Canadian Federalism V – Climate Change, Energy Sustainability and Canadian Federalism

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1. Introduction

Wildfires in central and northern Canada have become a defining feature of summers over past decade. The summer of 2023 proved to be the worst on record (Tasker 2023), with impacts spreading beyond the evacuation and destruction of rural communities to include unprecedented episodes of smoke and smog in major southern cities. The impacts of a changing climate are becoming very real parts the lived experience of Canadians.

These developments have moved the question action on climate moved to back to the forefront, topping public opinion polls over the summer of 2023. Over the same summer however, federal- provincial conflicts over energy, the environment and climate change also reached new peaks. The newly elected United Conservative Party (UCP) Premier of Alberta was seen to go out of her way to avoid linkages between the wildfires and climate change (Derworiz, 2023). There followed a moratorium on the province's booming renewable energy industry, a measure taken in apparent response to proposed federal initiatives intended to decarbonize the electricity sector. The province has been categorical in its refusal to accept the possibility of a federal cap on growth in GHG emissions from the fossil fuel sector (Black 2023).

The environment has been a long-standing point of federal-provincial tension. The modern concept of the biophysical environment did not exist as a matter of governance or public policy at time of the drafting of the *British North America Act*. It has since emerged as an area of 'shared' jurisdiction. The provinces have primary responsibility over energy and environmental matters, but the federal government possesses potentially very significant points of intervention of its own (Muldoon et.al 2020).

The question how to respond to the challenge of climate change has now been at the centre of federal-provincial conflicts for more than three decades, particularly between the fossil fuel exporting provinces, provinces whose economies are not carbon based, and federal government (Macdonald 2020). The climate policy experience highlights tensions between the goals of performance, effectiveness and legitimacy outlined in the introduction to this volume.

Successive efforts at cooperative federalism and or direct federal action failed to produce any effective national policy outputs or outcomes over first 25 years of

Canadian climate policy. The successes that were achieved were almost exclusively limited to the actions of individual provinces: BC's carbon tax; Ontario's phase-out of coal-fired electricity; Quebec's participation in the California-led Western Climate Initiative cap and trade system; and Nova Scotia's initiatives on energy efficiency and renewable energy (Macdonald and Winfield 2020).

This landscape underwent dramatic shifts following the 2015 Alberta and federal elections. In the initial 2015-2018 post-election period a federal-provincial near-consensus on climate action emerged. This laid the groundwork, for the first time, for substantive and effective national climate policy measures, including a national carbon pricing system. However, this federal-provincial consensus was short-lived, breaking down in aftermath of elections in key provinces 2018 and 2019 (Macdonald and Winfield 2020). Since then, the role of the provinces in climate policy has evolved, with the possible exception of BC (Pardy, Budd and Jaccard, 2023), in directions ranging from disengagement to outright hostility to climate action.

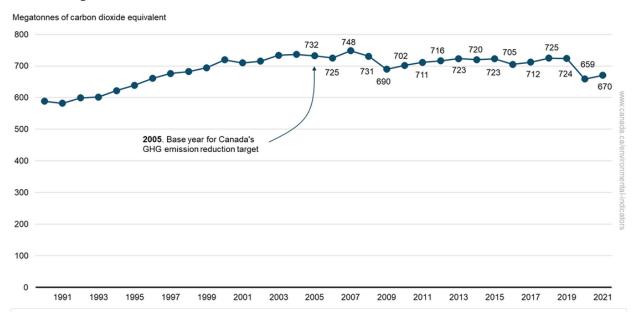
At the federal level, the post-2015 period has seen the most substantive and coordinated effort at effective climate policy formulation and implementation to date. At the same time, those efforts are now facing profound challenges to their legitimacy in federal-provincial terms. The federal-provincial landscape has moved from a position of relative consensus and near-closure on need for climate action and the key elements of the measures required to respond, including a national carbon pricing regime, to a situation of deep contestation and political fragility.

2. Canada's GHG emissions and trajectories

As can be seen in Figure 1 below, total Canadian GHG emissions generally moved upward from 1990 until the onset of the financial crisis of 2008. They then dipped due to the crisis but rose again as the economy recovered. Significant declines in emissions occurred from 2019 and 2021 due to the COVID-19 pandemic, but there are signs emission are rising again as the economy has reopened (Steibert and Sawyer 2023). Total emissions remain well above Canada's commitment under the 2015 United Nations Framework Convention on Climate Change (UNFCC) Paris Agreement to reduce its annual emissions by between 40 and 45 per cent relative to 2005 by 2030 (CESD 2021).

Figure 1 Greenhouse gas emission, Canada 1990-2021 (ECCC 2023)

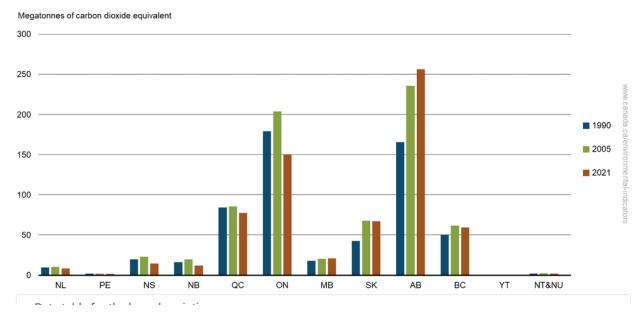
Greenhouse gas emissions, Canada, 1990 to 2021



While the trend in overall emissions has been largely one of increase followed by stability, the trends for emissions from different forms of economic activity vary. Areas that have seen significant increases in recent years include the use of fossil fuels for extracting and transporting oil and gas (27% of total Canadian emissions) transportation (24%) and more recently buildings (13%). Other sources, such as electricity (10%) and heavy industry (less than 12%) have declined (ECCC, 2019d: 58; Stiebert and Sawyer 2023).

Transportation is spread approximately evenly across the country on a per capita basis and so all parts of the country have seen similar increases in emissions from that source. The oil and gas industry, on the other hand operates only in some regions. For that reason, plus differences in policies implemented, emissions have been increasing in some provinces while decreasing in others in recent years. Figure 2 below gives an example.





The oil-producing province of Alberta in particular has seen GHG emission increases from 2005 to 2021of 9 per cent compared with the decreases in emissions from Ontario (27 per cent) and Quebec (12 per cent) during the same period. These shifts are due to the expansion of oil and gas industry in Alberta and a combination of economic restructuring and policy measures such as the elimination of coal-fired electricity generation in Ontario and the Quebec GHG emission cap-and-trade program. Relative to 1990 Alberta's emissions have risen 55%. (ECCC, 2023).

Emissions from oil and gas activity are expected to continue to increase, in part due to anticipated increases in production from the Alberta oil sands. Oil sands emissions were estimated to be 77 Mt in 2018 (Pembina, 2018). If all the oil sands projects which have already received regulatory approval come online, emissions will increase to 131 Mt (Pembina, 2018).

In 1992, 1997 and 2009 the Government of Canada gave commitments for reductions in total Canadian emissions under the auspices of the UNFCCC. All three of these targets were missed. Whether or not Canada is able to achieve its commitments under the 2015 Paris Climate Change Agreement remains an open question, particularly in the context of deepening federal-provincial conflicts over climate policy.

3. Evolution of Canadian Climate Policy

The evolution of Canadian climate policy can be broken down into 3 phases. The first, 1990-2015, phase was defined by ambitious international targets, but failures to implement effective climate policies, either through intergovernmental operation or by the federal government acting alone. Following the 2015 Alberta and Federal elections there was a brief (2015-2018) period of relative federal-provincial consensus leading to

the 2016 Pan Canadian Framework on Green Growth and Climate Change (PCF). The post-2018 period has been defined by a combination of federal attempts at climate policy leadership and increasing provincial disengagement and hostility, although new avenues of federal provincial cooperation have emerged under the guise of 'clean' industrial policy on the part of the federal government.

3.1 . Failure to develop effective national climate policy 1990-2015

In 1990, the Progressive Conservative government of Brian Mulroney, having previously helped to put the issue on the international policy agenda by co-hosting the 1988 "Toronto conference", set the target of stabilizing emissions at their 1990 levels by the year 2000. It started to work with the provinces to develop co-ordinated policy to achieve that goal. That was done for the next twelve years, without use of effective policy instruments such as law or tax. Not surprisingly, emissions continued to increase. Throughout that period, the government of Alberta played a veto role, lobbying against adoption of the 1990 target; lobbying in favour of voluntary instruments; and successfully pushing for a two-year pause after the 1997 Kyoto summit, during which governments did planning instead of policy implementation (Macdonald, 2009).

In 2002, the Canadian government led by Liberal Prime Minister Jean Chretien ratified the 1997 Kyoto Protocol to the UNFCCC. The fact it did so over the objections of Alberta and all other provinces brought the effort to develop co-ordinated policy to an end. Earlier that year, Alberta and Ottawa began to move in different policy directions. Alberta adopted a reduction target significantly weaker than the existing national target and initiated the policy it still follows today, of a net increase in provincial emissions, even while the country as a whole is seeking to reduce emissions. For its part, Ottawa gave up on working with the provinces and started to develop independent plans to regulate industrial emissions (Winfield and Macdonald, 2012).

Those plans for independent federal regulation were continued by the Liberal Paul Martin government from 2003 to 2005. The government fell, however, in December 2005 before the regulations were put into effect. The Conservative Harper government, in office from 2006 to 2015, then essentially ignored the issue. It made no effort either to work with the provinces to develop co-ordinated policy or to implement its own emissions-reduction policy (Toner and McKee, 2014). Instead, it worked to harmonize Canadian federal policy with that of the US federal government (Winfield and Macdonald, 2012). However, that alignment only lasted until it became apparent that the Obama administration intended to take action on industrial emissions even without new legislation from Congress.

During this period, however, some provinces began to independently implement effective policy. The most notable examples are the 2008 BC carbon tax, the phasing out of coal-fired electricity in Ontario (due initially to concerns for health effects of smog,

rather than climate change), the joint Quebec-California cap-and-trade system and legislated reductions from electricity generation in Nova Scotia.

By 2015 independent governments had been acting unilaterally for nine years, making no attempts to develop co-ordinated Canadian policy. Cross-border subnational co-ordination, which had seemed promising a decade earlier (Winfield and Macdonald, 2012), had not borne fruit, other than the Quebec-California partnership. Analysis done a few years earlier showed that the sum of the subnational efforts would not be sufficient to meet the 2020 target (NRTEE, 2012). Uncoordinated provincial action, with no leadership from the federal government, could not fulfil Canada's international commitments.

3.2 2015-2018 PCF and pipeline politics.

Two elections in 2015 would bring about a dramatic, if temporary, sea-change in federal-provincial climate policy landscape. A new NDP government in Alberta, elected under the leadership of Rachel Notley in May 2015 arrived with a mandate to reposition the province's role in climate policy from one of veto state, to one of active and constructive participation in federal-provincial initiatives over climate policy. There followed a substantial Climate Leadership Plan to reduce the rate of increase in Alberta emissions, including a carbon tax, an end to coal-fired electricity and a cap of 100 Mt, with exceptions, on oil sands emissions (Alberta 2015). At the same time, Premier Notley's support for coordinated national climate action came at a price - one which would significantly complicate the intergovernmental process. Alberta would only participate in a new national program if the federal government approved a new pipeline to tidewater to expand market access for Alberta's oil exports.

The arrival of the Notley government in Alberta was followed by the election of a new Liberal federal government, led by Justin Trudeau in October 2015. Unlike its predecessor, the new federal government was committed both to acting itself on the climate change and to working with the provinces to develop co-ordinated policy. The new government's platform specifically committed it to "provide national leadership and join with the provinces and territories to take action on climate change, put a price on carbon, and reduce carbon pollution" (Liberal Party of Canada, 2015, 39)

Since the late 2000s, the oil industry and successive Alberta governments had been strongly committed to seeing new pipelines built both to the US, and to either the west or east coast of Canada, from which point oil could be shipped to Asia or other parts of the world. The latter component of the pipeline strategy was driven by a combination of a weakening US market due to the increasing availability of low-cost 'fracked' oil, and opposition to pipeline expansions by the Obama administration in the US, particularly in light of the Harper government's climate policies. These dynamics made regulatory approvals for new pipelines, which used to be largely invisible and almost automatic, very visible and highly politicized. The American environmental movement, frustrated by the inability of the Obama administration to get climate-change

legislation through Congress, had adopted a new objective of stopping the Alberta to US Keystone XL pipeline. It had begun working with Canadian environmentalists on a strategy of "land locking" Alberta oil – making investment in the oil sands less attractive because of difficulties in getting the product to market (Hoberg, 2013).

Two other factors compounded the challenges faced by industry and the government of Alberta. The first was a series of court rulings flowing from s.35 of the *Constitution Act, 1982* requiring substantive and meaningful consultation with Indigenous peoples where proposed pipelines and other projects may affect their aboriginal and treaty rights and traditional or unceded territories (SCC 2004). At the same time, pipelines have the inherent effect of imposing costs on some and conferring benefits on others. In the case of the new Alberta pipelines the majority of the benefits would flow to Alberta industries and governments while the costs, in the form of risk from spills, would be borne by the other provinces through which the pipelines would pass. Local politicization of these risks led Quebec municipalities to object to the now cancelled Energy East pipeline. It has also led to the major disputes between British Columbia and Alberta over plans to build pipelines for Edmonton to Kitimat (the Northern Gateway) and build a new line on the route of the existing Kinder Morgan Trans Mountain pipeline from Edmonton to Burnaby on the Pacific coast.

With respect to carbon pricing, by early spring, 2016 it had become clear that the primary objective of the Trudeau government was to ensure that a price was put on carbon in all parts of the country, with "price" defined as either an explicit tax or a trading system which achieved a comparable reduction. The fact that the four largest provinces-BC, Alberta, Ontario and Quebec-- already had or were about to have pricing programs in place and made achieving the federal pricing objective that much easier. Saskatchewan, which had no pricing program and was relying primarily upon technological development of carbon capture, utilization and storage (CCUS) to achieve future reductions, objected to the federal proposal. So too did Nova Scotia. It had reduced its per capita emissions by more than any other province, but without use of a carbon tax or trading system. Its reductions were due to declining demand for electricity, legislated caps on Nova Scotia Power and subsidy for renewable-source electricity (Doelle, 2018).

On October 3, 2016 the Prime Minister formally announced a federal 'backstop' carbon pricing system in the House of Commons, starting at \$10/tonne in 2018 and rising to \$50 tonne in 2022. The federal 'backstop,' consisting of two components, a charge on fossil heating and transportation fuels, and an output-based pricing system (OBPS) for industrial emitters, would only apply in provinces or territories with no carbon pricing systems of their own (Canada 2023a).

The federal government's November 2016 approval of the Kinder Morgan Trans Mountain and the Alberta to Wisconsin Line 3 pipeline renewal and expansions, ¹ removed Alberta's objections to a national carbon pricing system, making a federal provincial agreement on climate policy possible at the December 2016 First Ministers Meeting in Ottawa. There all provincial and territorial governments except Manitoba and Saskatchewan signed on to the Pan-Canadian Framework on Clean Growth and Climate Change (PCF). Manitoba refused to sign because of an unrelated dispute over health care spending. Saskatchewan, which had inherited from Alberta the mantle of chief Ottawa opponent, both refused to sign and promised to challenge the federal backstop pricing system in court.

A pan-Canadian system for carbon pricing was identified as the central element of the PCF, while emphasizing the need for flexibility and to recognize the carbon pricing policies already implemented or in development by provinces and territories. The federal government was to outline a benchmark for pricing carbon pollution by 2018 (see Annex I) requiring the implementation of (i) an explicit price-based system (a carbon tax or a carbon levy and performance-based emissions system) or (ii) a capand-trade system. The PCF also included a range of complementary emission reduction actions in relation to electricity, buildings, transportation, industry, forestry, agriculture and waste management, actions around climate change impacts and adaptation, and clean technology, innovation and jobs, listing existing and planned federal and provincial actions.

PCF marked something of a zenith in federal-provincial cooperation on climate, including commitments to substantive measures at both levels, and providing for a federal 'backstop' role, particularly around carbon pricing, for the first time. The federal government proceeded to implement those parts of the program which fell fully within its jurisdiction including regulations on hydrochlorofluorocarbons (HFCs - substances that both deplete the ozone layer and contribute to climate change), and federal regulatory requirements to end coal-fired electricity generation by 2030 (with exemptions given to Saskatchewan and Manitoba) (ECCC, 2018a; 7). Federal regulations to reduce methane emissions from oil and gas, with provisions for provincial equivalency agreements, were published in 2018. Consultations on development of the federal clean fuel standard, intended to reduce the carbon intensity of liquid, gas and solid fuels by means of federal law, were initiated.

Work with the provinces in the form of shared-cost programs for projects leading to emission reductions also proceeded. \$1.4 billion federal funding for the PCF Low Carbon Economy Leadership Fund was made available (ECCC 2018a) with joint programs had been agreed to with all provinces except Manitoba and Saskatchewan, who, having not signed the PCF, were not eligible (Government of Canada, 2019).

¹ Approval of the Northern Gateway pipeline was invalidated by the Federal Court in June 2016 on the basis of failures to consult adequately with the affected Indigenous communities and subsequently abandoned by its proponents.

Substantial action was underway at the provincial level as well. Quebec's Climate Change Action Plan adopted in 2013 included participation a GHG emission cap and trade system with California. The Notley government in Alberta had already announced a Climate Leadership plan November 2015. Ontario announced a comprehensive climate change action Plan in 2017, including participation in the California-Quebec cap and trade system. In July 2017 the NDP led by John Horgan, supported by the three Green Party members, replaced Christy Clark's Liberals as the government of British Columbia, and renewed the province's engagement around climate change.

Arrival of the new NDP government reinforced the climate aspects of PCF, but complicated the relationship with Alberta. The BC NDP had been elected on a platform of strong opposition to the Transmountain pipeline project, leading to deepening conflicts with Alberta and threats by the project's private sector proponents to abandon the project. Faced with this threat of capital flight, the governments of Alberta and Canada accepted the deadline and vowed to do what was needed to ensure the pipeline was built. On May 29, 2018 it was announced that Ottawa had agreed to buy the existing pipeline for \$4.9 billion. It also planned to spend another seven billion dollars to build the new line, in the hopes of then selling both pipelines to private investors. Alberta promised another two billion dollars if needed.

However, to complicate things further, the Federal Court of Appeal overturned the National Energy Board's (NEB) November 2016 federal approval of the pipeline expansion in August 2018, on the grounds that the NEB had not considered impacts of increased tanker traffic upon endangered killer whales in the ocean waters off British Columbia and that the federal government consultation with Indigenous peoples had been inadequate. This development prompted the Alberta government to state that it was 'opt-outing' of the PCF - although the province maintained its carbon pricing system and other aspects of its Climate Leadership Plan. Following a reconsideration of the project application - this time with the federal government as owner and proponent- and new Indigenous consultations, the pipeline was approved again by the federal government in June 2019 (NEB 2019). That decision that was ultimately upheld by the Federal Court of Appeal in the face of challenges from Indigenous peoples (FCA 2020).

3.3. 2018-2023 Federal leadership and provincial disengagement

Summer of 2018 would prove another watershed in terms of the evolution of the relationship between the federal government and the provinces over climate change. The Trudeau government, carrying through, in its view, on the PCF, enacted the *Greenhouse Gas Pollution Pricing Act*, providing authority for a federal backstop carbon price, as part of the 2018 federal budget at the end of June. But at the provincial level, the relative consensus that had existed around climate action and had underwritten the PCF began to disintegrate. A series of provincial elections lead to the appearance new

populist conservative governments elected, in many cases, on platforms explicitly opposing action on climate change, particularly carbon pricing.

In Ontario, the Liberal government of Kathleen Wynne, which had played a significant role in the formulation and implementation of the PCF, suffered a crushing electoral defeat at the hands of Doug Ford's Progressive Conservatives, who ran on a populist platform promising, among other things to 'cancel the carbon tax.' The new government moved to immediately terminate Ontario's participation in the cap and trade program with Quebec and California, along with the rest of the province's climate change action plan (Winfield 2023). Manitoba did join the PCF in February 2018 and began planning to introduce carbon pricing, but then abruptly cancelled those plans (Lambert, 2018).

In Saskatchewan, Premier Scott Moe, who had replaced Brad Wall as premier, continued that province's vocal opposition to the federal tax, and initiated a legal challenge, soon joined by the Ford government in Ontario, to its constitutionality. The Coalition Avenir Québec (CAQ) government elected in Quebec in October 2018, would continue its engagement with the cap-and-trade system with California. More broadly however, Quebec began to play a less prominent climate leadership role than had been the case with the preceding Liberal government. In fact, Quebec would ultimately join the legal challenges to the federal government's 'backstop' carbon pricing system, even though its cap-and-trade system was considered 'equivalent' to the federal 'backstop' and the province therefore not subject to federal carbon pricing (Pineau and Whitmore 2023).

The disintegration of the PCF consensus was accelerated further by the United Conservative Party's (UCP) April 2019 Alberta election victory. During the campaign, UPC leader Jason Kenney had promised an end to Notley's co-operation with the federal Liberals, as well as the cancellation of her climate policies. Like the Ford government, Premier Kenney moved quickly to keep that promise (at least in part), eliminating Notley's carbon tax paid by individuals, although the commitment to a phase-out of coal-fired electricity, and the NDP regulations on industrial emissions were kept in a modified form (Thibault, Weis and Leach, 2023).

The federal government's initial response to these developments was to continue to carry through on what it regarded as its core climate policy – a backstop federal carbon price. In the fall of 2018, the Prime Minister announced that four provinces (Saskatchewan, Manitoba, Ontario and New Brunswick) had not implemented carbon pricing systems meeting the PCF 'benchmark, with the result that the federal backstop carbon price would be applied there, beginning April 1, 2019. Revenues generated through the federal fuel charge would be returned to the residents of the affected provinces directly by the federal government. Alberta was added to this list following the outcome of the April 2019 election, with application as of January 1, 2020, prompting the new Alberta government to announce plans for a legal challenge to the federal pricing scheme (Giovannetti, 2019).

In proceeding with the implementation of its 'backstop' carbon price over the objections of the provinces without carbon pricing systems of their own, rather than delaying in the face of growing provincial objections, Ottawa made an implicit choice to play a far more active role in the implementation of carbon pricing than it had ever anticipated at the time of the adoption of the PCF in December 2016. Ultimately, the federal government would find itself moving from a position of providing a 'backstop' of last resort to being the primary implementor carbon pricing in Canada, particularly for the fuel charge, and prompting legal challenges from Saskatchewan, Ontario and Alberta, with the support of other provinces, in the process.

This was exceptionally assertive approach on the part of the federal government in relation to an environmental matter. It would ultimately provide ground on which the Trudeau government choose to fight the 2019 federal election, buttressed by decisions from the Saskatchewan (SCA 2019) and Ontario Courts of Appeal (OCA 2019) upholding the federal government's backstop carbon pricing legislation as a valid exercise of Parliament's power to legislate for the "Peace, Order and Good Government of Canada" in May and June of 2019 respectively. In climate policy terms to federal government's approach suggested an underlying judgement that attempting to engage with explicitly hostile provincial governments would lead to no useful outcomes, and indeed a return to the pre-2015 federal-provincial stalemates, with even less provincial engagement than before.

The federal Conservative party did release a climate change plan in June 2019. However, like the plan released by the Ford government at the end of 2018 in an attempt to stave off the application of the federal 'backstop' carbon price, the plan made no use of carbon pricing and was equally vague except on the one point that if elected, the Conservatives would scrap the federal carbon pricing system (Jaccard, 2019). On voting day, October 21, 2019, the Conservatives won all but one of the seats in Alberta and Saskatchewan and received the greatest number of votes. The Liberals, however, won more House of Commons seats and so were re-elected, albeit with minority status, with the support of three opposition parties (the NDP, Bloc Quebecois and Greens (in combination with the Liberals drawing 60% of voters)) demanding increased action on the climate.

The election outcome collided with the demands of Alberta and Saskatchewan for new pipelines and the withdrawal of carbon pricing. Expanded pipeline capacity would allow increased oil and gas exports which, barring an unprecedented technological breakthrough, meant increased GHG emissions from those provinces. Moreover, premiers Kenney and Moe framed their demands as being central to national unity. Without representation in the government caucus the two provincial governments drew upon a century's worth of western alienation and flirtation with separatism to demand a new deal, not just for energy and climate policy, but also in areas such as the equalization program and possible steps toward increased provincial autonomy. That position was reinforced by the Alberta Court of Appeal's February 2020 majority finding

that the federal government's carbon pricing legislation was a "Constitutional Trojan horse" that far exceeded Parliament's constitutional authority (CAA 2020).

Federal response was largely to move forward on climate policy, but also to make important attempts at accommodation for the fossil fuel producing provinces. The government's December 2020 Health Environment, Healthy Economy (HEHE) paper gave the clearest overall sense of the Trudeau government's approach to achieving its climate change targets. The paper made it clear that carbon pricing would remain at the core of the government's policies, with the 'backstop' federal carbon price rising to \$170/tonne by 2030. The paper also placed a strong emphasis on retrofits of residential, commercial and institutional buildings for energy efficiency, and the electrification of transport, including the development of EV manufacturing and supply chains, and 'clean' electricity supplies.

With respect to industry there would be a \$7+ billion-dollar Strategic Innovation Fund to rapidly expedite decarbonization projects with large emitters, scale-up clean technology and accelerate industrial transformation across sectors. The roles of CCUS, hydrogen-based technologies and a federal clean fuel standard were all highlighted. CCUS and hydrogen-based strategies would become crucial instruments in federal government's attempts to accommodate Alberta and Saskatchewan's concerns, and engage with them constructively around climate and energy transition issues.

The federal government's constitutional position was strongly reinforced by the Supreme Court of Canada's March 2021 ruling that the federal backstop carbon pricing system was a valid exercise of Parliament's authority to legislate for the Peace, Order and Good Government (POGG) of Canada, noting that "Climate change is real ... and it poses a grave threat to humanity's future" (SCC 2021).

Reinforced by this ruling, the Intergovernmental Panel on Climate Change's (IPCC) 2021 6th assessment report highlighting need for more ambitious emission reduction targets, including a 45 per cent reduction in GHG emissions relative to 2010 levels by 2030 and the achievement of net zero by mid-century to avoid 'dangerous' climate change (defined as temperature increases greater that 1.5 degree centigrade by the end of the Century) and in anticipation of the upcoming UNFCCC Conference of the Parties in Glasgow, at which the newly elected Biden Administration in the United States would be participating, the federal government revised its GHG emission reduction targets. Its new Nationally Determined Contribution (NDC) submitted in April 2021 under the 2015 Paris agreement committed Canada to a 40-45 per cent reduction in emissions relative to 2005, by 2030, and net zero emissions by 2050. These targets were subsequently embedded in legislation through a June 2021 *Net Zero Accountability Act*.

The April 2021 federal budget began to move in direction of implementation of key themes in the HEHE paper, including major funding for building energy efficiency retrofits, and 'nature-based' solutions. Crucially from the perspective of federal-

provincial relations, the budget responded to growing demands from Alberta and the oil and gas industry for federal support for CCUS with a proposal for an investment tax credit for CCUS projects, as well as \$319 million in CCUS research and development funding. Large scale deployment of CCUS was seen to offer a means by which oil sands production could continue to expand while reducing GHG emissions, as well as facilitating the production of "blue" hydrogen from natural gas (PPF, 2021) The latter has also emerged as a significant theme in discussions about the future of the upstream fossil fuel sector in western Canada.

CCUS involves the capture and (usually) underground storage of CO2 associated with the combustion of fossil fuels or industrial processes that generate CO2 as a by-product. CCUS proponents argue that GHGs managed in this way will stay sequestered indefinitely. The technology has been highly controversial in climate policy terms with respect to its likely effectiveness and costs (Cameron and Carter 2023) and the extent to which it facilitates continued fossil fuel production and consumption (Letter from scientists, 2022).

The 2021 federal budget, tabled amid the ongoing COVID-19 pandemic, laid the groundwork for Liberal government's platform in federal election called for October. In addition to promises around the HEHE themes of building retrofits, EV mandates and charging infrastructure, the platform committed to reduce fossil industry emissions "from current levels at a pace and scale needed to achieve net-zero by 2050, with five-year targets starting in 2025" and a Clean Electricity Standard to bring the electricity grid to net-zero by 2035 (Liberal Party of Canada 2021, 42)

The outcome of the election was almost identical to that in 2019 – a Liberal minority government supported by three opposition parties with strong commitments to climate action. The Liberals again lost the popular vote to Conservatives but did gain single seats in Edmonton and Calgary. The Conservative's efforts to reposition themselves to the centre, particularly on climate change, were undermined by the difficulties the new Conservative leader, Erin O'Toole, suffered in getting his party to acknowledge the reality of climate change or the need for some form of carbon pricing (Winter 2021). The significance of the opposition support enjoyed by the federal Liberals was underlined by the March 2022 'Supply and Confidence' agreement with NDP. The agreement committed both parties to "tackling the climate crisis," including achieving significant emissions reductions by 2030 compared to 2005 levels and accelerating the trajectory to achieve net-zero emissions no later than 2050, the adoption of 'just transition' legislation, phasing-out public financing of the fossil fuel sector, and moving energy efficiency programs forward.

The 'Supply and Confidence' agreement was accompanied by a 2030 Emissions Reduction Plan (ECCC 2022) outlining a specific plan to achieve the government's 2030 target of a 40-45 per cent reduction GHG emissions. The plan anticipated major (>100mtCO2e/yr) reductions in emissions from the electricity sector, largely due to the phase-out of coal-fired generation by 2030. The oil and gas sector is expected to

contribute 42mt/yr through CCUS, the regulation of methane emissions and fuel-switching, but not production reductions.

The 2022 budget contained further substantive climate related measures. Crucially, from the perspective of Alberta and Saskatchewan, the budget implemented the CCUS tax credit proposed in the 2021 budget at an estimated annual cost of \$1.5 billion/yr., over the strong objections of climate advocates. The budget included additional funding in areas of growing provincial interest, including \$1 billion each for EV manufacturing and 'green' steel in Ontario, and nearly \$4 billion for infrastructure to support 'critical' minerals development, projects, and supply chain development and applications in areas like electric vehicle batteries, an area of high interest to Ontario, Quebec, and other provinces. Canada's role as a potential supplier of 'critical' minerals has also drawn the attention Canada's international allies in the context of the war that began with Russia's February 2022 invasion of Ukraine (Birchard 2023). At the same time, deep concerns began to emerge in terms of the environmental and climate impacts of increased mineral extraction, and the potential effects on rights and interests of affected Indigenous communities (Winfield 2023).

International events continued to have profound impacts on Canada's economic and climate policies. The arrival of the US Biden administration in 2020 on the basis of a platform to "Build Back Better" in response to the COVID-19 pandemic, and the impact of the pandemic and War in Ukraine on supply chains culminated in the adoption of an *Inflation Reduction Act* (IRA) by the Congress in October 2022. The US legislation included nearly \$400 billion in subsidies for "clean" technologies. The U.S. emphasis on expenditures was a product of political circumstances. Options like a system for pricing carbon and additional regulatory measures were ruled out due to a lack of Congressional support, leaving spending as the only significant way to address the climate issues (Dernbach and Jones 2023).

However, the situation created intense pressures on the Canadian federal government to compete in some way for investments in 'clean' technologies. In response, Canada's 2023 budget moved the subsidization of the development and deployment of 'clean' technologies to the centre of the federal government's climate and economic strategies. The budget committed \$80 billion to a 'clean' industrial strategy. Key measures included an expansion of the CCUS tax credit for the fossil fuel industry introduced in 2022, the introduction of a \$12 billion hydrogen tax credit – important in federal-provincial terms given the interest among many provinces, including BC, Alberta, Ontario, and Quebec, in hydrogen based strategies; and a \$25 billion tax credit for 'clean' electricity (including nuclear energy and CCUS for fossil fuel fired facilities), with a further \$20 billion to be provided from the federal Infrastructure Bank. The electricity tax credit was intended to facilitate provincial compliance with "clean" electricity regulations, aiming for a next zero electricity grid, proposed in August 2023. There was also an \$11 billion 'clean' manufacturing tax credit and growth fund, as well as specific multi-billion-dollar subsidies to Volkswagen and Stellantis for electric vehicle

and battery production in Ontario (Karim 2023). Finally, there were commitments to further accelerate federal approvals for 'critical' minerals projects.

The overall situation is one where the Federal government seems increasingly left to carry the implementation of substantive climate policy on its own. Relative to the situation of federal -provincial consensus and, in some areas, provincial leadership around climate policy, that underlay the 2016 PCF, among the provinces only BC can now really be said to be fully engaged. The federal government, for its part, has tried to maintain climate policy trajectory coming out of the PCF and laid out in fuller detail in the December 2020 HEHE paper. At same time, it has been attempting to advance constructive engagement with increasingly recalcitrant, if not openly hostile, provinces. Federal subsidies and expenditures around themes that provinces see as important to their economic strategies, like CCUS, hydrogen, nuclear energy, 'critical' minerals and EV and battery manufacturing, have emerged as a central instrument in this effort, particularly through the 2021-23 federal budgets.

The theme of accommodation of provincial interests is perhaps most evident around the federal role in implementation of a national carbon pricing system. The 2016 PCF assumed that the provinces would largely take the lead on carbon pricing, particularly given that Ontario, Quebec, Alberta, and BC all either had pricing systems in place already or were about to implement such systems. In practice, with the disintegration of the PCF federal-provincial consensus in the aftermath of the provincial elections in 2018 and 2019, the federal government has ended up playing a far larger role in the implementation of a 'backstop' national carbon price than it likely ever anticipated. The federal backstop charge on transportation and heating fuels, the most visible component of the national carbon pricing system from a consumer perspective, now applies in all provinces except BC and Quebec, having been extended to the Maritime provinces in July 2023. In effect the federal government has been left to bear the political costs of the most substantive and publicly visible aspect of climate policy implementation.

With respect to the second dimension of the federal 'backstop' carbon pricing system, the output-based pricing system (OBPS) that applies to industrial (>50,000 tonnes CO2E/yr) emitters of GHGs, the federal government has provided a high degree of accommodation to the provinces and territories, granting 'equivalent' status to provincial carbon pricing systems, even where there are serious doubts about the nature the provincial regimes (Turcott and Green 2021). As a result, as of the fall of 2023 the federal OBPS system only applied in Manitoba, Prince Edward Island, the Yukon and Nunavut (Canada 2023a).

Beyond carbon pricing, the PCF and the HEHE and subsequent federal documents recognized the need to employ a wider range of instruments than carbon pricing alone to achieve Canada's climate commitments. Again however, implementation of these tools, including clean fuel and electricity standards, zero emission (i.e. EV) vehicle sales mandates, an emission cap on the oil and gas sector and a growing range of subsidies

and expenditures, has been largely left to the federal government. Even within the regulatory dimensions of climate policy, very significant efforts at bilateral accommodation with the provinces have been embedded. The August 2023 proposed Clean Electricity Regulation (CER), intended to achieve a net zero electricity grid by 2035, incorporated important accommodations for existing natural gas fired generating facilities, and would even permit the addition and long-term (i.e. 20-year) operation of new gas-fired facilities if they are established before 2025, as per the electricity plans for Alberta and Ontario .

Despite these efforts to advance meaningful climate policy while accommodating provincial concerns, in some cases the federal-provincial conflicts over climate have become deeper than ever. This seems particularly the case with Alberta. Despite their public disputes over climate and energy policy, a surprising degree of behind-the-scenes accommodation and even cooperation did occur between the Trudeau and Kenney governments around issues like the OBPS, federal financial and regulatory support for CCUS, Alberta's role in the development of a 'hydrogen' economy, and continued federal support for the Trans Mountain pipeline as it costs grew beyond \$17 billion (The Energy Mix 2023). A similar situation has emerged with Ontario, where despite the province's earlier complete dismantling of the province's climate change strategy, there has been substantial cooperation with the Ford government around subsidies for 'green' steel and EV and advanced battery manufacturing, the OBPS, 'critical minerals,' hydrogen and new nuclear energy facilities (Winfield and Kaiser 2023).

The arrival and then May 2023 election of Danielle Smith's government in Alberta seems to have abruptly ended the semi-détente around climate policy that had emerged between Ottawa and Edmonton. The newly elected premier declined to link the summer 2023 wildfires to climate change, with an underlying implication of an element of climate denial (Derworiz, 2023). The premier has also stated her clear intention to fight the federal government over any proposed emissions limits on oil and gas sector (Black 2023). In response to the draft CER tabled in August 2023 Alberta abruptly imposed a 6-month 'moratorium' on province's booming renewable energy sector. The move has been interpreted as effectively the taking the sector, which the Alberta government apparently perceives to be important to the federal government, hostage (CP 2023). Whether other provinces, with the possible exception of Saskatchewan, are going to following Alberta's lead in renewing outright federal-provincial hostilities over climate policy, remains an open question.

4. Evaluation

This section evaluates the workings of Canadian climate change federalism, with a focus on the post-2018 period, examining the dimensions of performance, substantive policy outcomes, and the legitimacy of the resulting processes.

4.1 Performance: Institutions, Processes and Results.

With respect to performance, the consistency of the Trudeau government's approach to climate policy, and carbon pricing in particular, with the federal principle of governments recognizing the proper role and autonomy of other governments, has been deeply contested. The resulting debates have culminated in litigation before the Supreme Court which ultimately found in favour of Ottawa's 'backstop' approach. Although the level of outright conflict over climate policy with some, previously openly hostile provinces, particularly Ontario, has subsided somewhat, the conflicts over the appropriate role of the federal government around climate policy with others, notably Alberta and Saskatchewan, seemed to reach new heights.

In terms of a balance between unity and diversity, as described earlier, the post-2018 pattern, except for BC, of provincial disengagement around climate policy, leaving the federal government to carry the bulk of substantive policy development and implementation as inevitably tipped the balance in favour relative unity, given the lack of constructive provincial initiatives around climate change. At the same time, the federal government has made very substantial efforts to accommodate provincial concerns and interests.

Formal multi-lateral intergovernmental processes around climate policy have been increasingly sidelined, as the federal government has perceived such engagements with hostile provincial governments as unproductive. At the same time however, a degree of workability has emerged through bilateral or multilateral federal provincial engagements around specific issues and initiatives. Notable examples of such interactions have emerged subsidization of EV manufacturing and 'green' steel in Ontario, and the federal-provincial-industrial sectoral strategies in areas like hydrogen, nuclear energy, and critical minerals. In these areas provincial participation is effectively voluntary, but backed by the potential to access the very substantial federal financial support in the 2021-23 federal budgets (Winfield 2023).

Accountability in this context largely ends up being between the federal government and the provinces and territories, specifically around the expenditure of federal funds and the assessment of the 'equivalency' of provincial regimes around industrial carbon pricing and other regulatory initiatives. The federal Auditor General and Commissioner for Environment and Sustainable Development have remained very actively engaged around the oversight of federal climate policy, and some provincial auditors have engaged strongly as well. At the federal level climate policy accountability to the public and Parliament has potentially been enhanced through the federal *Net Zero Accountability Act*, which sets up a Net Zero Advisory body and establishes regular reporting requirements on Canada's progress towards net zero. The federally created Canadian Climate Institute also engages in regular evaluations of Canada's progress on climate policy, as does the long-established International Institute for Sustainable Development (Cameron and Carter 2023). Canada also continues to report its progress

on the achievement of its INCs under the UNFCCC to the international community (Canada 2023b).

4.2 Outcomes

The evaluation of the substantive climate policy outcomes being achieved in terms of reducing Canada's GHG emissions relative to its commitments under the *Net Zero Accountability Act*, and the UNFCCC Paris Agreement remains a work in progress. Canada's overall GHG emissions have stabilized over the past decade after a period of rapid growth. That growth was largely attributed to the expansion of activity in the oil sands and transportation related emissions The extent to which the stabilization of emissions can be attributed to climate-related policy interventions relative to other factors, including the 2008 financial crisis, longer-term economic restructuring, and the COVID-19 pandemic, remains unclear. At noted earlier, emissions have begun to increase again in the oil and gas, transportation and buildings sectors (Stiebert and Sawyer 2023).

At the same time, implementation of the policy framework laid out in the 2016 PCF and 2020 HEHE paper remains incomplete. Although the backstop federal carbon price is set to rise to \$170/tonne by 2030, other key measures, including an oil and gas emissions cap, the CERs, and zero-emission vehicle sales mandates have yet to be implemented. Some provinces remain on trajectories towards substantially increased GHG emissions, notably around natural gas-fired electricity in Ontario (Oved and Bailey 2023), oil and gas development in Alberta and Saskatchewan and liquid natural gas (LNG) development in BC (Horn and McNab 2014).

At the same time there are very serious debates about the likely effectiveness in reducing GHG emissions of key technologies that have been the focus of federal financial support through the 2021-23 budgets and key points of federal-provincial cooperation. CCUS and nuclear and hydrogen-based strategies have been subject to substantial criticism in this context. Many of these technologies, along with the shared federal-provincial emphasis on the development of Canada's 'critical' mineral resources, have been identified as involving potentially very serious negative environmental, climate, social, cultural and economic trade-offs of their own, particularly with respect to Canada's Indigenous peoples (Winfield 2023).

4.3. Legitimacy

The outcomes of the 2019 and 2021 federal elections, although producing minority governments, seemed to reinforce the Trudeau government's strong 2015 mandate around climate change. The issue was a central focus in both campaigns, and 60 per cent of the popular vote ultimately went to parties (Liberal, NDP, BQ and Green) with strong commitments to climate action.

Climate change has continued to poll very strongly nationally, as it has done consistently over the past decade, boosted in the fall of 2023 by that summer's record

wildfires. However, there has been increasing concern over economic security, and long-standing regional divisions over concern for climate change remain. The issue has consistently polled most strongly in BC and Quebec, and most weakly in the prairie west (Nanos 2023)

The results of the May 2023 Alberta election seemed to introduce a new level of intensity to the regional challenges to the legitimacy of federal climate policy. The outcome again emphasized the political fragility of the current climate policy framework, with most provinces relatively disengaged, leaving the federal government to carry the substance and political cost of meaningful climate policy implementation. The situation leaves Canada's entire climate policy framework extremely vulnerable to change in government at federal level, particularly with the federal Conservatives polling, in the fall of 2023, well ahead of Liberals (Nanos 2023). The Conservative party lacks any meaningful climate policy, and is openly hostile to key elements of the existing federal strategy, particularly its substantive components related to carbon pricing and regulatory measures (Bonasia 2023).

5. Explanation

In climate policy terms the federal government has demonstrated a remarkable degree of consistency in following-through from PCF, and directions laid out in December 2020 HEHE paper. Domestically it has been confronted with the near-complete disintegration of the federal-provincial near-consensus that existed around the 2016 PCF. New right-wing populist provincial governments, led by the Ford government in Ontario, and the Kenny government in Alberta, were elected in part as a result of focusing on the consumer impact of carbon pricing. That issue made has been made more sensitive in the context of rising inflation, and then the Bank of Canada's interest rate increases in response.

Faced, except for BC, with provincial disengagement at best, and outright hostility at worst, the federal government appears to have made a judgement that further attempts at multilateral federal-provincial engagement around climate policy would be pointless or even counterproductive in terms of advancing substantive and effective policies. Behind this there seems to be a very strong underlying commitment to climate action on the part of the federal government, likely coming from the centre, driven by a combination of personal commitment on the part of the Primer Minister, and political interest with respect to the progressive-urban coalition that led to the Liberal successes in the 2015, 2019 and 2021 federal elections (Angus Reid 2023 (BETTER REFERENCE)).

At the same time, beyond the very high-profile purchase and support of the Transmountain pipeline, the federal government has pursued a strategy of quiet bilateral engagement with the provinces. This has involved making accommodations around carbon pricing for industrial emitters and regulatory initiatives like the CER, to the point of potentially compromising their effectiveness in climate policy terms. This approach

has been complemented with a strategy of engagement around the concept of a 'clean' industrial strategy, both bilaterally (e.g. Ontario, Quebec on EVs and batteries) and around sectoral strategies in areas where multiple provinces have strong interests (e.g. hydrogen, critical minerals, nuclear/SMRs) facilitated with exceptionally strong doses of federal fiscal support, propelled in part by the perceived need to respond to the US *Inflation Reduction Act*.

Despite these efforts at accommodation, the hostility on the part of some provinces to effective climate policies has intensified. This has been the case especially with Alberta and Saskatchewan, a situation that seems to leave no clear pathway to accommodation when dealing with governments that don't seem to recognize climate change as a serious problem, and see effective responses to it as existential threats to their economies.

Conclusions

The federal-provincial landscape around climate change has been fundamentally altered from where it stood in 2016, where provinces (BC, Alberta, Ontario, Quebec and Nova Scotia) were the climate policy leaders. There now remains little positive engagement from provinces on climate policy per se, and outright hostility in some cases. The federal government has effectively been left to carry the overwhelming bulk, and political cost, of substantive climate policy implementation through carbon pricing, regulatory measures and subsidies. In this context, there have been substantial efforts at the accommodation of provincial interests, in some cases, to the point of compromising the effectiveness of these policies themselves. There have also been successful bilateral and multilateral engagement with some provinces around sector specific 'clean' industrial strategies, but these are seen far more in economic development than environmental or climate policy terms by the provinces involved, and are underwritten by federal financing.

The resulting situation is one of deep political fragility, with the primary federal opposition partly opposed to carbon pricing and other substantive climate policy measures other than the subsidization of technology development. Outside of BC there are no obvious provincial champions to take on climate policy leadership as was the case during the 2006-2015 Harper period. At same time impacts of a changing climate becoming ever more obvious, the timeframe for effective action to continues to shrink.

As a case study in federalism, the climate change case ends in a dilemma and trade-off between advancing collaborative federalism and implementing effective policies. Given the levels of provincial hostility to the non-expenditure based dimensions of the federal government's climate strategy, the only path forward to federal-provincial harmony would seem to be to sacrifice climate policy measures widely seen as essential to the achievement of Canada's GHG emission reduction goals, particularly carbon pricing and regulatory measures like the CER, while retaining fiscal support for

the 'clean' industrial strategies which have been well-received at the provincial level. Such an approach would effectively follow the pathway taken as a matter of political necessity by the Biden Administration through the IRA, and is essentially what the current federal Leader of the Opposition proposes. Such an approach is attractive in terms of reducing the levels of intergovernmental conflict around climate policy, but almost certain to fail to deliver the required substantive outcomes.

Bibliography

Alberta, 2015, Alberta's Climate Leadership Plan (Edmonton: Government of Alberta).

Angus Reid Institute, (2023) "Federal Vote Deep Dive: Despite national lead, major urban centres represent a significant obstacle for CPC," March 30, https://angusreid.org/federal-polling-canada-trudeau-poilievre-singh-ndp-liberals-conservatives/.

Birchard, R., "Von der Leyen talks raw materials, Ukraine in Canada, US," *DW*, March 6, https://www.dw.com/en/von-der-leyen-talks-raw-materials-ukraine-in-canada-us/a-64903085.

Black, M., 2023 – "Refrain from testing our government's or Albertans' resolve': Smith warns Ottawa over planned emissions cap," *The Edmonton Journal*, August 30, 2023. https://edmontonjournal.com/news/politics/refrain-from-testing-our-governments-or-albertans-resolve-smith-warns-ottawa-over-planned-emissions-cap.

Bonasia, C., 2023, "Poilievre could dial back Canada's climate gains, Globe editorial warns," *The Energy Mix*, September 12, https://www.theenergymix.com/2023/09/12/poilievre-could-dial-back-canadas-climate-

https://www.theenergymix.com/2023/09/12/poilievre-could-dial-back-canadas-climate-gains-globe-editorial-warns/.

The Canadian Press (CP) 2023, "Alberta announces pause on renewable energy projects, citing rural concerns," *The Calgary Herald*, August 3, https://calgaryherald.com/news/alberta-announces-pause-on-renewable-energy-citing-rural-concerns.

Canada. 2019. *The Low Carbon Economy Fund: News Releases*, 22 February. https://www.canada.ca/en/environment-climate-change/services/climate-change/low-carbon-economy-fund.html

Canada, (2020), A Healthy Environment and a Healthy Economy file:///C:/Users/Owner/Downloads/healthy environment healthy economy plan-2.pdf.

Canada (2023), "Net-Zero Emissions by 2050,

https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/net-zero-emissions-2050.html, accessed October 2.

Canada (2023a) "How carbon pricing works" https://www.canada.ca/en/environment-climate-change/services/climate-change/pricing-pollution-how-it-will-work/putting-price-on-carbon-pollution.html, accessed October 2.

Canada (2023b) Canada's Eighth National Communication on Climate Change and Fifth Biennial Report (Ottawa: Environment and Climate Change Canada) https://unfccc.int/sites/default/files/resource/Canada%20NC8%20BR5%20EN.pdf?download.

Cameron, L., and Carter, A., (2023) Why Carbon Capture and Storage Is Not a Net-Zero Solution for Canada's Oil and Gas Sector (Winnipeg: International Institute for Sustainable Development). https://www.iisd.org/system/files/2023-02/bottom-line-carbon-capture-not-net-zero-solution.pdf

Commissioner for Environment and Sustainable Development (CESD) 2021 "Lessons Learned from Canada's Record on Climate Change" 2021 Report 5 (Ottawa: CESD) https://www.oag-bvg.gc.ca/internet/English/parl cesd 202111 05 e 43898.html.

Court of Appeal of Alberta (CAA) 2020, Reference re Greenhouse Gas Pollution Pricing Act, 2020 ABCA 74.

Court of Appeal of Ontario (OCA) Reference re Greenhouse Gas Pollution Pricing Act, 2019 ONCA 544.

Dernbach, J.C., and Jones, R.A., "Evolution of U.S. Climate Law and Policy"

<u>Widener Law Commonwealth Research Paper No. 23-02,</u> https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4335291.

Derworiz, C., 2023 "Alberta Premier Danielle Smith deflects when asked about wildfires and climate change," *Global News* June 8.

https://qlobalnews.ca/news/9756870/alberta-wildfires-danielle-smith-climate-change/

Doelle, M. 2018. 'Toward a Principled Design of Carbon Pricing Systems: Lessons from Nova Scotia's Proposal to Meet the Carbon Pricing Requirement in the Pan-Canadian Framework for Climate Change', *Journal of Environmental Law and Practice*. 31:293-303.

The Energy Mix Staff (2022) "Smokescreen' masks \$17 billion cost of Trans Mountain Pipeline," *The Energy Mix*, October 13,

https://www.theenergymix.com/2022/10/13/smokescreen-masks-17b-taxpayer-cost-for-trans-mountain-

<u>pipeline/?utm_source=The+Energy+Mix&utm_campaign=f7423904ea-TEM_RSS_EMAIL_CAMPAIGN&utm_medium=email&utm_term=0_dc146fb5_ca-f7423904ea-509993085.</u>

Environment and Climate Change Canada. 2018a. Pan-Canadian Framework on Clean Growth and Climate Change: Second Annual Synthesis Report on the Status of Implementation, December.

http://publications.gc.ca/collections/collection 2018/eccc/En1-77-2018-eng.pdf

Environment and Climate Change Canada. (2019d). *National Inventory Report 1990–2017: Greenhouse Gas Sources and Sinks in Canada. Part*

1.http://publications.gc.ca/collections/collection 2019/eccc/En81-4-2017-1-eng.pdf

Environment and Climate Change Canada, 2022, 2030 Emissions Reduction Plan: Clean Air, Strong Economy (Ottawa: ECCC)

https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/climate-plan-overview/emissions-reduction-2030/plan/annex-5.html.

Environment and Climate Change Canada (ECCC) 2023, ECCC, "National Greenhouse Gas Emissions," accessed October 2, 2023. https://www.canada.ca/en/environment-climate-change/services/environmental-indicators/greenhouse-gas-emissions.html.

Federal Court of Appeal (FCA) 2020 Coldwater Indian Band Coldwater Indian Bank, Squamish Nation, Tsleil-Waututh Nation, Aitchelitz, Skowkale, Shxwha:y Village, Soowahlie, Squiala First Nation, Tzeachten Yakweakwioose vs. Attorney General of Canada, Trans Mountain Pipeline ULC and Transmountain Corporation, Alberta, Saskatchewan and the Canadian Energy Regulator Federal Court of Appeal, 2020 FCA 34.

Giovannetti, J., 2019, "Alberta launches legal challenge against Ottawa's carbon tax, " *The Globe and Mail*, June 20,

https://www.theglobeandmail.com/canada/alberta/article-alberta-launches-legal-challenge-against-ottawas-carbon-tax/.

Hoberg, G.. 2013. 'The Battle over Oil Sands Access to Tidewater: A Political Risk Analysis of Pipeline Alternatives', *Canadian Public Policy*, 39:3, September. 371-391.

Horn, M., and McNab, J., 2014, *LNG and Climate Change*, (Vancouver: Pacific Institute for Climate Solutions), https://www.pembina.org/reports/lng-and-climate-change-the-global-context-pi-pics.pdf.

Jaccard, M., 2019 "Emissions will rise under Conservative climate plan," *Policy Options*, August 21, https://policyoptions.irpp.org/magazines/august-2019/emissions-will-rise-under-conservative-climate-plan/.

Karim, N. (2023, July 6). "Canada mimics U.S. strategy by offering nearly \$30 billion for Stellantis, Volkswagen battery plants." *Financial Post*.

https://financialpost.com/commodities/energy/electric-vehicles/canada-us-30-billion-stellantis-volkswagen-battery-plants

P.Kelemen, S.M.Benson, H.Pilorgé, P.Psarras, J.Wilcox (2019) "An Overview of the Status and Challenges of CO2 Storage in Minerals and Geological Formations," *Frontiers in Climate* VOL-1, 2019,

URL=https://www.frontiersin.org/articles/10.3389/fclim.2019.00009.

Lambert, S. 2018. 'Manitoba backs out of planned federal carbon tax.'

The Globe and Mail, 3 October.

https://www.theglobeandmail.com/canada/article-manitoba-backs-out-of-planned-carbon-tax/

"Letter from scientists, academics, and energy system modellers: Prevent proposed CCUS investment tax credit from becoming a fossil fuel subsidy," January 19, 2022, https://www.researchgate.net/publication/357946638_Letter_from_Academics_re_CCU S_tax_investment_credit_January_2022

Liberal Party of Canada 2015, *A New Plan for a Strong Middle Class* (Ottawa: Liberal Party of Canada), https://liberal.ca/wp-content/uploads/sites/292/2020/09/New-plan-for-a-strong-middle-class.pdf.

Liberal Party of Canada, 2021 *Forward for Everyone*, (Ottawa, Liberal Part of Canada) https://liberal.ca/wp-content/uploads/sites/292/2021/09/Platform-Forward-For-Everyone.pdf.

Macdonald, D. 2009. 'The Failure of Canadian Climate Change Policy: Veto Power, Absent Leadership, and Institutional Weakness.' In Debora L. VanNijnatten and Robert Boardman, eds. *Canadian Environmental Policy and Politics: Prospects for Leadership and Innovation*. Don Mills: Oxford University Press.

Macdonald 2020 D.Macdonald, *Carbon Province/Hydro Province* (Toronto: University of Toronto Press).

Macdonald and Winfield, 2020 D.Macdonald and M.Winfield "Federalism and Canadian Climate Change Policy" in G.Skogstad and H.Bakvis, *Canadian Federalism* (4th ed) (Toronto: University of Toronto Press)

Muldoon et.al. 2020 P.Muldoon, J.Williams, A.Lucas, R.B.Gibson and P.Pickfield *An Introduction to Environmental Law and Policy in Canada 3rd Edition* (Toronto: Emond-Montgomery Publishers).

Nanos Research, (2023) Nanos "Weekly Tracking, ending September 22, 2023," https://nanos.co/wp-content/uploads/2023/09/Political-Package-2023-09-22-with-Tabs.pdf.

National Energy Board. 2019. 'News Release: NEB Releases Reconsideration report for Trans Mountain Expansion Project', 22 February. http://www.neb-one.gc.ca/bts/nws/nr/2019/nr04-eng.html.

National Round Table on the Environment and the Economy (NRTEE). 2012. *Reality Check: The State of Climate Progress in Canada.*

http://www.collectionscanada.gc.ca/webarchives2/20130322165455/http:/nrtee-trnee.ca/reality-check-the-state-of-climate-progress-in-canada.

Oved, M.C., and Bailey, A., 2023 "Ontario gas plants were supposed to run only during peak periods. Instead they're running most of the time, polluting the air you breathe," *The Toronto Star,* October 1, 2023, https://www.thestar.com/news/canada/ontario-gas-plants-were-supposed-to-run-only-during-peak-periods-instead-they-re-running/article-8ba52f13-bd5a-541a-b80e-9f497ff498be.html.

A.Pardy, T.Budd and M.Jaccard, (2023) "Subnational Climate Policy Leadership in British Columbia," in ," in Winfield, M., Hill, S., Gaede, J., eds., *Sustainable Energy Transitions for Canada* (Vancouver, University of British Columbia Press).

Pembina Institute. 2018. *The oilsands in a decarbonizing Canada*. https://www.pembina.org/pub/oilsands-decarbonizing-canada.

Pineau, P.-O., and Whitmore, J., (2023), "The Quebec Energy System," in Winfield, M., Hill, S., Gaede, J., eds., *Sustainable Energy Transitions for Canada* (Vancouver, University of British Columbia Press).

Public Policy Forum, 2021 *Carbon Capture, Utilization and Storage* — *The Time is Now,* March 1, https://ppforum.ca/articles/carbon-capture-utilization-and-storage-the-time-is-now/.

Saskatchewan Court of Appeal (SCA) 2019 Reference re Greenhouse Gas Pollution Pricing Act, 2019 SKCA 40 (CanLII).

Stiebert and Sawyer 2023 "S.Stiebert and D.Sawyer, "Emissions from oil and gas, buildings undercut Canada's climate progress," *440Megatonnes.ca* September 23. https://440megatonnes.ca/insight/emissions-oil-and-gas-buildings-undercut-canadas-climate-progress/

Supreme Court of Canada (SCC) 2004 Haida Nation v British Columbia (Minister of Forests). 2004 3 S.C.R. 511.

Supreme Court of Canada (2021) References re Greenhouse Gas Pollution Pricing Act, 2021 SCC 11.

Tasker 2023 J.P. Tasker, "Canada reports worst wildfire season on record — and there's more to come this fall" *CBC News*, August 11, https://www.cbc.ca/news/politics/canada-wildfire-season-worst-ever-more-to-come-1.6934284

Thibault, B., Weis, T., and Leach, A., (2023) "Alberta's Quiet but Resilient Energy Transition," in Winfield, M., Hill, S., Gaede, J., eds., *Sustainable Energy Transitions for Canada* (Vancouver UBC Press)

Toner, G. and J. McKee. 2014. 'Harper's Partisan Wedge Politics: Bad Environmental Policy and Bad Economic Policy'. In G. B. Doern and C. Storey eds. *How Ottawa Spends 2014-2015: The Harper Government – Good to Go?*_ Montreal: McGill-Queen's University Press.

Turcott, I., and Green, T., (2021) "Increasing climate ambition with output-based pricing" (Ottawa and Vancouver: Pembina Institute and David Suzuki Foundation) https://www.pembina.org/reports/2021-03-increasing-climate-ambition-with-output-based-pricing-submission.pdf.

Winfield, M., 2023 "The environment, climate change and market populist politics" in J.Malloy C. Collier eds., *Politics of Ontario* (6th edition), Forthcoming University of Toronto Press, for publication 2023.

Winfield, 2024, "Assessing Ottawa's Paths to Net Zero through an Energy Sustainability Lens," in D.VanNijnatten ed., *Canadian Environmental Policy and Politics (5th ed.)* (Toronto: Oxford, 2024).

Winfield, M. and D. Macdonald. 2012. 'Federalism and Canadian Climate Change Policy'. In H. Bakvis and G. Skogstad, eds. *Canadian Federalism*. Don Mills: Oxford University Press.

Winfield, M., and Kaiser, K., (2023) "Ontario and Climate Change," for J. Onusko and D. Anastakis, eds., *Ontario Since Confederation: A Reader* (Toronto: University of Toronto Press for publication 2023).

Winter, J., 2021, "Conservative climate plan better than before, but still full of inconsistencies," *CBC Opinion*, August 30, https://www.cbc.ca/news/opinion/opinion-election-conservative-party-climate-platform-1.6155156.