggars sitting on a sack of gold."[95]

The Latin American experience with constitutionalizing environmental rights offers a starkly different lesson than the one typically offered by its advocates. Far from painting a bright green picture, as some constitutional environmental rights advocates proclaim, the experiences of Argentina, Brazil, and Ecuador canvassed above suggest that the effects – if any – of constitutionalized environmental rights depend on their broader political and economic institutional contexts. Upon closer examination, however, those contexts suggest that constitutional environmental rights are more paper tigers than pro-environmental policy triggers. Indeed, even a cursory examination of these contexts reveals that environmental advocacy in Latin America struggles against not only the priorities of economic development that obtain elsewhere,[96] but also in a troubling number of cases against the absence of effective state policing and prevention of violence. The non-governmental organization Global Witness, for instance, reports that 185 environmental activists were murdered worldwide in 2015, and that more than half of those murders occurred in Latin America; 50 occurred in Brazil alone.[97] Throughout Latin America there

[95] Rafael Correa, "Intervencíon XII Cumbre ALBA" (30 July 2013), online: <http://www.youtube.com/watch?v=W67MqQUnPTA>. See also Rafael Correa, "Ecuador's Path" (2012) 77 New Left Review 89, online: <https://newleftreview.org/II/77/rafael-correa-ecuador-s-path> (arguing that "[i]t is madness to say no to natural resources, which is what part of the left is proposing—no to oil, no to mining, no to gas, no to hydroelectric power, no to roads"). But see Gabriela Corenel Vargas, William A Au & Alberto Izzotti, "Public health issues from crude-oil production in the Ecuadorian Amazon territories" (2020) 719 Science of the Total Environment 134647.

[96] See e.g. Chris Jeffords, "Hydraulic Fracturing and the Constitutional Human Right to Water in Pennsylvania" (2014) 21:2 Pennsylvania Economic Review 1 [Jeffords, "Hydraulic Fracturing and the Constitutional Human Right to Water"].

[97] Global Witness, "On Dangerous Ground" (20 June 2016), online: <https://www.globalwitness.org/en/campaigns/environmental-activists/dangerous-ground/>; see also "Dying to defend the planet: Why Latin America is the deadliest place for environmentalists", *The*

is an abundance of natural resources, which are often located on remote lands occupied and claimed by Indigenous peoples, and which tend to be insufficiently policed and protected by state governments.[98] *The New York Times* characterized the situation in the region this way: "The prospect of job creation and short-term returns has prompted several governments in Latin America to welcome mining companies *and keep regulation to a minimum*. In remote areas, unauthorized miners have sucked up natural resources without regard for the environmental and social damage they leave behind."[99] These conditions, notwithstanding the existence of constitutionalized environmental rights, are far more

Economist (11 February 2017), online: <http://www.economist.com/news/americas/21716687-commodities-technology-and-bad-policing-why-latin-america-deadliest-place>.

[98] *Ibid.*

[99] "El Salvador's Historic Mining Ban", Editorial, *The New York Times* (1 April 2017), online: <https://www.nytimes.com/2017/04/01/opinion/sunday/el-salvadors-historic-mining-ban.html> [emphasis added]. Environmental rights advocates such as Boyd candidly – albeit contradictorily – acknowledge that "Latin American environmental laws are notorious for being strong on paper but weak in reality. The main reasons for this are a lack of enforcement resources and a reluctance to enforce laws when doing so could adversely affect economic interests": Boyd, *The Environmental Rights Revolution, supra* note 33 at 146. However, much the same can be said about Canada, notwithstanding Canada's greater economic wealth. Canadian courts have long recognized this reality. See e.g. *Labrador Inuit Association v Newfoundland (Minister of Environment and Labour*), 1997 CanLII 14612 at para 11: "One must also be alert to the fact that governments themselves, even strongly pro-environmental ones, are subject to many countervailing social and economic forces". Indeed, a recent expert academic environmental law reform proposal in Canada was premised on "[t]he longstanding inadequacy of federal environmental laws", including "*the reality on the ground is that Canada's environmental laws are exceedingly weak in form and in their implementation*": Martin Olszynski et al, "Strengthening Canada's Environmental Assessment and Regulatory Processes" Recommendations and Model Legislation for Sustainability" (16 August 2017), online: <https://s3.ca-central-1.amazonaws.com/ehq-production-canada/file_answers/files/28b387fc534e5697ef3120eb00dfc1288a80262a/004/713/091/original/Strengthening_EnviroLaw_Response_Paper_%2818Aug2017%29.pdf?1503068970&utm_campaign=website&utm_source=ehq&utm_medium=email> at 3; see also Martin Olszynski et al, "Sustainability in environmental assessment", *Policy Options* (5 September 2017), <online: http://policyoptions.irpp.org/magazines/september-2017/sustainability-in-canadas-environmental-assessment-and-regulation/>. Accordingly, a critical examination of the so-called Latin American environmental rights revolution has much to teach us about the likely ineffectiveness of a constitutional right to a healthy environment in Canada absent underlying popular and political support for environmental protection and sustainability.

conducive to environmental exploitation – and significant human harm – than environmental protection.[100]

Much the same relationship between constitutionalized environmental rights and political economy obtains closer to home, in jurisdictions having substantially similar constitutional frameworks – *mutatis mutandis* – as Canada's. Consider, for example, the case of Pennsylvania. In 1971, Pennsylvania's state constitution was amended to include the following right:

> The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.[101]

Pennsylvania also has abundant reserves of natural gas contained in the Marcellus Shale region. Natural gas – *i.e.,* shale gas – can be extracted by means of a process called hydraulic fracturing, a technological process that *post*-dates the state's environmental rights amendment.[102] In the Marcellus Shale region, drilling a horizontal well for the

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[100] Meanwhile, legitimate – if nonetheless always contingent – environmental success stories in Latin America such as El Salvador's ban on metal mining – described as "historic" by *The New York Times* (*ibid*) – stemmed, not from litigation based on a constitutional environmental right, but from a broad-based, grassroots social movement that also regrettably (but tellingly) involved the deaths of several anti-mining activists. See Gene Palumbo & Elisabeth Malkin, "El Salvador, Prizing Water Over Gold, Bans All Metal Mining", *The New York Times* (29 March 2017), online: <https://www.nytimes.com/2017/03/29/world/americas/el-salvador-prizing-water-over-gold-bans-all-metal-mining.html>. But see M Belén Olmos Giupponi & Martha C Paz, "The Implementation of the Human Right to Water in Argentina and Colombia" (2015) 15 Anuario Mexicano de Derecho Internacional 323.

[101] PA Const art I, §27. For a detailed discussion of the inclusion of this right in Pennsylvania's constitution, see John C Dernbach & Edward J Sonnenberg, "A Legislative History of Article I, Section 27 of the Constitution of the Commonwealth of Pennsylvania" (2015) 24:2 Widener LJ 181.

[102] Jeffords, "Hydraulic Fracturing and the Constitutional Human Right to Water", *supra* note 96.

purpose of hydraulic fracturing over the course of just a single week requires between four and eight million gallons of water, and such wells are hydrofractured up to 20 times over their lifetimes.[103] Hydraulic fracturing results in negative externalities, including reductions in the quantity and quality of available drinking water.[104] Hydraulic fracturing accordingly reflects – and is made possible by – the state government's inability to fulfill its constitutional obligation to provide, among other things, pure water. Notwithstanding this right and a widely discussed decision of the Pennsylvania Supreme Court,[105] hydraulic fracturing is rampant in Pennsylvania, and its environmental effects have attracted considerable public attention.[106] According to Jeffords, however, the effect – if any – of the state's constitutional right to pure water is affected by the number of natural gas producers operating in the state and the extent to which these producers can be held accountable for violations of the constitutional right, both of which are conditions *external* to and broader than the scope and substance of the constitutional environmental right itself.[107]

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[103] *Ibid.*
[104] *Ibid.*
[105] *Pennsylvania Environmental Defence Foundation v Commonwealth*, 161 A (3d) 911 (Pa 2017). In this case, the Pennsylvania Supreme Court held that pursuant to the state's "Environmental Rights Amendment," funds that the state derives via permits and licenses from public natural resources must be reinvested into the conservation of those resources and cannot be used to fund other public programs. Notably, the decision does not limit natural resource extraction or environmental harm. It holds, rather, that any funds derived by the state therefrom go back into environmental conservation on the basis of public trust principles. Moreover, the decision, while hailed by some as transformative, raises far more questions than it answers. See e.g. Anthony R Holtzman et al, "Pennsylvania Supreme Court Issues Transformative Decision in Environmental Rights Amendment Case" (11 July 2017), K&L Gates *Legal Insight* (blog), online: <http://www.klgates.com/pennsylvania-supreme-court-issues-transformative-decision-in-environmental-rights-amendment-case-07-11-2017/>.
[106] See e.g. Eliza Griswold, "The Fracturing of Pennsylvania", *The New York Times* (17 November 2011), online: <http://www.nytimes.com/2011/11/20/magazine/fracking-amwell-township.html>.
[107] Jeffords, "Hydraulic Fracturing and the Constitutional Human Right to Water", *supra* note 97.

This finding accords with the fate of constitutional environmental rights generally, which have "largely failed at the state level" in the United States.[108] As United States Court of Appeals for the Sixth Circuit Judge Jeffrey Sutton rhetorically asks: "How does even the most motivated court enforce a 'right to a healthful environment'?"[109] This objection is not simply about the vagueness of the right's formulation, which applies to a greater or lesser extent to most, if not all, constitutional rights. However, such language can obscure deeper normative differences about the substance and scope of constitutional rights.[110] Rather, Judge Sutton's objection is more about institutional competence: "Courts are institutionally ill-equipped to do either of the two things ultimately needed to increase the funding for a policy, even a constitutionally protected policy: impose a tax increase themselves or order a reprioritization of a fixed budget." [111] Consequently, most constitutionalized environmental rights – including state-level environmental rights in the United States – "are under enforced because they are not designed or deemed to be self-executing."[112]

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[108] Emily Zackin, *Looking for Rights in All the Wrong Places: Why State Constitutions Contain America's Positive Rights* (Princeton, NJ: Princeton University Press, 2013) at 190-191.
[109] Jeffrey S Sutton, "Courts as Change Agents: Do We Want More—Or Less?" (2014) 127 Harv L Rev 1419 at 1440 [Sutton, "Courts as Change Agents"].
[110] This implicates the balancing of competing rights and interests, which in Canada plays out under section 1 of the *Charter*. This issue is discussed below in the next part of this chapter. See generally Jamie Cameron, "The Original Conception of Section 1 and its Demise: A Comment on *Irwin Toy Ltd v Attorney-General of Quebec*" (1989) 35 McGill LJ 253 [Cameron, "The Original Conception of Section 1"]; see also Lynda M Collins, "An Ecologically Literate Reading of the Canadian Charter of Rights and Freedoms" (2009) 26 Windsor Rev Legal Soc Issues 7 at 30-31 [Collins, "An Ecologically Literate Reading of the Charter"].
[111] Sutton, "Courts as Change Agents", *supra* note 109 at 1441.
[112] John C Dernbach, James R May & Kenneth T Kristl, "*Robinson Township v Commonwealth of Pennsylvania:* Examination and Implications" (2015) 67 Rutgers L Rev 1169 at 1194. See e.g. *Enos v Secretary of Environmental Affairs,* 731 NE2d 525 (Mass 2000) at 532, where the Supreme Court of Massachusetts held that the state constitutional right to clean air and water does not afford an independent means to challenge an agency's decision to grant a permit to operate a sewage treatment plant under the Massachusetts *Environmental Policy Act*. The judiciary of Montana has proven equally reluctant to enforce the state's constitutional environmental right. See e.g. *N Plains Res Council, Inc v Mont. Bd of Land Comm'rs,* 288 P.3d 169 (Mont. 2012) at 174-175. This difficulty equally constrains the enforcement of constitutional environmental rights worldwide. See generally James R May & Erin Daly, "Global

Perhaps unsurprisingly, then, even enthusiastic advocates of constitutionalizing environmental rights like Jeffords and Minkler "emphasize that our results do not support unqualified implementation of CER's [constitutional environmental rights] as a strategy to increase a country's environmental performance."[113] In addition to their model's failure to capture the influence of a country's economic and political institutional contexts, to which this chapter will ultimately return,[114] their analysis also neglected "to incorporate the *cost* of CER [constitutional environmental rights] implementation."[115] Given the paramount importance of the opportunity costs associated with potential strategic avenues for enhancing environmental protection and charting pathways to a more sustainable future, this omission is critical, and merits closer attention. This chapter turns now to a consideration of the strategic implementation costs of attempting to constitutionalize the right to a healthy environment in Canada.

II. You Say You'll Change the Constitution

Canadian constitutional environmental rights advocates' preferred approach is to amend the Constitution – more specifically the *Charter of Rights and Freedoms* – to add an explicit right to a healthy environment. Collins and Boyd argue that "the right to a healthy environment also delivers a much broader form of environmental protection than that offered by existing *Charter* rights. The environmental scope of existing constitutional

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Constitutional Environmental Rights" in Shawkat Alam et al, eds, *Routledge Handbook of International Environmental Law* (New York: Routledge, 2012) at 603.

[113] Jeffords & Minkler, "Do Constitutions Matter?", *supra* note 53.

[114] Indeed, the absence of the economics and politics of environmental protection, while fatal to the constitutional environmental rights argument, usefully gestures toward a more robust approach to enhancing environmental protection and accelerating the transition to sustainability.

[115] *Ibid* at 16 [emphasis added].

provisions is likely limited to conduct that implicates human health or protected Aboriginal rights (including title)."[116] Collins summarizes Boyd's research on the benefits of constitutional environmental rights globally and his argument for a constitutional amendment in Canada thus:

> […] the inclusion of the right to a healthy environment in the Canadian Constitution would: decrease environmentally-induced mortality and morbidity, preserve our natural heritage for future generations, reflect the centrality of the environment in Canadian national identity, clarify the environmental obligations of all levels of government, and reflect the core importance of environmental values in Indigenous legal systems in Canada, as well as aligning our Constitution with the international law of environmental human rights.[117]

Collins concludes by noting that "[w]hile constitutional amendment is *a difficult path in Canada, these benefits arguably justify the journey*."[118]

"Difficult," however, does not begin to do justice to the complexity of constitutional amendment in Canada. Amendments to the Constitution – including the *Charter* – not specifically enumerated in sections 42, 43, 44, and 45 of Part V of the *Constitution Act, 1982*[119] are subject to the amendment procedure set out in section 38(1) of same, which requires resolutions of the Senate and the House of Commons, and resolutions of the legislative assemblies of at least two-thirds of the provinces having at least 50 percent of

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[116] Lynda M Collins & David R Boyd, "Non-Regression and the *Charter* Right to a Healthy Environment" (2016) 29 J Envtl L & Prac 285 at 292 [Collins & Boyd, "The *Charter* Right to a Healthy Environment"].
[117] Collins, "Environmental Rights in the Canadian Constitution", *supra* note 29 at 539.
[118] *Ibid* [emphasis added]. But see Collins, "An Ecologically Literate Reading of the Charter", *supra* note 111 at 48 [emphasis added]: "*Fortunately, no amendment is required to import ecological rights into the Canadian Charter of Rights and Freedoms*."
[119] *Constitution Act, 1982,* being Schedule B to the *Canada Act 1982* (U.K.).

the population of all the provinces,[120] the so-called "7/50 formula".[121] As Peter Hogg explained, "[i]t will be difficult to secure *any* amendment to the Constitution, because of the high level of agreement required by the general amending procedure. Eight governments out of eleven is a group which is hard to assemble on *anything*".[122]

Hogg further explained that, no matter how much public consultation and participation has occurred in respect of a given amendment proposal, "at some stage in the process of amendment there has to be an agreement of the first ministers. […] Unfortunately, obtaining an agreement from the first ministers inevitably turns into a process of bargaining, which excludes popular involvement at the crucial moment, and which leaves no assurance that any given position has been accepted or rejected on the merits."[123] And as Adam Dodek observes, [o]n this basis, since patriation over 30 years ago, it has proven difficult, if not impossible, to amend the Constitution."[124] Indeed, the *Charter* has not been amended in its – thus far – 38-year history. That the *Charter* has not once been amended belies the tacit assumption animating the environmental rights argument that it is easier to engender support for an abstract constitutional right to a healthy environment than it is to

[120] *Ibid* at s 38(1).
[121] Adam Dodek, "Amending the Constitution: The Real Question Before the Supreme Court", *Policy Options* (March/April 2014) at 36 [Dodek, "Amending the Constitution"].
[122] Peter W Hogg, *Constitutional Law of Canada* (Toronto: Carswell, 2015) at 4-40 [emphasis added].
[123] *Ibid* at 4-42-4-43. Provincial opposition to a nationwide price on carbon was strident from the outset of the post-Paris-Agreement era in Canada. See e.g. Mia Rabson, "Saskatchewan environment minister says province will never allow a carbon tax", *National Observer* (4 May 2017), online: <http://www.nationalobserver.com/2017/05/04/news/saskatchewan-environment-minister-says-province-will-never-allow-carbon-tax>. See chapters four and five of this thesis for a fuller discussion of provincial "resistance" to federal carbon pricing.
[124] Dodek, "Amending the Constitution", *supra* note 121 at 36. But see Kate Glover, "Complexity and the Amending Formula" (2015) 24:2 Constitutional Forum 9; see also Jamie Cameron, "Legality, Legitimacy and Constitutional Amendment in Canada" (2016) Osgoode Legal Studies Research Paper Series No. 71/2016.

popularize complex and potentially controversial policies and regulations capable of promoting environmental protection and sustainability.

The political difficulty associated with the constitutional amendment procedure in Canada gestures towards its more fundamental paradox, particularly in respect of environmental protection, in which the federal, provincial, and territorial governments play key organizing roles. If the political will at the federal and provincial levels of government required to constitutionalize a greater level of environmental protection actually existed (it does not[125]), then a constitutional amendment would not be required in the first place. That political will would already be reflected in sufficiently stringent and robustly-enforced legislation at the federal, provincial, and territorial levels.

The lengthier experience with constitutional amendment in the United States is instructive in this regard. There are two ways to amend the US Constitution. The first and better known

[125] The literature on this score is regrettably deep. See e.g. Kathryn Harrison, *Passing the Buck: Federalism and Canadian Environmental Policy* (Vancouver: UBC Press, 1996); Stepan Wood, Georgia Tanner & Benjamin J Richardson, "What Ever Happened to Canadian Environmental Law?" (2010) 37 Ecology LQ 981; Jason MacLean, Meinhard Doelle & Chris Tollefson, "Polyjural and Polycentric Sustainability Assessment: A Once-In-A-Generation Law Reform Opportunity" (2016) 30:1 J Envtl L & Prac 36 [MacLean, Doelle & Tollefson, "Sustainability Assessment"]. Moreover, if a *Charter* right to a healthy environment were accompanied by the doctrine of non-regression, as Collins and Boyd propose (without explaining how), not only would there be even greater industry and political resistance to the amendment, but it is also likely that the broad popular support assumed – but not empirically established – by environmental rights advocates would diminish significantly. Canadian public opinion poll data bear this out. For example, when asked to choose between the policy option of reducing carbon emissions while also building new oil pipelines (which would violate, according to Collins and Boyd, the doctrine of non-regression), and the option of a ban on new oil pipeline construction as a further and progressive means of reducing emissions (which would be consistent with non-regression), a large majority of Canadians continues to support the *former* policy option. See Bruce Anderson & David Coletto, "Public Attitudes on oil, Pipelines, Climate, and Change", *Abacus Data* (9 September 2017), online: <http://abacusdata.ca/public-attitudes-on-oil-pipelines-climate-and-change/>. Nevertheless, the same polling data reveal, quite apart from any proposal to amend the *Charter*, "the widespread feeling, including in Alberta, that Canada should not stand apart from the race to innovate with cleaner forms of energy": *ibid*. For a discussion of more recent polling data, which supports the argument advanced here, see chapter five of this thesis.

is set out in Article V: Proposed amendments must be approved by two-thirds of each chamber of Congress (*i.e.,* the House of Representatives and the Senate) and subsequently ratified by three-fourths of the states.[126]

But Article V also allows for an alternative method of proposing constitutional amendments that cuts out Congress altogether: Two-thirds of state legislatures can call for a constitutional convention, and any resulting amendment proposal can be ratified by three-fourths of the states.[127] This method has yet to produce a constitutional amendment, and that is arguably by design, as the framers of the US Constitution evidently sought to avoid such outright partisanship: "The principle is that an idea should have demonstrated broad and transparent appeal before it is adopted into a framework of the republic."[128]

Since the ratification of the US Bill of Rights, five amendment proposals have received Congressional approval but failed to win state ratification, notably including the eradication of child labour and the protection of equal rights for women. Reflecting on not only these legislative developments but also on the ongoing failure to amend the US Constitution so as to prohibit budget-deficit spending, Cobb notes that "most causes worthy of legitimacy can obtain it without the Constitution being amended; *if the logic of a federal balanced budget were so compelling, it would have met with a greater degree of success legislatively*."[129]

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[126] US Const art V.
[127] *Ibid.*
[128] Jelani Cobb, "Comment: A State Away", *The New Yorker* (13 March 2017) 27 at 28 [Cobb, "A State Away"].
[129] *Ibid* [emphasis added].

Now, this is arguably an overly sanguine account of the workings of the legislative process, which tends to be subject to capture by special interests (see chapter three of this thesis). This is especially true in respect of environmental legislation, both in the United States[130] and Canada.[131] Nevertheless, this account undoubtedly illustrates the political foundations of constitutional amendment processes.

The US experience offers a further, and intricately nuanced, lesson. On the one hand, otherwise ordinary legislation that is bipartisan and popular in nature can be characterized as "sticky"[132] and thus difficult to displace notwithstanding the absence of constitutional entrenchment. But on the other hand, legislation and administrative action can also be effectively constrained and ultimately undermined by actions that are beyond the reach of constitutional rights. The *initial* efforts of the Trump administration to reduce and revise the role of the US Environmental Protection Agency (EPA) illustrate the point. In proposing his first budget plan, President Trump signaled an intention to cut the EPA's already-underfunded budget by 31% for the 2018 fiscal year.[133] However, the budget agreement ultimately reached by the US Congress rejected this sharp cut to the EPA along with several others to a variety of US science agencies proposed by President Trump.[134]

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[130] See e.g. Richard J Lazarus, "Congressional Descent: The Demise of Deliberative Democracy in Environmental Law" (2006) 94 Geo LJ 619.
[131] See e.g. MacLean, "Striking at the Root Problem of Canadian Environmental Law", *supra* note 30; see also MacLean, Doelle & Tollefson, "The Past, Present, and Future of Canadian Environmental Law", *supra* note 21.
[132] See e.g. Kelly Levin et al, "Overcoming the tragedy of super wicked problems: constraining our future selves to ameliorate global climate change" (2012) 45 Policy Sci 123 [Levin et al, "Overcoming the tragedy of super wicked problems"]; Aaron L Nielson, "Sticky Regulations" (2018) 85 U Chicago L Rev 85.
[133] See Sara Reardon & Erin Ross, "Science wins reprieve in US budget deal", *Nature* (1 May 2017), online: <http://www.nature.com/news/science-wins-reprieve-in-us-budget-deal-1.21835?WT.ec_id=NEWSDAILY-20170502>.
[134] *Ibid.*

Ultimately, the EPA's budget was still reduced, but only by 1%.[135] Congress's interests – in the aggregate – tend to be broader, more varied, and more significantly entrenched than the President's.[136] *The Economist* newspaper summed up the situation by observing that

> Reducing the EPA would be easier if Congress were to amend the environmental legislation underpinning the EPA's rules—for example, by binning the provisions of the Clean Air Act on which the CPP [the Obama Clean Power Plan] rests. But there is currently no chance this could evade the Democratic filibuster in the Senate, *and many Republican congressmen would not welcome the fight*. *Around 60% of Americans say they are in favour of more environmental protection*.[137]

Indeed, according to a report by *The New York Times* during the lead-up to the bipartisan congressional budget deal, "[t]ens of thousands of demonstrators, alarmed at what they see as a dangerous assault on the environment by the Trump administration, poured into the streets here on Saturday to sound warnings both planetary and political about the Earth's warming climate."[138]

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[135] *Ibid.*

[136] For example, the Senate rebuked the Trump administration's regulatory reform agenda by voting to uphold rather than overturn an Obama-era climate-change regulation that controls the release of methane from oil and gas wells on public land. See Coral Davenport, "In a Win for Environmentalists, Senate Keeps an Obama-Era Climate Change Rule", *The New York Times* (10 May 2017), online: <https://www.nytimes.com/2017/05/10/us/politics/regulations-methane-climate-change.html?emc=edit_nn_20170511&nl=morning-briefing&nlid=70167113&te=1&_r=0>.

[137] "Environmental protection: Revenge of the polluters", *The Economist* (23 February 2017), online: <http://www.economist.com/news/united-states/21717376-environmental-protections-will-not-be-undone-overnight-scourge-epa-takes-over?zid=313&ah=fe2aac0b11adef572d67aed9273b6e55>. The Trump administration faces even stronger bipartisan and popular opposition to fulfilling President Trump's campaign pledge to withdraw the United States from the Paris Agreement. See e.g. George P Shultz & Ted Halstead, "The Business Case for the Paris Climate Accord", *The New York Times* (9 May 2017), online: <https://www.nytimes.com/2017/05/09/opinion/the-business-case-for-the-paris-climate-accord.html>.

[138] Nicholas Fandos, "Climate March Draws Thousands of Protesters Alarmed by Trump's Environmental Agenda", *The New York Times* (29 April 2017), online: <https://www.nytimes.com/2017/04/29/us/politics/peoples-climate-march-trump.html>. Similar public outcry recently occurred in Australia over proposed cuts to funding of basic climate science. See Justin Gillis, "A Parable From Down Under for U.S. Climate Scientists", *The New York Times* (8 May 2017),

At the same time, however, the Trump administration is nevertheless proceeding with its agenda to revise and substantially reduce the role played by the EPA in regulating industry pollution. The EPA has begun dismissing academic members of its scientific review board – which reviews the research produced by EPA scientists used to draft rules and regulations on pollution ranging from hazardous waste to GHG emissions – while suggesting that the board's academic environmental and social scientists will be replaced by representatives from the very industries whose pollution the EPA is mandated to regulate.[139] According to the Union of Concerned Scientists, "[t]his is completely part of a multifaceted effort to get science out of the way of a deregulation agenda."[140] The "premature removals of members of this Board of Science Counselors when the board has come out in favour of the E.P.A. strengthening its climate science, plus the severe cuts to research and development – you have to see all these things as interconnected."[141]

So it would indeed appear. And yet, even if the US Constitution contained a right to a healthy environment, policy changes like the EPA's dismissal of independent academic scientists – framed in terms of staffing the EPA's review board with members "who understand the impact of regulations on the regulated community"[142] – would surely fall outside the scope and substance of any such constitutional right. In order to imagine how, simply recall the examples provided above, ranging from Pennsylvania to Brazil. As one

online: <https://www.nytimes.com/2017/05/08/climate/a-parable-from-down-under-for-us-climate-scientists.html>.

[139] See Coral Davenport, "E.P.A. Dismisses Members of Major Scientific Review Board", *The New York Times* (7 May 2017), online: <http://www.economist.com/news/united-states/21717376-environmental-protections-will-not-be-undone-overnight-scourge-epa-takes-over?zid=313&ah=fe2aac0b11adef572d67aed9273b6e55>.

[140] Quoted in *ibid*.

[141] *Ibid*.

[142] Spokesperson for the EPA's lead administrator, Scott Pruitt, quoted in *ibid.*

environmental scientist and member of the EPA's review board characterized the dismissal: "This is clearly very political".[143]

And so it is. Issues of environmental protection and sustainability are irreducibly political, and political victories are never permanent. Subsequently, in 2019 and early 2020 the Trump administration directed the EPA to (1) enable municipalities to continue dumping raw sewage into rivers, (2) remove pollution controls on wetlands, and (3) limited the use of science in the EPA's public-health rulemaking.[144] These rollbacks are part of the Trump administrations reversal of 100 environmental rules, the bulk of which have been carried out by the EPA.[145] As of this writing, 66 of these rules have been reversed, and the other 34 reversals are in progress.[146] While a number of the rollbacks have been challenged in court, this has not prevented the EPA, in instances where its rollback was rebuffed, from revising and reinstating the rollback.[147] However, unlike the broad popular opposition and public protests in response to the Trump administration's initial reductions to the EPA's authority and actions, these ongoing reversals – including the EPA's weakening Obama-era fuel economy and greenhouse gas standards for passenger cars and light trucks – do not yet appear to have elicited much of public response.[148]

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[143] Joseph Arvai, quoted in *ibid.*
[144] Jason MacLean, "Learning how to overcome political opposition to transformative environmental law" (2020) 117:15 Proc Nat Acad Sci 8243.
[145] See Nadja Popovich, Livia Albeck-Ripka, and Kendra Pierre-Louis, "The Trump Administration Is Reversing 100 Environmental Rules. Here's the Full List", *The New York Times* (20 May, 2020), online: <https://www.nytimes.com/interactive/2020/climate/trump-environment-rollbacks.html>.
[146] *Ibid.*
[147] *Ibid.*
[148] See e.g. Ann Carlson, "While You Were Sleeping: Coronavirus Apparently Won't Stop Trump Environmental Rollbacks" (26 March 2020), *LegalPlanet* (blog), online: <https://legal-planet.org/2020/03/26/while-you-were-sleeping-coronavirus-apparently-wont-stop-trump-environmental-rollbacks/>.

Returning to the Canadian context, the 2017 provincial election in British Columbia brought the political nature of these issues into clear relief. The Liberals, who had governed the province with a majority of seats for the previous 16 years, campaigned on a promise to "get to yes" with respect to natural resources development, while the official opposition NDP party campaigned on a promise to block or review anew a number of controversial energy development projects – *e.g.*, the Trans Mountain pipeline expansion, the Pacific NorthWest LNG terminal and pipelines, and the Site C hydroelectric dam – because of environmental concerns and the objections of local Indigenous communities.[149] "In British Columbia, the political debate is framed by these dimensions: Jobs versus sustainability, and what degree of influence should the province's 203 First Nations have on those decisions. *In this election, British Columbian voters will be choosing where the balance should rest*."[150] The result? In one of the closest Canadian elections in recent history, the Liberals initially emerged with a tenuous minority government, with the Green Party holding the balance of power.[151] Soon thereafter, the NDP and the Green Party formed a coalition government. Nevertheless, as discussed above in chapter four of this thesis,

[149] See e.g. Justine Hunter, "Local resources, national impact", *The Globe and Mail* (7 May 2017), online: <http://www.theglobeandmail.com/news/british-columbia/after-next-weeks-election-bcs-approach-to-development-will-be-felt-across-thecountry/article34912438/>. The constitutional duty to consult Indigenous peoples under section 35 of the *Constitution Act, 1982* further illustrates the inescapably political nature of the contested balancing of traditional Indigenous rights and economic development. In the Supreme Court of Canada's recent decision clarifying the nature of the right protected under section 35, *Clyde River (Hamlet) v Petroleum Geo-Services Inc,* 2017 SCC 40 at para 24, the Court noted that "[t]rue reconciliation is rarely, if ever, achieved in courtooms." The Court proceeded to reiterate its earlier conclusion in *Haida Nation v British Columbia (Minister of Forests),* [2004] 3 SCR 511 at para 14: "While Aboriginal claims can be and are pursued through litigation, negotiation is a preferable way of reconciling state and Aboriginal interests." Advocates of a constitutional right to a healthy environment would do well to heed the Supreme Court of Canada's own admonition against prioritizing case-by-case *ex post facto* litigation over the *ex ante* negotiation, agreement, and ongoing collaborative governance.

[150] *Ibid* [emphasis added].

[151] See Justine Hunter, "BC Liberals cut to minority with Greens holding balance of power", *The Globe and Mail* (10 May 2017), online: <http://www.theglobeandmail.com/news/british-columbia/bc-election-winner/article34942628/>. Soon after the election, the NDP and the Greens formed a coalition government.

British Columbia has since championed the development of its liquefied natural gas industry, just as the previous Liberal government had, contrary to its campaign promises to act ambitiously on climate change and reconciliation with Indigenous peoples.[152]

In stressing the contested and contingent nature of climate change and sustainability policy, and prioritizing public participation in environmental governance, I am not advancing an argument in this chapter against so-called "juristocracy,"[153] the critical term used to describe and decry a transfer of power from representative institutions to judiciaries. Nor is it a denial of the central importance of the Constitution to Canada's legal system, or its relevance to key policy issues.

The argument advanced here, rather, is subtler, and twofold. First, advocates of constitutionalizing environmental rights cannot hope to escape the irreducible politics of environmental protection and the promotion of sustainability. No matter how desirable, the avoidance of what is perceived by many environmental rights advocates as a failed political process, which is surely part and parcel of the constitutional environmental rights strategy, is simply not possible because environmental rights advocates' preferred means of constitutionalization – constitutional amendment – is irreducibly (and ironically) political.[154]

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[152] For a further discussion of how British Columbia's support of its LNG industry undermines its public commitments to climate action and reconciliation with Indigenous peoples, see chapter four of this thesis, particularly the discussion at pages 241-266.

[153] See e.g. Ran Hirschl, *Towards Juristocracy: The Origins and Consequences of the New Constitutionalism* (Cambridge, MA: Harvard University Press, 2004) at 1.

[154] As a result, at least one of the leading authors of the constitutional environmental rights argument has shifted strategy by advocating for the judicial recognition of an unwritten constitutional principle (UCP) of ecological sustainability. See e.g. Lynda Collins, "The Unwritten Constitutional Principle of Ecological

Second, even when environmental rights advocates shift their strategic lens to advancing environmental protection through litigation based on existing *Charter* rights (*e.g.,* sections 7 and 15) or the judicial recognition of an unwritten constitutional principle (*e.g.,* the UCP of ecological sustainability), the unavoidable – and unavoidably political – balancing of competing interests nevertheless looms large, whether it occurs in respect of governments' and courts' recourse to section 1 of the *Charter* or in respect to the narrow scoping of *Charter* rights themselves.[155] The recourse to politics in respect of environmental protection is unavoidable. As Holly Doremus rightly observes, "despite a societal consensus that the environment merits some level of protection, individuals strongly disagree about the desirable extent of protection and what trade-offs it justifies."[156]

Sustainability: A Solution to the Pipelines Puzzle?" (2019) 70 UNBLJ 30; Lynda Collins & Lorne Sossin, "In Search of an Ecological Approach to Constitutional Principles and Environmental Discretion in Canada" (2019) 52:1 UBC L Rev 293. For my initial response to the UCP argument, see Jason MacLean, Meinhard Doelle & Chris Tollefson, "The Science, Law, and Politics of Canada's Pathways to Paris: Introduction to *UBC Law Review's* Special Section on Canada and Climate Change" (2019) 52:1 UBC L Rev 227 at 234-238. My fuller response is set out above in chapter five of this thesis, and my argument is the same as the one advanced here: Arguments in favour of the judicial recognition of a UCP of ecological sustainability cannot escape the politics of climate change policymaking.

[155] See e.g. Cameron, "The Original Conception of Section 1", *supra* note 110; see also Cameron Jefferies, "Filling the Gaps in Canada's Climate Change Strategy: 'All Litigation, All the Time…?'" (2015) 38 Fordham Intl LJ 1371 at 1374 (arguing that "it is unlikely that a court would, even in the absence of a clear American-style Political Questions Doctrine, choose to weigh in on and/or order the sort of relief required to close the gaps in Canada's national [climate change] strategy"). For a comprehensive analysis of environmentalists' dismal record before the Supreme Court of the United States, see Jonathan Z Cannon, *Environment in the Balance: The Green Movement and the Supreme Court* (Cambridge, MA: Harvard University Press, 2015). See also Richard J Lazarus, "The National Environmental Policy Act in the U.S. Supreme Court: A Reappraisal and a Peek Behind the Curtains" (2012) 100 Geo LJ 1507 at 1509 (observing that the U.S. Supreme Court has decided 17 cases arising under the *National Environmental Policy Act* – "environmental law's 'Magna Carta' in the United States" – and that the government has won every case, almost all of them unanimously). Even Lazarus's comprehensive account of Massachusetts' historic victory at the Supreme Court of the United States in respect of the EPA's authority to regulate greenhouse gas emissions (*Massachusetts v EPA,* 549 US 497, 127 S Ct 1438 (2007)) emphasizes the difficulty of trying to make climate policy through the courts. See Richard J Lazarus, *The Rule of Five: Making Climate History at the Supreme Court* (Cambridge, MA: Harvard University Press, 2020).

[156] Holly Doremus, "Adapting to Climate Change with Law That Bends Without Breaking" (2010) 2 San Diego J Climate & Energy L 45 at 51 [Doremus, "Adapting to Climate Change"].

Politics, however, is not merely an *obstacle* to the constitutionalization of environmental rights. From the broader perspective of establishing and entrenching policies that promote environmental protection and sustainability that will stick, the perennial problem of politics points towards promising, if challenging, *opportunities* for policy design and law reform. These are explored below in the conclusion of this chapter.

III. Conclusion: You Say You Got a Real Solution

This chapter takes its title and subtitles from the Beatles' iconic song "Revolution." This narrative device, however, is far more than stylistic. The Beatles' hit song continues to resonate in a number of striking, counterintuitive ways. On the surface, the song may sound like an unabashed call for revolution, particularly to contemporary ears following the use of the song in a famous television commercial for Nike shoes in 1987.[157] But on closer inspection of not only the lyrics but also their ideological origins, "Revolution" turns out to be something altogether. According to a leading biographer of the group, Ian MacDonald, the song's author, John Lennon, was profoundly conflicted about the song's message.[158] The immediate inspiration for the song was the May 1968 student uprising in Paris, along with the reaction to the Tet Offensive in Vietnam and the assassination of Martin Luther King, both of which followed soon after.[159] Lennon was profoundly wary of the violence and destructive impulses of the radical, Maoist Left at the time, and

[157] See e.g. Nick Ripatrazone, "Story Behind Nike's Controversial 1987 'Revolution' Commercial", *Rolling Stone* (22 February 2017), online: <http://www.rollingstone.com/sports/30-years-after-nikes-revolution-beatles-commercial-w468218>.
[158] Ian MacDonald, *Revolution in the Head: The Beatles' Records and the Sixties,* 3rd ed (Chicago: Chicago Review Press, 2005) at 283. See also Jon Wiener, *Come Together: John Lennon in His Time* (London: Faber: 1984) at 60-63.
[159] MacDonald, *supra* note 158 at 283-284.

endeavoured in his lyrics to argue in favour of a more peaceful plan aimed at changing hearts and minds. As MacDonald puts it, Lennon's "rejection of 'minds that hate' and dry demand to be shown 'the plan' shows an intuitive grasp of the tangled issue of ideology".[160] In Lennon's lyrics there is also a finely-tuned sense of small-r revolutionary political strategy, one that continues – in modified form – to resonate today: "*But if you go carrying pictures of Chairman Mao / You ain't going to make it with anyone anyhow*."[161] Not only does this rhythmic turn signal Lennon's support of the then-counterculture's embrace of psychosexual politics,[162] but it also sounded – and continues to sound – serious skepticism regarding the consequences of previous revolutions and the likelihood of then-contemporaneous calls for same.[163] Lennon's lyrics artfully call into question the soundness of particular tactics while also attempting to enlarge the terrain of shared commitments and common ground.[164]

Now of course neither the context nor the intention of environmental rights revolutionaries neatly map onto the context or the intentions of '68 Leftists. But there is nonetheless a morphological similarity. Concentrating strategic resources on advocating for a constitutional amendment or prosecuting a strategic piece of *Charter* litigation is akin to the kind of "single-shot 'paradigmatic'" solutions that Levin and her colleagues have

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[160] *Ibid* at 284.
[161] The Beatles, "Revolution 1" (music) The Beatles, USA SKBO 3404 (25 November 1968) [emphasis added].
[162] MacDonald, *supra* note 158 at 284.
[163] For a brilliant analysis of this dimension (and others) of the 1960s revolutionary Left, see Richard Rorty, *Achieving Our Country: Leftist Thought in Twentieth-Century America* (Cambridge, MA: Harvard University Press, 1998).
[164] The evidence, however, suggests that he failed to do so, and in the end angered those on both the Left and the Right: MacDonald, *supra* note 158 at 283-284. This in itself is suggestive of a larger point that also resonates with issues of constitutional interpretation: The multivalent nature of language and meaning. Neither song lyrics nor rights discourses speak for themselves.

identified as being "inadequate to generate the necessary momentum or levers for the transformations of behavior and economic activity necessary to combat climate change."[165] They call instead for a "focus on coalitions and norms/values",[166] which ultimately accords with Doremus's skepticism about conceiving law as a cause rather than an effect of pro-environmental norms and commitments. As Doremus argues, "[c]lever governance strategies will never be sufficient *by themselves* to combat temptation [to exploit rather than protect the environment]. Unless people care, now in the future, about conservation, society simply will not bear the costs conservation imposes."[167]

The strategic question for environmental law and policy reform, then, is how to enhance public *demand* for and *participation in* policymaking – future pathways – actually capable of enhancing environmental protection, mitigating climate change, and promoting sustainability. This, after all, is no mean task in light of "polarized views about climate change",[168] which make it "difficult to have a civil, much less productive, conversation about it in the political arena."[169]

Two broad strategies stand out as especially promising: (1) advocacy establishing the economic and local community co-benefits of mitigating climate change and promoting sustainability; and (2) enhanced climate change and sustainability education and public discourse framed in such co-benefit terms.

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[165] Levin et al, "Overcoming the tragedy of super wicked problems", *supra* note 132 at 148.
[166] *Ibid*.
[167] Doremus, "Adapting to Climate Change", *supra* note 156 at 67 [emphasis added].
[168] Jeffrey J Rachlinski, "The Psychology of Global Climate Change" (2000) 2000 U Ill L Rev 299 at 300.
[169] *Ibid*.

Emerging research suggests that communicating – *i.e.,* framing – the co-benefits of addressing climate change – including economic development and enhanced local community resilience – motivates pro-environmental action and commitment to a degree on par with the prior belief that climate change is important, and does so *independent* of that belief.[170] That is, individuals "convinced" of the importance of addressing climate change as well as individuals who are "unconvinced" are equally likely to be motivated to address climate change through citizenship, consumerism, and making financial donations when they learn of the integrated economic and local communitarian co-benefits of climate change policies.[171] Indeed, those identifying as "unconvinced" about the importance of climate change were especially influenced by the prospect of economic development co-benefits.[172]

These findings – tentative as they still are at this juncture – suggest a potentially fruitful strategy at a particularly critical time, and they stand in stark distinction to the pessimistic implications of cognitive psychological research suggesting that action on climate change is prevented by ideology, or relies on personal experience of climate change. Communicating the co-benefits of addressing climate change can encourage greater public attention and action, and thereby influence government action, even among those unconvinced or unconcerned about climate change.[173] Importantly, this emerging line of research also suggests that climate and sustainability policy actions that clearly embody

[170] Paul G. Bain et al, "Co-benefits of addressing climate change can motivate action around the world" (2016) 6 Nat Clim Change 154. See also Eric Biber, "Cultivating a Green Political Landscape: Lessons for Climate Change Policy from the Defeat of California's Proposition 23" (2013) 66 Vand L Rev 399.
[171] *Ibid*.
[172] *Ibid.*
[173] *Ibid.* See also Heide Hackmann, Susanne C Moser & Asuncion Lera St. Clair, "The social heart of global environmental change" (2014) 4 Nat Clim Change 653.

co-benefits – especially the co-benefit of economic development – are capable of attracting broad public support.[174]

Perhaps the greatest support for this advocacy strategy comes – perhaps ironically – from the most recent US presidential election. While the results of a comprehensive meta-analysis show that ideology and political orientation are among the strongest predictors of climate change belief,[175] ideology and political orientation do not appear to predict climate mitigation policy support and actual implementation.[176] The state of Florida, for instance, voted for President Trump, but it also voted to expand the development of solar power.[177] Moreover, the US states that produce the greatest proportion of their electricity from wind, along with the leading wind-energy producing congressional districts, are all led by Republicans, many of whom support the development of clean and renewable energy sources, not because they reduce GHG emissions, but because of the potential economic benefits.[178]

A crucial caveat, however, is in order. While the co-benefits communication-and-policy-design model suggests promising directions for climate and sustainability advocacy, the

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[174] See e.g. Brett A Bryan et al, "Designer policy for carbon and biodiversity co-benefits under global change" (2016) 6 Nat Clim Change 301; See also Leah C Stokes & Christopher Warshaw, "Renewable energy policy design and Framing influence public support in the United States" (2017) 2:8 Nature Energy 1.

[175] Matthew J Hornsey et al, "Meta-analyses of the determinants and outcomes of belief in climate change" (2016) 6 Nat Clim Change 622.

[176] Nature Climate Change, "Politics of climate change belief", *supra* note 23.

[177] *Ibid.*

[178] *Ibid.* See also "A Rare Republican Call to Climate Action", Editorial, *The New York Times* (13 February 2017), online: <https://www.nytimes.com/2017/02/13/opinion/a-rare-republican-call-to-climate-action.html?_r=0>. See also "Green Texas: A renewable-energy boom is changing the face of an oil-producing state", *The Economist* (14 march 2020), online: <https://www.economist.com/united-states/2020/03/14/a-renewable-energy-boom-is-changing-the-politics-of-global-warming>.

co-benefits approach is not a panacea. Achieving co-benefits in practice will turn on contextually-sensitive communication strategies[179] and carefully-designed policies. More important still, critical choices remain for Canadians and citizens elsewhere about the level of co-benefits actually desired, and the price they are prepared to pay for them. Climate and sustainability academics advocates can play a pivotal role in instigating and guiding critical public conversations about alternative pathways in order to inform the necessary – and necessarily contentious – democratic deliberation over the desired balance of co-benefits. Indeed, it is imperative that we begin to do so.

The foregoing line of argument about co-benefit pathways has additionally important implications for the second broad strategy climate and sustainability advocates ought to further develop: Public education and discourse regarding climate change and sustainability. While the time-sensitive imminence of mitigating climate change and accelerating the transition to sustainability may suggest that there is not sufficient time to address public education, advocates must simultaneously play both the short game and the long game lest they cede the future to the advocates of "business as usual." For instance, in 2017 the Heartland Institute, a US conservative think tank well known for attacking climate science, launched a project to distribute a slim, glossy book entitled "Why Scientists Disagree About Global Warming" to virtually every science educator – from public school teachers to college and university instructors – in the United States.[180] The

[179] Kahan & Carpenter, "Out of the lab and into the field", *supra* note 24. See e.g. Hiroko Tabuchi, "In America's Heartland, Discussing Climate Change Without Saying 'Climate Change'", *The New York Times* (28 January 2017), online: <https://www.nytimes.com/2017/01/28/business/energy-environment/navigating-climate-change-in-americas-heartland.html>.
[180] Curt Stager, "Sowing Climate Doubt Among Schoolteachers", *The New York Times* (27 April 2017), online: <https://www.nytimes.com/2017/04/27/opinion/sowing-climate-doubt-among-schoolteachers.html>.

Institute's cover letter accompanying the tract makes its premise and intention perfectly clear: "Claims of a 'scientific consensus' on climate change rest on two college student papers, the writings of a wacky Australian blogger, and a non-peer-reviewed essay by a socialist historian."[181] One observer is likely correct in surmising that most recipients of this tract will simply ignore it, but even if only a small percentage of teachers use it as intended, to "teach the controversy," as it were, then tens of thousands of students will be misled year after year.[182] This by-no-means-isolated example[183] demonstrates the importance of engaging in efforts to better educate the public about climate science. Given the pathological role that ideology and political orientation has on such efforts, advocacy of this type would do well to build on the emerging research regarding the potential of communicating the co-benefits of climate change mitigation and sustainability for economic development and community resilience discussed above.

This task is no less pressing in Canada, where many extractive industry representatives and advocates continue to publicly contest the not only the value, but even the very possibility, of achieving sustainability.[184]

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[181] *Ibid.*
[182] *Ibid.*
[183] For example, in some US states, including Tennessee and Louisiana, state law permits the teaching of alternative interpretations of evolution and climate science: *ibid.*
[184] See e.g. Trevor McLeod, "Ottawa needs to bury this plan for a new assessment process—unless we want to kill any future energy projects", *Financial Post* (11 May 2017), online: <http://business.financialpost.com/fp-comment/ottawa-needs-to-bury-this-plan-for-a-new-assessment-process-unless-we-want-to-kill-any-future-major-energy-projects>. See also Canadian Association by Petroleum Producers, "A competitive policy and regulatory framework for Alberta's upstream oil and natural gas industry" (July 2017), online: <http://www.capp.ca/publications-and-statistics/publications/304673>. For a more complete discussion, see chapters three and four of this thesis.

This suggests a final note about the nature of the challenge before us, the conceptual soundtrack for which, even more than the Beatles' ambivalent "Revolution," is best captured by the radical jazz poet and anti-racist advocate Gil Scott-Heron's poem "The Revolution Will Not Be Televised."[185] "The first revolution", according to Heron, "is when you change your mind about how you look at things and see that there might be another way to look at it that you have not been shown."[186] Heron's deceptively-simple lyric suggests that the real revolution is the epistemic shift that precedes the actions inspired by that shift: "What you see later on is the results of that, *but that revolution, that change that takes place will not be televised*."[187]

Perhaps one day in the future our Constitution will contain a right to a healthy environment, or our courts will simply take it for granted that such a right is an unwritten principle of the Constitution, as foundational to the supreme law of the land as the unwritten principles of federalism, democracy, and the rule of law.[188] If and when that environmental rights revolution is consummated and celebrated, however, it will be due to a prior, far more foundational but *untelevized* revolution in how Canadians think about the proper interrelationship among economy, environment, community, and law. It will reflect a new,

[185] For an incisive discussion of the use of the longer, spoken-word version of Scott-Heron's poem "The Revolution Will Not Be Televised" in the opening credits of season six of the popular and controversial television show "Homeland", see Brian T Edwards, "Moving Target: Is 'Homeland' Still Racist?", *Los Angeles Review of Books* (31 March 2017), online: <https://lareviewofbooks.org/article/moving-target-is-homeland-still-racist/>.
[186] Quoted in *ibid*.
[187] Quoted in *ibid* [emphasis added].
[188] See e.g. *Reference re Secession of Quebec,* [1998] 2 SCR 217.

shared commitment to a sustainable future as a country with the collective courage to find 173 billion barrels of oil and leave them in the ground.

CONCLUSION

Environmental advocates in Canada have a short memory. As I write the conclusion to this thesis, there are (once again) renewed calls for a legally binding solution – "a climate law"[1] – to Canada's ongoing climate policy failure. The ENGOs Ecojustice, CANRac, West Coast Environmental Law, Équiterre, Environmental Defence, and the Pembina Institute have jointly called for a Canadian "Climate Accountability Act."[2] The Canadian Institute for Climate Choices, a think tank recently formed and funded by the federal government, followed soon thereafter with its own proposal for "legislating climate milestones" to clarify pathways and progress toward "far-off goals."[3] What these proposals share is an uncritical commitment to the idea that formalizing – *i.e.,* legalizing – the government's accountability to meet its climate policy goals is the missing link between the soaring rhetoric and the sad reality of Canada's climate change commitments.

These groups appear to have forgotten the fate of the *Kyoto Protocol Implementation Act,*[4] which sought to accomplish, *mutatis mutandis,* the same objectives as their fresh proposals for climate policy accountability. Indeed, the parallels are striking. The Act obligated the federal government to produce a plan describing the actions Canada would take to meet its commitment under the Kyoto Protocol, and to issue annual reports measuring its progress.

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[1] See e.g. Aaron Wherry, "Why Canada might need a climate law – and how it might work", *CBC News* (16 June 2020), online: <https://www.cbc.ca/news/politics/climate-change-emissions-canada-trudeau-kyoto-1.5613108?ref=mobilerss&cmp=newsletter_CBC%20News%20Politics%20Headlines_734_38101>.
[2] Julia Croome et al, "Policy Brief: A New Canadian Climate Accountability Act" (May 2020), online: <https://www.ecojustice.ca/wp-content/uploads/2020/05/a-new-climate-accountability-act.pdf>.
[3] Canadian Institute for Climate Choices, "Marking the Way: How Legislating Climate Milestones Clarifies Pathways to Long-Term Goals" (June 2020), online: <https://climatechoices.ca/reports/marking-the-way/>.
[4] *Kyoto Protocol Implementation Act,* SC 2007, c 30; repealed, 2012, c 19, s 699. This is discussed further in chapter one of this thesis.

Moreover, the National Roundtable on the Environment and the Economy, an independent body earlier established by the Mulroney federal government, would analyze the government's plan, while the Commissioner of the Environment and Sustainable Development under the auspices of the Auditor General of Canada would independently monitor the government's progress. The Act, of course, was repealed, the National Roundtable disbanded.

Yet there is an even more relevant – and *subsisting* – parallel to be drawn. In 2008, a minority federal government reluctantly enacted the *Federal Sustainable Development Act*.[5] This legislation remains very much legally in force in Canada. It requires the federal government to iteratively develop, monitor, report on, and continuously improve a federal sustainable development strategy.

It is worth recalling, moreover, that the purpose of the Act "accepts the basic principle that sustainable development is based on an ecologically efficient use of natural, social and economic resources and *acknowledges the need to integrate environmental, economic and social factors in the making of all decisions by government*."[6]

There can be no progress toward sustainability without progress on climate change mitigation. The *Federal Sustainable Development Act* creates, on its face, a broad and robust legal mandate for sustainability accountability, including climate accountability, in Canada. It obligates the federal government to create and update every three years a

[5] *Federal Sustainable Development Act,* SC 2008, c 33. This Act is introduced and discussed in detail in chapter one of this thesis.
[6] *Ibid* at s 5 [emphasis added].

sustainability strategy that is founded on the precautionary principle.[7] The government's sustainability strategy, moreover, "shall set out federal sustainable development goals and targets and an implementation strategy for meeting each target and identify the minister responsible for meeting each target."[8]

Yet little if any tangible progress has been made in Canada toward enhancing sustainability or mitigating climate change. Quite the opposite, in fact, as I have shown throughout this thesis. In 2020 the *Federal Sustainable Development Act* remains more honoured in the breach than observance. Absent broad and genuine popular support and demands for strong, science-based climate policy, renewed proposals for binding climate-accountability legislation in Canada will meet the same fate as their predecessors.

Nor will legally mandating milestones make up for Canada's lack of a credible climate policy imagination in the public interest. As I have argued throughout this thesis, it is not sufficient to simply call out industry capture of climate law and policy; it must be countered, not from the top down, but from the ground up. This, in turn, requires reimagining and transforming Canadian economic and social institutions, practices, and norms.[9] It also requires that climate policymaking squarely confront what has until now been an underlying – and effectively ignored – "nagging doubt," the uncritical presumption

[7] *Ibid* at s 9(1).
[8] *Ibid* at s 9(2).
[9] In addition to the innovative policymaking approaches discussed in this thesis, an emerging initiative, the Joint Clean Climate Research Partnership (JCCTRP) deserves special mention. The JCCTRP is a transdisciplinary collaboration among academic researchers, policymakers, and a broad range of stakeholders situated in Ontario, Quebec, California, and Vermont seeking to *reimagine* and *transform* public transportation policy in line with the goals of the Paris Agreement. It is premised on the understanding that affected stakeholders must be meaningfully involved in policymaking if it is to succeed in catalyzing progressive and durable change. See JCCTRP, online: <https://jcctrp.org/why-jcctrp/>.

that economic growth and environmental protection go hand in hand.[10] Climate policy academics and advocates must help facilitate the creation of a new socio-economic model that prioritizes, not continued nonrenewable-resource extraction and economic growth for economic growth's sake, but rather genuine socio-ecological sustainability.

Indeed, it is becoming increasingly clear that conventional approaches to climate protection and sustainable development are not only insufficiently ambitious and transformative, but also environmentally destructive. Sustainable development, including the SDGs themselves, support continued fossil-fueled economic development and may also mask environmental pollution and harm.[11] A new model is urgently needed.

In this thesis I have argued that Canada's inaction on climate change and genuine socio-ecological sustainability stems from the oil and gas industry and other carbon-intensive interests' capture of its environmental laws, regulations, policies, and, more fundamental still, its policy *imagination*. The predominant approach to analyzing environmental law in Canada continues to largely ignore industry capture, both its purchase on the Canadian climate law-and-policy imaginary and the possibilities of escaping its clutches.

Although the time that Canada and the world have to change course and stabilize the Earth's climate system grows shorter by the day, the overarching lesson of this thesis is that there is no silver-bullet solution. There is neither a single climate policy (*e.g.,* carbon

[10] Jonas Meckling & Bentley B Allan, "The evolution of ideas in global climate policy" (2020) 10 Nat Clim Change 434 at 437.
[11] See e.g. Yiwen Zeng et al, "Environmental destruction not avoided with the Sustainable Development Goals" (2020) 3 Nature Sustainability, https://doi.org/10.1038/s41893-020-0555-0.

pricing) nor law (be it the *Greenhouse Gas Pollution Pricing Act,* an unwritten constitutional principle of ecological sustainability, or a new Climate Accountability Act) capable of quickly "solving" our climate crisis. Day by day, Canadians are choosing – knowingly or not – a climate future increasingly of their own making. The role of engaged climate law and policy scholarship, in Canada as elsewhere, is to help better inform those choices by exposing their underlying commitments and ultimate consequences, and to seek to bring them – like a climate policy silver buckshot – into alignment with the policy implications and imperatives of climate science.

BIBLIOGRAPHY

I. LEGISLATION

Bill C-69, *An Act to enact the Impact Assessment Act and the Canadian Energy Regulator Act, to amend the Navigation Protection Act and to make consequential amendments to other Acts,* 42-1

Canadian Energy Regulator Act, SC 2019, c 28, s 10

Canadian Environmental Assessment Act, SC 1992, c 37

Canadian Environmental Assessment Act, 2012, SC 2012, c 19, s 52

Canadian Environmental Protection Act of 1999, SC 1999, c 33

Constitution Act, 1867, 30 & 31 Victoria, c 3 (UK)

Constitution Act, 1982, being Schedule B to the *Canada Act 1982* (UK), 1982, c 11, s 52

Critical Infrastructure Defence Act, 2020 Bill 1, Second Session, 30th Legislature, 69 Elizabeth II (Alberta)

Critical Infrastructure Defence Act, SA 2020 cC-32.7

Environmental Management Act, SBC 2003, c 53 (BC)

Federal Sustainable Development Act, SC 2008, s 33

Fisheries Act, RSC 1985, c F-14

Greenhouse Gas Pollution Pricing Act, being Part 5 of the *Budget Implementation Act, 2018, No 1,* SC 2018, c 12

Impact Assessment Act, SC 2019, c 28

Kyoto Protocol Implementation Act, SC 2007, c 30; repealed, 2012, c 19, s 699

National Energy Board Act, RSC, 1985, c N-7

Navigation Protection Act, RSC 1985, c N-22

Smoke Nuisance Abatement (Metropolis) Act, 16&17 Vict (1853) c 128 (UK)

Supreme Court Act, RSC 1985, c S-26

II. JURISPRUDENCE

114957 Canada Ltée (Spraytech, Société d'arrosage) v Hudson (Town), [2001] 2 SCR 241

Agraira v Canada (Minister of Public Safety and Emergency Preparedness), [2013] 2 SCR 559

British Columbia v Canadian Forest Products, [2004] 2 SCR 74

Canadian Western Bank v Alberta, [2007] 2 SCR 3

Clyde River (Hamlet) v Petroleum Geo-Services Inc., 2017 SCC 40

Coastal First Nations v British Columbia (Environment), 2016 BCSC 34 (CanLII)

Coldwater et al v Canada (Attorney General) et al, 2020 FCA 34

Coldwater Indian Band et al v Canada (Attorney General) et al, SCC Case File No 3911 (2 July 2020)

Delgamuukw v British Columbia, [1997] 3 SCR 1010

Edwards v Attorney-General for Canada (1929), [1930] AC 124 (PC)

Enos v Secretary of Environmental Affairs, 731 NE2d 525 (MA 2000)

Environnement Jeunesse v Attorney General of Canada, Case File No 500-06-000955-183 (QC Sup Ct)

Forest Ethics Advocacy Association v National Energy Board, 2014 FCA 88

Friends of the Oldman River Society v Canada (Minister of Transport), [1992] 1 SCR 3

Gitxaala Nation v Canada, 2016 FCA 187

Haida Nation v British Columbia (Minister of Forests), [2004] 3 SCR 511

La Rose v Her Majesty the Queen, Court File No T-1750-19 (FC)

Mendoza et al v The National State of Argentina et al (2008)

Munro v National Capital Commission, [1966] SCR 663

N Plains Res Council, Inc. v Mont. Bd of Lan Comm'rs, 288 P3d 169 (MT 2012)

Ontario Power Generation Inc v Greenpeace Canada et al, 2015 FCA 186

Orphan Well Association v Grant Thornton Ltd., [2019] 1 SCR 150

Pennsylvania Environmental Defence Foundation v Commonwealth, 161 A (3D) 911 (PA 2017)

Quebec (Attorney General) v Canadian Owners and Pilots Association, [2010] 2 SCR 536

Reference re Environmental Management Act (British Columbia), 2019 BCCA 181

Reference re Greenhouse Gas Pollution Pricing Act, 2019 SKCA 40

Reference re Greenhouse Gas Pollution Pricing Act, 2019 ONCA 544

Reference re Impact Assessment Act, 2020 ABCA 202 (CanLII)

Reference re Secession of Quebec, [1998] 2 SCR 217

Reference re Upper Churchill Water Rights Reversion Act, [1984] 1 SCR 297

Regina v TNT Canada Inc (1986), 58 OR (2d) 410 (ONCA)

R v Comeau, 2018 SCC 15

R v Crown Zellerbach Canada Ltd., [1988] 1 SCR 401

R v Hydro-Québec, [1997] 3 SCR 213

Rogers Communication v Châteauguay, [2016] 1 SCR 467

Saskatchewan (Attorney General) v Lemare Lake Logging Ltd., [2015] 3 SCR 419

Sawyer v Transcanada Pipeline Limited, 2017 FCA 159

Syncrude Canada Ltd v Canada (Attorney General), 2016 FCA 160

Taseko Mines Limited v Canada (Environment), 2017 FC 1100

Tesla Motors Canada ULC v Ontario (Ministry of Transportation), 2018 ONSC 5062

Tsleil-Waututh Nation v Canada (Attorney General), 2018 FCA 153

III. POLICIES & REGULATIONS

Canadian Intergovernmental Conference Secretariat, "Vancouver Declaration on Clean Growth and Climate Change" (3 March 2016)

Canadian Radio-television and Telecommunications Commission, "Let's Talk TV: A Conversation with Canadians" (nd)

City of Toronto, "Backgrounder: City of Toronto's Waste-to-Renewable-Natural-Gas

Environment and Climate Change Canada, *Pan-Canadian Framework on Clean Growth and Climate Change: Canada's Plan to Address Climate Change and Grow the Economy* (2016)

Environment and Climate Change Canada, "Pan-Canadian Approach to Pricing Carbon Pollution" (3 October 2016)

Government of Alberta, OC 160/2019

Government of Canada, "About methane regulations" (nd)

Government of Canada, "Let's Talk Climate Action" (nd)

Government of Canada, "The Government's decision" (18 June 2019)

Government of Canada, "Working Group on Carbon Pricing Mechanisms: Final Report" (2016)

Government of Canada, "Environment and Regulatory Reviews: Discussion Paper" (June 2017)

Government of Canada, *Equality + Growth – A Strong Middle Class* (27 February 2018)

Government of Canada, "Prime Minister Justin Trudeau's Pipeline Announcement" (29 November 2016)

Government of Saskatchewan, *Prairie Resilience: A Made-in-Saskatchewan Climate Change Strategy* (2017)

H Res 109 – Recognizing the duty of the Federal Government to create a Green New Deal, 116th Congress (2019-2020)

House of Commons, 42nd Parliament, 1st Session, Sitting No 435, Vote No 1366 (17 June 2019)

National Energy Board, "Trans Mountain Pipeline ULC – Trans Mountain Expansion Project (2 August 2019)

IV. SECONDARY SOURCES

"A Rare Republican Call to Climate Action", Editorial, *The New York Times* (13 February 2017), online: <https://www.nytimes.com/2017/02/13/opinion/a-rare-republican-call-to-climate-action.html?_r=0>

Denis Abessa, Ana Farmá & lucas Bureaem, "The systematic dismantling of Brazilian environmental laws risks losses on all fronts" (2019) 3 Nature Ecology & Evolution 510

"About", *National Observer,* online: <www.nationalobserver.com/about>

Laurie E Adkin, ed, *First World Petro-Politics: The Political Ecology and Governance of Alberta* (Toronto: University of Toronto Press, 2016)

Jennifer Allan et al, "Summary of the Paris Climate Change Conference: 29 November – 13 December 2015" Earth Negotiations Bulletin Vol 12, No 663 (December 2015), online: <http://www.iisd.ca/climate/cop21/enb/>

Bruce Anderson & David Coletto, "Climate, Carbon, and Pipelines: A Path to Consensus", *Abacus Data* (18 October 2016), online: <http://abacusdata.ca/climate-carbon-and-pipelines-a-path-to-consensus/>

Bruce Anderson & David Coletto, "Public Attitudes on oil, Pipelines, Climate, and Change", *Abacus Data* (9 September 2017), online: <http://abacusdata.ca/public-attitudes-on-oil-pipelines-climate-and-change/>

Michelle Wilde Anderson, "Resource Extraction" in Eric Klineberg, Caitlin Zaloom & Sharon Marcus, eds, *Antidemocracy in America: Truth, Power, and the Republic at Risk* (New York: Columbia University Press, 2019)

"Argentinian Supreme Court's Pioneering Judgment on Environmental Rights" (2017), *FuturePolicy.org* (blog), online: <http://www.futurepolicy.org/equity-and-dignity/rights-and-responsibilities/argentinian-supreme-courts-pioneering-judgement-on-environmental-rights/>

Chris Arsenault, "Brazil, home of the Amazon, rolls back environmental protection", *Reuters* (15 May 2017), online: <http://www.reuters.com/article/us-brazil-politics-environment/brazil-home-of-amazon-rolls-back-environmental-protection-idUSKCN18B21P>

GB Asheim et al, "The case for a supply-side climate policy" (2019) 365 Science 325

Trish Audette-Longo, "Oilpatch wants Alberta to ease up on rules", *National Observer* (28 July 2017), online: <http://www.nationalobserver.com/2017/07/28/analysis/oilpatch-wants-alberta-ease-rules>

"Australia approves controversial coal project", *BBC News* (13 June 2019), online: <https://www.bbc.com/news/world-australia-48618774>

Javier Auyero & Débora Alejandra Swistun, *Flammable: environmental suffering in an Argentine shantytown* (Oxford: Oxford University Press, 2009)

Alina Averchenkova & Sini Maitikainen, "Assessing the consistency of national mitigation actions in the G20 with the Paris Agreement" (London: Grantham Research Institute on Climate Change and the Environment, London School of Economics, 2016), online: <http://www.lse.ac.uk/GranthamInstiturte/wp-content/uploads/2016/11/Averchenkova-and-Matikainen-2016.pdf>

Hope M Babcock, "The Federal Government Has an Implied Moral Constitutional Duty to Protect Individuals from Harm Due to Climate Change: Throwing Spaghetti against the Wall to See What Sticks" (2019) 45:4 Ecology Law Quarterly 735

Ian Bailey, "B.C. environmental law group criticizes federal approach to climate change", *The Globe and Mail* (31 August 2016), online:

<http://www.theglobeandmail.com/news/british-columbia/bc-environmental-law-group-criticizes-federal-approach-to-climate-change/article31656437/>

Ian Bailey, "Site C criticism by federal justice minister surfaces in 2012 video", *The Globe and Mail* (29 March 2016), online: <http://www.theglobeandmail.com/news/british-columbia/site-c-criticism-by-federal-justice-minister-surfaces-in-2012-video/article29374893/>

Ian Bailey, "Trudeau resolute on Trans Mountain pipeline expansion despite protests", *The Globe and Mail* (20 December 2016), online: <http://www.theglobeandmail.com/news/british-columbia/trudeau-resolute-on-trans-mountain-pipeline-expansion-despite-expected-protests/article33397590/>

Paul G Bain et al, "Co-Benefits of Addressing Climate Change Can Motivate Action Around the World" (2016) 6 Nat Clim Change 154

Camille Bains, "BC Liberals cite jobs as top election issue, NDP pledges climate action", *The Globe and Mail* (1 May 2017), online: <http://www.theglobeandmail.com/news/british-columbia/bc-liberals-cite-jobs-as-top-election-issue-ndp-pledges-climate-action/article34867571/>

Kyle Bakx, "3 reasons why Alberta oil prices have sunk", *CBC News* (4 October 2018), online: <https://www.cbc.ca/news/business/alberta-wcs-wti-discount-differential-1.4849015>

Jeffrey Ball, "Why Carbon Pricing Isn't Working: Good Idea in Theory, Failing in Practice", *Foreign Affairs* (July/August 2018), online: <www.foreignaffairs.com/articles/world/2018-06-14/why-carbon-pricing-isnt-working>

Alex Ballingall, "Environment Canada report says we are on pace to miss emissions target", *Toronto Star* (27 March 2017), online: <https://www.thestar.com/news/canada/2017/03/27/environment-canada-report-says-we-are-on-pace-to-miss-emissions-target.html>

Sidhartha Banerjee, "TransCanada to produce Energy East environmental impact study: Quebec". *The Globe and Mail* (22 April 2016), online: <http://www.theglobeandmail.com/news/national/transcanada-to-produce-energy-east-environmental-impact-study-quebec-says/article29728353/>

Nigel D Bankes & Alistair R Lucas, "Kyoto, Constitutional Law and Alberta's Proposals" (2004) 42 Atla L Rev 355

Michael Barber, *How to Run a Government So that Citizens Benefit and Taxpayers Don't Go Crazy* (Toronto: Penguin Books, 2015)

Philip Barton, "Economic Instruments and the Kyoto Protocol: Can Parliament Implement Emissions Trading without Provincial Co-Operation?" (2002) 40 Atla L Rev 417

B.C. Environmental Assessment Office, online: <http://www.eao.gov.bc.ca>

BC Gov News, "Environment and Climate Change Strategy: Additional measures being developed to protect B.C.'s environment from spills" (30 January 2018), online: <https://news.gov.bc.ca/releases/2018ENV0003-000115>

BC Gov News, "Province submits court reference to protect B.C.'s coast" (26 April 2018), online: <https://news.gov.bc.ca/releases/2018PREM0019-000742>

Hilary Beaumont, "First Nation Groups Launching Massive Lawsuit After Trudeau's LNG Decision", *VICE* (29 September 2016), online: <http://www.vice.com/en_ca/read/first-nations-groups-launching-massive-lawsuit-after-trudeaus-lng-decision>

Silke Beck & Martin Mahony, "The IPCC and the politics of anticipation" (2017) 7:4 Nat Clim Change 311

Paul Beier et al, "A How-To Guide for Coproduction of Actionable Science" (2017) 10:3 Conservation Letters 288

M Belén Olmos Giupponi & Martha C Paz, "The Implementation of the Human Right to Water in Argentina and Colombia" (2015) 15 Anuario Mexicano de Derecho Internacional 323

Elena M Bennett et al, "Bright spots: seeds of a good Anthropocene" (2016) 14:8 Front Ecol Environ 441

Jeremy Berke, "No country would find 173 billion barrels of oil in the ground and just leave them", *Business Insider* (10 March 2017), online: http://www.businessinsider.com/trudeau-gets-a-standing-ovation-at-energy-industry-conference-oil-gas-2017-3>

Bernstein et al, eds, *A Globally Integrated Climate Policy for Canada* (Toronto: University of Toronto Press, 2008)

Steven Bernstein, *The Compromise of Liberal Environmentalism* (New York: Columbia University Press, 2001)

Eric Biber, "Cultivating a Green Political Landscape: Lessons for Climate Change Policy from the Defeat of California's Proposition 23" (2013) 66 Vand L Rev 399

Eric Biber, "Law in the Anthropocene Epoch" (2017) 106 Geo LJ 1

Javier Blas & Alex Longley, "Oil market abandons 2017 re-balancing hope as contango returns", *World Oil* (9 June 2017), online: <http://www.worldoil.com/news/2017/6/9/oil-market-abandons-2017-re-balancing-hope-as-contango-returns>

Andy Blatchford, "Baloney Meter: Brad Wall could challenge any federal carbon tax on Crown corps", *CBC News* (28 July 2016), online: <http://www.cbc.ca/news/politics/baloney-meter-brad-wall-carbon-tax-1.3699134>

Daniel Bodansky, "Customary (and Not So Customary) International Environmental Law" (1995) 3 Indiana BOournal of Global Legal Studies 106

Daniel Bodansky, "The Paris Climate Change Agreement: A New Hope?" (2016) 110:2 Am J Intl L 288

Jan Willem Bolderdijk et al, "Values Determine the (In)Effectiveness of Informational Interventions in Promoting Pro-Environmental Behavior" (2013) 8 PLoS ONE e83911, online: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0083911>

Alan Bond et al, "Impact Assessment: Eroding Benefits through Streamlining?" (2014) 45 Impact Assessment Rev 46

Ron Bousso & Karolin Schaps, "Shell braces for 'lower forever' oil prices as profits soar", *Reuters* (27 July 2017), online: <http://www.reuters.com/article/us-shell-results-idUSKBN1AC0LO>

William Boyd, "Climate Change, Fragmentation, and the Challenges of Global Environmental Law: Elements of a Post-Copenhagen Assemblage" (2010) 32 U Pa J Intl L 457

David R Boyd, "Governing the Environment", *Literary Review of Canada* 20:2 (March 2012), online: <http://reviewcanada.ca/magazine/2012/03/a-right-to-clean-air/>

David Richard Boyd, *The Environmental Rights Revolution: A Global Study of Constitutions, Human Rights, and the Environment* (Vancouver: UBC Press, 2012)

David Richard Boyd, *The Right to a Healthy Environment: Revitalizing Canada's Constitution* (Vancouver: UBC Press, 2012)

James Bradshaw & Christine Dobby, "How 'the Blais show' shook up Canadian telecom", *The Globe and Mail* (9 September 2016), online: <http://www.theglobeandmail.com/report-on-business/blais-crtc-profile/article31797971/>

Louis Brandeis, *Other People's Money and How the Bankers Use It* (*New York: Frederick A. Stokes*, 1914)

British Columbia, *Climate Leadership Plan* (Victoria, 2016), online: <http://climate.gov.bc.ca/tile/read-bcs-climate-leadership-plan/>

British Columbia, Legislative Assembly, *Official Report of Debates*, 41-3, Issue 104 (14 March 2018) (Hon G Heyman)

Eugénie Brouillet & Bruce Ryder, "Key Doctrines in Canadian Legal Federalism" in Peter Oliver, Patrick Macklem & Nathalie Des Rosiers, eds, *The Oxford Handbook of the Canadian Constitution* (New York: Oxford University Press, 2017) 415

Michael Brüggermann & Sven Engesser, "Beyond False Balance: How Interpretative Journalism Shapes Media Coverage of Climate Change" (2017) 42 Global Environmental Change 58

Robert J Brulle, "The climate lobby: a sectoral analysis of lobbying spending on climate change in the USA, 2000 to 2016" (2018) 149 Climatic Change 289

Brett A Bryan et al, "Designer policy for carbon and biodiversity co-benefits under global change" (2016) 6 Nat Clim Change 301

Jan Burck et al, *Climate Performance Index: Results 2020* (Bonn: Germanwatch, 2019), online: <www.climate-change-performance-index.org>

Canada, Environment and Climate Change Canada, "Pan-Canadian Approach to Pricing Carbon Pollution" (Ottawa: ECCC, 3 October 2016), online: <https://www.canada.ca/en/environment-climate-change/news/2016/10/canadian-approach-pricing-carbon-pollution.html>

Canada, Environment and Climate Change Canada, "Technical Paper on the Federal Carbon Pricing Backstop" (Ottawa: 18 May 2017), online (pdf): <https://www.canada.ca/content/dam/eccc/documents/pdf/20170518-2-en.pdf>

Canada, Environment and Natural Resources, "Carbon pricing: regulatory framework for the output-based pricing system" (Ottawa: ENR, 21 January 2018), online: <https://www.canada.ca/en/services/environment/weather/climatechange/climate-action/pricing-carbon-pollution/output-based-pricing-system.html>

Canada, Environment and Natural Resources, "Guidance on the pan-Canadian carbon pollution pricing benchmark" (Ottawa: ENR, 16 January 2018), online: <https://www.canada.ca/en/services/environment/weather/climatechange/pan-canadian-framework/guidance-carbon-pollution-pricing-benchmark.html>

Canada, Environment and Natural Resources, "Supplemental benchmark guidance" (Ottawa: ENR, 20 December 2017), online: <https://www.canada.ca/en/services/environment/weather/climatechange/pan-canadian-framework/guidance-carbon-pollution-pricing-benchmark/supplemental-benchmark-guidance.html>

Canada, National Energy Board, "Trans Mountain Pipeline ULC (Trans Mountain) Application for the Trans Mountain Expansion Project (Project), National Energy Board (Board) reconsideration of aspects of its Recommendation Report as directed by Order in Council P.C. 2018-1177 (Reconsideration) MH-052-2018, Procedural Direction No. 4 – Affidavits and written argument-in-chief, including comments on draft conditions and recommendations" (Calgary: NEB, February 2019), online (pdf): <http://www.neb-one.gc.ca/pplctnflng/mjrpp/trnsmntnxpnsn/trnsmntnxpnsnrprt-eng.pdf>

Canada, National Energy Board, "Trans Mountain Pipeline ULC – Trans Mountain Expansion Project", (Calgary: NEB, 2 August 2019), online: <https://www.neb-one.gc.ca/pplctnflng/trnsmntnxpnsn/index-eng.html>

Canada, Officer of the Auditor General of Canada, *Commissioner of the Environment and Sustainable Development Releases Fall 2014 Report* (7 October 2014), online: <www.oag-bvg.gc.ca/internet/English/mr_20141007_e_39911.html>

Canada, "Prime Minister Justin Trudeau's Pipeline Announcement" (29 November 2016), online: <https://pm.gc.ca/eng/news/2016/11/29/prime-minister-justin-trudeaus-pipeline-announcement>

Canada, "Update on the Output-Based Pricing System: Technical Backgrounder" (27 July 2018), online: <www.canada.ca/en/services/environment/weather/climatechange/climate-action/pricing-carbon-pollution/output-based-pricing-system-technical-backgrounder.html>

Canadian Association of Petroleum Producers, "A Competitive Policy and Regulatory Framework for Alberta's Upstream Oil and Natural Gas Industry", (July 2017), online: <www.capp.ca/publications-and-statistics/publications/304673>

Canadian Association of Petroleum Producers, "Collaboration Between Industry and Government Key to Enhancing the Competitiveness of Alberta's Oil and Natural Gas Sector Internationally: CAPP" (5 July 2017), online: <www.capp.ca/media/news-releases/economic-competitiveness-report-media-release>

Canadian Council of Ministers of the Environment, *A Canada-Wide Accord on Environmental Harmonization* (Ottawa, 1998), online: <http://www.ccme.ca/en/resources/harmonization/index.html>

Canadian Energy Pipeline Association, "Response to the Expert Panel Review of Environmental Assessment Processes Final Report, Building Common Ground: A New Vision for Impact Assessment in Canada" (5 May 2017), online (pdf): <cepa.com/wp-content/uploads/2017/06/CEPA-response-to-Expert-Panel-Report-Final.pdfMacLean FINAL Dissertation document (8 November 2020).docx>

Canadian Environmental Assessment Agency, "Decision Statement Issued under Section 54 of the *Canadian Environmental Assessment Act, 2012* (Ottawa, 27 September 2016), online: <http://www.ceaa.gc.ca/050/document-eng.cfm?document=115669>

Canadian Environmental Assessment Agency, "Pacific NorthWest LNG Project: Environmental Assessment Report" (September 2016), online: <http://www.ceaa.gc.ca/050/documents-eng.cfm?evaluation=80032>

Canadian Institute for Climate Choices, "Marking the Way: How Legislating Climate Milestones Clarifies Pathways to Long-Term Goals" (June 2020), online: <https://climatechoices.ca/reports/marking-the-way/>

Canadian Intergovernmental Conference Secretariat, "Conferences – First Ministers' Meeting – Vancouver Declaration on clean growth and climate change" (3 March 2016), online: <http://www.scics.gc.ca/english/conferences.asp?a=viewdocument&id=2401>

Canadian Intergovernmental Conference Secretariat, "Vancouver Declaration on Clean Growth and Climate Change" (3 March 2016), online: <https://pm.gc.ca/eng/news/2016/03/03/communique-canadas-first-ministers>

Canadian Press, "Brian Jean: 'Climate change costs are going to hit everybody': Wildrose gives party leader a mandate to fight to end carbon tax", *Maclean's* (29 October 2016), online: <http://www.macleans.ca/news/canada/brian-jean-climate-change-costs-are-going-to-hit-everybody/>

Canadian Public Health Association, "Lancet Countdown 2018 Report: Briefing for Canada's Policymakers" (November 2018), online (pdf): <www.lancetcountdown.org/media/1418/2018-lancet-countdown-policy-brief-canada.pdf>

Canadian Radio-television and Telecommunications Commission (CRTC), "Let's Talk TV: A Conversation with Canadians", online: <http://www.crtc.gc.ca/eng/talktv-parlonstele.htm>

Jonathan Z Cannon, *Environment in the Balance: The Green Movement and the Supreme Court* (Cambridge, MA: Harvard University Press, 2015)

Carbon Pricing Leadership Coalition, *Report of the High-Level Commission on Carbon Pricing* (29 May 2017), online: <https://www.carbonpricingleadership.org/report-of-the-highlevel-commission-on-carbon-prices>

Carbon Pricing Leadership Coalition, *Report of the High-Level Commission on Carbon Prices* (Washington: International Bank for Reconstruction and Development and International Development Association & The World Bank, 2017), online (pdf): <https://static1.squarespace.com/static/54ff9c5ce4b0a53decccfb4c/t/59b7f2409f8dce5316811916/1505227332748/CarbonPricing_FullReport.pdf>

Cinnamon P Carlarne, "On Localism and the Persistent Power of the State" (2018) 112 AJIL Unbound 285

Cinnamon P Carlarne, "Rethinking A Failing Framework: Adaptation and Institutional Rebirth for the Global Climate Change Regime" (2013) 25 Geo Int'l Envtl L Rev 1

Ann Carlson, "The Trump Administration's Assault on California's Global Climate Leadership" (2018) 112 AJIL Unbound 269

Ann Carlson, "While You Were Sleeping: Coronavirus Apparently Won't Stop Trump Environmental Rollbacks" (26 March 2020), *LegalPlanet* (blog), online: <https://legal-planet.org/2020/03/26/while-you-were-sleeping-coronavirus-apparently-wont-stop-trump-environmental-rollbacks/>

Ann E Carlson, "Iterative Federalism and Climate Change" (2009) 103 Northwestern L Rev 109

Ben Carlson, "Commodities are good for traders, bad for investors", *The Globe and Mail* (24 July 2017) [emphasis added], online: <https://www.theglobeandmail.com/globe-investor/commodities-are-good-for-traders-bad-for-investors/article35784585/>

Daniel Carpenter & David A Moss, "Introduction" in Daniel Carpenter & David A Moss, eds, *Preventing Regulatory Capture: Special Interest Influence and How to Limit It* (New York: Cambridge University Press, 2014

Christopher Carrigan & Cary Coglianese, "George J. Stigler, 'The Theory of Economic Regulation'" in Steven J Balla, Martin Lodge & Edward C Page, eds, *The Oxford Handbook of Classics in Public Policy and Administration* (Oxford: Oxford University Press, 2015) 287

Joseph F Castrilli, "Legal Authority for Emissions Trading in Canada" in Elizabeth Atkinson, ed, *The Legislative Authority to Implement a Domestic Emissions Trading System* (Ottawa: National Round Table on the Environment and the Economy, 1999)

Claudia Cattaneo, "'A key test': Canadian oil executives await Trudeau's grand bargain on pipelines", *Financial Post* (28 November 2016), online: <http://business.financialpost.com/commodities/energy/canadian-oil-executives-await-trudeaus-grand-bargain-on-pipelines/wcm/4e28ee64-aa6d-4e1a-a816-88a0e008d4ab>

Damien Cave, "It Was Supposed to be Australia's Climate Change Election. What happened?", *The New York Times* (19 May 2019), online: <https://www.nytimes.com/2019/05/19/world/australia/election-climate-change.html>

CBC News, "Canada election 2015: Trudeau promises 'true partnership' with provinces", *CBC News* (22 August 2015), online: <http://www.cbc.ca/news/politics/canada-election-2015-learned-this-week-aug22-1.3200542>

CBC News, "Justin Trudeau's 'Sunny Ways' a nod to Sir Wilfred Laurier", *CBC News* (20 October 2015), online: <http://www.cbc.ca/news/canada/nova-scotia/ns-prof-trudeau-sunny-ways-1.3280693>

Nathalie J Chalifour, "Canadian Climate Federalism: Parliament's Ample Constitutional Authority to Legislate GHG Emissions through Regulations, a National Cap and Trade Program, or a National Carbon Tax" (2016) 36 Nat'l J Const L 331

Nathalie J Chalifour, "Climate Federalism – Parliament's Ample Constitutional Authority to Regulate GHG Emissions" (2016) University of Ottawa Faculty of Law Working Paper Series, online: <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2775370>

Nathalie Chalifour & Jason MacLean, "Courts should not have to decide climate policy", *Policy Options* (21 December 2018), online: <http://policyoptions.irpp.org/magazines/december-2018/courts-not-decide-climate-change-policy/>

Nathalie J Chalifour, "Drawing Lines in the Sand: Parliament's Jurisdiction to Consider Upstream and Downstream Greenhouse Gas (GHG) Emissions in Interprovincial Pipeline Project Reviews" (2018) 23:1 Rev Const Studies 129

Nathalie J Chalifour, "Jurisdictional Wrangling over Climate Policy in the Canadian Federation: Key Issues in the Provincial Constitutional Challenges to Parliament's *Greenhouse Gas Pollution Pricing Act*" (2019) 50:2 Ottawa L Rev 197

Nathalie J Chalifour, "Making Federalism Work for Climate Change: Canada's Division of Powers Over Carbon Taxes" (2008) 22:2 Nat J Const L 119

Nathalie J Chalifour & Laurel Besco, "Taking Flight: Federal Action to Mitigate Canada's GHG Emissions from Aviation" (2017) 48:2 Ott L Rev 577

Nathalie J Chalifour, "The Constitutional Authority to Levy Carbon Taxes" in Thomas J. Courchene & John Allan, eds, *Canada: The State of the Federation* (Montreal: McGill-Queens University Press, 2009) 177

Sander Chan et al, "Reinvigorating International Climate Policy: A Comprehensive Framework for Effective Nonstate Action" (2015) 6:4 Global Policy 466

Bruce Cheadle & The Canadian Press, "Carr tells climate forum fossil fuel wealth can't be left in the ground", *National Observer* (21 October 2016), online: <http://www.nationalobserver.com/2016/10/21/news/carr-tells-climate-forum-fossil-fuel-wealth-cant-be-left-ground>

Bruce Cheadle, "Environmentalists file court challenge of Ottawa's Trans Mountain pipeline approval", *CBC News* (20 December 2016), online: <http://www.cbc.ca/news/canada/calgary/pipelines-whales-british-columbia-lawsuit-noise-trans-mountain-calgary-court-1.3904797>

Bruce Cheadle, "Sask., N.S. and N.L. ministers walk out of climate talks after Trudeau announces carbon price", *CBC News* (3 October 2016), online: <http://www.cbc.ca/news/politics/federal-provincial-environment-ministers-meeting-1.3789134>

Adam S Chilton & Mila Versteeg, "Do Constitutional Rights Make a Difference?" (2016) 60:3 American Journal of Political Science 575

City of Toronto, "Backgrounder: City of Toronto's Waste-to-Renewable-Natural-Gas Project" (20 July 2018), online: <www.toronto.ca/home/media-room/backgrounders-other-resources/backgrounder-waste-to-renewable-natural-gas-project/>

Campbell Clark, "Canadians back bold climate-change action, poll finds", *The Globe and Mail* (27 November 2015), online: <http://www.theglobeandmail.com/news/politics/canadians-back-bold-climate-change-action-poll-finds/article27518927/>

Climate Action Network Canada, "61% of Canadians say protecting the climate more important than pipelines and tarsands" (7 April 2015), online: <http://climateactionnetwork.ca/2015/04/07/61-of-canadians-say-protecting-the-climate-more-important-than-pipelines-and-tarsands/>

Climate Action Tracker, online: <http://climateactiontracker.org>

"Climate Scientists' Letter to Federal Government", *The Vancouver Sun* (May 26, 2016), online: <https://www.scribd.com/document/314292821/Climate-Scientists-Letter-to-Federal-Government>

David Coady et al, "Global Fossil Fuel Subsidies Remain Large: An Update Based on Country-Level Estimates" (2019) IMF Working Paper No 19/89, online: <https://www.imf.org/en/Publications/WP/Issues/2019/05/02/Global-Fossil-Fuel-Subsidies-Remain-Large-An-Update-Based-on-Country-Level-Estimates-46509>

David Coady, Ian Parry, Louis Sears & Baoping Shang, "IMF Working Paper: How Large Are Global Energy Subsidies?" (2015) International Monetary Fund Fiscal Affairs Department Working Paper, online: <https://www.imf.org/external/pubs/ft/wp/2015/wp15105.pdf>

Jelani Cobb, "Comment: A State Away", *The New Yorker* (13 March 2017) 27

Anne-Marie Codur, William Moomaw & Jonathan Harris, "After Paris: The New Landscape for Climate Policy", Global Development and Environment Institute, Tufts University, Climate Policy Brief No 2 (February 2016), online: <www.ase.tufts.edu/gdae/Pubs/climate/ClimatePolicyBrief2.pdf>

William Coleman & Grace Skogstad, eds, *Policy Communities and Public Policy in Canada: A Structural Approach* (Mississauga, ON: Copp Clark Pitman, 1990)

Steve Coll, *Private Empire: ExxonMobil and American Power* (New York: Penguin, 2012)

Robert Collier, "Fueling America: Oil's Dirty Future", *San Francisco Chronicle* (22 May 2005), online: <www.sfgate.com/green/article/FUELING-AMERICA-OIL-S-DIRTY-FUTURE-Canadian-2668998.php>

Lynda M Collins, "An Ecologically Literate Reading of the Canadian Charter of Rights and Freedoms" (2009) 26 Windsor Rev Legal Soc Issues 7

Lynda M Collins, "Are We There Yet? The Right to Environment In International and European Law" (2007) 3:2 MJSDL 119

Lynda Collins & Lorne Sossin, "In Search of an Ecological Approach to Constitutional Principles and Environmental Discretion in Canada" (2019) 52:1 UBC L Rev 293

Lynda M Collins & David R Boyd, "Non-Regression and the *Charter* Right to a Healthy Environment" (2016) 29 J Envtl L & Prac 285

Lynda M Collins, "Safeguarding the *Longue Durée*: Environmental Rights in the Canadian Constitution" (2015) 71 SCLR (2d) 519

Lynda Collins, "The Unwritten Constitutional Principle of Ecological Sustainability: A Lodestar for Canadian Environmental Law?" (5 June 2019), *IACL-AIDC Blog* (blog), online: <https://blog-iacl-aidc.org/unwritten-constitutional-principle-of-ecological-sustainability-a-lodestar-for-canadian-environmental-law>

Lynda Collins, "The Unwritten Constitutional Principle of Ecological Sustainability: A Solution to the Pipelines Puzzle?" (2019) 70 UNBLJ 30

Comedy Central, "The Daily Show with Jon Stewart: Martin Gilens & Benjamin Page" (30 April 2014), online (video): Comedy Central <www.cc.com/video-clips/kj9zai/the-daily-show-with-jon-stewart-martin-gilens---benjamin-page >

Commissioner of the Environment and Sustainable Development, *2014 Fall Report of the Commissioner of the Environment and Sustainable Development* (Ottawa, October 2014), online: <http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201410_e_39845.html

Commissioner of the Environment and Sustainable Development, "2015 Fall Report of the Commissioner of the Environment and Sustainable Development" (Ottawa, January 2016), online: <http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201512_e_41007.html>

Commissioner of the Environment and Sustainable Development, *Federal and Departmental Sustainable Development Strategies Part 2—Review of 2012 Progress Report of the Federal Sustainable Development Strategy* (Ottawa: Office of the Auditor General of Canada, 2013)

Commissioner of the Environment and Sustainable Development, *Perspectives on Climate Change Action in Canada – A Collaborative Report from Auditors General – March 2018* (27 March 2018), online: <www.oag-bvg.gc.ca/internet/English/parl_otp_201803_e_42883.html#hd2b>

Commissioner of the Environment and Sustainable Development, "Report 2—Canada's Preparedness to Implement the United Nations Sustainable Development Goals" in *2018*

Spring Reports of the Commissioner of the Environment and Sustainable Development (24 April 2018), online: <www.oag-bvg.gc.ca/internet/English/att__e_43001.html>

Commissioner of the Environment and Sustainable Development, "The Commissioner's Perspective" (Ottawa, October 2017), online: <http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201710_00_e_42488.html>

Rafael Correa, "Ecuador's Path" (2012) 77 New Left Review 89, online: <https://newleftreview.org/II/77/rafael-correa-ecuador-s-path>

Rafael Correa, "Intervencíon XII Cumbre ALBA" (30 July 2013), online: <http://www.youtube.com/watch?v=W67MqQUnPTA>

Julia Croome et al, "Policy Brief: A New Canadian Climate Accountability Act" (May 2020), online: <https://www.ecojustice.ca/wp-content/uploads/2020/05/a-new-climate-accountability-act.pdf>

Michael Crothers, "Why carbon capture is just as important as renewable energy", *The Globe and Mail* (9 October 2016), online: <http://www.theglobeandmail.com/report-on-business/rob-commentary/why-carbon-capture-is-just-as-important-as-renewable-energy/article32311433/>

Kevin Crowley, "Exxon Doubles Down on Oil: As Rivals Embrace Renewables, the Energy Giant is Betting on Continued Crude Demand", *Bloomberg Businessweek* (15 June 2018), online: <www.bloomberg.com/news/articles/2018-06-15/exxon-doubles-down-on-oil>

"Crude awakening: ExxonMobil and the oil industry are making a bet that could end up wrecking the climate", *The Economist* (9-15 February 2019)

Kelly Cryderman, "Alberta Wildrose, PC members overwhelmingly vote to merge", *The Globe and Mail* (22 July 2017), online: <https://beta.theglobeandmail.com/news/alberta/wildrose-progressive-conservative-unite-right-united-conservative-party-alberta/article35776606/?ref=http://www.theglobeandmail.com&>

Catherine Cullen, "Justin Trudeau Signs Paris Climate Treaty at UN, Vows to Harness Renewable Energy", *CBC News* (22 April 2016), online: <https://www.cbc.ca/news/politics/paris-agreement-trudeau-sign-1.3547822>

Bill Curry, "Trudeau says he 'misspoke' about phasing out oil sands", *The Globe and Mail* (24 January 2017), online:

<http://www.theglobeandmail.com/news/politics/trudeau-says-he-misspoke-about-phasing-out-oil-sands/article33748712/>

Coral Davenport, "E.P.A. Dismisses Members of Major Scientific Review Board", *The New York Times* (7 May 2017), online: <http://www.economist.com/news/united-states/21717376-environmental-protections-will-not-be-undone-overnight-scourge-epa-takes-over?zid=313&ah=fe2aac0b11adef572d67aed9273b6e55>

Coral Davenport, "In a Win for Environmentalists, Senate Keeps an Obama-Era Climate Change Rule", *The New York Times* (10 May 2017), online: <https://www.nytimes.com/2017/05/10/us/politics/regulations-methane-climate-change.html?emc=edit_nn_20170511&nl=morning-briefing&nlid=70167113&te=1&_r=0>

Coral Davenport, "Nations Approve Landmark Climate Accord in Paris", *The New York Times* (13 December 2015), online: <http://www.nytimes.com/2015/12/13/world/europe/climate-change-accord-paris.html?_r=0>

Mike De Souza, "High-Ranking Federal Officials Sped Up Trans Mountain Review after Phone Call from Kinder Morgan's Ian Anderson", *National Observer* (18 April 2018), online: <www.nationalobserver.com/2018/04/18/news/high-ranking-federal-officials-sped-trans-mountain-review-after-phone-call-kinder>

Declaration of the United Nations Conference on the Human Environment, 5-16 June 1972, 11 I.L.K. 1416, online: United Nations Environmental Programme <http://www.un-documents.net/unchedec.htm>

Elizabeth Demarco et al*,* "Canadian Challenges in in Implementing the Kyoto Protocol: A Cause for Harmonization" (2004) 42 Atla L Rev 209

Shawn Denstedt & Sander Duncanson, "Expert Report on Environmental Assessment Gives Rise to More Uncertainty" (12 April 2017), online (pdf): <www.osler.com/en/resources/regulations/2017/expert-report-on-environmental-assessment-gives-ri>

John C Dernbach & Edward J Sonnenberg, "A Legislative History of Article I, Section 27 of the Constitution of the Commonwealth of Pennsylvania" (2015) 24:2 Widener LJ 181

John C Dernbach, James R May & Kenneth T Kristl, "*Robinson Township v Commonwealth of Pennsylvania:* Examination and Implications" (2015) 67 Rutgers L Rev 1169

Nathalie Des Rosiers, "Rights Are Not Enough: Therapeutic Jurisprudence Lessons for Law Reformers" (2015) 18:3 Touro L Rev 443

Dialogues on Sustainability, "Work in Progress", online: *Sustainable Canada Dialogues* <www.sustainablecanadadialogues.ca/en/scd/workinprogress>

Adam Dodek, "Amending the Constitution: The Real Question Before the Supreme Court", *Policy Options* (March/April 2014)

Meinhard Doelle, "Bill C-69: The Proposed New Federal Impact Assessment Act (IAA)" (9 February 2018), *Environmental Law News* (blog), online: <https://blogs.dal.ca/melaw/2018/02/09/bill-c-69-the-proposed-new-federal-impact-assessment-act/>

Meinhard Doelle, "CEAA 2012: The End of Federal EA as We Know It?" (2012) 24 J Envtl L & Prac 1

Meinhard Doelle, *From Hot Air to Action? Climate Change, Compliance and the Future of International Environmental Law* (Toronto: Carswell, 2005)

Meinhard Doelle, "Integration Among Global Environmental Regimes: Lessons Learned from Climate Change Mitigation" in Aldo Chircop et al, eds, *The Future of Regime-Building in the Law of the Sea: Essays in Tribute to Douglas M. Johnston* (Leiden: Martinus Nijhoff Publishers, 2009)

Meinhard Doelle, *The Federal Environmental Assessment Process: A Guide and Critique* (Markham, ON: LexisNexis, 2008)

Meinhard Doelle, "The Legacy of the Climate Talks in Copenhagen: Hopenhagen or Brokenhagen?" (2010) 4 Carbon & Climate Review 86; Daniel Bodansky, "The Copenhagen Climate Change Conference – A Postmortem" (2010) 104 Am J Intl L 230

Meinhard Doelle, "The Paris Agreement: Historic Breakthrough or High Stakes Experiment?" (2016) 6:1-2 Climate Law 1

Simon Donner, "Statement on greenhouse gas emissions associated with Trans Mountain Pipeline expansion", (17 August 2016), *Maribo* (blog), online: <http://blogs.ubc.ca/maribo/2016/08/17/statement-on-greenhouse-gas-emissions-associated-with-the-trans-mountain-pipeline-expansion/>

"Don't bypass Brazil's environmental protections", Editorial, (2016) 539 Nature 139

Holly Doremus, "Adapting to Climate Change with Law That Bends Without Breaking" (2010) 2 San Diego J Climate & Energy L 45

Michael C Dorf & Charles F Sabel, "A Constitution of Democratic Experimentalism" (1998) 98 Colum L Rev 267

Christian Downie, *Business Battles in the US Energy Sector: Lessons for a Clean Energy Transition* (New York: Routledge, 2019)

Lee Drutman, *The Business of America is Lobbying: How Corporations Became Politicized and Politics Became More Corporate* (New York: Oxford University Press, 2015)

"Dying to defend the planet: Why Latin America is the deadliest place for environmentalists", *The Economist* (11 February 2017), online: <http://www.economist.com/news/americas/21716687-commodities-technology-and-bad-policing-why-latin-america-deadliest-place>

Editorial Cartoon, *National Post,* 19 June 2019. Courtesy of Gary Clement and the National Post, a division of Postmedia Network Inc

Brian T Edwards, "Moving Target: Is 'Homeland' Still Racist?", *Los Angeles Review of Books* (31 March 2017), online: <https://lareviewofbooks.org/article/moving-target-is-homeland-still-racist/>

EKOS Research Associates, "Canadian Attitudes toward Energy and Pipelines: Survey Findings" (1 March 2016), online: <www.ekospolitics.com/wp-content/uploads/full_report-march_17_2016.pdf>

"El Salvador's Historic Mining Ban", Editorial, *The New York Times* (1 April 2017), online: <https://www.nytimes.com/2017/04/01/opinion/sunday/el-salvadors-historic-mining-ban.html>

Stewart Elgie, "Kyoto, the Constitution and Carbon Trading: Waking a Sleeping BNA Bear (or Two)" (2007) 13 Rev Const Stud 67

Stewart Elgie & Nathalie Chalifour, "Saskatchewan's highest court ruled in favour of carbon pricing – and it wasn't really close on key issues", *The Globe and Mail* (17 May 2019), online: <https://www.theglobeandmail.com/opinion/article-saskatchewans-highest-court-ruled-in-favour-of-carbon-pricing-and/>

Marc Eliesen, "National Energy Board is a Captured Regulator in Urgent Need of Overhaul", *The Narwhal* (9 September 2016), online: <thenarwhal.ca/national-energy-board-captured-regulator-urgent-need-overhaul>

Friedrich Engels, "The Bakuninists at Work" in Karl Marx & Friedrich Engels, eds, *Revolution in Spain* (London, UK: Lawrence & Wishart, 1939 (originally published in *Der Volkstaat*, 31 October and 5 November 1873)

Environment and Climate Change Canada, "Canadian Environmental Sustainability Indicators: Greenhouse gas emissions" (2020), online: <https://www.canada.ca/en/environment-climate-change/services/environmental-indicators/greenhouse-gas-emissions.html>

Environment and Climate Change Canada, "Canadian Environmental Sustainability Indicators: Progress Towards Canada's Greenhouse Gas Emissions Reduction Target" (Ottawa: Government of Canada, 2017), online: <www.ec.gc.ca/indicateurs-indicators/default.asp?lang=en&n=CCED3397-1>

Environment and Climate Change Canada, News Release, "Government of Canada Announces Pan-Canadian Pricing on Carbon Pollution" (3 October 2016), online: < www.canada.ca/en/environment-climate-change/news/2016/10/government-canada-announces-canadian-pricing-carbon-pollution.htmlMacLean FINAL Dissertation document (8 November 2020).docx>

Environment and Climate Change Canada, *Pan-Canadian Framework on Clean Growth and Climate Change: Canada's Plan to Address Climate Change and Grow the Economy* (Gatineau: Environment and Climate Change Canada, 2016), online (pdf): *Government of Canada* <publications.gc.ca/collections/collection_2017/eccc/En4-294-2016-end.pdf>

Environment and Climate Change Canada, "Progress towards Canada's greenhouse gas emissions reduction target" (January 2019)

Environment and Climate Change Canada, "Technical Paper on Federal Carbon Pricing Backstop" (18 May 2017), online: *Government of Canada* <https://www.canada.ca/en/services/environment/weather/climatechange/technical-paper-federal-carbon-pricing-backstop.html>

Environment and Climate Change Canada, "Trans Mountain Pipeline ULC – Trans Mountain Expansion Project: Review of Related Upstream Greenhouse Gas Emissions Estimates" (Ottawa, ON: May 19, 2016)

Environment and Climate Change Canada, *Working Group on Carbon Pricing Mechanisms: Final Report* (Gatineau, QC: ECCC, 2016), online: <http://publications.gc.ca/pub?id=9.822040&sl=0>

Environment Canada, *Canada's Emissions Trends* (Ottawa, October 2013), online: <http://www.ec.gc.ca/ges-ghg/985F05FB-47444269-8C1A-D443F8A86814/1001-Canada's%20Emissions%20Trends%202013_e.pdf>

Environmental Defence & Stand.Earth, "Canada's Oil & Gas Challenge: A Summary Analysis of Rising Oil and Gas Industry Emissions in Canada and Progress Towards Meeting Climate Targets" (2018), online: (pdf) <https://www.stand.earth/sites/default/files/Canadas_Oil%2BGas_Challenge.pdf>

Environmental Defence Canada, *The Single Biggest Barrier to Climate Action in Canada: The Oil and Gas Lobby* (2019), online: <https://environmentaldefence.ca/report/oil_barrier_climate_action_canada/>

"Environmental protection: Revenge of the polluters", *The Economist* (23 February 2017), online: <http://www.economist.com/news/united-states/21717376-environmental-protections-will-not-be-undone-overnight-scourge-epa-takes-over?zid=313&ah=fe2aac0b11adef572d67aed9273b6e55>

Ėquiterre et al, "Clock is Ticking: A Mid-Term Report Card on the Federal Government and its Work on the Environment" (May 2018), online (pdf): <https://equiterre.org/sites/fichiers/gvt_midterm_report_eng.pdf>

Peter Erickson et al, "Why fossil fuel producer subsidies matter" (2020) 578 Nature E1

Daniel C Esty, "Bottom-Up Climate Fix", *The New York Times,* (21 September 2014), online: <http://www.nytimes.com/2014/09/22/opinion/bottom-up-climate-fix.html?_r=0>

Expert Panel for the Review of Environmental Assessment Processes, *Building Common Ground: A New Vision for Impact Assessment in Canada* (Ottawa, ON: Canadian Environmental Assessment Agency, 2017) (pdf) online: <https://www.canada.ca/content/dam/themes/environment/conservation/environmental-reviews/building-common-ground/building-common-ground.pdf>

Expert Panel on the Modernization of the National Energy Board, "Forward Together: Enabling Canada's Clean, Safe, and Secure Energy Future: Report of the Expert Panel on the Modernization of the National Energy Board" (15 May 2017), online (pdf): <https://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/pdf/NEB-Modernization-Report-EN-WebReady.pdf>

Nicholas Fandos, "Climate March Draws Thousands of Protesters Alarmed by Trump's Environmental Agenda", *The New York Times* (29 April 2017), online: <https://www.nytimes.com/2017/04/29/us/politics/peoples-climate-march-trump.html>

Cynthia Farnia et al, "Democratic Deliberation in the Wild: The McGill Online Design Studio and the RegulationRoom Project" (2014) 41 Fordham Urb LJ 1527

Lucas Ferrante & Philip M Fearnside, "Brazil's new president and 'ruralists' threaten Amazonia's environment, traditional peoples and the global climate" (2019) 46:4 Environmental Conservation 261

Christiana Figueres et al, "Three years to safeguard our climate" (2017) 546 Nature 593

Elizabeth Fischer, "Environmental Law as 'Hot' Law" (2013) 25:3 Journal of Environmental Law 347

James Fitz-Morris, "Justin Trudeau tells Paris climate summit Canada ready to do more", *CBC News* (30 November 2015), online: <http://www.cbc.ca/news/politics/trudeau-address-climate-change-paris-1.3343394>

PJ Fitzpatrick & A John Sinclair, "Multi-jurisdictional environmental assessment" in KS Hanna, ed, *Environmental Impact Assessment: Practice and Participation*, 3rd ed (Toronto: Oxford University Press, 2016)

Carlos Flick, "The Movement for Smoke Abatement on 19th Century Britain" (1980) 21:1 Technology and Culture 29

Henry Fountain, "Global Temperatures Are on a Course for Another Record This Year", *The New York Times* (19 July 2016), online: <http://www.nytimes.com/2016/07/20/science/nasa-global-temperatures-2016.html>

Henry Fountain, "How Hot Was It in July? Hotter than Ever", *The New York Times* (22 August 2016), online: <http://www.nytimes.com/2016/08/23/science/how-hot-was-it-in-july-hotter-than-ever.html?_r=0>

Todd C Frankel & Peter Whoriskey, "Tossed Aside in the 'White Gold' Rush: Indigenous people are left poor as tech world takes lithium from under their feet", *Washington Post* (19 December 2016), online: <https://www.washingtonpost.com/graphics/business/batteries/tossed-aside-in-the-lithium-rush/>

Fabiana Frayssinet, "It Takes More than Two to Tango – or to Clean up Argentina's Riachuelo River", *Inter Press Service* (13 August 2014), online: <http://www.ipsnews.net/2014/08/it-takes-more-than-two-to-tango-or-to-clean-up-argentinas-riachuelo-river/>

Gabriel Friedman & Geoffrey Morgan, "Bill C-69 fuels battle", *Financial Post* (16 February 2019)

Thomas L Friedman, "Paris Climate Accord is a Big, Big Deal", *The New York Times* (16 December 2015), online:< http://www.nytimes.com/2015/12/16/opinion/paris-climate-accord-is-a-big-big-deal.html>

"From Sunny Ways to Midterm Blues? Two years after Trudeau majority, Liberals and CPC in dead heat", Angus Reid Institute (13 October 2017, online: <angusreid.org/trudeau-midterm/>

Andrew Gage, "BC's Climate Plan shows why real leadership requires accountability", West Coast Environmental Law Clinic (31 August 2016), online: <http://wcel.org/resources/environmental-law-alert/bc-climate-plan-shows-why-real-leadership-requires-accountabilit>

Jean Galbraith, "Two Faces of Foreign Affairs Federalism and What They Mean for Climate Change Mitigation" (2018) 112 AJIL Unbound 274

Gloria Galloway, "Canada Lags in Conservation Efforts", *The Globe and Mail* (24 July 2017), online: <www.theglobeandmail.com/news/politics/canada-lagging-behind-on-commitment-to-protect-lands-and-fresh-water-reportsays/article35779173/>

Oliver Geden, "Climate Advisers Must Maintain Integrity" (2015) 521 Nature 27

Oliver Geden, "The Paris Agreement and the Inherent Inconsistency of Climate Policymaking" (2016) 7 Wiley Interdisciplinary Rev Climate Change 790

David George-Cosh, "Morneau vows Trans Mountain 'will be built' despite court ruling", *BNN Bloomberg* (30 August 2018), online: <https://www.bnnbloomberg.ca/morneau-says-trans-mountain-will-be-built-despite-court-ruling-1.1131151>

Heather K Gerken, "A New Progressive Federalism" (2012) 24 Democracy Journal 37, online: <https://democracyjournal.org/magazine/24/a-new-progressive-federalism>

Heather K Gerken, "Federalism as the New Nationalism: An Overview" (2014) 123 Yale LJ 1889

Heather K Gerken, "The Loyal Opposition: Why Our Federalism is Not Your Father's Federalism" (Opening Keynote Address of the 2013 Doctoral Scholarship Conference delivered at the Yale Law School, 23 December 2013), (2014) 123 Yale LJ 1958

Heather K Gerken, “The Supreme Court 2009 Term—Foreword: Federalism All the Way Down” (2010) 124 Harv L Rev 4

Michael B Gerrard, “Legal Pathways for a Massive Increase in Utility-Scale Renewable Generation Capacity” (2017) 47 Environmental L Reporter 10591

Robert B Gibson, Meinhard Doelle & A John Sinclair, “Fulfilling the Promise: Basic Components of Next Generation Environmental Assessment” (2016) 29 J Envtl L & Prac 257

Robert B Gibson, “In full retreat: the Canadian government’s new environmental assessment law undoes decades of progress” (2012) 30:3 Impact Assessment and Project Appraisal 179

Robert B Gibson, “Opportunities: Finding best openings for influential applications” in Robert B Gibson, ed, *Sustainability Assessment: Applications and Opportunities* (New York: Routledge, 2017)

Emma Gilchrist, “Trudeau Just Broke His Promise to Canada’s First Nations”, *Desmog.ca* (29 July 2016), online: <http://www.desmog.ca/2016/07/29/trudeau-just-broke-his-promise-canada-s-first-nations>

Emma Gilchrist, “Trudeau’s New Pipeline Talking Point – Straight From the Oil Industry”, *Desmog Canada* (21 December 2016), online: <https://www.desmog.ca/2016/12/21/trudeau-s-new-pipeline-talking-point-straight-oil-industry>

Emma Gilchrist, “Welcome to the Narwhal” (14 May 2018), online: *The Narwhal* <thenarwhal.ca/welcome-to-the-narwhal/>

Martin Gilens & Benjamin I Page, “Testing Theories of American Politics: Elites, Interest Groups, and Average Citizens” (2014) 12:3 Perspectives on Politics 564

Justin Gillis, “A Parable From Down Under for U.S. Climate Scientists”, *The New York Times* (8 May 2017), online: <https://www.nytimes.com/2017/05/08/climate/a-parable-from-down-under-for-us-climate-scientists.html>

Damien Gillis, “Justin Trudeau’s Two-Faced Climate Game”, *The New York Times* (2 May 2018), online: <www.nytimes.com/2018/05/02/opinion/trudeau-climate-kinder-morgan-pipeline.html>

Justin Giovannetti, “Federal carbon tax violates Canada’s founding principles, Saskatchewan’s lawyers argue”, *The Globe and Mail* (13 February 2019), online:

<https://www.theglobeandmail.com/canada/article-federal-carbon-tax-violates-canadas-founding-principles-saskatchewan/>

Justin Giovannetti, "Federal lawyers say provinces aren't able to manage greenhouse gas levels alone", *The Globe and Mail* (14 February 2019), online: <https://www.theglobeandmail.com/canada/article-lawyers-say-provinces-arent-able-to-manage-greenhouse-gas-levels/>

Global Witness, "On Dangerous Ground" (20 June 2016), online: <https://www.globalwitness.org/en/campaigns/environmental-activists/dangerous-ground/>

"Globe editorial: Alberta's disastrous oil price discount? Blame Canada", *The Globe and Mail* (23 November 2018), online: <https://www.theglobeandmail.com/opinion/editorials/article-globe-editorial-albertas-disastrous-oil-price-discount-blame-canada/>

"Globe editorial: Ottawa changes its mind on UNDRIP, but it is taking a risk", Editorial, *The Globe and Mail* (25 April 2017), online: <http://www.theglobeandmail.com/opinion/editorials/ottawa-changes-its-mind-on-undrip-but-it-is-taking-a-risk/article34815894/>

Globe editorial, "Trans Mountain is now an economic and constitutional disaster", *The Globe and Mail* (8 April 2018), online: <https://www.theglobeandmail.com/opinion/editorials/article-globe-editorial-bc-governments-pipeline-hypocrisy-could-come-back/>

Globe editorial, "Trudeau must stand up to B.C.'s crude tactics", *The Globe and Mail* (1 February 2018), online: <https://www.theglobeandmail.com/opinion/editorials/globe-editorial-trudeau-must-stand-up-to-bcs-crude-tactics/article37825229/>

Kate Glover, "Complexity and the Amending Formula" (2015) 24:2 Constitutional Forum 9; see also Jamie Cameron, "Legality, Legitimacy and Constitutional Amendment in Canada" (2016) Osgoode Legal Studies Research Paper Series No. 71/2016

Matthew H Goldberg et al, "Oil and gas companies invest in legislators that vote against the environment" (2020) 117:10 Proc Natl Acad Sci 5111

Mark Gollum, "Trudeau pledges 'real change' as Liberals leap ahead to majority government", *CBC News* (19 October 2015), online: <http://www.cbc.ca/news/politics/canada-election-2015-voting-results-polls-1.3278537>

Jeff Goodell, "The World's Most Insane Energy Project Moves Ahead", *Rolling Stone* (14 June 2019), online: <https://www.rollingstone.com/politics/politics-news/adani-mine-australia-climate-change-848315/>

Megan Gorrey, "NSW councils urge reforms to 'challenging' national environmental laws", *The Sydney Morning Herald* (9 June 2020), online: <https://www.smh.com.au/national/nsw/nsw-councils-urge-reforms-to-challenging-national-environment-laws-20200607-p550c2.html>

Government of Canada, "A Climate Change Plan for the Purposes of the Kyoto Protocol Implementation Act 2012: Canada's Withdrawal from the Kyoto Protocol", (5 December 2011), online: <https://www.ec.gc.ca/Publications/default.asp?lang=En&n=EE4F06AE-1&xml=EE4F06AE-13EF-453B-B633-FCB3BAECEB4F&offset=3&toc=hide>

Government of Canada, "About methane emissions" (no date), online: <https://www.canada.ca/en/environment-climate-change/services/climate-change/global-methane-initiative/about-methane-emissions.html>

Government of Canada, "Backgrounder: Interim Measures for Pipeline Reviews" (27 January 2016), online: <http://news.gc.ca/web/article-en.do?nid=1029989>

Government of Canada, "Backgrounder: Review of Environmental Assessment Processes" (20 June 2016), online: <http://news.gc.ca/web/article-en.do?nid=1088149>

Government of Canada, "Basics of Environmental Assessment" (5 June 2017), online: <https://www.canada.ca/en/environmental-assessment-agency/services/environmental-assessments/basics-environmental-assessment.html>

Government of Canada, *Canada's Action Plan on Open Government,* (last modified on 9 September 2016), online: <http://data.gc.ca/eng/canadas-action-plan-open-government>

Government of Canada, "Canada's approach to climate change", online: <http://letstalkclimateaction.ca/canada-s-approach-to-climate-change>

Government of Canada, "Canada's Changing Climate Report – Executive Summary" (2019)

Government of Canada, "Canada's Mid-Century Long-Term Low-Greenhouse Gas Development Strategy" (19 November 2016), online: <https://www.canada.ca/en/environment-climate-change/news/2016/11/canada-submits-century-strategy-clean-growth-economy.html?=undefined&>

Government of Canada, "Canada's official greenhouse gas inventory" (15 April 2020), online: <https://www.canada.ca/en/environment-climate-change/services/climate-change/greenhouse-gas-emissions/inventory.html>

Government of Canada, "Energy and the economy" (26 May 2020), online: <https://www.nrcan.gc.ca/science-data/data-analysis/energy-data-analysis/energy-and-economy/20062>

Government of Canada, *Environmental and Regulatory Reviews: Discussion Pape*r (June 2017), online: <https://www.canada.ca/content/dam/themes/environment/conservation/environmental-reviews/share-your-views/proposed-approach/discussion-paper-june-2017-eng.pdf>

Government of Canada, *Equality + Growth – A Strong Middle Class* (27 February 2018), online (pdf): www.budget.gc.ca/2018/docs/plan/budget-2018-en.pdf

Government of Canada, "Let's Talk Climate Action", online: <http://letstalkclimateaction.ca/index.php?lang=en>

Government of Canada, "Making Real Change Happen: Speech from the Throne to Open the First Session of the Forty-second Parliament of Canada" online (4 December 2015): <http://speech.gc.ca/en/content/making-real-change-happen>

Government of Canada, "Ministerial Regulatory Proposal related to Offshore Exploratory Drilling East of Newfoundland and Labrador – Comment Period on Discussion Paper" (4 March 2020), online: <https://www.canada.ca/en/impact-assessment-agency/news/2020/03/ministerial-regulatory-proposal-related-to-offshore-exploratory-drilling-east-of-newfoundland-and-labrador-mdash-comment-period-on-discussion-paper.html.>

Government of Canada, "News Release: Government of Canada Announces Pan-Canadian Pricing on Carbon Pollution", (3 October 2016), online: <http://news.gc.ca/web/article-en.do?nid=1132149>

Government of Canada, "News Release: Let's Talk TV: CRTC sets out a roadmap to maximize choice and affordability for Canadian TV viewers" (19 March 2015), online: <http://news.gc.ca/web/article-en.do?nid=952659>

Government of Canada, "News Release: The Government of Canada Approves Pacific Northwest LNG Project" (27 September 2016), online: <http://news.gc.ca/web/article-en.do?nid=1130489>

Government of Canada, "Pan-Canadian Approach to Pricing Carbon Pollution" (3 October 2016), online: <https://www.canada.ca/en/environment-climate-change/news/2016/10/canadian-approach-pricing-carbon-pollution.html>

Government of Canada, "Pan-Canadian Framework on Clean Growth and Climate Change: Canada's Plan to Address Climate Change and Grow the Economy" (9 December 2016), online: <https://www.canada.ca/en/services/environment/weather/climatechange/pan-canadian-framework.html>

Government of Canada, *Planning for a Sustainable Future: A Federal Sustainable Development Strategy for Canada 2010-2013* (Ottawa: Sustainable Development Office, Environment Canada, 2013)

Government of Canada, "Supplemental benchmark guidance" (20 December 2017), online: *Government of Canada* <https://www.canada.ca/en/services/environment/weather/climatechange/pan-canadian-framework/guidance-carbon-pollution-pricing-benchmark/supplemental-benchmark-guidance.html>

Government of Canada, "Technical paper: federal carbon pricing backstop" (9 June 2017), online: <https://www.canada.ca/en/services/environment/weather/climatechange/technical-paper-federal-carbon-pricing-backstop.html>

Government of Canada, "The Government's decision" (18 June 2019), online: <https://www.canada.ca/en/campaign/trans-mountain/the-decision.html>

Government of Canada, "Working Group on Carbon Pricing Mechanisms: Final Report" (2016)

Government of Manitoba, "News Release: Province Releases Expert Legal Opinion on Carbon Pricing" (11 October 2017), online: <http://news.gov.mb.ca/news/index.html?item=42320>

Government of Manitoba, "Province Releases Expert Legal Opinion on Carbon Pricing" (11 October 2017), online: <http://news.gov.mb.ca/news/index.html?item=42320>

Sari Graben & Eric Biber, "Presidents, Parliaments, and Legal Change: Quantifying the Effects of Political Systems in Comparative Environmental Law" (2017) 35 Virginia Environmental Law Journal 357

Emma Graney, “Alberta Energy regulator suspends environmental monitoring requirements for oil and gas companies”, *The Globe and Mail* (22 May 2020), online: <https://www.theglobeandmail.com/business/article-alberta-energy-regulator-temporarily-suspends-environmental/>

Emma Graney, “Canada called out for slow move to sustainable energy: Report by World Economic Forum follows a sharp rebuke by the world’s largest wealth fund”, *The Globe and Mail* (14 May 2020), online: <https://www.theglobeandmail.com/business/article-world-economic-forum-calls-out-canada-for-slow-move-to-sustainable/>

Emma Graney, “OECD and IEA call for an end to fossil fuel sector subsidies”, *The Globe and Mail* (6 June 2020), online: https://www.theglobeandmail.com/business/article-oecd-and-iea-call-for-an-end-to-fossil-fuel-industry-subsidies/> [Graney, OECD and IEA call for end of subsidies”]

Emma Graney, “Oil patch pushes Ottawa for tax breaks on capital investments”, *The Globe and Mail* (5 June 2020), online: <https://www.theglobeandmail.com/business/article-canadian-association-of-petroleum-producers-pushes-ottawa-for-tax/>

Pierre Gratton, “Bill C-69: a step forward for Canada’s mining sector”, *The Globe and Mail* (16 September 2018), online: <https://www.theglobeandmail.com/business/commentary/article-bill-c-69-a-step-forward-for-canadas-mining-sector/>

“Graveyard of the pipelines”, *The Economist* (6 July 2017), online: <https://www.economist.com/news/americas/21724840-new-leftist-coalition-may-delay-construction-controversial-pipeline-turmoil-british>

Stephanie J Green et al, “Oil sands and the marine environment: current knowledge and future challenges” (2017) 15:2 Front Ecol Environ 74

“Green Texas: A renewable-energy boom is changing the face of an oil-producing state”, *The Economist* (14 march 2020), online: <https://www.economist.com/united-states/2020/03/14/a-renewable-energy-boom-is-changing-the-politics-of-global-warming>

Jessica F Green, “Why We Need a More Activist Academy” (15 July 2018), online: *The Chronicle of Higher Education* <www.chronicle.com/article/Why-We-Need-a-More-Activist/243924>

Éric Grenier, “Canadians are worried about climate change, but many don’t want to pay taxes to fight it: Poll”, *CBC News* (18 June 2019), online: <https://www.cbc.ca/news/politics/election-poll-climate-change-1.5178514>

Eliza Griswold, “The Fracturing of Pennsylvania”, *The New York Times* (17 November 2011), online: <http://www.nytimes.com/2011/11/20/magazine/fracking-amwell-township.html>

Jorge Guardiola & Fernando García-Quero, “Nature & *Buen Vivir* in Ecuador: The battle between conservation and extraction” (2014) 1:1 Alternautas 100

Daniel Gutman, “Argentina’s Never-ending Environmental Disaster”, *Inter Press Service* (11 February 2017), online: <http://www.ipsnews.net/2017/02/argentinas-never-ending-environmental-disaster/>

Donald Gutstein, *The Big Stall: How Big Oil and Think Tanks Are Blocking Action on Climate Change in Canada* (Toronto: James Lorimer & Company, 2018)

H Res 109 – Recognizing the duty of the Federal Government to create a Green New Deal, 116th Congress (2019-2020), online: <https://www.congress.gov/bill/116th-congress/house-resolution/109/text>

Jacob S Hacker & Paul Pierson, *Winner-Take-All Politics: How Washington Made the Rich Richer – and Turned its Back on the Middle Class* (New York: Simon & Schuster, 2011)

Heide Hackmann, Susanne C Moser & Asuncion Lera St Clair, “The social heart of global environmental change” (2014) 4 Nat Clim Change 653

Thomas Hale, “‘All Hands on Deck’: The Paris Agreement and Nonstate Climate Action” (2016) 16:3 Global Environmental Politics 12

Brendan Haley, “From Staples Trap to Carbon Trap: Canada’s Peculiar Form of Carbon Lock-In” (2011) 88:1 Studies in Political Economy 97

James E Hansen et al, “Target atmospheric CO_2: Where should humanity aim?” (2008) 2 Open Atmos Sci J 217

James Hansen et al, “Ice melt, sea level rise and superstorms: evidence from paleoclimate data, climate modeling, and modern observations that 2 °C global warming could be dangerous” (2016) 16 Atmospheric Chemistry & Physics 3761

James Hansen et al, “Young people’s burden: requirement of negative CO_2 emissions” (2017) 8 Earth System Dynamics 577

Kathleen Harris, “Canada failing to meet its 2020 emissions targets”, *CBC News* (24 October 2013), online: <http://www.cbc.ca/news/politics/canada-failing-to-meet-2020-emissions-targets-1.2223930>

Kathleen Harris, “Justin Trudeau won’t rule out imposing carbon price plan on provinces”, *CBC News* (20 July 2016), online: <http://www.cbc.ca/news/politics/trudeau-carbon-tax-provinces-1.3686769>

Kathryn Harrison, “The Road Not Taken: Climate Change Policy in Canada and the United States” (2007) 7:4 Global Environmental Politics 92

Kathryn Harrison, *Passing the Buck: Federalism and Canadian Environmental Policy* (Vancouver: UBC Press, 1996)

Fiona Harvey, “Paris Climate Change Agreement: The World’s Greatest Diplomatic Success”, *The Guardian* (14 December 2015), online: <http://www.theguardian.com/environment/2015/dec/13/paris-climate-deal-cop-diplomacy-developing-united-nations>

Amanda Harvey-Sanchez, “Opinion: Trudeau could lose millennials (and the 2019 election) if he approves a pipeline”, *National Observer* (21 October 2016), online: <http://www.nationalobserver.com/2016/10/21/opinion/opinion-trudeau-could-lose-millennials-and-2019-election-if-he-approves-pipeline>

Dan Healing, “‘This is very much a crisis’: Prime Minister Justin Trudeau says of low Alberta oil price”, *Global News* (22 November 2018), online: <https://globalnews.ca/news/4688063/trudeau-calgary-chamber-of-commerce-address/>

Markus Hecker & Jackie Dawson, “Canada’s Paris-pipeline paradox”, *The Conversation* (4 June 2018), online: <https://theconversation.com/canadas-paris-pipeline-paradox-97636>

Benjamin J Henley et al, “Amplification of risks of water supply at 1.5 ºC and 2 ºC in drying climates: a case study of Melbourne, Australia” (2019) 14 Environ Res Lett, https://doi.org/10.1088/1748-9326/ab26ef

Jamie Henn, “Our Greener, Climate-Friendly Future Is Going to Be Amazing – It’s Our Job to Tell That Story”, *Common Dreams* (15 May 2020), online: <https://www.commondreams.org/views/2020/05/15/our-greener-climate-friendly-future-going-be-amazing-its-our-job-tell-story>

Alexander Hertel-Fernandez, *How Conservative Activists, Big Businesses, and Wealthy Donors Reshaped the American States – and the Nation* (New York: Oxford University Press, 2019)

Alexander Hertel-Fernandez, Matto Mildenberger & Leah C Stokes, "Legislative Staff and Representation in Congress" (2019) 113:1 American Political Science Review 1

Melody Hessing, Michael Howlett & Tracy Summerville, eds, *Canadian Natural Resource and Environmental Policy: Political Economy and Public Policy* 2nd ed (Vancouver, BC: UBC Press, 2005)

Ella Hickson, *Oil* (London: Nick Hern Books, 2016)

Ran Hirschl, *Towards Juristocracy: The Origins and Consequences of the New Constitutionalism* (Cambridge, MA: Harvard University Press, 2004)

George Hoberg, "Environmental Policy: Alternative Styles" in Michael Atkinson, ed, *Governing Canada: Institutions and Public Policy* (Toronto: Harcourt Brace Javanovich, 1993)

Peter W Hogg, "Constitutional Authority Over Greenhouse Gas Emissions" (2009) 46 Atla L Rev 207

Peter W Hogg, *Constitutional Law of Canada* (Toronto: Carswell, 2015)

Peter Hogg, *Constitutional Law of Canada,* loose-leaf (2006-Rel 1) 5th ed (Toronto: Carswell, 2007)

Peter W Hogg, "A Question of Parliamentary Power: Criminal Law and the Control of Greenhouse Gas Emissions" (2008), online: C.D. Howe Institute <https://www.cdhowe.org/question-parliamentary-power-criminal-law-and-control-greenhouse-gas-emissions>

Anthony R Holtzman et al, "Pennsylvania Supreme Court Issues Transformative Decision in Environmental Rights Amendment Case" (11 July 2017), K&L Gates *Legal Insight* (blog), online: <http://www.klgates.com/pennsylvania-supreme-court-issues-transformative-decision-in-environmental-rights-amendment-case-07-11-2017/>

Matthew J Hornsey et al, "Meta-analyses of the determinants and outcomes of belief in climate change" (2016) 6 Nat Clim Change 622

Solomon Hsiang et al, "Estimating economic damage from climate change in the United States" (2017) 356 Science 1362

Shi-Ling Hsu & Robin Elliot, "Regulating Greenhouse Gases in Canada: Constitutional and Policy Dimensions" (2009) 54 McGill LJ 463

Justine Hunter, "BC Liberals cut to minority with Greens holding balance of power", *The Globe and Mail* (10 May 2017), online: <http://www.theglobeandmail.com/news/british-columbia/bc-election-winner/article34942628/>

Justine Hunter, "Local resources, national impact", *The Globe and Mail* (7 May 2017), online: <http://www.theglobeandmail.com/news/british-columbia/after-next-weeks-election-bcs-approach-to-development-will-be-felt-across-thecountry/article34912438/>

Justine Hunter, "Now it's the BC NDP's turn to square the circle on LNG and greenhouse-gas emissions", *The Globe and Mail* (16 September 2018), online: <https://www.theglobeandmail.com/canada/british-columbia/article-now-its-the-ndps-turn-to-square-the-circle-on-lng-and-greenhouse-gas/>

Allan Hutchinson, "Climate change: A constitutional puzzle", *The Globe and Mail* (27 April 2016), online: <http://www.theglobeandmail.com/opinion//climate-change-a-constitutional-puzzle/article29764807/>

Allan C Hutchinson, *The Companies We Keep: Corporate Governance for a Democratic Society* (Toronto, ON: Irwin Law, 2005)

International Energy Agency, "World Energy Outlook 2018: Executive Summary" (2018), online: <https://www.iea.org/weo2018/>

International Institute for Sustainable Development, "Costs of Pollution in Canada: Measuring the impacts on families, businesses and governments" (June 2017), online: <http://www.iisd.org/library/cost-pollution-canada>

International Institute for Sustainable Development, Global Subsidies Initiative, "Unpacking Canada's Fossil Fuel Subsidies: Their size, impacts, and what should happen next" (2016), online: <http://www.iisd.org/faq/ffs/canada/>

"Is the *Greenhouse Gas Pollution Pricing Act,* Part 5 of the *Budget Implementation Act, 2018, No. 1,* SC 2018, c. 12, unconstitutional in whole or in part?" (Province of Ontario, OIC 1014/2018).

Benjamin Israel et al, *The oilsands in a carbon-constrained Canada: The collision course between overall emissions and national climate commitments* (Calgary, AB: The Pembina Institute, 2020), online: <https://www.pembina.org/pub/oilsands-carbon-constrained-canada>

John Ivison, “Liberals’ carbon pricing along with pipeline approval a winner with voters, poll suggests”, *National Post* (18 October 2016), online: <http://news.nationalpost.com/full-comment/john-ivison-liberals-strategy-of-pipeline-approval-with-carbon-pricing-a-winner-with-voters-poll-suggests>

John Ivison, “Trudeau convinced that pipeline strategy must be top priority”, *National Post* (11 April 2016), online: <http://news.nationalpost.com/full-comment/john-ivison-trudeau-convinced-that-pipeline-strategy-must-be-top-priority>

Mark Jaccard, “B.C.’s climate plan reaches Olympian heights of political cynicism”, *The Globe and Mail* (21 August 2016), online: <http://www.theglobeandmail.com/opinion/bcs-climate-plan-reaches-olympian-heights-of-political-cynicism/article31464244/>

Mark Jaccard, Mikela Hein & Tiffany Vass, “Is Win-Win Possible? Canada’s Government Achieve Its Paris Commitment … and Get Re-Elected?” (20 September 2016) School of Resource and Environmental Management, Simon Fraser University, online (pdf): <http://rem-main.rem.sfu.ca/papers/jaccard/Jaccard-Hein-Vass%20CdnClimatePol%20EMRG-REM-SFU%20Sep%2020%202016.pdf>

Mark Jaccard, “Penny wise and pound foolish on climate policy?”, *Policy Options* (11 October 2016), online: <http://policyoptions.irpp.org/magazines/october-2016/penny-wise-and-pound-foolish-on-climate-policy/>

Mark Jaccard, *The Citizen’s Guide to Climate Success: Overcoming Myths that Hinder Progress* (New York: Cambridge University Press, 2020)

Mark Jaccard, “Trudeau’s Orwellian Logic: We Reduce Emissions by Increasing Them”, *The Globe and Mail* (20 February 2018), online: <www.theglobeandmail.com/opinion/trudeaus-orwellian-logic-reduce-emissions-by-increasing-them/article38021585/>

Hannah Jackson, “National climate emergency declared by House of Commons”, *Global News* (18 June 2019), online: <https://globalnews.ca/news/5401586/canada-national-climate-emergency/>

Aerin L Jacob et al, “Cross-Sectoral Input for the Potential Role of Science in Canada’s Environmental Assessment” (2018) 3 FACETS 512

Brent Jang, “B.C.’s climate targets will be impossible to reach if LNG Canada project goes ahead, critics say”, *The Globe and Mail* (21 September 2018), online: <https://www.theglobeandmail.com/canada/british-columbia/article-bcs-climate-targets-will-be-impossible-to-reach-if-lng-canada/>

Brent Jang, "LNG Canada CEO vows to press ahead with gas project facing protests", *The Globe and Mail* (22 January 2019), online: <https://www.theglobeandmail.com/business/article-lng-canada-ceo-vows-to-press-ahead-with-gas-project-facing-protests/>

Gordon Jaremko, "Disaster Relief Now Means Healing Relations", *Edmonton Journal* (20 November 2006)

Cameron Jefferies, "Filling the Gaps in Canada's Climate Change Strategy: 'All Litigation, All the Time…?'" (2015) 38 Fordham Intl LJ 1371

Christopher R Jeffords, "An Economist's Musings on Constitutions and the Environment", online: (2013) 54 Alumni News, Department of Economics, Indiana University of Pennsylvania <http://www.theglobeandmail.com/opinion/editorials/ottawa-changes-its-mind-on-undrip-but-it-is-taking-a-risk/article34815894/>

Chris Jeffords & Joshua C Gellers, "Constitutionalizing Environmental Rights: A Practical Guide" (2017) Journal of Human Rights and Practice 1

Chris Jeffords & Lanse Minkler, "Do Constitutions Matter? The Effects of Constitutional Rights Provisions on Environmental Outcomes", University of Connecticut Department of Economics Working Paper Series, Working Paper 2014-16 (July 2014), online: <https://ideas.repec.org/p/uct/uconnp/2014-16.html>

Chris Jeffords, "Hydraulic Fracturing and the Constitutional Human Right to Water in Pennsylvania" (2014) 21:2 Pennsylvania Economic Review 1

Jesse D Jenkins & Valerie J Karplus, "Carbon pricing under binding political constraints" (2016) United Nations University WIDER Working Paper 2016/44, online: <https://www.wider.unu.edu/publication/carbon-pricing-under-binding-political-constraints>

Jesse D Jenkins, "Political Economy Constraints on Carbon Pricing Policies: What are the Implications for Economic Efficiency, Environmental Efficacy, and Climate Policy Design?" (2014) 69 Energy Policy 467

Matthew R Johnson et al, "Comparisons of Airborne Measurements and Inventory Estimates of Methane Emissions in the Alberta Upstream Oil and Gas Sector" (2017) 51:21 Environ Sci Technol 13008

Anna Johnston, "Imagining EA 2.0: Outcomes of the 2016 Federal Environmental Reform Summit" (2016) 30:1 J Envtl L & Prac

Joint Clean Climate Research Partnership (JCCTRP), online: <https://jcctrp.org/why-jcctrp/>

Jeffrey Jones, "Malaysia's Petronas scraps $11.4-billion LNG project in B.C.", *The Globe and Mail* (25 July 2017), online: <https://www.theglobeandmail.com/report-on-business/pacific-northwest-lng-megaproject-not-going-ahead/article35790713/>

Jeffrey Jones, "Oil sands megadeal gives boost to CNRL", *The Globe and Mail* (3 August 2017), online: <https://www.theglobeandmail.com/report-on-business/canadian-natural-resources-cuts-capital-expenditures-as-profit-tops-estimates/article35870832/>

Dan M Kahan & Katherine Carpenter, "Out of the lab and into the field" (2017) 7:4 Nat Clim Change 309

Robert G Kaiser, *So Much Damn Money: The Triumph of Lobbying and the Corrosion of American Government* (New York: Knopf, 2009)

Sam Kalen, "An Essay: An Aspirational Right to a Healthy Environment" (2016) 34 UCLA J Envtl L & Pol'y 156.

Ashifa Kassam, "Environmentalists 'expected better' of Trudeau as Canada backs natural gas projects", *The Guardian* (28 September 2016), online: <https://www.theguardian.com/world/2016/sep/28/canada-pacific-northwest-lng-natural-gas-pipeline-british-columbia>

Bonnie L Keeler et al, "Society is Ready for a New Kind of Science—Is Academia?" (2017) 67:7 BioScience 591

Keep Canada Working, "About Keep Canada Working", online: <keepcanadaworking.ca/about>

James Keller, "UCP's Kenney vows to take tougher stand on pipelines than Notley's NDP", *The Globe and Mail* (17 February 2019), online: <https://www.theglobeandmail.com/canada/alberta/article-kenney-vows-to-take-tougher-stand-on-pipelines-than-notleys-ndp/>

Paul Kellogg, *Escape from the Staple Trap: Canadian Political Economy after Left Nationalism* (Toronto: University of Toronto Press, 2015)

John Kemp, "Should OPEC worry about contango and backwardation?", *Reuters* (24 May 2017), online: <http://www.reuters.com/article/us-opec-oil-contango-kemp-idUSKBN18K2G3>

Steven Kennett, "Federal Environmental Jurisdiction After *Oldman*" (1992) 31 McGill LJ 180

Patrick W Keys et al, "Anthropocene risk" (2019) 2 Nature Sustainability 667

Martha-Marie Kleinhans & Roderick A Macdonald, "What is a *Critical* Legal Pluralism?" (1997) 12 Can J L & Soc 25

Christopher Knaus, "Mining firms worked to kill off climate action in Australia, says ex-PM", *The Guardian* (10 October 2019), online: <https://www.theguardian.com/environment/2019/oct/10/mining-firms-worked-kill-off-climate-action-australia-ex-pm-kevin-rudd>

Jamie Kneen, "Bill C-69: New Federal Environmental Review Laws Fall Short of Promises" (9 February 2018), *MiningWatch Canada* (blog), online: <http://www.miningwatch.ca/blog/2018/2/9/bill-c-69-new-federal-environmental-review-laws-fall-short-promises>

John H Knox, "The Myth and Reality of Transboundary Environmental Impact Assessment" (2002) 96:2 Am J Intl L 291

Martti Koskenniemi, "Imagining the Rule of Law: Rereading the Grotian 'Tradition'" (2019) 30:1 EJIL 17

Martti Koskenniemi, 'The Politics of International Law – 20 Years Later' (2009) 20:1 EJIL 7

Louis J Kotzé, "Rethinking global environmental law and governance in the Anthropocene" (2014) 32 Journal of Energy and Natural Resources Law 121

Teresa Kramarz, "Using the Courts to Protect the Environment in Argentina: Accountability Pitfalls When Judges Have the Last Word" (2018) 2:1 Case Studies in the Environment 1

Carol Kroeger, "Opinion: True prairie resilience needed to fight climate change", *Regina Leader Post* (20 June 2019), online: <https://leaderpost.com/opinion/columnists/prairie-resilience-plan-does-not-offer-enough-focus-on-reducing-ghg-emissions>

Paul Krugman, "Class, Oligarchy, and the Limits of Cynicism", *The New York Times* (21 April 2014), online: <krugman.blogs.nytimes.com/2014/04/21/class-oligarchy-and-the-limits-of-cynicism/>

Paul Krugman, “Politicians Don’t Need New Ideas”, *The New York Times* (2 May 2018), online: <www.nytimes.com/2018/05/02/opinion/politicians-dont-need-new-ideas.html>

Paul Krugman, “Wind, Sun and Fire”, *The New York Times* (1 February 2016), online: <http://mobile.nytimes.com/2016/02/01/opinion/wind-sun-and-fire.html>

Steve Lambert, “Manitoba files separate court challenge of federal carbon tax, seeks judicial review”, *The Globe and Mail* (24 April 2019), online: <https://www.theglobeandmail.com/canada/article-manitoba-files-separate-court-challenge-of-federal-carbon-tax-seeks/>

JR Lamontagne et al, “Robust abatement pathways to tolerable climate futures require immediate global action” (2019) 9:4 Nat Clim Change 290

Lancet Countdown, Canadian Medical Association, & Canadian Public Health Association, “Lancet Countdown 2018 Report: Briefing for Canada’s Policymakers” (November 2018), online (pdf): <http://www.lancetcountdown.org/media/1418/2018-lancet-countdown-policy-brief-canada.pdf>

Judith Lavoie, “Anxious Communities Still Without Answer on Fate of Site C Mega-dam After JPR Report Release” *Desmog.ca,* (8 May 2014), online: <http://www.desmog.ca/2014/05/08/communities-without-answer-fate-site-c-after-jrp-report>

Judith Lavoie, “Site C Not Subject to ‘Rigorous Scrutiny,’ Fails First Nations, Royal Society of Canada Warns Trudeau”, *Desmog.ca* (24 May 2016), quoting Professor Karen Bakker, Canada Research Chair in Water Governance at the University of British Columbia, online: <http://www.desmog.ca/2016/05/24/site-c-not-subject-rigorous-scrutiny-fails-first-nations-royal-society-canada-warns-trudeau>

Richard J Lazarus, “Congressional Descent: The Demise of Deliberative Democracy in Environmental Law” (2006) 94 Geo LJ 619

Richard J Lazarus, “Environmental Law at the Crossroads: Looking Back 25, Looking Forward 25” (2013) 2 Mich J Envtl & Admin L 267

Michael Lazarus, Peter Erickson & Kevin Tempest, “Supply-side climate policy: the road less taken” (2015) Stockholm Environment Institute Working Paper 2015-13

Richard J Lazarus, “Super Wicked Problems and Climate Change: Restraining the Present to Liberate the Future” (2009) 94:5 Cornell L Rev 1153

Richard J Lazarus, *The Making of Environmental Law* (Chicago: University of Chicago Press, 2004)

Richard J Lazarus, "The National Environmental Policy Act in the U.S. Supreme Court: A Reappraisal and a Peek Behind the Curtains" (2012) 100 Geo LJ 1507

Richard J Lazarus, *The Rule of Five: Making Climate History at the Supreme Court* (Cambridge, MA: Harvard University Press, 2020)

Andrew Leach, "Is Justin Trudeau a hypocrite on climate change?", *The Globe and Mail* (24 April 2017), online: <http://www.theglobeandmail.com/report-on-business/rob-commentary/is-justin-trudeau-a-hypocrite-on-climate-change/article34797080/>

Andrew Leach, "The challenges ahead for Liberals' carbon plan", *The Globe and Mail* (3 October 2016), online: <http://www.theglobeandmail.com/opinion/the-challenges-ahead-for-liberals-carbon-plan/article32266670/>

Daniel Leblanc, "Quebec hopping mad over federal intervention to protect frog habitat", *The Globe and Mail* (22 June 2016), online: <http://www.theglobeandmail.com/news/politics/quebec-slams-ottawa-for-unilateral-action-to-protect-frog-habitat/article30565269/>

Jean LeClair, "The Elusive Quest for the Quintessential National Interest" (2005) 38:2 UBC L Rev 353

Bruce Ledewitz, "Establishing a Federal Constitutional Right to a Healthy Environment in Us and in Our Posterity" (1998) 68 Miss LJ 565

John Lee, "The Underlying Legal Theory to Support a Well-Defined Human Right to a Healthy Environment as a Principle of Customary International Law" (2000) 25 Colum J Envtl L 283

Lawrence Lessig, *Republic, Lost: How Money Corrupts Congress – and a Plan to Stop It* (New York: Twelve, 2011); Zephyr Teachout, *Corruption in America: From Benjamin Franklin's Snuff Box to Citizens United* (Cambridge, MA: Harvard University Press, 2014)

Lawrence Lessig, *The USA is Lesterland* (CC-BY-NC (4.0), 2013)

Kelly Levin et al, "Overcoming the tragedy of super wicked problems: constraining our future selves to ameliorate global climate change" (2012) 45 Policy Sci 123

Liberal Party of Canada, "A New Plan for Canada's Environment and Economy" (August 2015), online: <https://www.libera.ca/files/2015/08/A-new-plan-for-Canadas-environment-and-economy.pdf>

Liberal Party of Canada, *Real Change,* "A New Nation-To-Nation Process", online: <https://www.liberal.ca/realchange/a-new-nation-to-nation-process/>

Liberal Party of Canada, *Real Change*, "Climate Change", online: <https://www.liberal.ca/realchange/climate-change/>

Liberal Party of Canada, *Real Change,* "Environmental Assessments", online: <https://www.liberal.ca/realchange/environmental-assessments/>

John Liggio et al, "Measured Canadian oil sands $C0_2$ emissions are higher than estimates made using internationally recommended methods" (2019) Nature Communications 10:1863, https://doi.org/10:1038/s41467-019-09714-9

Bruce Lindsay, "Climate of Exception: What Might a 'Climate Emergency' Mean in Law?" (2010) 38:2 Federal L Rev 255

Brink Lindsey & Steven M Teles, *The Captured Economy: How the Powerful Enrich Themselves, Slow Down Growth, and Increase Inequality* (New York: Oxford University Press, 2017).

Carol Linnitt, "Canada Joins 'High Ambition Coalition' To Push for Strong Climate Treaty in Paris", *Desmog* (11 December 2015), online: <http://www.desmog.ca/2015/12/11/canada-joins-high-ambition-coalition-push-strong-climate-treaty-paris>

Carol Linnit, "Feds Never Considered Cumulative Climate Impacts of Pacific Northwest LNG, Court Docs Reveal", *Desmog* (14 July 2017), online: <https://www.desmog.ca/2017/07/14/feds-never-considered-cumulative-climate-impacts-pacific-northwest-lng-court-docs-reveal>

Carol Linnitt, "Most Canadians Support Carbon Pricing, See Climate as Election Issue: New Poll", *Desmog.ca* (22 April 2015), online: <http://www.desmog.ca/2015/04/22/most-canadians-support-carbon-pricing-see-climate-election-issue-new-poll>

Carol Linnitt, "Trudeau silent as B.C. First Nations Take Site C Dam Fight to Federal Court", *Desmog.ca* (13 September 2016), online: <http://www.desmog.ca/2016/09/13/trudeau-silent-bc-first-nations-take-site-c-dam-fight-federal-court>

Carol Linnitt, “Why is Trudeau Back-Tracking On B.C.’s Oil Tanker Ban? These 86 Meetings with Enbridge Might Help Explain”, *Desmog.ca* (20 October 2016), online: <http://www.desmog.ca/2016/10/20/why-trudeau-back-tracking-b-c-s-oil-tanker-ban-these-86-meetings-enbridge-might-help-explain>

Richard Lindgren, “Canada’s Impact Assessment Act: Myth vs. Fact” (23 July 2018), online (blog): *Canadian Environmental Law Association* <www.cela.ca/IAA-myth-vs-fact>

LNG Canada, online: <https://www.lngcanada.ca/>

Zi-Ann Lum, “Kinder Morgan Pipeline Would Still Get Green Light Under New Rules”, *Huffington Post* (8 February 2018), online: <https://www.huffingtonpost.ca/2018/02/08/kinder-morgan-pipeline-would-still-get-green-light-under-new-rules-mckenna_a_23356857/>

Trent Lott & John Breaux, “Here’s How to Break the Impasse on Climate”, *The New York Times* (20 June 2018), online: <www.nytimes.com/2018/06/20/opinion/climate-change-fee-carbon-dioxide.html>

Alistair R Lucas & Jenette Yearsley, “The Constitutionality of Federal Climate Change Legislation” (2011) 4 University of Calgary SPP Research Papers 15

Amanda H Lynch & Siri Veland, *Urgency in the Anthropocene* (Cambridge, MA: The MIT Press, 2018)

Douglas Macdonald, *Business and Environmental Politics in Canada* (Toronto, ON: University of Toronto Press Higher Education, 2007)

Douglas Macdonald, *Hydro Province, Carbon Province: The Challenge of Canadian Energy and Climate Federalism* (Toronto: University of Toronto Press, 2020)

Ian MacDonald, *Revolution in the Head: The Beatles’ Records and the Sixties,* 3rd ed (Chicago: Chicago Review Press, 2005)

Jason MacLean et al, “A Plan that Promotes Environmental Sustainability”, *Policy Options* (30 May 2017), online: <policyoptions.irpp.org/magazines/may-2017/plan-promotes-environmental-sustainability/>

Jason MacLean, “Alberta’s support of the national climate plan is nice, but hardly necessary”, *Maclean’s* (24 February 2018), online: <https://www.macleans.ca/news/canada/albertas-support-of-the-national-climate-plan-is-nice-but-hardly-necessary/>

Jason MacLean & Catherine Potvin, "At the ballot box, cast a vote for climate change innovation and investment", *The Conservation* (18 October 2019), online: <https://theconversation.com/at-the-ballot-box-cast-a-vote-for-climate-change-innovation-and-investment-125411>

Jason MacLean, "Autonomy in the Anthropocene? Libertarianism, Liberalism, and the Legal Theory of Environmental Regulation" (2017) 40:1 Dal LJ 279

Jason MacLean, "Climate Change, Constitutions, and Courts: The *Reference re Greenhouse Gas Pollution Pricing Act* and Beyond" (2019) 82 Sask L Rev 147

Jason MacLean & Chris Tollefson, "Climate-Proofing Judicial Review Post-Paris: Judicial Competence, Capacity, and Courage" (2018) 31:3 J Envtl L & Prac 245

Jason MacLean, "Gateway to Nowhere: Environmental Assessment, the Duty to Consult, and the Social License to Operate in *Gitxaala Nation v. Canada (Northern Gateway)"* (July 2016) *Toronto Law Journal, online:* http://archive.constantcontact.com/fs158/1107293291635/archive/1125455087928.html#LETTER.BLOCK57

Jason MacLean, "Greening the *Charter*? Why trying to constitutionalize a right to a healthy environment is misguided", *CBA National* (2017), online: <http://nationalmagazine.ca/Articles/February-2017/Greening-the-Charter-Why-trying-to-constitutionali.aspx>

Jason MacLean, "How to evaluate Energy East? Try evidence", *Toronto Star* (7 February 2016), online: <https://www.thestar.com/opinion/commentary/2016/02/07/how-to-evaluate-energy-east-try-evidence.html>

Jason MacLean, "Kill Bill C-69 – it undermines efforts to tackle climate change", *The Conversation* (25 October 2018), online: <https://theconversation.com/kill-bill-c-69-it-undermines-efforts-to-tackle-climate-change-105118>

Jason MacLean, "Learning how to overcome political opposition to transformative environmental law" (2020) 117:15 Proc Nat Acad Sci 8243

Jason MacLean "Like Oil and Water? Canada's Administrative and Legal Framework for Oil Sands Pipeline Development and Climate Change Mitigation" (2015) 2 The Extractive Industries and Society 785

Jason MacLean, "Manufacturing Consent to Climate Inaction: A Case Study of *The Globe and Mail's* Pipeline Coverage" (2019) 42:2 Dal LJ 283

Jason MacLean, “No, carbon pricing alone will not be enough to lower emissions”, *Maclean’s* (29 November 2016), online: <http://www.macleans.ca/economy/economicanalysis/no-carbon-pricing-alone-wont-be-enough-to-lower-emissions/>

Jason MacLean, “Ontario’s cap-and-trade regime off to a shaky start”, *Toronto Star* (March 3, 2016), online: <http://www.thestar.com/opinion/commentary/2016/03/03/ontarios-cap-and-trade-regime-off-to-a-shaky-start.html>

Jason MacLean, “Paris *and* Pipelines? Canada’s Climate Policy Puzzle” (2018) 32:1 J Envtl L & Prac 47

Jason MacLean, Meinhard Doelle & Chris Tollefson, “Polyjural and Polycentric Sustainability Assessment: A Once-In-A-Generation Law Reform Opportunity” (2016) 30:1 J Envtl L & Prac 36

Jason MacLean, “Regulatory Capture and the Role of Academics in Public Policymaking: Lessons from Canada’s Environmental Regulatory Review Process” (2019) 52:2 UBC L Rev 489

Jason MacLean, “Rethinking the Role of Non-State Actors in International Climate Governance” (2020) 16:1 Loy U Chi Intl L Rev 21

Jason MacLean, “Striking at the Root Problem of Canadian Environmental Law: Identifying and Escaping Regulatory Capture” (2016) 29 J Envtl L & Prac 111

Jason MacLean, “The carbon tax case is a dangerous political game”, *The Globe and Mail* (13 February 2019), online: <https://www.theglobeandmail.com/business/commentary/article-the-carbon-tax-case-is-a-dangerous-political-game/>

Jason MacLean, “The constitutional complexity of pipelines: It’s as clear as bitumen”, *The Globe and Mail* (5 February 2018), online: <https://www.theglobeandmail.com/opinion/the-constitutional-complexity-of-pipelines-its-as-clear-as-bitumen/article37849206/>

Jason MacLean, “The Crude Politics of Carbon Pricing, Pipelines, and Environmental Assessment” (2019) 70 UNBLJ 129

Jason MacLean, “The Death of Contract, Redux: Boilerplate and the End of Interpretation” (2016) 58:3 Can Bus LJ 289

Jason MacLean, "The misleading promise of 'balance' in Canada's climate change policy," *Policy Options* (29 March 2016), online: <http://policyoptions.irpp.org/magazines/march-2016/the-misleading-promise-of-balance-in-canadas-climate-change-policy/>

Jason MacLean, Meinhard Doelle & Chris Tollefson, "The Past, Present, and Future of Canadian Environmental Law: A Critical Dialogue" (2015) 1:1 Lakehead LJ

Jason MacLean, "The problem with Canada's gradual climate policy", *Policy Options* (26 October 2018), online: <http://policyoptions.irpp.org/magazines/october-2018/the-problem-with-canadas-gradual-climate-policy/>

Jason MacLean, Meinhard Doelle & Chris Tollefson, "The Science, Law, and Politics of Canada's Pathways to Paris: Introduction to *UBC Law Review's* Special Section on Canada and Climate Change" (2019) 52:1 UBC L Rev 227

Jason MacLean, "The Trans Mountain saga as a public policy failure", *Policy Options* (13 April 2018), online: <https://policyoptions.irpp.org/magazines/april-2018/trans-mountain-saga-public-policy-failure/>

Jason MacLean, "Trans Mountain's only certainty – death and carbon taxes", *Vancouver Sun* (17 April 2018), online: <https://vancouversun.com/opinion/op-ed/jason-maclean-trans-mountains-only-certainty-death-and-carbon-taxes>

Jason MacLean, "Troubled Waters: Reinvigorating Great Lakes Governance through Deliberative Democracy" (2018) 9:3 Sea Grant Law & Policy Journal 9

Jason MacLean, "Trudeau's carbon price clever politics, not credible climate policy", *Policy Options* (14 October 2016), online: <http://policyoptions.irpp.org/magazines/october-2016/trudeaus-carbon-price-clever-politics-not-credible-climate-policy/>

Jason MacLean, "We can't build pipelines and meet our climate goals", *Maclean's* (9 December 2016), online: <http://www.macleans.ca/economy/economicanalysis/we-cant-build-pipelines-and-meet-our-climate-goals/>

Jason MacLean, "Will We Ever Have Paris? Canada's Climate Change Policy and Federalism 3.0" (2018) 55:4 Atla L Rev 889

Jason MacLean, Nathalie Chalifour & Sharon Mascher, "Work on climate, not weaponizing the Constitution", *The Conversation* (8 May 2019), online: <https://theconversation.com/work-on-climate-not-weaponizing-the-constitution-116710>

Jason MacLean, "You Say You Want an Environmental Rights Revolution? Try Changing Canadians' Minds Instead (of the *Charter*)" (2018) 49:1 Ott L Rev 183

Roderick A Macdonald, "Kaleidoscopic Federalism" in J-F Gaudreault-DesBiens & Fabien Gélinas, eds, *The States and Moods of Federalism: Governance, Identity and Methodology* (Montreal: Blais, 2005)

Roderick A Macdonald, "Understanding Regulation by Regulations" in I Bernier & A Lajoie, eds, *Regulations, Crown Corporations and Administrative Tribunals* (Toronto: University of Toronto Press, 1985)

Roderick A Macdonald & Robert Wolfe, "Canada's Third National Policy: The Epiphenomenal or the Real Constitution?" (2009) 59 UTLJ 469

Andrew MacLeod, "Death of Kinder Morgan Project a Campaign Promise, Premier Says", *The Tyee* (10 April 2018), online: <https://thetyee.ca/News/2018/04/10/Death-Kinder-Morgan-Campaign-Promise/>

Robert MacNeil, *Thirty Years of Failure: Understanding Canadian Climate Policy* (Halifax, NS: Fernwood Publishing, 2019)

Sara Mainville, "The Ghost of the Harper OmniBus Legislation Continues on with Bill C-69" (9 February 2018), online (blog): *Olthuis Kleer Townsend – LLP* <www.oktlaw.com/ghost-harper-omnibus-legislation-continues-bill-c-69/>

Charles Mandel & Mike De Souza, "Trudeau attacked from all sides over pipeline stance", *National Observer* (12 April 2016), online: <http://www.nationalobserver.com/2016/04/12/news/trudeau-attacked-all-sides-over-pipeline-stance>

Murray Mandryk, "Prairie Resilience plan does not offer enough focus on reducing GHG emissions", *Regina Leader Post* (12 April 2019), online: <https://leaderpost.com/opinion/columnists/prairie-resilience-plan-does-not-offer-enough-focus-on-reducing-ghg-emissions>

Farhad Manjoo, "How Y2K Offers a Lesson for Fighting Climate Change", *New York Times* (19 July 2017), online: <https://www.nytimes.com/2017/07/19/technology/y2k-lesson-climate-change.html?hpw&rref=business&action=click&pgtype=Homepage&module=well-region&region=bottom-well&WT.nav=bottom-well>

Geoff Mann & Joel Wainwright, *Climate Leviathan: A Political Theory of Our Planetary Future* (New York: Verso, 2018)

Paddy Manning, “Adani approved: Australia’s governments can’t cope with climate change”, *The Monthly* (13 June 2019), online: <https://www.themonthly.com.au/today/paddy-manning/2019/13/2019/1560405239/adani-approved>

CS Mantyka-Pringle et al, “Honouring indigenous treaty rights for climate justice” (2015) 5 Nat Clim Change 798

Jochen Markard, Rob Raven & Bernhard Truffer, “Sustainability Transitions: An Emerging Field of Research and its Prospects” (2012) 41:6 Research Policy 955

Creeden Martell, “Saskatchewan premier plans to appeal carbon tax decision to Supreme Court”, *CBC News* (3 May 2019), online: <https://www.cbc.ca/news/canada/saskatchewan/carbon-tax-saskatchewan-appeal-1.5121414>

Susana Mas & Catherine Cullen, “Justin Trudeau signs Paris climate treaty at UN, vows to harness renewable energy”, *CBC* (22 April 2016), online: <http://www.cbc.ca/news/politics/paris-agreement-trudeau-sign-1.3547822>

Sharon Mascher, “Prime Minister Trudeau You’ve Got the Power (the Criminal Law Power): *Syncrude Canada Ltd v Canada* and Greenhouse Gas Regulation” (21 June 2016), *ABlawg.ca* (blog), online (pdf): <https://ablawg.ca/wp-content/uploads/2016/06/Blog_SM_Syncrude_FCA_June2016.pdf>

Mohammad S Masnadi & Adam R Brandt, “Climate impacts of oil extraction increase significantly with oilfield age” (2017) 7 Nat Clim Change 551

Mohammad S Masnadi et al, “Global carbon intensity of crude oil production” (2018) 361:6405 Science 851

Gary Mason, “Canada lags on climate action. But we’re in good (bad) company”, *The Globe and Mail* (4 October 2019), online: <https://www.theglobeandmail.com/opinion/article-canada-is-a-climate-laggard-but-were-in-good-bad-company/>

Gary Mason, “Carbon-tax opponents don’t let facts get in the way”, *The Globe and Mail* (15 February 2019), online: <https://www.theglobeandmail.com/canada/article-carbon-tax-opponents-dont-let-facts-get-in-the-way/>

Jeff Mason & Darren Ennis, “G20 agrees on phase-out of fossil fuel subsidies”, *Reuters* (25 September 2009), online: <http://www.reuters.com/article/us-g20-energy-idUSTRE58O18U20090926>

Jonathan S Masur & Eric A Posner, "Norming in Administrative Law" (2018) University of Chicago Coase-Sandor Institute for Law & Economics Working Paper No 840, online: <papers.ssrn.com/sol3/papers.cfm?abstract_id=3132881>

Karl Mathiesen & Fiona Harvey, "Climate coalition breaks cover in Paris to push for binding and ambitious deal", *The Guardian* (8 December 2015), online: <https://www.theguardian.com/environment/2015/dec/08/coalition-paris-push-for-binding-ambitious-climate-change-deal>

Mari Matsuda, "The Next Dada Utopian Visioning Peace Orchestra: Constitutional Theory and the Aspirational" (2017) 62:4 McGill LJ 1203

James R May & Erin Daly, "Global Constitutional Environmental Rights" in Shawkat Alam et al, eds, *Routledge Handbook of International Environmental Law* (New York: Routledge, 2012)

Shawn McCarthy, "B.C.'s John Horgan remains tight-lipped on Trans Mountain pipeline permits", *The Globe and Mail* (25 July 2017), online: <https://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/bcs-john-horgan-remains-tight-lipped-on-transmountain-pipeline-permits/article35798930/>

Shawn McCarthy, "Canadian Energy Industry Slams Liberal's Environmental Assessment Rules", *The Globe and Mail* (2 April 2018), online: <www.theglobeandmail.com/business/article-canadian-energy-industry-slams-liberals-environmental-assessment/>

Shawn McCarthy, "Carbon prices must rise to meet Canada's 2030 greenhouse-gas targets: officials", *The Globe and Mail* (31 March 2017), online: <http://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/carbon-prices-must-rise-to-meet-2030-ghg-targets-officials/article34510739/>

Shawn McCarthy, "Lack of climate clarity threatens oil reserve values, report says", *The Globe and Mail* (17 January 2019), online: <https://www.theglobeandmail.com/business/article-canadian-oil-reserves-at-risk-from-policies-to-combat-global-warming/>

Shawn McCarthy, "Liberal government formally ratifies Paris climate accord", *The Globe and Mail* (5 October 2016), online: <http://www.theglobeandmail.com/news/politics/ottawa-formally-ratifies-paris-climate-accord/article32267242/>

Shawn McCarthy, "Ottawa set to re-introduce incentives for home-energy retrofits", *The Globe and Mail* (19 October 2016), online: <http://www.theglobeandmail.com/report-on-

business/industry-news/energy-and-resources/ottawa-to-incentivize-energy-efficient-home-retrofits/article32429370/>

Shawn McCarthy & Bill Curry, "Ottawa sought insider industry analysis for Trans Mountain deal, documents reveal", *The Globe and Mail* (21 January 2019), online: <https://www.theglobeandmail.com/politics/article-ottawas-45-billion-acquisition-of-trans-mountain-pipeline-was-based/>

Shawn McCarthy, "Ottawa to Dramatically Scale Back Carbon Tax on Competitiveness Concerns", *The Globe and Mail* (1 August 2018), online: <www.theglobeandmail.com/business/industry-news/energy-and-resources/article-ottawa-to-dramatically-scale-back-carbon-tax-on-competitiveness/>

Shawn McCarthy, "Provinces balk at federal push to speed up phase-out of coal power", *The Globe and Mail* (2 September 2016), online: <http://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/provinces-balk-at-federal-push-to-accelerate-phasing-out-of-coal-power/article31685245/>

Shawn McCarthy & Ian Bailey, "Provinces oppose Trudeau's carbon floor-price proposal", *The Globe and Mail* (2 March 2016), online: <https://www.theglobeandmail.com/news/british-columbia/environment-shouldnt-become-arena-for-political-fights-trudeau/article28996991/>

Shawn McCarthy, "Saskatchewan Premier Brad Wall Rejects Ottawa's Carbon Plan", *The Globe and Mail* (19 February 2016), online: <http://www.theglobeandmail.com/news/politics/saskatchewan-premier-brad-wall-rejects-ottawas-carbon-pricing-plan/article28808667/>

Shawn McCarthy, "Senators challenge efficacy of Liberals' resource project assessment plan", *The Globe and Mail* (6 February 2019), online: <https://www.theglobeandmail.com/business/article-senators-challenge-efficacy-of-liberals-resource-project-assessment/>

Matthew McClearn, "What the death of Ontario's green energy dream can teach other provinces about the challenges ahead", *The Globe and Mail* (1 June 2020), online: <https://www.theglobeandmail.com/business/article-what-the-death-of-ontarios-green-energy-dream-can-teach-other/>

Dennis McConaghy, "The Canadian right is failing on carbon pricing", *Maclean's* (20 October 2016), online: <http://www.macleans.ca/economy/economicanalysis/the-canadian-right-is-failing-on-carbon-pricing/>

Holly McKenzie-Sutter, “Ecology groups challenge ‘flawed’ assessment of N.L. oil and gas drilling”, *CBC News* (14 May 2020), online: <https://www.cbc.ca/news/canada/newfoundland-labrador/court-challenge-of-oil-gas-exploration-1.5570060>

Bill McKibben, “Free California of Fossil Fuels” *The New York Times* (8 August 2018), online: <www.nytimes.com/2018/08/08/opinion/fires-california-fossil-fuels.html>

Robin McKie, “World risks missing key climate target”, *The Guardian* (6 August 2016), online: <https://www.theguardian.com/science/2016/aug/06/global-warming-target-miss-scientists-warn>

Trevor McLeod, “Ottawa needs to bury this plan for a new assessment process—unless we want to kill any future energy projects”, *Financial Post* (11 May 2017), online: <http://business.financialpost.com/fp-comment/ottawa-needs-to-bury-this-plan-for-a-new-assessment-process-unless-we-want-to-kill-any-future-major-energy-projects>

Tim McMillan, “Clouds hang over NDP’s climate change plan”, *Calgary Herald* (11 December 2017), online: <http://calgaryherald.com/opinion/columnists/mcmillan-dark-clouds-hang-over-ndps-climate-change-plan>

Allison McNeely & Kevin Orland, “Fight over abandoned oil wells may head to Supreme Court of Canada”, *The Globe and Mail* (1 August 2017), online: <https://beta.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/fight-over-abandoned-oil-wells-may-head-to-supreme-court/article35858825/?ref=http://www.theglobeandmail.com&>

Elizabeth McSheffrey, “Step one, get fossil fuel money out of politics, German analyst tells Ottawa”, *National Observer* (23 May 2017), online: <http://www.nationalobserver.com/2017/05/23/news/step-one-get-fossil-fuel-money-out-politics-german-analyst-tells-ottawa>

Jonas Meckling & Bentley B Allan, “The evolution of ideas in global climate policy” (2020) 10 Nat Clim Change 434

Kyle C Meng & Ashwin Rode, “The social cost of lobbying over climate policy” (2019) 9 Nat Clim Change 472

Carl Meyer, “‘It’s like pulling teeth’: Catherine McKenna accused of stalling on fossil fuel subsidies”, *National Observer* (14 February 2019), online: <https://www.nationalobserver.com/2019/02/14/news/its-pulling-teeth-catherine-mckenna-accused-stalling-fossil-fuel-subsidies>

Carl Meyer, "Trudeau Government Says Canada will avoid Billions of Dollars in Losses from New Crackdown on Oilpatch Pollution", *National Observer* (26 April 2018), online: <www.nationalobserver.com/2018/04/26/news/trudeau-government-says-canada-will-recover-billions-dollars-new-crackdown-oilpatch>

Matto Mildenberger, *Carbon Captured: How Business and Labor Control Climate Politics* (Cambridge, MA: The MIT Press, 2020)

Oliver Milman, "Canada gives $3.3bn subsidies to fossil fuel producers despite climate pledge", *The Guardian* (15 November 2016), online: <https://www.theguardian.com/world/2016/nov/15/climate-change-canada-fossil-fuel-subsidies-carbon-trudeau>

Nick Miroff, "In Ecuador, oil boom creates tension", *Washington Post* (16 February 2014), online: <https://www.washingtonpost.com/world/in-ecuador-oil-boom-creates-tension/2014/02/16/f790d2f4-8f6d-11e3-878e-d76656564a01_story.html?utm_term=.07d5947b72b0>

Mission 2020, *2020: The Climate Turning Point* (Mission 2020, 2017), online: <http://go.nature.com/2takuw3>

Timothy Mitchell, "Carbon democracy" (2009) 38:3 Economy and Society 399

Scott Moe, "Why Saskatchewan is fighting the Trudeau carbon tax in court", *Regina Leader-Post* (11 February 2019), online: <https://leaderpost.com/opinion/columnists/scott-moe-why-saskatchewan-is-fighting-the-trudeau-carbon-tax-in-court>

Frances C Moore & Delavane B Diaz, "Temperature impacts and economic growth warrant stringent mitigation policy" (2015) 5 Nat Clim Change 127

Jonathan Moore et al, "Towards Linking Environmental Law and Science" (2018) 3 FACETS 375

Adele Morris, "Why the federal government should shadow price carbon", *Brookings* (13 July 2015), online: <https://www.brookings.edu/blog/planetpolicy/2015/07/13/why-the-federal-government-should-shadow-price-carbon/>

Adam Morton, "How Australia election will decide its role in climate change", *Nature* (16 May 2019), online: <https://www.nature.com/articles/d41586-019-01543-6>

FL Morton, "The Constitutional Division of Powers with Respect to the Environment in Canada" in Kenneth M Holland et al, eds, *Federalism and the Environment:*

Environmental Policymaking in Australia, Canada, and the United States (Westport, CT: Greenwood Press, 1996)

James Munson, "The AFN is divided on environmental assessment reform", *ipolitcs* (21 October 2017), online: <http://ipolitics.ca/2017/10/21/the-afn-is-divided-on-environmental-assessment-reform/>

Dale D Murphy, "The Business Dynamics of Global Regulatory Competition" in David Vogel & Robert A Kagan, eds, *Dynamics of Regulatory Change: How Globalization Affects National Regulatory Policies* (Los Angeles, CA: University of California Press, 2004)

Cyril Mychalejko, "Ecuador's Constitution Gives Rights to Nature", *UpsideDownWorld* (27 September 2008), online: <https://www.opednews.com/populum/page.php?f=Ecuador-s-Constitution-Giv-by-Cyril-Mychalejko-080925-102.html>

National Aeronautics and Space Administration, "NASA Analysis Finds August 2016 Another Record Month", GISTEMP Update (12 September 2016), online: <http://data.giss.nasa.gov/gistemp/news/20160912/>

National Energy Board, "Strategic Plan", online: <https://www.neb-one.gc.ca/bts/whwr/gvrnnc/strtgcpln-eng.html>

National Energy Board, "Summary of Recommendation: Trans Mountain Expansion Project" (19 May 2016), online: <http://www.neb-one.gc.ca/pplctnflng/mjrpp/trnsmntnxpnsn/smmrrcmmndtn-eng.html>

National Roundtable on the Environment and Economy, *Paying the price: The economic impacts of climate change in Canada* (Ottawa, 2011)

Natural Resources Canada, "Trans Mountain Expansion Project", online: <https://www.nrcan.gc.ca/questionnaire/18721>

Natural Resources Defense Council, "What Is the Clean Power Plan?" (29 September 2017), online: *National Resources Defense Council* <www.nrdc.org/stories/how-clean-power-plan-works-and-why-it-matters>

Dwight Newman, "Wrecking the Federation to save the Planet", *C2C Journal* (3 April 2019), online: <https://www.c2cjournal.ca/2019/04/wrecking-the-federation-to-save-the-planet/>

Aaron L Nielson, "Sticky Regulations" (2018) 85 U Chicago L Rev 85

Rod Northey, "Fading Role of Alternatives in Federal Environmental Assessment" (2016) 29 J Envtl L & P 41

Notre Dame Global Adaptation Initiative (ND-GAIN), online: <https://gain.nd.edu/>

Martha C Nussbaum, "Climate Change: Why Theories of Justice Matter" (2013) 13 Chi J Int'l L 469

Peter O'Neil, "Federal government's 'social license' for pipelines 'permission' cuts out communities", *Vancouver Sun* (21 September 2016), online: <http://vancouversun.com/news/local-news/federal-governments-social-licence-for-pipelines-permission-cuts-out-communities>

Office of the Auditor General of Canada, "Commissioner of the Environment and Sustainable Development releases Fall 2014 Report" (Ottawa, 7 October 2014), online: <http://www.oag-bvg.gc.ca/internet/English/mr_20141007_e_39911.html>

Office of the Prime Minister of Canada, "Minister of Natural Resources Mandate Letter", online: <http://pm.gc.ca/eng/minister-natural-resources-mandate-letter>

Office of the Prime Minister of Canada, "Prime Minister Justin Trudeau's Pipeline Announcement" (29 November 2016), online: <pm.gc.ca/eng/news/2016/11/30/prime-minister-justin-trudeaus-pipeline-announcement>

Oil Change International & Friends of the Earth U.S., *Still Digging: G20 Governments Continue to Finance the Climate Crisis* (27 May 2020), online: <http://priceofoil.org/2020/05/27/g20-still-digging/>

Martin Olszynski, Nigel Bankes & Andrew Leach, "Alberta Court of Appeal Opines That Federal Carbon Pricing Legislation Unconstitutional" (17 March 2020), *ABlawg.ca* (blog), online: <https://ablawg.ca/2020/03/17/alberta-court-of-appeal-strikes-down-federal-carbon-pricing-legislation-on-constitutional-grounds/>

Martin Olszynski, "Bill C-69's Detractors Can Blame Harper's 2012 Omnibus Overreach (Blog Edition)" (25 September 2018), *ABlawg.ca* (blog), online (pdf): <http://ablawg.ca/wp-content/uploads/2018/09/Blog_MO_Bill_C_69_Sept2018.pdf>

Martin Olszynski, "Bill C-69's detractors can blame Harper's 2012 omnibus overreach", *Calgary Herald* (26 September 2018), online: <https://calgaryherald.com/opinion/columnists/column-bill-c-69s-detractors-can-blame-harpers-2012-omnibus-overreach>

Martin Olszynski & Meinhard Doelle, "*Ontario Power Generation Inc. v Greenpeace Canada*: Form over Substance Leads to a 'Low Threshold' for Federal Environmental Assessment" (23 September 2015), *ABlawg.ca* (blog), online (pdf): <https://ablawg.ca/wp-content/uploads/2015/09/Blog_MOandMD_Ontario-Power-Generation-Inc-_FCA_20Sept2015.pdf>

Martin Olszynski, Sharon Mascher & Meinhard Doelle, "From Smokes to Smokestacks: Lessons from Tobacco for the Future of Climate Change Liability" (2017) 30:1 Geo Envtl L Rev 1

Martin Olszynski et al, "Strengthening Canada's Environmental Assessment and Regulatory Processes: Recommendations and Model Legislation for Sustainability" (18 August 2017), online: <t.co/6WxDKmclBE>

Martin Olszynski et al, "Sustainability in Canada's Environmental Assessment", *Policy Options* (5 September 2017), online: <policyoptions.irpp.org/magazines/september-2017/sustainability-in-canadas-environmental-assessment-and-regulation/>

Percy Olson, "A Constitutional Analysis of Drilling for Oil in Ecuador" (23 March 2014), *Michigan Journal of Environmental & Administrative Law* (blog), online: <http://www.mjeal-online.org/a-constitutional-analysis-of-drilling-for-oil-in-ecuador/>

Geordan Omand, "Tories boo leadership candidate Michael Chong for proposing to reduce carbon pollution", *The National Observer* (19 February 2017), <online: http://www.nationalobserver.com/2017/02/19/news/tories-boo-leadership-candidate-michael-chong-proposing-reduce-carbon-pollution>

Geordan Omand, "Trans Mountain pipeline facing new legal challenge from First Nations", *The Canadian Press* (17 January 2017), online: <http://globalnews.ca/news/3187421/first-nations-take-crown-to-court-over-pipeline/>

Open Government Partnership, online: <http://www.opengovpartnership.org>

Organization for Economic Co-operation and Development, "Fossil Fuel Support Country Note: Canada" (April 2019), online: <https://www.oecd.org/fossil-fuels/data/>

Organization for Economic Co-operation and Development, "Governments should use Covid-19 recovery efforts as an opportunity to phase our support for fossil fuels, say OECD and IEA" (5 June 2020), online: <http://www.oecd.org/environment/governments-should-use-covid-19-recovery-efforts-as-an-opportunity-to-phase-out-support-for-fossil-fuels-say-oecd-and-iea.htm>

Benjamin I Page & Martin Gilens, *Democracy in America? What Has Gone Wrong and What We Can Do About It* (Chicago, IL: University of Chicago Press, 2017)

Wendy J Palen et al, "Consider the global impacts of oil pipelines" (2014) 510 Nature 465

Margaret A Palmer, "Socioenvironmental Sustainability and Actionable Science" (2012) 62:1 BioScience 5

Gene Palumbo & Elisabeth Malkin, "El Salvador, Prizing Water Over Gold, Bans All Metal Mining", *The New York Times* (29 March 2017), online: <https://www.nytimes.com/2017/03/29/world/americas/el-salvador-prizing-water-over-gold-bans-all-metal-mining.html>

Bruce Pardy, "A Right to Clean Air? Constitutional protection for the environment may leave people out of luck", *Literary Review of Canada* 20:2 (March 2012) 26, online: <http://reviewcanada.ca/magazine/2012/03/a-right-to-clean-air/>

Jugal K Patel, "How 2016 Became Earth's Hottest Year on Record", *The New York Times* (18 January 2017), online: <https://www.nytimes.com/interactive/2017/01/18/science/earth/2016-hottest-year-on-record.html>

Laura Payton, "Liberals back away from setting tougher carbon targets", *CTV News* 18 September 2016), online: <http://www.ctvnews.ca/politics/liberals-back-away-from-setting-tougher-carbon-targets-1.3075857>

Heide Pearson, "Alberta launches promised constitutional challenge of federal carbon tax", *Global News* (20 June 2019), online: <https://globalnews.ca/news/5412786/alberta-constitutional-challenge-federal-carbon-tax/>

Terry Pedwell, "Consumer groups urge CRTC to ban discriminatory TV discount plans", *The Globe and Mail* (8 September 2016), online: <http://www.theglobeandmail.com/report-on-business/consumer-groups-want-crtc-to-ban-discriminatory-basic-tv-offerings/article31763165/>

Sam Peltzman, "George Stigler's Contribution to the Economic Analysis of Regulation" (1993) 101:5 J Political Economy 818

Scott Peters, "Time for a Carbon Tax", Letter to the Editor, *The New York Times* (3 August 2018), online: <www.nytimes.com/2018/08/03/opinion/letters/carbon-tax-litigation-oil-companies.html>

Dan Petryk, “Another oh-so-Canadian pipeline mess. Plus other letters to the editor”, *The Globe and Mail* (10 January 2019), online: <https://www.theglobeandmail.com/opinion/letters/article-jan-10-another-oh-so-canadian-pipeline-mess-plus-other-letters-to/>

Thomas Piketty, “Brahmin Left vs Merchant Right: Rising Inequality & the Changing Structure of Political Conflict (Evidence from France, Britain, and the US, 1948-2017)” (March 2018) WID.world Working Paper Series No 2018/7, online: <wid.world/wid-publications/#library-working-papers>

Thomas Piketty, *Capital in the Twenty-First Century* (Cambridge, MA: Harvard University Press, 2014)

Thomas Piketty, “Manifesto for the Democratisation of Europe” (10 December 2018), online (blog): *Le Blog de Thomas Piketty* <piketty.blog.lemonde.fr/2018/12/10/manifesto-for-the-democratisation-of-europe/>

Bora Plumptre, “National emissions numbers underscore need to invest in clean economy: What the newest National Inventory Report tells us about Canada’s growing carbon emissions” (23 April 2020), *Pembina Institute* (blog), online: <https://www.pembina.org/blog/national-emissions-numbers-underscore-need-invest-clean-economy>

“Political swings and roundabouts”, Editorial, (2017) 7:4 Nat Clim Change 305

“Politics of climate change belief”, Editorial, (2017) 7:1 Nat Clim Change 1

Nadja Popovich, Livia Albeck-Ripka, and Kendra Pierre-Louis, “The Trump Administration Is Reversing 100 Environmental Rules. Here’s the Full List”, *The New York Times* (20 May, 2020), online: <https://www.nytimes.com/interactive/2020/climate/trump-environment-rollbacks.html>

Catherine Potvin et al, “A Framework to Evaluate Low-Carbon Energy Transitions Learning Projects” (September 2018), online (pdf): *Sustainable Canada Dialogues* <www.sustainablecanadadialogues.ca/pdf_2018/SCD_Evaluation_Report_with_appendices.pdf >

Catherine Potvin, “Statement of Work (SOW) – NRCan’s Long-Term Economic and Policy Research Agenda” (2018) [unpublished, archived at McGill University (on file with the authors)]

Lewis F Powell, Jr, "Confidential Memorandum: Attack of American Free Enterprise System" (23 August 1971), online: *Moyers* <billmoyers.com/content/the-powell-memo-a-call-to-arms-for-corporations/2/>

Jim Prentice & Jean-Sébastian Rioux, *Triple Crown: Winning Canada's Energy Future* (Toronto: HarperCollins, 2017)

Mara Prentiss, *Energy Revolution: The Physics and the Promise of Efficient Technology* (Cambridge, MA: Harvard University Press, 2015)

"President Obama's Farewell Address: Full Video and Text", *The New York Times* (10 January 2017), online: <https://www.nytimes.com/2017/01/10/us/politics/obama-farewell-address-speech.html?_r=0>

Prime Minister's Office, "Minister of Environment and Climate Change Mandate Letter", online: <http://pm.gc.ca/eng/minister-environment-and-climate-change-mandate-letter>

Benedict Probst et al, "Impact of a large-scale tilting initiative on deforestation in the Brazilian Amazon" (2020), online doi: <https://doi.org/10.1038/s41893-020-0537-2.>

"Progressive politics from the ground up", *CommonWealth* (Summer 2017) 56

Mychaylo Prystupa, "Federal Ministers Argue Trans Mountain Expansion is Necessary Part of Climate Plan", *The Tyee* (21 March 2018), online: <https://thetyee.ca/News/2018/03/21/Trans-Mountain-Climate-Plan/>

Kate Puddister, *Seeking the Court's Advice: The Politics of the Canadian Reference Power* (Vancouver: UBC Press, 2019)

Mia Rabson, "Saskatchewan environment minister says province will never allow a carbon tax", *National Observer* (4 May 2017), online: <http://www.nationalobserver.com/2017/05/04/news/saskatchewan-environment-minister-says-province-will-never-allow-carbon-tax>

Mia Rabson, "Selected Oilsands Projects May Avoid New Environmental Assessment Rules", *CBC News* (27 April 2018), online: <www.cbc.ca/news/politics/oil-sands-exempt-assessment-rules-1.4639525>

Jeffrey J Rachlinski, "The Psychology of Global Climate Change" (2000) 2000 U Ill L Rev 299

Margaret Jane Radin, *Boilerplate: The Fine Print, Vanishing Rights, and the Rule of Law* (Princeton, NJ: Princeton University Press, 2012)

K Sabeel Rahman, *Democracy Against Domination* (New York, NY: Oxford University Press, 2017)

Sara Reardon & Erin Ross, "Science wins reprieve in US budget deal", *Nature* (1 May 2017), online: <http://www.nature.com/news/science-wins-reprieve-in-us-budget-deal-1.21835?WT.ec_id=NEWSDAILY-20170502>

Eric Reguly & Shawn McCarthy, "Paris climate accord marks shift toward low-carbon economy", *The Globe and Mail* (12 December 2015), online: <http://www.theglobeandmail.com/news/world/optimism-in-paris-as-final-draft-of-global-climate-deal-tabled/article27739122/>

Saphira AC Rekker et al, "Comparing extraction rates of fossil fuel producers against global climate goals" (2018) 8:6 Nat Clim Change 489

Report of the Conference of the Parties on its Third Session, Kyoto Protocol to the UN Framework Convention on Climate Change, 3rd Sess, pt 2, Annex I, UN Doc. FCCC/CP/1997/7/add. 1, reprinted in 37 ILM. 22 (1998)

Report of the Conference of the Parties on its twenty-first session, held in parties from 30 November to 13 December 2015 – Addendum Part two: Action taken by the Conference of the Parties at its twenty-first session, 29 January 2016, Decision 1/CP.21, CP, 21st Sess., FCCC/CP/2015/10/Add.1, online: UNFCCC <http://unfccc.int/resource/docs/2015/cop21/eng/10a01.pdf>

Review Panel Established by the Federal Minister of the Environment and the British Columbia Minister of the Environment, *Report of the Joint Review Panel, Site C Clean Energy Project* (Ottawa, 1 May 2014), online: <https://www.ceaa-acee.gc.ca/050/documents/p63919/99173E.pdf>

Andrew C Revkin, "Ecuador Constitution Grants Rights to Nature" (29 September 2008), *Dot Earth* (blog), online: <https://dotearth.blogs.nytimes.com/2008/09/29/ecuador-constitution-grants-nature-rights/>

John Richards & Larry Pratt, *Prairie Capitalism: Power and Influence in the New West* (Toronto: McClelland and Stewart Limited, 1979)

Thea Riofrancos, "*Extractivismo* unearthed: a genealogy of a radical discourse" (2017) 31: 2-3 Cultural Studies 277

Nick Ripatrazone, "Story Behind Nike's Controversial 1987 'Revolution' Commercial", *Rolling Stone* (22 February 2017), online: <http://www.rollingstone.com/sports/30-years-after-nikes-revolution-beatles-commercial-w468218>

William J Ripple, Christopher Wolf & Thomas M Newsome, “World Scientists’ Warning of a Climate Emergency” 70:1 BioScience 8

William J Ripple et al, “World Scientists’ Warning to Humanity: A Second Notice” (2017) 67:12 BioScience 1026

David Roberts, “The Conceptual Breakthrough Behind the Paris Climate Treaty”, VOX, (15 December 2015), online: <http://www.vox.com/2015/12/15/10172238/paris-climate-treaty-conceptual-breakthrough>

Yann Robiou du Pont & Malte Meinhausen, “Warming assessments of the bottom-up Paris Agreement emissions pledges” (2018) 9:4810 Nature Communications 1

Jan Rocha, “Brazil Risks ‘International Pariah’ Status with Deep Cuts to Amazon Monitoring”, *Climate News Network* (23 April 2017), online: <http://theenergymix.com/2017/04/23/brazil-risks-international-pariah-status-with-deep-cuts-to-amazon-monitoring/>

Johan Rockström et al, “A roadmap for rapid decarbonization: Emissions inevitably approach zero with a ‘carbon law’” (2017) 355:6331 Science 1269

Dani Rodrik, *Economics Rules: The Rights and Wrongs of the Dismal Science* (New York: W.W. Norton & Company, 2015)

Joeri Rogelj et al, “Estimating and tracking the remaining carbon budget for stringent climate targets” (2019) 571 Nature 335

Joeri Rogelj et al, “Mitigation Pathways Compatible with 1.5 ºC in the Context of Sustainable Development”, ch 2 in *Global Warming of 1.5°C: An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty* (Geneva, CH: IPCC, 2018)

Joeri Rogelj et al, “Paris Agreement climate proposals need a boost to keep warming well below 2 °C” (2016) 534 Nature 631

Kenneth Rogoff, “The case for a World Carbon Bank”, *The Globe and Mail* (8 July 2019), online: <https://www.theglobeandmail.com/business/commentary/article-the-case-for-a-world-carbon-bank/>

Chris Rolfe, *Turning Down the Heat: Emissions Trading and Canadian Implementation of the Kyoto Protocol* (Vancouver: West Coast Environmental Law Research Foundation, 1998)

Richard Rorty, *Achieving Our Country: Leftist Thought in Twentieth-Century America* (Cambridge, MA: Harvard University Press, 1998)

David C Rose, "Five Ways to Enhance the Impact of Climate Science" (2014) 4 Nat Clim Change 522

Daniel Rosenbloom, Brendan Haley & James Meadowcroft, "Critical Choices and the Politics of Decarbonization Pathways: Exploring Branching Points Surrounding Low-Carbon Transitions in Canadian Electricity" (2018) 37 Energy Research & Soc Science 22

Daniel Rosenbloom et al, "Transition Experiments: Opening Up Low-Carbon Transition Pathways for Canada through Innovation and Learning" (2018) 44:4 Can Pub Pol'y 368

Daniel Rosenbloom & James Meadowcroft, "Transition Experiments: Unlocking low-carbon transition pathways for Canada through innovation and learning" (2017), online: <http://www.researchgate.net/publication/320161503>

Royal Bank of Canada, "Lost in Transportation: Putting the discount on Canadian heavy oil in context" (9 May 2018), online (pdf): <http://www.rbc.com/economics/economic-reports/pdf/other-reports/WCS%20spread_May2018.pdf>

JB Ruhl, "The Metrics of Constitutional Amendments: Any Why Proposed Environmental Quality Amendments Don't Measure Up" (1999) 74 Notre Dame L Rev 245

Jeffrey D Sachs, *The Age of Sustainable Development* (New York: Columbia University Press, 2015)

Philippe Sands, *Principles of International Environmental Law* (Manchester: Manchester University Press, 1995)

Saskatchewan Environmental Society, "'*Prairie Resilience*' is Not Enough: The Saskatchewan Environmental Society's Response to The Saskatchewan Government's Climate Change Plan" (December 2018), online: <http://environmentalsociety.ca/prairie-resilience-is-not-enough/>

Saskatchewan, News and Media, "Province Challenges Federal Government's Ability to Impose a Carbon Tax" (Regina: NM, 25 April 2018), online:

<https://www.saskatchewan.ca/government/news-and-media/2018/april/25/carbon-tax-case>

Tomonori Sato & Tetsu Nakamura, "Intensification of hot Eurasian summers by climate change and land-atmosphere interactions" (2019) 9:10866 Scientific Reports, https://doi.org/10.1038/s41598-019-47291-5

Donald J Savoie, *What Is Government Good At? A Canadian Answer* (Montreal, QC: McGill-Queens University Press, 2015)

Jesse Sayles et al, "Socio-ecological network analysis for sustainability sciences: a systematic review and innovative research agenda for the future" (2019) 14 Environ Res Lett 093003

Oscar Schachter, "The Emergence of International Environmental Law" (1991) 44 Journal of International Affairs 457

"Scheer wins Conservative leadership race: results by ballot", *The Hill Times* (27 May 2017), online: <https://www.hilltimes.com/2017/05/27/conservative-leadership-race-results-ballot/108523>

David Schindler, "Facts Don't Matter: Harper is gone, but pro-development governments continue to ignore science", *Alberta Views* (1 July 2017), online: <http://albertaviews.ca/facts-dont-matter/>

David Schindler & Faisal Moola, "Opinion: Decision to approve Site C undermines reconciliation with Indigenous peoples and long-term action on climate change", *Vancouver Sun* (20 December 2017), online: <https://vancouversun.com/opinion/op-ed/opinion-decision-to-approve-site-c-undermines-reconciliation-with-indigenous-peoples-and-long-term-action-on-climate-change>

David W Schindler, "The Impact Statement Boondoggle" (1976) 192:1 Science 509

John Schwartz, "William T. Vollmann Would Like a Word or Two About Climate Change. Or 1,200 Pages", *The New York Times* (6 August 2018), online: <www.nytimes.com/2018/08/06/books/review/william-t-vollmann-carbon-ideologies-no-immediate-danger-no-good-alternative.html?hpw&rref=books&action=click&pgtype=Homepage&module=well-region&region=bottom-well&WT.nav=bottom-well>

Sonia I Seneviratne et al, "The many possible climates from the Paris Agreement's aim of 1.5 ºC warming" (2018) 558 Nature 41

Erin K Sexton et al, “Canada’s mines pose transboundary risks” (2020) 386 Science 376

Kai D Sheffield, “The Constitutionality of a Federal Emissions Trading Regime” (2014) 4:1 Western Journal of Legal Studies 1

Dinah Shelton, ed, *Commitment and Compliance: The Role of Non-Binding Norms in the International Legal System* (New York: Oxford University Press, 2003)

Dinah Shelton, ed, *Human Rights and the Environment* (Cheltenham, UK: Edward Elgar Publishing, 2011)

George P Shultz & Ted Halstead, “The Business Case for the Paris Climate Accord”, *The New York Times* (9 May 2017), online: <https://www.nytimes.com/2017/05/09/opinion/the-business-case-for-the-paris-climate-accord.html>

Nate Silver, *The Signal and the Noise: Why So Many Predictions Fail—but some Don’t* (New York: Penguin, 2012)

A John Sinclair, Timothy J Peirson-Smith & Morrissa Boerchers, “The Role of E-Governance and Social Media in Creating Platforms for Meaningful Participation in Environmental Assessment”, *Conference for Democracy & Open Government,* Research Papers, Case Studies and Policy Papers (Hong Kong, 2014), online: <http://www.donau-uni.ac.at/de/department/gpa/telematik/edemocracy-conference/edem/vid/20593/index.php?URL=/en/department/gpa/telematik/edemocracy-conference/20593>

Thomas Sisk, “Science is a casualty of the Trans Mountain pipeline debate”, *Vancouver Sun* (16 April 2018), online: <https://vancouversun.com/opinion/op-ed/thomas-sisk-science-is-a-casualty-of-the-trans-mountain-pipeline-debate>

Michael Slezak, “Hottest ever June marks 14th month of record-breaking temperatures”, *The Guardian* (20 July 2016), online: <https://www.theguardian.com/environment/2016/jul/20/june-2016-14th-consecutive-month-of-record-breaking-heat-says-us-agencies>

Merran Smith, “Poll: Most Canadians Want Federal Leadership on Climate Change”, Clean Energy Canada (2 October 2016), online: <http://cleanenergycanada.org/poll-canadians-want-federal-leadership-climate-change/>

Pete Smith et al, “Biophysical and economic limits to negative CO_2 emissions” (2015) 6 Nat Clim Change 42

Wallis Snowdon, "'Alberta is struggling': Notley defends carbon tax ultimatum", *CBC News* (4 October 2016), online: <http://www.cbc.ca/news/canada/edmonton/alberta-is-struggling-notley-defends-carbon-tax-ultimatum-1.3790650>

Rebecca Solnit, "Power in Paris", *Harper's,* (18 November 2015), online: <http://harpers.org/archive/2015/12/power-in-paris/>

"Special Report: Breaking the Habit: The Future of Oil", *The Economist* (26 November 2016), online: <https://www.economist.com/news/special-report/21710628-worlds-use-oil-approaching-tipping-point-writes-henry-tricks-dont-expect>

"Special Report: Oil: Breaking the Habit", *The Economist* (26 November 2016)

Curt Stager, "Sowing Climate Doubt Among Schoolteachers", *The New York Times* (27 April 2017), online: <https://www.nytimes.com/2017/04/27/opinion/sowing-climate-doubt-among-schoolteachers.html>

Will Steffen et al*,* "Trajectories of the Earth System in the Anthropocene" (2018) 115:33 PNAS 8252

Thomas Sterner et al, "Policy design for the Anthropocene" (2019) 2:1 Nature Sustainability 14

George J Stigler, "Supplementary Note on Economic Theories of Regulation," in George J Stigler, *The Citizen and the State: Essays on Regulation* (Chicago: University of Chicago Press, 1975) 137

George J Stigler, "The Theory of Economic Regulation" (1971) 2:1 Bell J Economics & Management Science 3

Stockholm Environment Institute et al, *The Production Gap: The discrepancy between countries' planned fossil fuel production levels consistent with limiting warming to 1.5ºC or 2ºC* (2019), online: <http://productiongap.org/>

Leah Cardamore Stokes, *Short Circuiting Policy: Interest Groups and the Battle Over Clean Energy and Climate Policy in the American States* (New York: Oxford University Press, 2020)

Leah C Stokes & Christopher Warshaw, "Renewable energy policy design and Framing influence public support in the United States" (2017) 2:8 Nature Energy 1

Submission of the B.C. Government to the *Canadian Environmental Assessment Review*, online: <http://www.eao.gov.bc.ca/pdf/BC_Submission_5Yr_review_Nov_28-2011.pdf>

Scott Surphlis, "The Federation: Is Canadian Federalism Fit to Meet the Challenges of the Future?", *The Public Policy & Governance Review* (17 January 2018), online: <https://ppgreview.ca/2018/01/17/the-federation-is-canadian-federalism-fit-to-meet-the-challenges-of-the-future/>

Sustainable Canada Dialogues, "About Sustainable Canada Dialogues" (2019), online: <www.sustainablecanadadialogues.ca/en/scd>

Sustainable Canada Dialogues, "Acting on Climate Change: Solutions from Canadian Scholars" (18 March 2015), online (pdf): <www.sustainablecanadadialogues.ca/files/PDF_DOCS/SDC_EN_30marchlr.pdf>

Jeffrey S Sutton, "Courts as Change Agents: Do We Want More—Or Less?" (2014) 127 Harv L Rev 1419

David Suzuki, "We can make Canada's reality match its image" (5 December 2013), *Science Matters* (blog), online: <http://www.davidsuzuki.org/blogs/science-matters/2013/12/we-can-make-canadas-reality-match-its-image/>

John Swaigen, "The Hudson Case: Municipal Powers to Regulate Pesticides Confirmed by Quebec Courts" (2000) 34 CERL (NS) 162

John Swan, "Consideration and the Reasons for Enforcing Contracts" (1976) UW Ontario L Rev 83

Imre Szeman, Jennifer Wenzel & Patricia Yaeger, eds, *Fueling Culture: 101 Words for Energy and Environment* (New York: Fordham University Press, 2017)

Hiroko Tabuchi, "In America's Heartland, Discussing Climate Change Without Saying 'Climate Change'", *The New York Times* (28 January 2017), online: <https://www.nytimes.com/2017/01/28/business/energy-environment/navigating-climate-change-in-americas-heartland.html>

Kevin Taft, *Oil's Deep State: How the petroleum industry undermines democracy and stops action on global warming – in Alberta, and in Ottawa* (Toronto, ON: James Lorimer & Company Ltd., Publishers, 2017)

Adrienne Tanner, "The Environmentalist's Quandary on Pipelines", *The Globe and Mail* (27 April 2018), online: <www.theglobeandmail.com/canada/british-columbia/article-the-environmentalists-quandary-on-pipelines/>

John Paul Tasker, “Indigenous leaders boycott ‘segregated’ premiers meeting in Edmonton” (17 July 2017), online: *CBC News* <http://www.cbc.ca/news/politics/indigenous-leaders-first-ministers-meeting-1.4208336>

John Paul Tasker, “Kenney warns of constitutional challenge if environmental assessment overhaul is passed as written”, *CBC News* (2 May 2019), online: <https://www.cbc.ca/news/politics/kenney-court-bill-c69-senate-1.5119675>

John Paul Tasker, “Ottawa may have overpaid for Trans Mountain by up to $1B, parliamentary budget officer says”, *CBC News* (31 January 2019), online: <https://www.cbc.ca/news/politics/trans-mountain-pbo-1.5000212>

John Paul Tasker, “Trudeau cabinet approves Trans Mountain, Line 3 pipelines, rejects Northern Gateway”, *CBC News* (29 November 2016), online: <http://www.cbc.ca/news/politics/federal-cabinet-trudeau-pipeline-decisions-1.3872828>

Zephyr Teachout, “Original Intent: How the Founding Fathers Would Clean Up K Street”, (2009) 11 *Democracy*

The Beatles, “Revolution 1” (music) The Beatles, USA SKBO 3404 (25 November 1968)

The Canada Energy Regulator, online: <https://www.cer-rec.gc.ca/nrg/sttstc/lctrct/index-eng.html>

The Canadian Press, “Alberta minister says it’s a ‘great time’ to build a pipeline because COVID-19 restrictions limit protests against them”, *The Globe and Mail* (25 May 2020), online: <https://www.theglobeandmail.com/canada/alberta/article-alberta-minister-says-its-a-great-time-to-build-a-pipeline-because/>

The Canadian Press, “Former Bank of Canada governor Stephen Poloz appointed to Enbridge board”, *The Globe and Mail* (4 June 2020), online: <https://www.theglobeandmail.com/business/article-former-bank-of-canada-governor-stephen-poloz-appointed-to-enbridge/>

The Canadian Press, “Full text of Gerald Butts’s resignation letter”, *The Globe and Mail* (18 February 2019), online: <https://www.theglobeandmail.com/canada/article-full-text-of-gerald-buttss-resignation-statement/>

The Canadian Press, “Provinces have until the end of 2018 to submit carbon price plans: McKenna”, *CBC News* (15 December 2017), online: <http://www.cbc.ca/news/politics/carbon-price-2018-mckenna-1.4450739>

The Canadian Press, "Trudeau says naysayers on Canada's carbon-tax-plan using 'scare tactics'", *CBC News* (14 October 2016), online: <http://www.cbc.ca/news/canada/calgary/trudeau-carbon-tax-scare-tactics-1.3805715>

The Economist, "Countries should seize the moment to flatten the climate curve" (21 May 2020), online: <https://www.economist.com/leaders/2020/05/21/countries-should-seize-the-moment-to-flatten-the-climate-curve>

The Economist, "Of wood and trees" (15 October 2016), online: <http://www.economist.com/news/united-states/21708684-environmentalists-against-environment-evergreen-state-wood-and-trees>

The Economist, "Some firms are preparing for a carbon price that would make a big difference" (14 December 2013), online: <http://www.economist.com/news/business/21591601-some-firms-are-preparing-carbon-price-would-make-big-difference-carbon-copy>

The Honourable Stephen Harper, "Address to the Canada-UK Chamber of Commerce, London, England (14 July 2006), online: <http://www.pm.gc.ca/eng/media.asp?id=1247>

The Report of the Royal Commission on Aboriginal Peoples, (Ottawa, Library of Parliament, 1996), online: <http://www.lop.parl.gc.ca/content/lop/researchpublications/prb9924-e.htm>

The Royal Commission on the Economic Union and Development Prospects for Canada, (Ottawa: Privy Council Office, 1985), online: <http://publications.gc.ca/site/eng/472251/publication.html>

The Royal Swedish Academy of Sciences, Press Release, "The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 1982" (20 October 1982), online: *The Nobel Prize* <www.nobelprize.org/nobel_prizes/economic-sciences/laureates/1982/press.html>

Charles Tilly & Lesley J Wood, *Social Movements: 1768–2012*, 3rd ed (Boulder, CO: Paradigm, 2013)

Katarzyna B Tokarska et al*,* "The climate response to five trillion tonnes of carbon" (2016) 6 Nat Clim Change 851

Jeff Tollefson, "Brazil debates loosening environmental protections: Barrage of proposals would allow developers to sidestep environmental reviews" (2016) 539 Nature 147

Jeff Tollefson, "Climate-panel chief Hoesung Lee wants focus on solutions", *Nature News & Comment* (13 October 2015), online: <https://www.nature.com/news/climate-panel-chief-hoesung-lee-wants-focus-on-solutions-1.18556>

Chris Tollefson, "Environmental assessment Bill as a lost opportunity", *Policy Options* (14 February 2018), online: < https://policyoptions.irpp.org/magazines/february-2018/environmental-assessment-bill-is-a-lost-opportunity/>

Chris Tollefson & Jason MacLean, "Here is why B.C. must do its own review of the Trans Mountain pipeline", *The Globe and Mail* (23 May 2017), online: <https://www.theglobeandmail.com/opinion/why-bc-must-do-its-own-review-of-the-trans-mountain-pipeline/article35095482/>

Chris Tollefson, Anthony R Zito & Fred Gale, "Symposium Overview: Conceptualizing New Governance Arrangements" (2012) 90 Public Administration 1

Richard S Tol, "The Social Cost of Carbon" (2011) 3:1 Annual Review of Economics 419

Maria Fernanda Tomaselli et al, "What do Canadians think about economic growth, prosperity and the environment?" (2019) 161 Ecological Economics 41

Trevor Tombe, "Blocking pipelines is a costly way to lower emissions", *Maclean's* (22 November 2016), online: <http://www.macleans.ca/economy/economicanalysis/blocking-pipelines-is-a-costly-way-to-lower-emissions/>

Trevor Tombe, "Policy, not pipelines, will determine if we meet our goals", *Maclean's* (2 December 2016), online: <http://www.macleans.ca/economy/economicanalysis/policy-not-pipelines-will-determine-if-we-meet-our-goals/>

Trevor Tombe, "Put a price on emissions and let the chips fall where they may", *Maclean's* (3 October 2016), online: <http://www.macleans.ca/economy/economicanalysis/put-a-price-on-emissions-and-let-the-chips-fall-where-they-may/>

G Toner, J Meadowcraft & D Cherniak, "The Struggle of the Canadian Federal Government to Institutionalize Sustainable Development", in D VanNijnatten, ed, *Canadian Environmental Policy and Politics: The Challenges of Austerity and Ambivalence* (Toronto: Oxford University Press, 2015)

Dan Tong et al, "Committed emissions from existing energy infrastructure jeopardize 1.5 ºC climate target" (2019) 572 Nature 373

"Trans Mountain, Trudeau and First Nations: A guide to the political saga so far", *The Globe and Mail* (24 May 2019), online: <https://www.theglobeandmail.com/politics/article-trans-mountain-kinder-morgan-pipeline-bc-alberta-explainer/>

Trans Mountain Corporation, "Expansion Project", online: <https://www.transmountain.com/project-overview>

Trans Mountain Corporation, "Product", online: <https://www.transmountain.com/product>

Betsy Trumpener, "Trudeau government signals support for Site C dam, grants two permits", *CBC News* (29 July 2016), online: <http://www.cbc.ca/news/canada/british-columbia/trudeau-government-issues-key-federal-permits-for-site-c-1.3700880>

Justin Trudeau, Prime Minister of Canada, online: http://www.pm.gc.ca/eng/news/2015/11/27/open-and-accountable-government>

Charles Tupper, "Union of the Colonies" (10 April 1865), *Macdonald-Laurier Institute* (blog), online: https: < https://www.macdonaldlaurier.ca/union-colonies-speech-honourable-provincial-secretary-charles-tupper-april-10-1865/https://www.macdonaldlaurier.ca/union-colonies-speech-provincial-secretary-charles-tupper-april-10-1865/>

Isabelle Turcotte, "Budget 2018 builds on last year's commitment to climate change" (28 February 2018), *Pembina Institute* (blog), online: <https://www.pembina.org/blog/budget-2018-builds-on-last-years-commitment>

Isabelle Turcotte, "We Need to Hold the Line on Carbon Pricing: Digging into the Federal Government's Response to Industry Concerns" (7 August 2018), online (blog): *Pembina Institute* <www.pembina.org/blog/we-need-hold-line-carbon-pricing>

Chris Turner, "The Coal Phase-Out: Why it's right and Jason Kenney is wrong", *Alberta Views* (30 June 2017), online: <https://albertaviews.ca/the-coal-phase-out/>

Mark Tushnet, "Constitutional Workarounds" (2009) 87 Tex L Rev 1499

Brooke Unger, "Special Report: Canada", *The Economist* (27 July 2019)

Union of Concerned Scientists, "Global Action on Historic Climate Change Agreement Expected in Paris" (12 December 2015), online: <http://www.ucsusa.org/news/press_release/global-action-on-historic-climate-change-agreement-expected-in-paris-0651#.V752y4Xbanc>

UN IPCC, “Special Report: Global Warming of 1.5 ºC” (IPCC, 2018)

UN Treaty Collection, “7 c Doha Amendment to the Kyoto Protocol”, online: <https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-7-c&chapter=27&lang=en>

UNEP, “Emissions Gap Report 2018” (November 2018), online: <www.unenvironment.org/resources/emissions-gap-report-2018>

United Conservative Party, “Policy Declaration 2018”, online (pdf): <https://unitedconservative.ca/Content/UCP%20Policy%20Declaration.pdf>

United Nations Climate Change Secretariat, “Climate Action Now: Summary for Policymakers 2016”, online: <http://climateaction2020.unfccc.int/spm/spm-archive/>

United Nations Department of Economic and Social Affairs, *Sustainable Development Goals*, online: <sustainabledevelopment.un.org/?menu=1300>

United Nations Framework Convention on Climate Change, Intergovernmental Negotiating Committee for a Framework Convention on Climate Change (992), 31 ILM. 849, online: <http://unfccc.int/resource/docs/a/18p2a01.pdf>

United Nations General Assembly Preparatory Committee for the United Nations Conference on Environment and Development, Report of the Economic Commission for Europe on the Bergen Conference, Annex I, *Bergen Ministerial Declaration on Sustainable Developments*, A/CONF.151/PC/10, August 6, 1990

United Nations Intergovernmental Panel on Climate Change, “Special Report: Global Warming of 1.5 ºC” (November 2018), online (pdf): <https://www.ipcc.ch/site/assets/uploads/sites/2/2019/05/SR15_SPM_version_report_LR.pdf>

Ian Urquhart, *Costly Fix: Power, Politics, and Nature in the Tar Sands* (Toronto: University of Toronto Press, 2018)

JCJM van den Bergh & WJW Botzen, “A lower bound to the social cost of CO_2 emissions” (2014) 4 Nat Clim Change 253

Inge van den Bijgaart, Reyer Gerlagh & Matti Liski, “A simple formula for the social cost of carbon” (2016) 77 Journal of Environmental Economics and Management 77

Ian Vandaelle, “Brad Wall slams Ottawa for mulling carbon tax: ‘Now is not the time’”, *Business News Network* (14 June 2014), online:

<http://www.bnn.ca/News/2016/6/14/Brad-Wall-Dissonant-to-even-talk-carbon-tax.aspx>

Gabriela Corenel Vargas, William A Au & Alberto Izzotti, "Public health issues from crude-oil production in the Ecuadorian Amazon territories" (2020) 719 Science of the Total Environment 134647

David G Victor, *Global Warming Gridlock: Creating More Effective Strategies for Protecting the Planet* (New York: Cambridge University Press, 2011)

David Victor et al, eds, *The Implementation and Effectiveness of International Environmental Commitments: Theory and Practice* (Cambridge, MA: The MIT Press, 1998)

John Vidal, "Climate deal ratified but fears linger", *The Guardian Weekly* (14 October 2016)

David Vogel, *Fluctuating Fortunes: The Political Power of Business in America* (New York: Basic Books, 1989)

Valerie Volcovici, "Americans demand climate action (as long as it doesn't cost much) – Poll", *Reuters* (26 June 2019), online: <https://uk.reuters.com/article/uk-usa-election-climatechange-poll/americans-demand-climate-action-poll-idUKKCN1TR181?utm_campaign=Carbon%20Brief%20Daily%20Briefing&utm_medium=email&utm_source=Revue%20newsletter>

Liam Wagner et al, "Trading Off Global Fuel Supply, CO2 Emissions and Sustainable Development" (2016) 11:3 PLoS One e0149406

Jeremy Waldron, *Political Political Theory: Essays on Institutions* (Cambridge, MA: Harvard University Press, 2016)

Michael Wara, "Instrument Choice, Carbon Emissions, and Information" (2015) 4:2 Mich J Envtl & Admin L 261

Wesley Wark, "Fear not: Canadians largely unfazed by global threats", *The Globe and Mail* (3 August 2017), online: <https://www.theglobeandmail.com/opinion/fear-not-canadians-largely-unfazed-by-global-threats/article35873146/>

Jody Warrick & Chris Mooney, "196 Countries Approve Historic Climate Agreement", *Washington Post* (12 December 2015), online: <https://www.washingtonpost.com/news/energy-environment/wp/2015/12/12/proposed-historic-climate-pact-nears-final-vote/>

Lee Wasserman & David Kaiser, “Beware of Oil Companies Bearing Gifts”, *The New York Times* (25 July 2018), online: <www.nytimes.com/2018/07/25/opinion/carbon-tax-lott-breaux.html>

Nick Watts et al, “The 2018 report of the *Lancet* Countdown on health and climate change: shaping the health of nations for centuries to come” (2018) 392:10163 The Lancet 2479, online: <https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)32594-7/fulltext>

Andrew Weichel, “B.C. premier, Indigenous groups respond to Trans Mountain purchase”, *CTV News Vancouver* (29 May 2018), online: <https://bc.ctvnews.ca/b-c-premier-indigenous-groups-respond-to-trans-mountain-purchase-1.3950261>

Brandie Weikle, “Canada and California sign deal to cut vehicle emissions”, *CBC News* (26 June 2019), online: <https://www.cbc.ca/news/business/canada-california-vehicle-emissions-1.5190619>

Paul Wells, “Just try them: Powerful conservative leaders from across the country are suddenly united against Justin Trudeau’s carbon tax plan. And they’re spoiling for a fight”, *Maclean’s* (1 December 2018), online: <http://archive.macleans.ca/article/2019/12/1/just-try-them>

Alana R Westwood et al, “The Role of Science in Contemporary Canadian Environmental Decision Making: The Example of Environmental Assessment” (2019) 52:1 UBC L Rev 243; Erin K Sexton et al, “Canada’s mines pose transboundary risks” (2020) 386 Science 376

Aaron Wherry, “Why Canada might need a climate law – and how it might work”, *CBC News* (16 June 2020), online: <https://www.cbc.ca/news/politics/climate-change-emissions-canada-trudeau-kyoto-1.5613108?ref=mobilerss&cmp=newsletter_CBC%20News%20Politics%20Headlines_734_38101>

Ed Whittingham & Diane Regas, “Trudeau Must Hold the Line on New Methane Rules”, *The Globe and Mail* (11 June 2017), online: <www.theglobeandmail.com/report-on-business/rob-commentary/trudeau-must-hold-the-line-on-canadas-new-methane-rules/article35280646/>

Jon Wiener, *Come Together: John Lennon in His Time* (London: Faber: 1984)

James Wilt, "Canada bans deep-sea mining, oil and gas drilling in marine protected areas", *The Narwhal* (26 April 2019), online: <https://thenarwhal.ca/canada-bans-deep-sea-mining-oil-and-gas-drilling-in-marine-protected-areas/>

James Wilt, “Industry Sways Feds to Allow Offshore Drilling in Laurentian Channel Marine Protected Area”, *The Narwhal* (22 July 2017), online: <thenarwhal.ca/industry-sways-feds-allow-offshore-drilling-laurentian-channel-marine-protected-area/>

Josh Wingrove, “Scathing report details Canada’s environmental shortfalls”, *The Globe and Mail* (7 October 2014), online: <http://www.theglobeandmail.com/news/politics/canada-lagging-on-emissions-goals-environment-watchdog-warns/article20959840/?page=all>

Josh Wingrove, “Trudeau Said to Plan Pipeline Approval, Favor Kinder Morgan”, *Bloomberg* (13 September 2016), online: <http://www.bloomberg.com/news/articles/2016-09-13/trudeau-said-to-plan-pipeline-approval-favoring-kinder-morgan>

Mark Winfield, “A New Era of Environmental Governance in Canada: Better Discussions Regarding Infrastructure and Resource Development Projects” (May 2016), Metcalf Foundation Green Prosperity Papers, online (pdf): <metcalffoundation.com/stories/publications/a-new-era-of-environmental-governance-in-canada/>

Mark S Winfield, “An Unimaginative People: Instrument Choice in Canadian Environmental Law and Policy” (2008) 71 Sask L Rev 79

Mark Winfield, “Decision-Making, Governance and Sustainability: Beyond the Age of ‘Responsible Resource Development’” (2016) 29 J Envtl L & P 129

Mark Winfield, Deborah Curran & Martin Olszynski, “How post-truth politics is sinking debate on environmental assessment reform”, *The Conversation* (11 October 2018), online: <https://theconversation.com/how-post-truth-politics-is-sinking-debate-on-environmental-assessment-reform-104684>

David A Wirth, “The International and Domestic Law of Climate Change: A Binding International Agreement Without the Senate or Congress?” (2015) 39 Harv Envtl L Rev 515

David Wirth, “The Rio Declaration on Environment and Development: Two Steps Forward and One Back, or Vice Versa?” (1995) 29 Ga L Rev 599

Danielle Wood & Kate Griffiths, “Who’s in the room? Access and influence in Australian politics” (2018) Grattan Institute Report No 2018-12, online: <https://grattan.edu.au/report/whos-in-the-room/>

World Economic Forum, "Energy Transition Index 2020: from crisis to rebound" (13 May 2020), online: <https://www.weforum.org/reports/fostering-effective-energy-transition-2020>

World Meteorological Organization, "Globally Averaged $C0_2$ Levels Reach 400 parts per million in 2015", World Meteorological Organization, (24 October 2016), online: <http://public.wmo.int/en/media/press-release/globally-averaged-co2-levels-reach-400-parts-million-2015>

Stepan Wood, "Book Review: Transboundary Harm in International Law Lessons From the Trail Smelter Arbitration" (2007) 45:3 Osgoode Hall LJ 637

Stepan Wood, Georgia Tanner & Benjamin J Richardson, "Whatever Happened to Canadian Environmental Law?" (2010) 37:3 Ecology LQ 981

Karen Tam Wu, "LNG Canada's announcement presents big challenge to B.C.'s clean growth" (2 October 2018), *Pembina Institute* (blog), online: <https://www.pembina.org/media-release/lng-canada-fid>

Konrad Yakabuski, "Balancing Carbon Emissions with the Economy Proves to be Difficult Task for Ottawa" *The Globe and Mail* (7 August 2018), online: <www.theglobeandmail.com/business/commentary/article-balancing-carbon-emissions-with-economy-proves-to-be-difficult-task/>

Konrad Yakabuski, "Québec's move to challenge federal carbon tax is about more than provincial rights", *The Globe and Mail* (9 July 2019), online: <https://www.theglobeandmail.com/business/commentary/article-quebecs-move-to-challenge-federal-carbon-tax-is-about-more-than/>

Emily Zackin, *Looking for Rights in All the Wrong Places: Why State Constitutions Contain America's Positive Rights* (Princeton, NJ: Princeton University Press, 2013)

Sandra Beth Zellmer, "Sacrificing Legislative Integrity at the Altar of Appropriations Riders: A Constitutional Crisis" (1997) 21 Harv Envtl L Rev 457

Michelle Zilio, "Liberals spend $200,000 for advice on delivering campaign pledges", *The Globe and Mail* (30 September 2016), online: <http://www.theglobeandmail.com/news/politics/liberals-spend-200000-for-advice-on-delivering-campaign-pledges/article32187629/>

Michelle Zilio, "Ottawa to roll out new rules to cut Canadian carbon emissions", *The Globe and Mail* (9 October 2016), online:

<https://beta.theglobeandmail.com/news/politics/ottawa-to-roll-out-new-rules-to-cut-canadian-carbon-emissions/article32312495/>

Richard Zussman, "B.C. Premier John Horgan expecting 'peaceful resolution' to natural gas pipeline protest", *Global News* (9 January 2019), online: <https://globalnews.ca/news/4831105/john-horgan-peaceful-resolution-pipeline-protest/>