CLIMATE CHANGE INACTION IN CANADA: POLITICAL SUBSYSTEMS AND POLICY OUTCOMES IN THE OIL & GAS INDUSTRY, 1999-2019

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Abstract

Despite increasing urgency of the climate crisis, Canada is unlikely to meet its 2030 greenhouse gas emissions reduction target under the Paris Agreement. The expansion of the country's fossil fuel industry is one of the main causes for Canada's emissions. Consequently, recent studies have adopted a policy network approach to outline the relationship between the federal government and the fossil fuel industry to explain the country's inaction. However, the relationship between this network and actual policy outcomes remains unclear. Hence, this study determines the extent to which climate and energy policy change applied by the federal and Alberta provincial governments reflect the interests of the fossil fuel industry. The main findings point to the fossil fuel industry having had substantial political influence on climate and energy policy decisions over the last twenty years, although its influence has been increasingly contested over time. However, this network remains influential in Canadian politics.

Keywords: climate crisis, climate inaction, fossil fuel industry, policy network, Canada, Canadian politics, energy policy, public policy

"Become a general in the struggle for a humane planetary future. If this is asking more than you are competent to give now, find your level; get more experience and training, then assume all the responsibility that you can carry. Future generations on our planet may not know your name, but they will remember you and bless you as part of the magnificent vanguard who stepped into the breach at this very decisive time in human history and fought to secure a viable future for the children – the sons and daughters – of this beloved planet Earth.

Be glorious."

– Robert Moore & Douglas Gillette, *The Warrior Within*, 1992

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AER	Alberta Energy Regulator
ALSA	Alberta Land Stewardship Act, SA 2009, c A-26.8
BCNI	Business Council on National Issues
CANLII	Canadian Legal Information Institute
CAPP	Canadian Association of Petroleum Producers
CCIR	Carbon Competitiveness Incentive Regulation, Alta Reg 255/2017
CCS	Carbon capture and storage
CCEMA	Climate Change and Emissions Management Act, SA 2003, c C-16.7
CEPA	Canadian Environmental Protection Act, SC 1999, c 33
CER	Canada Energy Regulator
CLP	Climate Leadership Plan
CMP	Corporate Mapping Project
CSO	Civil society organization
EAA	Canadian Environmental Assessment Act (multiple versions)
ELC	Environmental Law Centre
EMCRA	Emissions Management and Climate Resilience Act, SA 2003, c E-7.8
ENGO	Environmental non-governmental organization
EPIC	Energy Policy Institute of Canada
ERCB	Energy Resources Conservation Board
GDP	Gross domestic product
GHG	Greenhouse gas emissions
INDCs	Intended nationally determined contributions
ISED	Innovation, Science and Economic Development Canada
IPCC	Intergovernmental Panel on Climate Change
Mbpd	Million barrels of oil per day
Mt CO2 eq	Megaton of carbon dioxide equivalent
NDP	New Democratic Party
NEB	National Energy Board
NRCan	Natural Resources Canada
NRGO	Standing Committee on Natural Resources and Government Operations
PN	Policy network
SGER	Specified Gas Emitters Regulation, Alta Reg 139/2007
SNA	Social network analysis
REDA	Responsible Energy Development Act, SA 2012, c R-17.3
TIER	Technology Innovation and Emissions Reduction Regulation, Alta Reg 133/2019
UCP	United Conservative Party
UNEP	United Nations Environment Programme

1. Introduction & Overview

1.1. Problem Statement: Inaction in the Face of the Climate Crisis

As the effects of the climate crisis continue to mount and the critical need to reduce global greenhouse gas (GHG) emissions becomes ever more pressing, solutions proposed by nearly every country so far have failed to garner comprehensive support, along with increasing criticism regarding their effectiveness – or lack thereof. Indeed, the recent turn to a new decade seems to have also been accompanied by a noticeable change in tone found in climate change-related literature. For instance, Heatley, Read, & Foster (2019) argue that, while previous mainstream and greatly influential works[1] on the subject contributed to increasing public concerns about the global climate crisis, they nonetheless contained a significant optimism that the situation could be averted without too much long-term damage – an optimism, they say, we no longer can afford.

There is now compelling evidence indicating that global efforts to tackle the crisis are critically insufficient, and especially overshadowed by a 'business-as-usual' mentality dominating policymakers regarding the greatest challenge of our time (Broadbent, 2017; Clarke, 2018; Graham, 2019; Heatley et al., 2019; Jackson, 2017; Lancet Report, 2019; Lukacs, 2020; MacArthur et al., 2020; Newell, 2019; Satgar, 2018). For instance, the Paris Agreement – and the roughly 4,500 other multilateral and bilateral environmental agreements signed since 1990 (Mitchell, 2017, 2018) have been heavily condemned for failing to provide effective solutions to such a global problem (Cass, 2015; Clarke, 2018; Heatley et al., 2019; Jackson, 2017; Pleyers, 2010). Notably, critics argue that independently set targets, such as the ones set within the Paris Agreement, are unlikely to generate the needed results, given that polluting rates of GHG

[1] The authors notably refer to the Stern Review (2007), as well as the works of Naomi Klein (2014) and George Monbiot (2017). See Heatley et al. (2019).

emissions have, for the most part, not only failed to stabilize but continue to increase every year (Cooper et al., 2017; EIA, 2019; Hémous, 2016; Jackson et al., 2019; Jackson, 2017; Olivier, Shure, & Peters, 2017; Mildenberger & Stokes, 2019; Pirani, 2018; Satgar, 2018; UNEP, 2019). Moreover, "the Paris declarations may have helped create space for political, and even legal, action. But Paris also shone a harsh light on the failure of the process as a whole. The principal participants largely rejected strong regulation, and stuck stubbornly to the principle of reducing emissions by commodifying them (i.e. producing tradable rights to pollute)" (Pirani, 2018, p.164). In fact, recent measures now estimate global temperature increase to reach *at least* 3.5ºC (IPCC report, 2018), making the Paris Agreement virtually useless[2]. In all, "the categorical truth is that things are now certainly going to get worse – much worse – *whatever* we do" (Heatley et al., 2019, p.3, emphasis in original).

The current situation regarding the climate crisis is considered by many to be a consequence of the dominant capitalist logic, in which the imperative for constant production and accumulation has been heavily criticized for disregarding planetary boundaries and finite resources (Evans, 2008; Jackson, 2010; Rist, 2014; Pleyers, 2010). Moreover, attention has been particularly directed to the 'growth imperative', the relentless pursuit of profit and capital often associated as a fundamental characteristic of capitalism, which has been a dominating force in global economic policy (Buch-Hansen, 2018; Jackson, 2017; McNeill Douglas, 2019; Schmelzer, 2015). However, despite growing criticism and suggested alternatives for the transition from this economic model, there has been little to no transformative change at any substantial scale.

[2] In addition to the IPCC report, several groups tracking countries' progress towards meeting their respective Intended Nationally Determined Contributions (INDCs) reveal that only less than a dozen nations are actually on track to meet their 1.5ºC-limit target. See Climate Action Tracker (2019) and Cooper et al. (2017).

This negative depiction also characterizes Canada's record on climate change adaptation and mitigation. While there is significant evidence showing that both Canada's population and its economy are particularly vulnerable to the climate crisis, the federal government has generated highly insufficient corrective measures to reduce its ecological footprint. In fact, the country is among the group of nations that are unlikely to meet their sustainability targets set within the Paris Agreement – and among the worst of the G20 countries (Clarke, 2018; Climate Action Tracker, 2019; Climate Transparency, 2019; Hoberg, 2016; Lum, 2018). In fact, the independent center *Climate Action Tracker*, which rates the efforts of multiple countries with respect to their commitments under the Paris Agreement, currently classifies Canada's climate policies as 'insufficient', contributing to a warming of 3ºC, instead of the goal of maintaining global warming below 1.5-2ºC (Climate Action Tracker, 2020a). This poor national profile, along with the inadequate performance of a great majority of other countries, represent the general 'business-as-usual' approach witnessed across the globe, which generated strong activism within civil society groups, as well as in academic literature, where growing research is directed toward understanding why, despite decades' worth of scientific evidence and warnings regarding climate change being caused by man-made actions, governments are so reluctant to respond adequately to this crisis (Carter, 2016; Compston, 2010; Heatley et al., 2019; Howlett & Joshi-Koop, 2010; Taft, 2017).

1.2. Crises of Climate and Energy, and the Canadian Oil & Gas Industry

Poor global efforts to tackle this crisis essentially reflect the sheer complexity of climate change, which has been qualified as a 'super wicked problem' (Levin et al., 2012). However, the main challenge in dealing with the climate crisis stems not from a lack of scientific knowledge, but, according to Levin et al. (2012), rather rests on our governance institutions that fail to target current

path-dependent reliance on 'high carbon' sources of energy, as well as creating new processes that would entrench and expand policies to generate the transition towards a decarbonized economy.

For instance, of particular concern is the discrepancy between the planet's 'carbon budget' – the maximum limit of cumulated carbon dioxide that can be in the atmosphere in order to prevent global warming above 1.5-2^{o}C – and the potential for GHG emissions from the proven global fossil fuel reserves. The IPCC's carbon budget estimates total cumulative emissions of between 420 and 580 gigatons of carbon dioxide in order to have a fair chance in preventing dangerous levels of global warming (Rogelj et al., 2018). Meanwhile, the consumption of the entire current reserves of fossil fuels would equate to about 2,734 gigatons of carbon dioxide (Heede & Oreskes, 2016)[3]. Consequently, "energy firms, which dominate the lists of the world's largest corporations, suffer from a deepening dependency. They depend upon counting as a financial asset a reserve of fossil fuels of which four-fifths must stay buried and uncounted in the ground if we are serious about keeping the planet habitable" (Mitchell, 2013, p.256).

In other words, the climate crisis is essentially an energy crisis. The main sources of global emissions are all related to the use of fossil fuels, from their extraction and production to their consumption. In Canada, 52% of the country's emissions originate from the fossil fuel industry[4] and transportation (Environment and Climate Change Canada, 2020a). Consequently, the urgent need to reduce global emissions thereby implies a complete rethinking of the modern world's relationship with energy; from the use of fossil fuels for electricity, heating, and transportation, to

[3] Multiple organizations have provided their own calculations of the carbon budget, which has led to varying figures – as well as regarding the extent of proven reserves of fossil fuels. Regardless, the notion of the important dichotomy between emissions limits and sustained consumption of fossil fuel, which can far exceed this limit, remains. See Carbon Tracker Initiative (2011, 2020), Rogelj et al. (2018), and McKibben (2012).

[4] Defined here as any corporation involved in the extraction, processing, and transport of oil, bitumen, gas, or coal (Carroll & Huijzer, 2018).

the way in which cities are designed. Particularly in North America, nearly a century of cheap oil and significant economic growth resulted in city development in the form of sprawling suburbs and low-density urban areas with poor public transport infrastructures, further exacerbating the emergence of a car culture. Consequently, it is important to better understand the interrelation between these two crises, how issues related to fossil fuels and the 'environment' are one and the same.

Interestingly, the introduction of the term 'energy crisis' occurred nearly at the same time in the 1970s as the politicization of the 'environment', "a word that had previously meant milieu or surroundings, but had recently come to be used with the definite article, like the term 'economy' two decades earlier, to designate an object of widespread political concern" (Mitchell, 2013, p.175). Indeed, Mitchell's extensive work on the effects of fossil fuels on political systems reveals the extent to which oil companies have played a consequential role, beginning in the 1970s, in framing the 'environment' issue within specific boundaries that best fit their interests:

> "…oil companies joined [efforts] to frame the environment as a new object of politics, and to define it and calibrate it in particular ways. Like the economy, the environment was not simply an aspect of external reality, against which the oil industry had to contend. It was a set of forces and calculations that rival groups attempted to mobilise." (p.192)

In the context of Canada, there is growing understanding that inaction regarding the climate crisis stems from political inaction, caused mainly by strong influence from business and industries (Boyd, 2003; Wood, Tanner, & Richardson, 2010) – particularly from oil and gas industry[5] actors.

[5] For the purpose of this thesis, the terms 'fossil fuel' and 'oil and gas' are used interchangeably.

The contribution of the fossil fuel industry onto the Canadian economy is puzzling. National estimates account its total output as only slightly more than 5% of the national gross domestic product (GDP) in 2019, and averaged 5.1% of GDP between 1997 and 2019[6] (Statistics Canada, 2020c). However, a recent study by Stanford (2021) points to current statistics being calculated with 2012 oil prices – thus neglecting the significant fall of prices in 2014. As such, by adjusting for more recent prices, real GDP output is likely to be less than 3%. Moreover, the industry employs about 170,000 workers, which represents less than 1% of the country's labour force (Stanford, 2021; Statistics Canada, 2020a), as shown in Table 1.1. Interestingly, the total labour force of the industry has declined significantly since 2014, by about 50,000 workers, despite a strong overall performance of the Canadian labour market[7].

Table 1.1: Economic Figures of Some Canadian Industries, 2019

Industry	Percentage of GDP (2012 dollars)	Percentage of Exports	Percentage of National Labour Force
Service-based	70.8%	N/A	80.6%
Manufacturing	10.2%	68%	9.3%
Agriculture	2.1%	1.0%	1.5%
Fossil Fuel	5.3%	20.1%	0.9%

Sources: Global Affairs Canada, 2019; Natural Resources Canada, 2020a; Statistics Canada, 2020a, 2020c; ISED Canada, 2020.

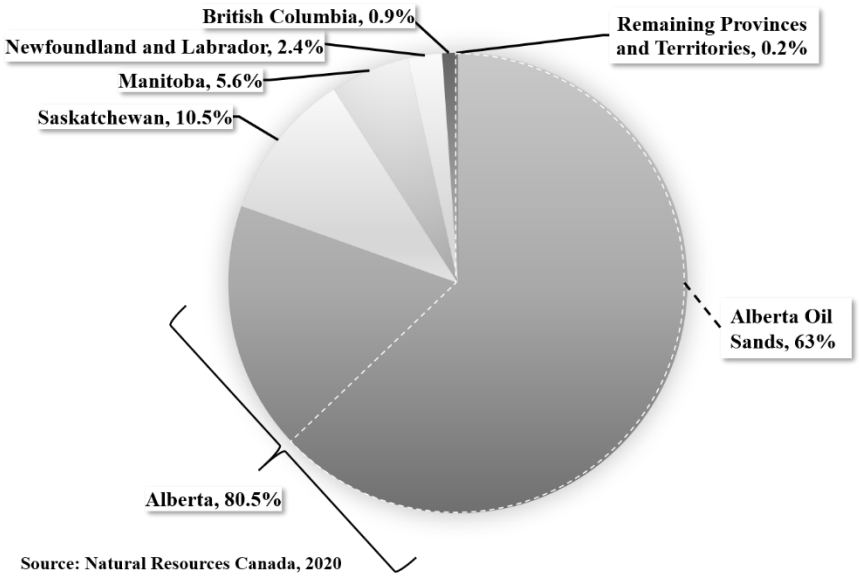
However, these numbers do not reflect the full story. The fossil fuel industry wields a subtle influence across Canada's economy, partly due to the country's regional development. For instance, more than 80% of the industry is concentrated in the province of Alberta, which in turn fuels indirectly other industries supporting fossil fuel development (such as accommodation, transportation, food services, and many more.), as shown in Figure 1.1 below (Natural Resources

[6] These figures represent fossil fuel extraction only. With the addition of oil and gas transportation, in accordance with the definition of the fossil fuel industry introduced earlier, its share of national GDP increases to 6.7% in 2019, with an average of 6.1% between 1997 and 2019 (Statistics Canada, 2020c).

[7] Stanford points to the steady decline of the national unemployment rate since 2014, reaching 5.7% in 2019 – the lowest measure since Statistics Canada began monitoring unemployment in 1976. See Stanford (2021).

Canada, 2020a). This creates deep connections between this single industry and the welfare of Alberta as a whole. By the same token, the entire province also feels the wrath of a bust of the fossil fuel industry, once the volatile oil prices fall dramatically (such as in 2014, and more recently following the global recession caused by the COVID-19 pandemic).

Figure 1.1: National Oil Production by Province & Territories, 2019



Source: Natural Resources Canada, 2020

Moreover, the fossil fuel industry has had significant growth over the last three decades, largely supported by a drastic increase in oil prices in the early 2000s, which attracted significant investment and development projects, particularly in Alberta's oil sands (Natural Resources Canada, 2020a; Heyes, Leach, & Mason, 2018; Stringham, 2012). Indeed, crude oil production increased significantly over time, from 1.5 million barrels of oil per day (Mbpd) in 1990 to 4.7 Mbpd in 2019, making Canada the fourth largest oil producer in the world (Canada Energy Regulator, 2020). Additionally, national production is still projected to reach more than 7.1 Mbpd by 2040 (Canada Energy Regulator, 2019)[8]. This increase in production was also combined with a significant rise in GHG emissions, from 106 megatons of carbon dioxide equivalent (Mt CO2

[8] Although these projections may now be reduced due to the consequences of the global recession from the COVID-19 pandemic.

eq) to 194 Mt CO2 eq in 2018 – an 82% increase (Canada Energy Regulator, 2017; Environment and Climate Change Canada, 2020a). Moreover, oil production in Alberta's oil sands is one of the most carbon-intensive in the world (Jing, et al., 2020; Masnadi et al., 2018)[9].

Conversely, despite representing only a portion of Canada's GDP and exports, the fossil fuel industry is shown to be enjoying a disproportionate degree of influence over political decisions on national and provincial climate and energy policy (Carroll & Huijzer, 2018; Clarke, 2018; Graham, Carroll & Chen, 2019; Neubauer, 2018; Stanford, 2019). For instance, oil & gas companies represent some of Canada's largest political donors[10] – and the three main donors in Alberta have been fossil fuel companies for a number of years[11] (Brownlee, 2020). Moreover, Brownlee also points to a massive rise in lobbying expenditures by fossil fuel companies since the 1970s, with an even sharper increase following the 2000s. Notably, this influence has been notoriously used to challenge and delegitimize calls for governments to transition towards green and sustainable energy sources and decarbonized economies. In turn, this industry and its advocates have suggested alternative – but widely less effective – transition measures, such as GHG emission reduction targets based on emission intensity levels rather than absolute emissions (Saric, Carson, & Bachmann, 2017; Meadows & Crossman, 2016; Wood et al., 2010), geoengineering and carbon capture and storage (CCS) projects (Carton, 2020; Markusson et al., 2017), the phasing out of fossil fuels on a longer-term timeline than required by international scientific authorities (Carton, 2020; Graham, 2019; Lee, 2017; Pineault, 2018), or the adoption of voluntary- or market-based

[9] Proponents of oil development in Canada point to technological innovation and the use of better industry practices that led to a reduction of the industry's emission intensity by 30% between 2000 and 2018 (Kaplan & Milke, 2020). Despite these improvements, recent studies still denote Canada's oil production and refining as one of the most polluting in the world (Jing et al., 2020; Masnadi et al., 2018). See also Markusoff (2019) for a discussion on the topic.
[10] While corporations and unions are prevented from directly contributing to political parties at the federal level, the situation differs widely between provinces. See Brownlee (2020).
[11] Encana, Cenovus, and Suncor have been the top 3 political donors between 2004 and 2016. See Schwartz (2018).

solutions, such as carbon markets – in which the scope and scale of the carbon prices have been largely insufficient to reduce absolute GHG emissions (Fluker, 2015; Levin et al., 2012). Overall, these measures essentially represent a form of "new climate denialism" (Carroll et al., 2018; Daub et al., 2020; Graham, 2019), a practice focused on shaping the narrative and language of climate policy in order to limit its effect on the fossil fuel industry (Blue et al., 2018)[12], where "the climate crisis is acknowledged [by the fossil fuel industry] while effective climate action is forestalled in favour of increased fossil fuel production" (Carroll, Graham, & Yunker, 2018, p.61).

1.3. Political Influence of the Canadian Fossil Fuel Industry

While being the biggest source of GHG emissions in the country, the fossil fuel industry is largely viewed as one of the most prominent causes of inaction regarding the climate crisis and maintenance of the status quo from governmental institutions as well as business organizations (Adkin, 2016; Carter, 2018; Clarke, 2018). This industry's extraordinary relationship with state institutions, and its extensive political influence, have been increasingly studied through a policy network (PN) approach, which suggests that policymaking processes are influenced by the formal and informal arrangements of actors within and outside the government, regrouped under a 'subsystem' of actors, which uses a broad range of resources – such as lobbying, public relations and communications for framing specific issues, and the financing of specific think tanks and other CSOs to advance their views[13] – to influence political decisions over specific policy issues and affect policy processes and outcomes (Compston, 2009a; Knoke, 2018; Marsh & Rhodes, 1992; Thatcher, 1998). From a historical context, Mitchell (2013) points to the emergence of a 'hydrocarbon cartel' in the late 1920s within major oil companies to engineer oil supply scarcity,

[12] Blue et al. actually refer to this practice as "ecological modernization", but its characteristics are strongly similar to the other accounts of "new denialism" referenced here.
[13] These elements will be further developed in the following chapters.

control prices, and stifle competition from alternative sources of energy (at the time coal, but later nuclear and then renewables). In turn, these practices led to the development of broad and consolidated networks, enabling an extensive array of tools and resources to influence political issues, which proved particularly useful in the context of the climate crisis:

> "…oil companies developed much larger and more extended networks for the production of expertise, which became increasingly involved in making of the wider world a place where its products could thrive. […] 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 help define the nature of the crisis and promote a particular set of solutions." (Mitchell, 2013, p.193)

In Canada, studies using this approach have outlined an extensive network encompassing fossil fuel industry-related corporations and business associations, federal and provincial government officials, and decision-making individuals of civil society organizations and other institutions, consolidated together as a hegemonic group supplanting its own private interests over the 'common interest' of the Canadian population (Carter, 2018; Carroll, 2020b; Neubauer, 2018; Pineault, 2018). In turn, the extent of this network has also been qualified as the Canadian "petrobloc": "a decentralized yet interlocked constellation of state, civil society, and corporate actors jointly dedicated to tar sands expansion" (Neubauer, 2018, p.249). Overall, the oil and gas industry policy network is brought forward as a possible main cause of political inaction in Canada regarding the climate crisis.

A vivid example of such a network in Canada is the creation of the Energy Policy Institute of Canada (EPIC), which also led to one of the country's greatest scandals under the *Lobbying Act*,

with the conviction of Bruce Carson for fraud and influence peddling by the Supreme Court of Canada[14]. EPIC was established in 2009 to represent the main interests of the largest oil and gas companies in Canada, with the main purpose of developing "a strategy for Canada's global energy leadership"[15]. More specifically, EPIC provided numerous recommendations for energy and environmental legislation reform and deregulation, which were ruled as having a direct influence on the 2012 omnibus bills C-38 and C-45[16], which drastically reshaped the *Canadian Environmental Assessment Act* as well as virtually every other environmental protection legislation – largely for the benefit of the fossil fuel industry (Doelle, 2012; Gibson, 2012)[17]. As such, this series of events outline a clear need to study and better understand the extent of the oil and gas industry's influence onto Canadian politics. Consequently, this project asks the following question: *To what extent do the policy changes applied by the federal and Alberta provincial governments onto the country's fossil fuel industry between 1999 and 2019 reflect the interests of the Canadian oil and gas industry policy network?*

1.4. Research Objectives and Thesis Structure

Despite growing evidence of the existence of such a network, the extent to which policy outcomes – at a national or subnational level – are directly impacted by the oil and gas policy network's influence remains unclear. Indeed, one of the main criticisms found in policy network theory is the lack of evidence between a network's structure (or typology) and its causal impact onto policy

[14] Bruce Carson was a senior advisor to former Prime Minister Stephen Harper, executive director of the Canadian School of Energy and Environment, and also vice-chair of EPIC. He was convicted of three charges under the *Lobbying Act* by the Ontario Court of Justice. See *R v. Carson, 2016, ONCJ 596*. His case was then appealed to the Supreme Court, which rejected by a count of 8-1 his appeal. See *R v. Carson, 2018, SCC 12*.

[15] Justice Kehoe, in *R v. Carson, 2016, ONCJ 596,* para. 233. For a detailed explanation of EPIC and its effects on Canada's climate and energy policy and legislation, see Taft (2017).

[16] See *R v. Carson, 2016, ONCJ 596* and Taft (2017).

[17] The significant impact of these two bills have been covered extensively by previous studies, and will also be covered more extensively in following chapters.

preferences, processes, and outcomes (Braunstein, 2015; Dowding, 1995, 2001; Heaney & Strickland, 2017; Howlett, 2002; Rhodes, 2009; Thatcher, 1998). Moreover, this criticism also applies to network studies in Canada, where the emphasis of research has been mostly directed towards providing evidence of the existence of the fossil fuel industry network and outlining its overall structure across various state, industry, and societal policy domains. Furthermore, there is limited empirical evidence outlining this network's impact on climate and energy policy decisions – reviewed in detail in following chapters.

As such, this study aims to consider the theoretical and practical implications of the relationship between the oil and gas PN and Canadian governments (more specifically, the federal government and the Alberta provincial government) in the efforts to address the climate crisis, more specifically through policy outcomes related to emissions reduction and fossil fuel industry regulation between 1999 and 2019. The main objectives are:

- to critically examine the different factors believed to be causes of political inaction to address the climate crisis within Canadian governments;
- to review the strengths and limitations of recent oil and gas policy network studies and their value as a tool to address the political inaction in the Canadian context;
- to consider the extent to which oil and gas PN interests have been aligned with policy decisions of the Alberta provincial government and the federal government over time, and to determine the implications of such relationships in the efforts to address the climate crisis in the country.

The thesis is structured as follows: the next chapter presents the research methodology used, along with the inductive hypotheses that have guided the study. To observe the potential links between

the fossil fuel policy network structure and policy outcomes described above, the study adopts a mixed-method approach, combining case studies of climate and energy policy of the federal and Alberta provincial governments with semi-structured interviews with key individuals related to these case studies.

The third chapter provides a literature review situating policy networks within the Canadian political economy, which justifies the use of a PN approach for this study. Given the 'wicked complexity' of the climate crisis, this study adopts an analytic eclecticism approach, a pragmatist intellectual stance focused on widely-scoped problems, which arises from "efforts to specify how elements of different causal stories might coexist as part of a more complex argument [which] requires engaging and utilizing, not displacing, the well-organized research efforts undertaken by committed adherents of various traditions" (Sil & Katzenstein, 2010, p.415). As such, the literature review is structured to cover two broad – yet interrelated – themes: the evolution of the Canadian economy and its relatively recent dependence on fossil fuel; and other sources of pressure – such as trade agreements, Canada's federalist structure, and the adoption of a neoliberal political doctrine since the 1980s – as exacerbating this dependence on fossil fuel for economic development. The main argument here is that, despite their critical importance, these concepts prove to be insufficient by themselves in fully explaining the political inaction of Canadian governments in tackling the climate crisis. However, as will be shown, the combination of Canada's staples-based economy, its highly decentralized federalist structure, and the adoption of neoliberal ideology, generated a political environment highly favourable for the development of strong networks of non-state actors which then had the resources and opportunity to influence policy processes towards outcomes that were in their interests – at the expense of both the public and the environment.

Following this broader justification of the legitimacy and benefits of studying Canadian political dynamics through a policy network approach, the fourth chapter thus delves further into the PN literature, and critically reviews recent oil and gas network studies, where their limitations represent this study's analytical gap. More precisely, the study focuses on the relationship between the oil and gas PN and its effect on policy outcomes. The fifth chapter presents the findings of the case studies, along with a thematic analysis from the primary data collected. The findings reveal that the Canadian fossil fuel policy network has had substantial influence over climate and energy policy outcomes over the last 20 years. However, the network's influence appears to have been decreasing in recent years, mainly due to an increase in both diversity and number of actors involved in policy processes at the federal and provincial level (but to a lesser degree in Alberta), combined with reduced cohesion among oil and gas industry actors. The findings show that, despite this waning influence, this network remains highly influential within Canadian politics. Finally, the sixth chapter concludes with a discussion of the implications of these findings, followed by the acknowledgement of research limitations, and points to areas of further research, along with concluding remarks.

1.5. Significance of Study

Despite the increasing urgency of the climate crisis, the fact that the Canadian government has had, so far, a widely inadequate stance to minimize its carbon footprint and manage this crisis is ever more alarming. The extent of this dire situation represents the need for further research that may lead to better understand the main reasons limiting action by Canadian governments in tackling the climate crisis – the greatest crisis of our time. By examining the degree of importance of the oil and gas industry policy network within this issue, this study specifically aims to play a part in the understanding of the political inaction of Canadian governments regarding the climate

crisis. In addition, this study also contributes to the policy network literature, more specifically regarding understanding the causal mechanisms between network structure and policy outcomes, an area known to be understudied within this field (Braunstein, 2015; Howlett, 2002; Thatcher, 1998). Lastly, this research fits within the contemporary ecological political economy (EPE), a subfield of the broader Canadian political economy, which provides a unique integrative framework linking environmental issues with power relations in the Canadian political economy context (Adkin, 2016a; Carter, 2020). Indeed, "EPE theorizes how our dominant petro-capitalist system forwards extraction that undermines the environment and heightens social inequities" (Carter, 2020, p.118).

2. Research Methodology

This chapter delves into the methodology used for this research project. As mentioned in the introduction, the research adopts a policy network approach to study the political inaction of Canadian governments regarding the climate crisis. The first section defines the research question in light of the previous review of recent oil and gas network studies. Consequently, a mixed-method approach is used, which is presented in the second section. The third section presents the data collection process. Finally, the fourth section outlines the research hypotheses that will guide the study.

2.1. Research Question

As the research will show, a number of recent studies have outlined the close relationship between fossil fuel industry and state actors as a main source of the political inaction regarding the climate crisis – using a policy network (PN) approach to better understand this dynamic. This approach is notably used by the Corporate Mapping Project (CMP), a SSHRC-funded research project focusing specifically on the network and ties between oil industry actors and other spheres of Canadian society. The CMP's studies, along with some the works of the Canadian Center for Policy Alternatives, the Parkland Institute, and a few other researchers, review the country's top fossil fuel industry companies and associations regarding their financial behaviour (Graham, 2019), share ownership and ties with other financial institutions (Carroll and Huijzer, 2018; Rowe et al., 2019), interlocking directories with academic institutions and other civil society organizations (Carroll, 2020a; Carroll et al., 2018; Carroll, Graham, and Yunker, 2018; Gray and Carroll, 2018), as well as oil and gas industry lobbying practices (Cayley-Daoust and Girard, 2012; Graham et al., 2019).

These studies point to growing evidence of the existence of an extensive policy network spanning across oil and gas companies and industry associations, financial institutions, national economic elites, civil society organizations, as well as some government officials and political parties. While these studies are highly useful in understanding the structure and extent of this network within Canadian politics, they still face several limitations regarding policy network analysis. However, despite this compelling evidence, there remain analytical gaps regarding the study of such networks.

Briefly, there are three fundamental roles of a policy network analysis: to describe linkages among actors; to measure how networks change and adapt over time; and to study the causal mechanisms between network structures and policy outcomes (Thatcher, 1998)[18]. Consequently, it appears that most of the empirical evidence provided in the existing literature is related to the first role, whereas the remaining two are largely understudied[19]. Indeed, these studies provide valuable evidence of the relations between actors, as well as insights into the implications that an established policy network such as the oil and gas PN can have on Canadian politics. However, there remains a need to complement these contributions with further research directed towards understanding how the fossil fuel PN evolves over time, and the degree to which it is able to influence provincial and federal climate and energy policy decisions. This contribution would further support the use – and enhance the explanatory power – of a PN approach to study Canadian political inaction in the context of the climate crisis. More specifically, causal mechanisms[20] between the existence and

[18] Further discussed in Chapter 4.
[19] Graham et al.'s (2017) study is the only one that looks at how the policy network changes and adapts over time, notably by using the same approach of Cayley-Daoust & Girard (2012) in order to compare their findings. Nonetheless, this role remains understudied.
[20] In accordance with the study's eclectic analytical approach, it also adopts Sil & Katzenstein's (2010, p.421) more open-ended definition of causal 'mechanisms' as "all entities […] that generate immediate effects through processes

structure of an oil and gas industry policy network and actual policy outcomes remain understudied. This element thus represents the focus of the study. This leads to the main research question: *To what extent do the policy changes applied by the federal and Alberta provincial governments onto the country's fossil fuel industry between 1999 and 2019 reflect the interests of the Canadian oil and gas industry policy network?*

2.2. Mixed-Method Approach

This study adopts a mixed-method approach in order to investigate this question. The first part consists of case studies of climate and energy policy of both the federal and the Alberta provincial governments. The cases are conducted through a PN approach, in order to determine links between policy subsystem structure and climate and energy policy outcomes. These cases are then complemented with a series of semi-structured interviews of prominent individuals with extensive experience in Canadian environmental and oil & gas industry-related policymaking, and/or in policy network research within Canadian politics and society.

This mixed-method approach rests on a base of pragmatism in social research, which combines the strengths of both methods in order to address their individual limitations. In other words, it "points to the importance of joining beliefs and actions in a process of inquiry that underlies any search for knowledge" (Morgan, 2014, p.1051). Moreover, Sil & Katzenstein (2010, p.418) emphasize its benefits in social research, in which "knowledge claims, however produced and defended, are always in need of reconsideration and reconstruction on the basis of engagement

that may or may not recur across contexts and that may be, but often are not, directly observable". Notably, this definition allows for "a more complex view of causality in which different types of mechanisms interact to generate outcomes of interests in different contexts" (p.421). Therefore, this study acknowledges the breadth of complexity of the problematic observed here and avoids making any claim in identifying a single causal link that may explain political inaction in Canada regarding tackling the climate crisis.

with the experiences of actors seeking to cope with real-world problems". As such, the application of a pragmatist view is particularly useful in the context of policy research as a valuable tool to observe and understand the structural context of a liberal capitalist democracy, where resources and political power are unevenly distributed among actors (Evans, 2020).

Particularly, interviewing experts on a specific policy domain is considered to be highly valuable in the policy network literature for better understanding a given network, notably due to its informal nature, which may be quite difficult to grasp for an outsider researcher. In turn, the combination of interviews with a PN approach "would create more detailed and nuanced information about personal and business relations and would enable analyses of multiplex networks" (Knoke, 2018, p.557). These two methods are further explained below.

Case Studies: Howlett's Model

In order to research causality mechanisms between the oil and gas PN and policy outcomes related to environmental policy, the research adopts a model based on the work of Burnaby Mountain Professor Michael Howlett (2002). The premise of Howlett's study is specifically directed towards the idea that policy networks affect policy processes and outcomes, and therefore would prove that policy network (also referred as subsystem) analysis is valuable beyond mere 'heuristics'[21]. Mainly, Howlett demonstrates:

> "If subsystem structure affects policy outcomes then, at minimum, in inspecting specific policy sectors over some fairly long period of time, one would expect to find some correlation between changes in policy outcomes and changes in subsystem culture.

[21] Critics of PN studies often qualify this approach as 'heuristics', as they contend that it lacks analytical or explanatory power beyond simple descriptive purposes. See Howlett (2002).

> [Thus,] conducting such a demonstration involves measuring policy change and subsystem change in specific sectors over at least a decade and comparing the record or pattern of changes in policy subsystems with the record of changes in policy outcomes." (2002, p.241)

Consequently, Howlett compiles the variations in both a policy subsystem's configuration and related policy outcomes within four Canadian federal policy sectors over a ten-year period (from 1990 to 2000) in order to determine a correlation between these two elements. The resulting model operationalizes policy change and subsystem configuration variations, which can then be used in a specific policy domain to determine whether a certain network has a direct impact on policy processes and outcomes.

Application of the model requires the collection and comparison of two data sources: policy change and network structure variation. For policy change, Howlett adapts works of previous scholars[22] to create a two-dimensional terminology based on the degree to which new actors and ideas can enter the policy sphere, resulting in four distinct types of policy change (see Table 2.1).

Table 2.1: Operationalized Model of Policy Change

		Entrance of New Actors	
		High	Low
Entrance of New Ideas	High	Changes in policy goals	Changes in programme specifications
	Low	Changes in policy instrument types	Changes in instrument components

Source: Adapted from Howlett, 2002

Howlett's model draws heavily from research on group effectiveness and diversity, in which decision-making groups tend to perform better in the long-term and adapt to crises through policy innovation when they are constituted by a more diverse set of individuals (Sil & Katzenstein, 2010). For instance, Page (2007, p.10) states that "collections of people with diverse perspectives

[22] Notably Durant & Dhiel (1989) and Hall (1993). See Howlett (2002).

and heuristics outperform collections of people who rely on homogeneous perspectives and heuristics". Thus, on one end of Howlett's table, the entrance of new ideas would imply a paradigmatic shift of ideas within policy. If paired with the entrance of new actors, the result would lead to fast change in the abstract goals and intended ends directing overall policy decisions. If the entrance of new actors is limited, the paradigmatic shift would occur more gradually, thereby only affecting concrete programme specifications. At the other end, a lack of new ideas would only result in incremental policy change. If there is nonetheless an entrance of new actors, rapid change would affect abstract policy instrument types. Otherwise, the lack of both new ideas and actors would only generate slow, incremental change to concrete instrument components.

For subsystem configurations, Howlett uses his previous work[23] on policy subsystem configurations to create an operationalized, two-dimensional typology, based on the degree of *symmetry* and *insulation* of a subsystem (see Table 2.2). Symmetry refers to the degree of overlap between a policy subsystem and the entire discourse community (the population of any stakeholder with a certain involvement within a specific policy domain). This factor has a direct impact on the extent to which new actors can enter the network from the policy community. Indeed, Howlett (2002, p.249) explains that "subsystems which feature a relatively small interest network within a much larger discourse community will, all other things being equal, be more susceptible to new actors than will those featuring very little distance between the two component parts". Secondly, insulation refers to the level of separation between a network and the community. This is a critical factor for measuring the extent to which new ideas are integrated from the community to the network[24]. Together, "these two dimensions of subsystem structure – the degree of insulation of

[23] Such as Howlett & Ramesh (1998). See Howlett (2002).
[24] Additionally, long-lasting network members are more likely to be more influential than newer actors, particularly if older members also benefit from more resources available for political influence. See Rhodes (1990).

the network from non-"interest-related" actors, and the extent of symmetry existing between communities and networks – proved to be significant inhibitors and facilitators of policy change" (Howlett, 2002, p.260).

Table 2.2: Operationalized Model of Policy Subsystem Configurations

		Network's degree of insulation from community	
		Low	High
Network-community symmetry	Low	Open subsystem	Contested subsystem
	High	Resistant subsystem	Closed subsystem

Source: Howlett, 2002

A 'closed' subsystem is similar to the policy community network type found in early PN literature. This subsystem tends to be highly stable and cohesive, leading to very high insulation from new actors or ideas. Therefore, the existence of such a network would limit types of policy change to mere instrumental components. On the other end of the spectrum is an 'open' subsystem, in which exists significant space between the discourse community and the interest network, combined with low barriers between both. The lack of cohesion within this network can then lead to significant policy change, even of entire policy goals. Between these two extremes exist two other types of subsystems. The 'resistant' subsystem is characterized by minimal differences between the network and the discourse community, but where the boundary between both groups is easily penetrable. Under this configuration, "one would expect changes to be restricted largely to instrument components, but with some experimentation involving program specifications, as some new ideas about policy goals could penetrate across subsystem boundaries but would be dealt with largely existing actors" (p.250). Meanwhile, the 'contested' subsystem represents a type of network that is quite different from the discourse community, but where the barriers between the two groups are high. This type of network structure would limit the consideration of new policy goals, but may nonetheless permit changes to policy instrument types. The different network

configurations and their respective relationship with subsequent policy change are summarized in Table 2.3 below.

Table 2.3: Policy Subsystem Configurations & Propensity for Types of Policy Changes

		Network's degree of insulation from community	
		Low	High
Network-community symmetry	Low	Open subsystem (tends towards all forms of policy change)	Contested subsystem (tends towards change only in policy instrument types and instrument components)
	High	Resistant subsystem (tends towards change in instrument components and programme specifications)	Closed subsystem (tends towards change only in instrument components)

Source: Adapted from Howlett, 2002

Through this approach, Howlett provides significant evidence linking patterns of policy change and two specific (and observable) "structural characteristics of policy subsystems, both related to the manner in which discourse communities and interest networks interact within a subsystem" (p.260). Given this study's focus on causal mechanisms between network change and policy outcomes, Howlett's work represents one of the few studies directed toward network structures and policy outcomes that can be particularly useful in the context of this research (Braunstein, 2015). Notably, the evidence provided "suggests that the presence of a specific kind of network in a given policy sector reveals a great deal about the propensity for it to experience intra or interparadigmatic types of policy change" (Howlett, 2002, p.260).

Consequently, Howlett's methodology shows the practicality of a typology approach to policy network analysis when combined with quantitative data. As mentioned earlier, the addition of semi-structured interviews to Howlett's model further enriches the PN analysis. Indeed, conducting interviews with key individuals knowledgeable on climate and energy policy across the time period following the case study of provincial and federal subsystems allows for a refined qualitative interpretation of the cases' findings. The next section discusses the data collection

process regarding the PN case studies in order to apply Howlett's model, along with the interview conducted.

2.3. Data Collection Process

This study adopts a PNA approach through the application of Howlett's (2002) framework of research on causal mechanisms between policy subsystem configuration and policy outcomes, followed by semi-structured interviews. The main part of the research consists of a case study of the effects of the oil and gas PN on specific related policy outcomes, conducted by measuring policy and network change within the fossil fuel industry sector between 1999 and 2019.

This time period was selected for two reasons. First, adopting a multiyear time period of at least ten years is necessary in network analysis in order to have a proper depiction of the general network (Howlett, 2002). Indeed, "the danger in using short time periods is that hey might capture only infrequent changes and miss the overall patterns of stability characteristics of most periods of network behaviour" (Howlett & Maragna, 2006, p.437). Adopting a multi-decade time period limits the emphasis on short periods of punctuated equilibrium and transition, instead revealing enduring dynamics in policy development (Lemphers, 2020; Levin et al., 2012). Second, the selected 20-year period covers two major changes in governments both in Alberta and at the federal level. At the provincial level, the election of Rachel Notley and the New Democratic Party (NDP) in 2015 was a historical moment for Alberta, ending a 44-year rule of the Progressive Conservatives. This change was short-lived, however; the NDP lost the following election in 2019, to the newly-formed United Conservative Party (UCP), led by Jason Kenney. At the federal level, the Conservative Party, led by Stephen Harper, was elected in 2006 after 12 years under the Liberal Party. It was then ousted in 2015 by the Liberal Party, under Justin Trudeau. It will then be valuable

to observe whether these political changes have affected policy network configurations, or if they remained intact.

The research considers the importance of a meso-level analysis in order to avoid overgeneralization of a complex policy domain[25]. Therefore, only the changes in policy decisions and PNs within the context of the climate crisis policy domain (multi-issue) affecting the fossil fuel industry (specific issue) are observed, both for the Canadian federal and Alberta provincial governments. Changes in network configuration are measured by assessing subsystem membership at the beginning and end of the selected time period for the study. Subsystem members can be identified as actors who presented policy briefs to parliamentary committees – which are available within respective committee reports (Howlett, 2002; Knoke, 2018). Thus, committees relevant to fossil fuel industry development, GHG emissions policy, and environment protection in the context of fossil fuel activities were reviewed for the federal subsystem. However, such information is rather limited, as there is no specific committee for the fossil fuel industry or GHG emissions, and committees do not necessarily publish reports every year. Consequently, relevant reports published near the beginning and end of the studied period are considered. Table 2.4 presents the different federal committees considered, along with their respective reports, and the number of policy briefs submitted by stakeholders for each report.

[25] As emphasized by Howlett, such overgeneralization is prevented by adopting a two-stage strategy "in which a large multi-issue [is] examined and then a specific, significant issue [is] selected to focus on the analysis" (2002, p.253).

Table 2.4: Considered Federal Committees and Respective Reports

Committee	Published Work	Policy Briefs
Standing Committee on Environment and Sustainable Development (ENVI), House of Commons	Report 1: Harmonization and Environmental Protection: An analysis of the harmonization initiative of the Canadian Council of Ministers of the Environment (1997)	3
	Report 2: Kyoto and Beyond: Meeting the Climate Change Challenge (1997)	0
	Report 4: Bill C-32 (1998)	
	Clean Growth and Climate Change: How Canada Can Lead Internationally (2019)	5
Standing Committee on Natural Resources and Government Operations (NRGO), House of Commons	The Kyoto Conference on Climate Change: Let`s Get the Ball Rolling (1997)	15
Standing Committee on Energy, the Environment, and Natural Resources (ENEV), Senate of Canada	Fifth Report: To examine issues relating to energy (2000)	
	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 (2019)	201
	Study on the effects of transitioning to a low carbon economy (2019)	145

Source: Senate of Canada; House of Commons of Canada.

For the federal policy network, subsystem membership at the beginning of the period is based on the policy briefs submitted to the Standing Committee on Natural Resources and Government Operations (NRGO) of the House of Commons[26] in the making of their "Kyoto Conference on Climate Change" report in November 1997, where 15 different actors submitted at least one policy brief. For the 2019 subsystem membership, data is extracted from the Standing Committee on Energy, the Environment and Natural Resources (ENEV) of the Senate of Canada[27] in relation to the Committee's report that led to Bill C-69[28]. Here, 201 policy briefs were submitted by 164 different actors. As described in the previous section, policy subsystem configuration is measured through two distinct factors. First, insulation is determined by assessing the number of members within the subsystem who are present throughout the period. As per Howlett's (2002) work, a high

[26] 36th Parliament, 1st Session.
[27] 42nd Parliament, 1st Session.
[28] *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, SC 2019, c 28*. It received royal ascent on the 21st of June, 2019.

percentage of continuing members would indicate a high insulation level. Second, symmetry is represented by the percentage increase in the number of actors within the subsystem over time, in which a large positive increase would represent a low degree of symmetry.

Data sources for the Alberta provincial subsystem are more difficult to gather. The Legislative Assembly of Alberta and the Government of Alberta provide very limited digital records of submitted policy briefs or witnesses to committees, royal commissions, or task forces that are publicly available. Therefore, the application of Howlett's model is limited for the Alberta provincial subsystem. Alternatively, network membership structure can also be determined by looking at the inclusion and exclusion of non-state actors involved in policy decisions (Braunstein, 2015)[29]. Notably, Braunstein's work emphasizes the fact that some actors have a direct line of influence in policy processes, while "other actors merely voice their ideas and advocate policy positions in hope of influencing the policy-making process" (2015, p.53). Therefore, the analysis of the Alberta subsystem is based on the inclusion and exclusion of non-state actors in key institutional bodies (such as standing committees, task forces, and public consultation policy groups) to the province across the study's time period. Finally, policy actors identified are then compared with the subsystem actors of the recent oil and gas policy network studies reviewed (in Chapter 4) in order to outline key reoccurring actors over time.

Policy change is determined by reviewing the enactment, repeal, or amendment of provincial and federal legislation (acts), as well as relevant regulation subordinate to these acts, related to fossil fuel industry development, GHG emissions policy, and environment protection in the context of fossil fuel activities between 1999 and 2019. Consequently, the database of the *Canadian Legal*

[29] Braunstein's (2015) work builds, in part, on Howlett's (2002) study of causal mechanisms between PNs and policy outcomes. Refer to Chapter 4 for a more detailed explanation of Braunstein's model.

Information Institute (CanLII) was used to review provincial and federal legislations. Table 2.5 provides information regarding the main pieces of legislation reviewed, along with their respective amendments during the study's time period.

Table 2.5: Main Provincial & Federal Acts Reviewed

Title of Act	Amendments (1999-2019)
- Province of Alberta Acts -	
Pipeline Act, RSA 1980, c P-8 and *RSA 2000, c P-15*	10
Environmental Protection and Enhancement Act, RSA 2000, c E-12 (EPEA)	19
Oil & Gas Conservation Act, RSA 1980, c O-5 and *RSA 2000, c O-6*	14
Oil Sands Conservation Act, RSA 2000, c O-7	7
Climate Change and Emissions Management Act, SA 2003, c E-7.8 (CCEMA), formerly the *Emissions Management and Climate Resilience Act, SA 2003, c E-7.8 (EMCRA)*	6
Alberta Land Stewardship Act, SA 2009, c A-26.8 (ALSA)	2
Carbon Capture and Storage Funding Act, SA 2009, c C-2.5	0
Responsible Energy Development Act, SA 2012, c R-17.3 (REDA)	1
Oil Sands Emissions Limit Act, SA 2016, c O-7.5	1
Climate Leadership Act, SA 2016, c C-16.9	2
Energy Efficiency Alberta Act, SA 2016, c E-9.7	0
- Federal Acts -	
National Energy Board Act, RSC 1985, c N-7 (NEBA)	15
Canada Oil and Gas Operations Act, RSC 1985, c O-7	14
Canada Environmental Assessment Act, SC 1992, c 37 (CEAA)	6
National Round Table on the Environment and the Economy Act, Sc 1993, c 31	3
Canadian Environmental Protection Act, 1999, SC 1999, c 33 (CEPA)	13
Kyoto Protocol Implementation Act, SC 2007, c 30	2
Canada Environmental Assessment Act, 2012, SC 2012, c 19, s 52 (CEAA, 2012)	4
Jobs and Economic Growth Act, SC 2010, c 12	5
Jobs, Growth and Long-term Prosperity Act, SC 2012, c 19	6
Pipeline Safety Act, SC 2015, c 21	0
Canadian Energy Regulator Act, SC 2019, c 28, s 10	0
Impact Assessment Act, SC 2019, c 28, s 1	0

Source: Canadian Legal Information Institute (CanLII).

However, it is important to note that not every amendment has had a significant impact on the type of policy change analyzed here[30]. A broad set of sources were compiled in order to interpret the substantial number of changes in legislation. Notably, *The Alberta Law Review* publishes on a mostly annual basis an extensive review of provincial and federal legislative changes that may

[30] Although several amendments may have had significant effects on the legislation studied here, they will not be considered if their effects are outside of these elements.

affect the oil and gas industry in the form of an academic paper[31]. In total, there are 23 publications under this title that covered legislative changes related to this study's research scope within the selected time period. The information found in these publications was also compared and combined with several other articles from the *Alberta Law Review*, as well as from other academic and law journals, such as the *Canadian Bar Review, McGill Journal of Sustainable Development Law, Ottawa Law Review, Queen`s Law Journal*, as well as specific articles from various Canadian academic journals. In addition, this study gathered official documents made publicly available by the federal government and the provincial government of Alberta, along with policy briefs and legislative reports from other relevant organizations, such as the Pembina Institute, the Alberta Environmental Law Centre (ELC), EcoJustice, and the Canadian Bar Association – Alberta Branch. The considerable amount of data compiled from these different sources was then analyzed in order to classify legislative changes according to Howlett's policy change typology. The analysis of these two types of data are then combined in order to determine the type of network subsystem for both cases, and their evolution over time. The results of this process are presented in Chapter 5.

Subsequently, ten semi-structured interviews were conducted for this study. The selection of key individuals as participants followed the argument that interviews meeting specific research factors (such as quality and depth of data gathered from participants) can ensure validity of the data collected even from a small sample size (Robson, 2002; Romney et al., 1986). The individuals interviewed were senior government officials, directors and executives of oil and gas companies and industry associations, policy analysts from ENGOs and think tanks, as well as environmental

[31] The articles are mostly titled "Recent Regulatory and Legislative Developments of Interest to Energy Lawyers", although some issues have minor title variations.

lawyers and policy experts with multiple decades of involvement in Canadian environmental or energy legislation. Each interview lasted approximately an hour. The interviews were recorded[32], transcribed, and then coded. The interviews are identified in this study using a randomized alphanumerical code, with the full list of participants in Appendix 4. In order to ensure confidentiality, every interviewee had control over the degree of their respective anonymity, as well as for the title used to represent them. They also each had the opportunity to review and modify direct interview quotes used for the study.

The participant selection process started with the identification through the case studies conducted of key actors in the Canadian oil and gas industry or involved in provincial and federal politics in the context of climate and/or energy policy. Additional participants were then contacted following a snowball technique from the first round of interviews. Every interview followed a general framework, using broad questions, and then gradually specifying the inquiries, gravitating around the themes of political change in Alberta and the federal government over the past 20 years, the degree of influence of the fossil fuel industry on politics, impacts of various legislation or policy change, and views on political influence from non-state actors.

2.4. Hypotheses

Through the use of Howlett's (2002) model, an inductive research approach is taken. Mainly, this research aims to observe the extent to which fossil fuel industry interests have been aligned with policy decisions of the Alberta provincial government over time, and the implication of such relationship in the efforts to address the climate crisis in the country. Thus, the following preliminary hypotheses will guide the initial research:

[32] As part of the consent agreement of the study's ethics process, each participant had the choice to be recorded or not – although every interviewee subsequently allowed it.

- H1: The oil and gas industry PN is a highly concentrated network, defined as a high insulation from the remaining discourse community and the main actors remaining relatively stable over time, thus limiting the introduction of new ideas or new actors within the network. The network would then be highly resistant to policy choices that contradict the network's interest, and the allocation of power to actors outside of the network.
- H2: Adopted policy would be restricted to incremental change (if any), affecting limited areas of the industry or network-related activities. Consequently, these features would characterize the subsystems as closed networks.

The structure of the study is also an adaption to the reality of conducting research during a global pandemic. The worldwide spread of the COVID-19 virus in 2020 had significant consequences on research, particularly regarding the ability to undertake fieldwork and gather primary data, notably through in-person interviews. With the main part of research done through secondary sources of information, this project ensured that it reduced its vulnerability to the uncertainties related to the COVID-19 crisis and consequent measures of social distancing and quarantining imposed by public health authorities. Consequently, the interviews were done through online communication channels. Furthermore, this type of research also represented limited ethical risk.

Prior to discussing the results of this research, it is useful to justify the value of a policy network approach within Canadian politics. The next chapter presents this discussion.

3. Literature Review

3.1. The Climate Crisis and Democratic Deficits in Canada

The introduction depicted the greatly insufficient efforts by the Canadian federal government in reducing national GHG emissions. A particularly striking element of this situation, however, is the fact that the Canadian population is largely in favour of increased ecological regulation across the nation's economy. There is considerable environmental activism in the country, established over multiple decades and in various forms; numerous reputed think tanks and research institutes are devoted to the climate crisis, as well as countless other civil society organizations which use different means in order to make governments more accountable to the issue. Additionally, recent years saw an important increase in social events, climate walks (or strikes), and other forms of civil disobedience to express the population's growing concerns regarding the climate crisis and the political inertia surrounding it. Some groups have also resorted to legal actions, as shown by lawsuits filed against the federal government for its inaction towards climate change (Killoran, Feasby, & Huys, 2019; Lukacs, 2020; Peritz, 2018; Schmunk, 2019). Even across Alberta, the nation's oil powerhouse, the public opinion has been largely against any further development of oil sands projects until environmental and infrastructure issues are addressed. Public opinion also favours increased environmental protection and regulation enforcing GHG emission reduction in the oil sands (Carter & Zalik, 2016).

However, despite public opinion, scientific evidence, and extensive warnings from the global community about the climate crisis and the need to reduce fossil fuel extraction, for more than the last two decades, the federal and some provincial governments have instead directed even more economic development towards the oil and gas sector (Adkin, 2016b; Carter, Fraser, & Zalik,

2017; Graham, 2019; Harrison, 2015). Such discrepancy between public opinion and government policy has been described as an erosion of democratic institutions in Canada. For instance, a recent study on policy trends of environmental regulation within Canada's oil-producing provinces[33] provided evidence that economic development through the growth of the fossil fuel industry has been overriding environmental regulation – accompanied with important democratic deficits (Carter et al., 2017). The study emphasizes that, across each province, "citizens face high barriers to participation in decisions regarding the oil and gas sector. Not only is public access to decision making in oil and gas activity frequently weak, but in various cases it has been actively undermined" (p.69). Moreover, the findings of the study place Alberta as one of the worst provinces in the country in terms of regulatory streamlining of environmental and fossil fuel industry legislation, as well as for democratic deficits. These findings also corroborate with the work of Adkin et al. (2017), who reviewed cases of various environmental regulations in Alberta, monitoring the province's public engagement process in the development of the regulations, which showed significant democratic deficit. Notably, the review of the 2007 consultations for the '*Climate Change Strategy: Responsibility/Leadership/Action Plan*' led the study to state:

> "As in 2002, the public consultation process appeared to have little impact on the established trajectory of the province's climate change strategy. […] Public and expert input that did not conform to government goals was generally ignored in 2007, and the formal influence of stakeholder processes was limited to narrow technical input and options analysis. Neither government nor industry wanted new policies that might slow the growth of the energy sector. Moreover, in the parallel informal meetings in which

[33] Alberta, British-Columbia, Newfoundland and Labrador, and Saskatchewan.

> Ministry of Environment staff obtained feedback on policy options from select stakeholders, industrial emitters maintained a privileged influence on policymaking. Their influence outweighed that of democratic consultative processes involving the public, ENGOs, and non-industry experts." (pp.308-309)

Adkin et al. (2017) emphasize the extent to which democratic engagement has been restricted – but also can greatly vary. Moreover, their findings show that democratic deficits are at the highest with any policy linked to the regulation of the fossil fuel industry, thus directly impeding on the government's ability to implement ecological regulation onto the largest polluting sector in the country. In all, a key point of this study was that "liberal capitalist democracies are systemically resistant to the thoroughgoing democratization of environmental governance" (p.317).

The democratic deficits illustrated above further support the premise of this study, in which Canadian climate and energy policy decisions have failed, on numerous occasions, to reflect public interests – and particularly to tackle the climate crisis effectively. However, such deficits, and their relationship with further reliance on the fossil fuel industry for economic growth, could be explained by numerous factors. Among them, Canada's relatively recent dependence on fossil fuels must first be placed within historical context – that the country's political economy has gravitated, since its inception, around staples-based forms of development. In turn, Canada's legacy of dependence on natural resources for economic growth is now represented by the current importance of oil and gas, notably in the province of Alberta. This has led some to describe Canada as a 'petro-state' in order to describe the seemingly erosion of democratic institutions across the country. However, the reality may be more complex than this argument would imply. The next section presents the literature review that supports this perspective.

3.2. Canada's Dependence on Oil Through Staples Theory & Rentierism

From a historical perspective, Canada's political economy has been mostly built and reliant upon natural resources for its development. From its establishment as a European colony, the natural resources found on the Canadian territory were already shipped and sold to world markets (Hessing, Summerville, & Howlett, 2005; Pineault, 2014; Stanford, 2019). Although a deep modernization and industrialization in the mid-20th century transformed the country as one of the most advanced nations in the world, contemporary Canada remains largely a resource-based economy with a focus on trade. Thus, its economic structure has been the subject of extensive research since Confederation, with various approaches used to explain and define the nation's history of dependence on various 'staples' resources. As Stanford (2019, p.80) argues, "fish, furs, timber, wheat, minerals, and now petroleum were the industries that led the way through these successive chapters of Canadian economic history". Indeed, Canada's dependence on natural resources has fluctuated a lot over time. This historical context is best understood through staples theory, which was developed specifically to explain the importance of resource industries for Canada's economic development – in turn greatly shaping its political economy (Grinspun & Mills, 2015; Shrivastava & Stefanick, 2015; Pineault, 2018).

Early staples theory literature corresponds to the works of Harold Innis (1894-1952) and W.A. Mackintosh (1895-1970)[34], who studied the impact of the then dominant resource industries of 19th and early 20th century – mainly fur trade, fish, and wheat – to depict the Canadian economy as dominated by its primary sector. According to them, this focus on the export of barely processed goods greatly restricted the development of value-adding processes or the diversification of the

[34] See Shrivastava & Stefanick (2015), Shrivastava (2015a), and Grinspun & Mills (2015).

economy (Grinspun & Mills, 2015; Hessing, Summerville, & Howlett, 2005, Stanford, 2014, 2019). However, Innis and Mackintosh warned that too much emphasis on the primary sector makes Canada both highly dependent on other larger economies, such as the British Empire or the United States[35], and particularly vulnerable to the high fluctuations of commodity markets, prone to 'boom and bust' cycles (Cameron, 2014; Clarke, 2018). Additionally, dependence on staples exports was also argued to have deeper effects on the Canadian society than merely its economy, in fact shaping economic, social, and political institutions at national and subnational levels (Grinspun & Mills, 2015; Shrivastava, 2015a). This is also emphasized by Grant (2014), where the "nature of the production function […] under which the staple commodity is produced [has] broader implications not only for the economy as a whole, but political and social institutions as well" (p.22).

Political economist Mel Watkins (1932-2020) would later greatly enrich these initial arguments, notably through the introduction of the 'staples trap' (Watkins, 1963). Mainly, the initial comparative advantage from an abundance of one or more natural resources leads to an overreliance on their exports and the concentration of capital, labour, and other resources towards these industries, which then act as barriers to economic diversification (Hessing et al., 2005; Mills & Tufts, 2019). In turn, the staples trap has been frequently used to describe the structure of Canada's economy, particularly to denounce periods of slow economic growth or limiting further sophistication of industries (Cameron, 2014; Drache, 2014). However, Canada also represents a case of exiting the staples trap. The country successfully managed, during the second half of the 20th century, to deeply modernize its economy and transcend to one of the richest countries in the

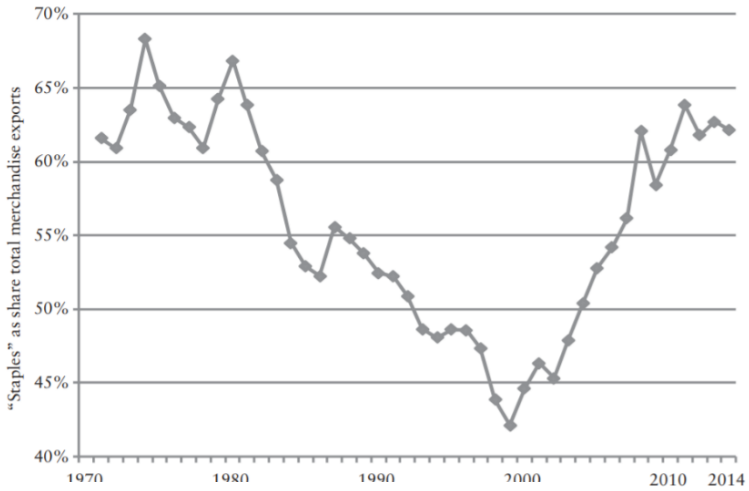
[35] Canada's staples economy has been described as a form of 'core-periphery' arrangement, in which Canada is positioned as a subordinate of larger economies – particularly the U.S. See Carter (2018), Pineault (2014), and Stanford (2019).

world before the 2000s (Drache, 2014; Stanford, 2014, 2019). Interestingly, several scholars point to the existence of a strong welfare state and high capacity to implement policies and regulations orienting industries in a certain direction as the most optimal way to exit the staples trap (Grinspun & Mills 2015; Hessing et al., 2005; Pineault, 2018; Rotstein, 2014; Stanford, 2019).

However, emerging from a staples trap does not entail that an economy is forever exempt from falling into one again. Multiple factors may cause a state to revert back into staples dependence. Correspondingly, several scholars argue that the staples trap is still of relevance today (Gunton, 2014; Rotstein, 2014). Indeed, this modernization trend began to invert drastically around the turn of the 21st century. This situation is studied extensively in the works of Stanford (2019), where his analysis of Canada's economic development leads him to qualify the period between 2000 and 2014 as one where the country has essentially 'structurally undeveloped'[36]. Indeed, Stanford describes a sharp decline in the level of diversification of the economy, accompanied by a significant deterioration in business innovation and Canadian manufacturing, particularly in high-technological sectors – meanwhile accompanied by a drastic increase in the share of exports of staple goods, as shown in Figure 3.1. Consequently, "there is no doubt […] that the renewed reliance on extraction and export of unprocessed staples [particularly petroleum] to other, more technologically advanced economics over the last fifteen years represents a qualitative step backwards in Canada's economic development" (Stanford, 2019, p.87).

[36] One metric of this 'undevelopment' is the economic complexity index, ranking countries based on an aggregation of production, technology, and exports and imports. The Atlas of economic complexity, measured by the Center for International Development of Harvard University, shows that Canada has gone from having the 16th most complex economy in the early 1990s to 39th in 2018, with an all-time low of 41st between 2011 and 2015 (CID, 2018). Alternatively, MIT's Observatory of Economic Complexity also describes an important decrease in Canada's economic complexity, from 13th in the early 1990s, to 31st in 2018 (OEC, 2020).

Figure 3.1: Composition of Canada's Exports



Source: Stanford, 2019

Even though the causes for this 'undevelopment' are multi-dimensional, the evidence presented by Stanford largely attributes this critical transformation of Canada's political economy to the profound development and expansion of the fossil fuel industry – which follows the objective of former Prime Minister Stephen Harper to make Canada an 'energy superpower'[37]. According to Stanford, "the evidence is strong that the relative and absolute erosion of manufacturing during this period [2002-2014] (as well as other non-resource export industries) was clearly exacerbated by the over-appreciation of the Canadian currency, which in turn was clearly driven by [petroleum industry] developments" (2019, p.95). These findings corroborate with other studies pointing to the recent significant increase of Canadian oil production – particularly gravitating around the Athabasca oil sands in Alberta – as points of significant economic and environmental concern for the country – especially amidst a climate crisis mainly caused by the consumption of non-

[37] Prime Minister Stephen Harper, "Address by the Prime Minister at the Canada-UK Chamber of Commerce" (delivered at the Canada-UK Chamber of Commerce on July 14th, 2006). The mention of the term 'superpower' is interpreted here more as a publicity stunt. By definition, a superpower would imply a state with greater power and influence (over global energy supply, in this case) than the majority of other states – quite an improbable feat for Canada to achieve. However, this statement nonetheless encapsulates Harper's vision of national energy policy.

renewable sources of energy (Altvater, 2009; Carroll, 2020a; Pirani, 2018). Stanford (2014) explains that:

> "The key features of the staples trap first identified by Watkins are all visible in Canada today: A cozy compact between government and the staples-exporting industry […]. Enormous, publicly-subsidized investments in export-oriented infrastructure. Pressure to extract and export the staple in ever-large volumes to amortize development and infrastructure costs faster. A cumulative reinforcement of the dominance of the staples as seemingly the only path to economic progress – even as the risks of staples reliance become increasingly obvious." (pp.66-67)

It appears that Canada has indeed fallen into a staples trap. There is substantial evidence pointing to the increasing oil production in Alberta since the 2000s as having considerable consequences onto the province's economy – as well as to the national economy as a whole. The oil boom led to foreign takeovers, the overvaluation of the Canadian dollar – thus damaging other Canadian industries and exports in a Dutch Disease-like manner[38] – and crises of significant scale within the Canadian automotive and manufacturing sectors (Clement, 2019; Mills & Sweeney, 2013; Stanford, 2019). This is further explained by Stanford (referenced in Clement, 2019, p.37):

> "By the turn of the 21st century, raw and barely processed resources account for well under half of Canada's total merchandise exports – the lowest in our history. Early in the

[38] The 'Dutch Disease' refers to the effects of a primary sector boom onto other economic sectors (Magud & Sosa, 2010). Notably, the development of a natural resource (or many) "would tend to squeeze out other traditional export industries (manufacturing, for example) […] partly through 'external' economic adjustments if inflows of financial capital and growing resource exports increase the exchange rate and make it harder for traditional exports to compete" (MacFadyen & Watkins, 2014, p.416). Research by the International Monetary Fund in oil-exporting countries demonstrates that increase in oil production tends to generate negative impacts on other economic sectors, particularly in countries with open capital markets and reliant on foreign investment for oil development (Ismail, 2010).

> new century, however, the logic of staples dependence reasserted itself. Inflated global commodity prices (especially for oil, some minerals, and agriculture) sparked major inflows of capital into expanded staples production in Canada."

There has been opposition to this view. Particularly, research on such decline of the manufacturing industry[39] has shown that the increases in commodity prices are not the main (or only) causes for the inflation of the Canadian dollar that has affected the Canadian manufacturing sector in the late 2000s (Cross, 2013; MacFadyen & Watkins, 2014; Naim & Tombe, 2013). Indeed, Canada's modern economic structure and its interrelation to the highly complex and globalized oil industry represent an economic situation that is distinctly different from the conventional staples trap first imagined by Watkins (Clement, 2019; Harrison, 2015; Mills & Sweeney, 2013; Shrivastava & Stefanick, 2015). Notably, the position of Canada, as one of the wealthiest and most industrialized nations (even after a period of 'undevelopment'), along with its high level of urbanization and developed service sector, among other factors, are quite antithetical to Innis' staples theory from a century ago – which depicted staples-based Canada more within a colonial perspective, with very low economic diversification, essentially fulfilling its 'peripheral' role for the dominant ('core') states like the British Empire or the United States (Mills & Sweeney, 2013). Furthermore, while current oil production fits within the initial precepts of staples theory, it also goes beyond it, notably with measured democratic deficits – particularly in Alberta – from dependence on resource rents and the creation of a patronage system (Harrison, 2015). Consequently, other scholars have recently introduced the concept of 'carbon trap' (Haley, 2014)[40] to depict the combination of

[39] There was substantial debate over whether Canada has been suffering from the Dutch Disease, which shares several similarities with the staples trap, notably following comments from former Leader of the Opposition Thomas Mulcair in 2012. Mulcair pointed to the loss of manufacturing jobs caused by an inflated dollar from increasing oil production in Alberta – which generated strong opposition. See Naim & Tombe (2013).

[40] A highly similar concept is also Pineault's 'carbon lock-in'. See Pineault (2014, 2018).

ecological and economic issues surrounding the reliance on fossil fuel, where the "rapid and intensive development of the tar sands industry during a global context of an energy paradigm shift based on the normalization of unconventional forms of fossil fuels have locked Canada into a staples/carbon trap" (Pineault, 2018, p.137). As such, the increased reliance on fossil fuel essentially acts as a critical barrier restricting Canada's ability to transition into a low-carbon economy (Haley, 2014).

Consequently, the current oil dependence – and the staples trap it generates – can be seen has having moved Canada to a form of 'neostaples' state, which represents the strong changes of the Canadian political economy since the 20th century, while nonetheless maintaining the relevance of staples theory (Drache, 2014; Mills & Tufts, 2019; Mills & Sweeney, 2013; Shrivastava & Stefanick, 2015; Shrivastava, 2015a). These political economic changes represent a sharp contrast between previous staples traps and its contemporary form. Indeed, "today's resource curse is more complex, multi-stranded and transnational than in Innis' day. It is rooted in more than commercial dependency on the US market. It has led to a variety of rigidities with crippling consequences for an economy burdened by debt and a shrinking industrial core" (Drache, 2014, p.4).

Alongside the carbon trap, the emergence of Canada as one of the largest producers of oil in the world – with allegedly the third greatest oil reserves (MacArthur et al., 2020; Mildenberger & Stokes, 2019) – also led to the use of rentier theory (or 'rentierism') to describe the country's growing dependence on the extraction and export of fossil fuel (Adkin, 2016; Carter, 2018; Carter & Zalik, 2016; Clarke, 2018). A rentier state is typically heavily dependent on mineral or natural resources, where its economic power arises from rents – financial payments given to the state for the use of its territory and the natural resources embedded within it (Carter & Zalik, 2016; Gray, 2011, 2018; Ross, 2001). In turn, this dependence on natural resources limits the state's

diversification of its economy, relying instead on exports of its natural resources, which further exacerbates the state's dependence on natural resource extraction – resulting in the 'resource curse', also known as the 'Dutch Disease' – quite similar to the staples trap previously described (Carter & Zalik, 2016; Clarke, 2018; Mildenberger & Stokes, 2019; Ross, 2001). Most importantly, from the substantive revenues gained through resource rents, a rentier state becomes significantly less dependent on tax revenues from its citizens[41], leading to diminishing pressure and incentives for a state to be accountable, democratically speaking, to its citizens. As such, Gray (2011, p.1) argues that "since the state receives this external income [from rents] and distributes it to society, it is relieved of having to impose taxation, which in turn means that it does not have to offer concessions to society such as democratic bargain or a development strategy". Rentier theory was initially applied to oil-producing countries in the Middle East, which accumulated substantial wealth largely by rents created by fossil fuel extraction, thus leading to the term of 'petro-state'; a usually derogatory term defining a state whose revenues are dependent on oil rents instead of taxes, resulting in weak political and economic institutions, and where state power and wealth are highly concentrated within a small, elite group (Gray, 2011, 2018; Karl, 2007; Shrivastava, 2015a). In this respect, some studies claim that, through the critical dependence on oil in the province of Alberta (and also due to the federal government's stance regarding ecological regulation), the concept of petro-state encapsulates Canada as whole (Cayley-Daoust & Girard, 2012; Clarke, 2018; Taft, 2017).

However, the application of Karl's (1997, 2007) 'petrostate thesis', which was initially applied onto oil-prolific countries, such as Saudi Arabia and Qatar, seems unfit to define a country with

[41] Interestingly, Alberta is the only province with no provincial sales tax in Canada (Government of Alberta, 2021a; Stefanick, 2015).

such different political institutions as Canada than its Middle Eastern counterparts. In that respect, there are two main arguments for the characterization of Canada as a petro-state worth exploring: that returns from the fossil fuel industry represent a prominent share of a state's GDP, exports, and government revenues; and this economic overreliance on oil then leads to democratic deficits.

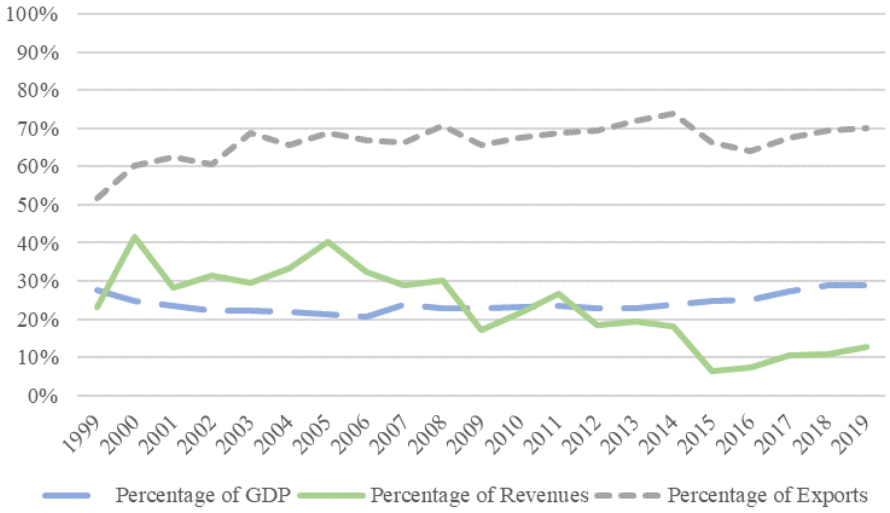
Using these two components provides more clarity, but Canada's situation remains intriguing. On one hand, Canada's oil revenues and exports represent only a fraction of the country's GDP, and are significantly lower than the typical figures found in other petro-states (Neubauer, 2018)[42]. Additionally, Neubauer points to Canada's multiparty democratic system, 'vibrant' civil society, and independent media as completely antagonistic to Karl's analysis of petro-states, which are traditionally seen as antidemocratic, with a tendency towards authoritarian regimes (Ross, 2001). Based on these figures, Canada seems quite unlikely to be a petro-state.

On the other hand, while petro-states are usually studied at a national level, it may be more useful to apply rentier theory in the Canadian context at a subnational level. Although Canada has undergone a significant economic diversification that does not seem typical for a petro-state, it has done so in an uneven, 'regional' way – especially since Alberta represents more than three quarters of the country's oil and gas industry (Carter & Zalik, 2016). Moreover, between 1999 and 2019, fossil fuel represented, on average, 67% of Alberta's exports, 24% of its GDP, and 23% of government revenues (see Figure 3.2)[43].

[42] Oil represented, on average, approximately 7% of Canada's GDP between 2011 and 2017, as opposed to Saudi Arabia and Qatar with 50% and 55%, respectively, in 2016. In terms of oil exports, while Canadian figures are slightly more significant, with oil constituting more than 15% of national exports, it is still far from Saudi Arabia, representing 85% of its total exports. See Neubauer (2018).

[43] As shown in the graph above, the figures have remained relatively stable over time – aside from government revenues, which were heavily impacted following the decrease in oil prices in 2014 – with each figures' median very close to the average (67.5%, 23.4%, and 23.1%, respectively). However, prior to 2014, fossil fuel represented an average of 28% of Alberta's revenues (Government of Alberta, 2020). See also Shrivastava (2015b).

Figure 3.2: Economic Figures of Alberta



Sources: Government of Alberta, 2020, 2021c; Statistics Canada, 2020b.

Consequently, these figures would, technically, meet the minimal requirements for a country to be qualified as a petro-state[44] – or, in this case, a 'petro-province' (Adkin, 2016; Carter, 2016; Shrivastava, 2015b). Secondly, given the province's economic dependence on the oil and gas industry, studies report a form of deference from the Alberta government towards the industry, and a deterioration of its democratic political system as a trade-off to decreased reliance and accountability to Alberta citizens (Adkin, 2016b; Adkin et al., 2017; Carter et al., 2017, Harrison, 2015). Consequently, the lack of representation of citizen interest in politics, especially in the context of the climate crisis, would fit with Karl's (1997) 'oil-based social contract'[45], associated

[44] Where oil-based revenues and exports typically represent at least 50% of total exports, 25% of GDP, and 25% of government revenues. See Gray (2011, 2018) and Neubauer (2018).

[45] In more economic terms, the surplus of capital generated from oil rents generally leads to a democratic deficit as trade-off. See Carter & Zalik (2016). Given the state's dependence on revenues from oil extraction, the state often becomes 'hostile' to ecological criticisms, as it undermines its source of capital and power, which creates a form of rival relationship between state and civil society actors. A representation of this dynamic is the current Alberta provincial government's Public Inquiry on Anti-Energy Campaigns, which investigates the main organizations in Alberta opposing fossil fuel industry development projects. As of February 2021, the Inquiry has not yet released its final report, and is quite a controversial subject in Alberta. There has been multiple critics questioning its use of public funds, as well as the dissemination of climate change literature with limited credibility, to which some critics have described as 'climate denialism literature'. See Russel & Rusnel (2021).

to rentierism: market interests become paramount to government institutions, and private developers often prioritized over the state's citizens interests. Thus, based on these arguments, Alberta would qualify as a petro-province.

However, the claimed causal relationship between oil rents and democratic deficits strongly depicted in rentier state literature has also been challenged (Mitchell, 2013). Notably, Mitchell's (2013) historical analysis of the production of fossil fuels outlines a greater complexity than this causality would imply; "not every country dependent on oil revenues fails to develop more democratic forms of government" (p.201). Similarly, Shrivastava & Stefanick's (2015) work on democracy issues in Alberta following the enormous rise of the oil industry as a significant portion of the province's revenues also challenges the argument that increased oil dependence leads to decreasing democracy or authoritarian regimes[46]. Rather, it seems that it is the tremendous wealth acquired within a relatively short period of time that puts significant tension on a democratic system by greatly damaging the fundamental principle of economic and political equality in a liberal democracy[47]. Therefore, democratic issues would emerge due to inadequate or ineffective economic and political institutions linked to the rent gains from oil, and not necessarily from oil extraction per se. As Shrivastava puts it, "ultimately, it is not the commodity of oil itself that is the culprit, but the exacerbation of the tension between the individualistic and collectivist assumptions underlying liberal democracy, an amplification brought on by the great wealth generated in a short span of time in a neoliberal context" (2015a, p.35).

[46] Proponents of oil development argue that the massive returns from such revenues can provide the required capital for a state to further develop its economy, invest in technological innovation, and transition to sustainable energy sources – with the case of Norway as a frequent example. See Carter (2016) and Shrivastava & Stefanick (2015).
[47] Here, Shrivastava & Stefanick define liberal democracy as "a system of governance characterized by civil liberties, more than one political party competing for election, separation of power, the rule of law, and a representative government based on majority rule with protection for minority rights" (2015, p.8).

In turn, Gray's (2011) conception of 'late rentierism' seems more adequate in this matter. Although the initial tenets of rentierism are largely accepted in the literature, Gray points to an apparent sophistication of oil-based political economies following the oil crises of the 1970s and several other factors, such as globalization and technological innovation, that made them inherently more complex political economies, much different than classical rentier states (Gray, 2011, 2018). Through this approach, rentierism is "restructured and honed from its initial and overly optimistic goal of being an explanation for state structures, into the more realistic of *rentierism* explaining a political *dynamic* and strategy used by states in oil-rich political economies" (Gray, 2018, p.30, emphasis in original). This perspective therefore shifts the debate away from whether Alberta or Canada is actually a 'petro-state', and instead towards a more constructive analysis of Canadian political dynamics and their similarities with the rentier thesis.

Consequently, Shrivastava (2015b) points to evidence of developmental liberalism as a "missing piece in the oil and democracy literature" (p.392), where it is not necessarily the increase of oil production and its associated wealth that lead to critical democratic deficits in Alberta and Canada. Rather, it is the governance processes, policies, and institutions – especially under a neoliberal political ideology – that came with oil industry development that have been critical factors to the democratic issue in the country, notably due to increasing economic, political, and social inequalities at provincial and federal levels. Particularly, Shrivastava (2015b, p.393) explains that "while the causal links between oil dependence and democratic malaise typically are not direct, it is well established in the oil and democracy literature […] that significantly large oil extraction generates great wealth for some but also creates particular political and economic conditions that inhibit democracy for most of the population in an oil-exporting economy". Thus, this argument further emphasizes the need to review the prominent role of neoliberal political ideology and its

effect on Canada's political economy since its gradual adoption in the 1980s – which is discussed in the following section.

In all, the literature reviewed here – from staples theory to rentierism – leads to a few concluding points regarding Canadian political economy, and the specific consequences of excessive focus on oil production. First, Canada's relationship with natural resource extraction has resurfaced as a main part of the economy, and the country may in fact be repeating the same economic mistakes as in the past – albeit quite possibly on a greater scale. For instance, Drache (2014) recounts the extensive transnational railway projects of the 19th century, influenced by a period of particularly high wheat prices, so that Canadian agriculture could benefit even more from these lucrative crops. However, at the turn to the 20th century, prices dropped, and the large railway infrastructure quickly became problematic, resulting in the federal government having to bail out all three transcontinental lines. In comparison, the numerous oil pipeline projects in recent times, proliferating during the 'booming', upside of the cycle, seem no different; such infrastructure may quickly become extremely expensive and economically untenable once the cycle busts (while also omitting the ecological consequences associated with such projects). This has become more important during this year, particularly due to the COVID-19 pandemic, where oil prices have reached some of the lowest points in history. The extremely high volatility of global oil markets in contemporary times only further exposes such projects in short and medium terms.

Second, rentierism can be useful to emphasize the extent of Alberta's dependence on oil and the growing social and environmental concerns raised over the province's economic structure and reliance on the fossil fuel industry – although the link between oil rents and democratic deficits has been challengeds. In turn, regardless of whether Alberta can truly be characterized as a 'petro-province', the combination of Alberta's petro-state characteristics and the consolidation of

neoliberal ideology across Canada is "prompting a country [Canada] that is statistically not a petro-state to behave like one in terms of its disregard for the basic tenets of liberal democracy and for sustainable economic and environmental objectives" (Shrivastava, 2015b, p.399). Consequently, it appears that rentier state theory is insufficient on its own to fully explain a state's political structure, mainly since the argument that oil rents necessarily leads to democratic deficits (or tends towards totalitarianism) has been challenged. Mitchell (2013) brilliantly exposes this misconception. Notably, he explains that "the transformation of oil into large and unaccountable government incomes is not a cause of the problem of democracy and oil, but the outcome of particular ways of engineering political relations out of flows of energy" (p.5). Notably, this approach fails to fully characterize the political inaction regarding the climate crisis. Similarly, Adkin (2016) emphasizes that "petro-politics alone cannot explain the forms of disciplining of dissent that we have witnessed in Alberta since the early 1990s, and that have characterized neoliberal regimes (including non-oil-producing states) elsewhere" (p.19).

The combination of the various theories discussed in this section further outlines the need to better understand the multiple roles of social, political, and economic institutions in the country regarding oil industry development and political inaction regarding the climate crisis. Indeed, "by explaining development performance solely in terms of the size and nature of the resource wealth, the oil and democracy literature often does not adequately account for the role of internal and external social, political, and economic environments in shaping development outcomes in resource-abundant countries" (Shrivastava & Stefanick, 2015, p.12). As such, staples theory explains the long history of natural resource dependence in Canada, having played a strong role in the development of political and economic institutions favoring a certain form of national development strategy. In addition, the review of literature on rentierism also identified the configuration of state institutions

as a third and causal link between the vast amount of wealth accumulated through oil production and democratic deficits. For instance, Hessing et al. (2005) explain that "in understanding the 'development of underdevelopment' in Canada, it is often argued, the structural relations of capitalism must be examined to illustrate the ways in which transnational corporations perpetuate a flow of capital from corporate headquarters to branch plants, from the centre to the periphery" (p.39). Consequently, after situating the recent increase of the Canadian oil and gas industry within a historical context, it is now important to turn towards other factors that would also explain the democratic deficits witnesses in the context of political inaction regarding the climate crisis. Thus, the next section reviews such other factors – both within and outside of Canadian governmental structures – that influence Canada's climate and energy policy choices.

3.3. Effects of Multilevel Pressures on Oil Dependence in Canada

From the previous section, which described the increasing importance of oil and gas within Canadian economies, it is worth wondering whether the federal government actually has the political power deemed required to implement and enforce impactful climate policy onto the fossil fuel industry (as well as on provinces) in the first place. For instance, compelled with the apparent 'laggard' attitude of both the United States and Canada regarding the climate crisis, Craft & Howlett (2013, p.2) ask whether these governments "have the capacity to design and implement the complex policy initiatives required for climate change adaptation". Efforts to answer this question point to multilevel (macro, meso, and micro) factors that can impact a state's degree of political power. In other words, there is a combination of transnational, national (domestic)[48], and

[48] The domestic context here also encompasses national-provincial relations, explained later in this section.

subnational (or domain-specific) factors that determine power distribution and interaction type between actors, thereby affecting policy processes and outcomes (Adam & Kriesi, 2019).

Given this approach, the Canadian federal government appears to be stuck in a two-front conflict between international- and domestic-level pressures (Hessing et al., 2005; Howlett & Joshi-Koop, 2010). At the international level, Canada's high trade dependence makes the country particularly exposed to global and transnational pressures. Fridell (2020) points to the considerable number of multilateral, bilateral, and regional trade agreements that Canada has signed since the Canada-U.S. Free Trade Agreement (CUFTA) in 1989, which significantly transformed the country's trade policy. Notably, different components of these trade agreements are seen as a loss of state sovereignty over transnational or foreign corporations[49]. These agreements thereby limit the federal government's capacity to take on environmental initiatives that are not aligned with its largest-trading countries. For instance, the significance of the United States as importer of Canadian goods (and notably oil) has led several Canadian Prime Ministers, especially former PM Stephen Harper, to align environmental regulation with American policy – which has also been far from satisfactory in recent years[50] (Climate Action Tracker, 2020b; Craft & Howlett, 2013; Wood et al., 2010).

[49] A notorious example is NAFTA's Chapter 11 on foreign investment rights, which enabled foreign investors to challenge government policy and seek compensation for loss of potential profits. Nearly half of the claims filed under Chapter 11 are targeting Canadian policy, and have notably effected efforts of Canadian governments to introduce health or environmental regulations (ban of certain harmful chemicals, moratorium of hydraulic fracturing (fracking) in Quebec, and multiple others). See Fridell (2020). More critically, Nobel prize economist Joseph E. Stiglitz described NAFTA's Chapter 11 as "a provision designed to discourage environmental regulations by making the imposition of such regulations costly to the government's budget" (2013, p.177).

[50] The idea that Canada would follow U.S. climate policy would be quite disastrous for the environment. The Climate Action Tracker currently classifies the United States' climate policies as 'critically insufficient', which would lead to a global warming of *more* than 4ºC. See Climate Action Tracker (2020b).

At the national level, important pressures can be regrouped under two interrelated concepts: parliamentary and administrative structures (Adam & Kriesi, 2019). The parliamentary structure represents the political configuration of the state (intra-state sources of pressure), while the administrative structure delves into the type of relationship between state and market actors (extra-state sources of pressure) that can influence policy capacity. Together, these two concepts determine formal and informal institutions that play a critical role in the policy process, choice, and capacity of the state.

Canada's parliamentary arrangement can be understood through Lijphart's (2012) extensive work on democratic structures. Through a comparative analysis of 36 democratic states, he provides a two-dimensional framework, each structured into five fundamental principles of varying scales, to classify the different democratic arrangements. First, the federal-unitary dimension represents the level of division of power within the state across different institutions. Correspondingly, numerous studies have pointed to domestic parliamentary pressures in Canada to emerge largely from the country's federalist structure (Carter, 2016; Lemphers, 2020; MacLean, 2018; Mildenberger & Stokes, 2019; Montpetit, 2002), where the Canadian Constitution highly restricts federal regulatory capacity over provincial affairs and development. As such, "an adequate understanding of policy designs in […] Canada is impossible without a systematic account of the impact of federal arrangements" (Montpetit, 2002, p.2). Particularly, environmental considerations and natural resource ownership have been some of the most highly contended issues between provincial and federal governments, and "remain the subject of divided authority and complex jurisdictional debate" (Hessing et al., 2005, p.98). Therefore, these factors are of particular importance in reviewing the various causes of political inaction regarding the climate crisis.

Federalism implies the creation of at least two levels of government where both levels are sovereign in their respective jurisdictions – in this case federal and provincial (Hessing et al., 2005; Lijphart, 2012). The effectiveness of a federation relies on the guaranteed and protected division of power between central and regional governments[51]. Consequently, Canada's constitutional arrangement under the Constitution Act of 1982 resulted in the formation of one of the most decentralized federations in the world (Atkinson et al., 2013; Doern & Gattinger, 2003; Healy, VanNijnatten, & Lopez-Vallejo, 2014; Lijphart, 2012; Smith, 2010). Of particular interest is that provincial governments have control over the natural resources within their respective jurisdictions, while the federal government oversees federal lands, fisheries, shipping and navigation, and interprovincial and international trade (Hessing et al., 2005; Howlett & Joshi-Koop, 2010; MacArthur et al., 2020; Mildenberger & Stokes, 2019).

In the context of oil production, Canada's federalist structure provides near-exclusive autonomy to the provinces over their own energy policy (Mildenberger & Stokes, 2019). As such, there has been a drastic increase in fossil fuel production in Saskatchewan, Newfoundland and Labrador, and particularly Alberta, in recent years (Carter, 2018). In turn, these recent increases resulted in the fossil fuel industry becoming the biggest emitter of carbon emissions in the country, slightly ahead of the transportation sector (Carter, 2016; Environment and Climate Change Canada, 2020a). Thus, despite the federal government's international commitment to reduce total GHG emissions, the current trajectory of several provinces makes it quite unlikely that Canada will meet it meet its INDCs under the Paris Agreement (Carroll & Daub, 2018; MacArthur et al., 2020).

[51] Lijphart also acknowledges that strong bicameralism, a rigid constitution, and an efficient judicial review are other fundamentals. However, guaranteed division of power is considered as the central prerequisite. See Lijphart (2012).

Consequently, Canada's federal system, particularly its highly decentralized structure, then seems to be impeding climate and energy policy that would be aligned with emissions reduction imperatives. On one hand, the high dependence on trade limits the federal government's willingness to adopt adequate environmental measures to mitigate the effects of climate change, notably if its trading partners (notably the U.S.) do not do so themselves. On the other hand, even if Ottawa were to put climate change mitigation as foremost priority, it would nonetheless face very limited authority over the exploitation of natural resources, particularly fossil fuel, across provinces and territories (MacArthur et al., 2020). Consequently, Mildenberger & Stokes (2019, p.5) contend that, "while the Canadian federal government has exclusive authority to negotiate international agreements – including international climate agreements – its capacity to implement these agreements is constrained by the provinces' willingness to comply with Ottawa's priorities". A recent example of this is the current legal challenges by a number of provinces opposing the federal government's carbon tax under the *Greenhouse Gas Pollution Pricing Act*[52]. These elements outline the complexity of the climate issue and its impact on provincial development due to the interrelation and contention of provincial and federal policymaking. As such, it also calls for further research of climate policy capacity at the subnational level (i.e., provincial and domain-specific), which is seen as quite understudied given its level of importance (Atkinson et al., 2013; Graham et al., 2019; Rayner, McNutt, & Wellstead, 2013; Williams & McNutt, 2013).

For instance, through their work on policy capacity within the Canadian forestry sector, Rayner et al. (2013) emphasize that the extent to which provincial-level policymaking is critical within

[52] SC 2018, c 12, s 186.

regulatory capacity analysis is contingent on the level of decentralization of a specific industry domain. They write that:

> "In an extremely decentralized subsystem such as forestry, the picture is radically incomplete without a consideration of provincial policy capacities. […] In addition, in a development that mirrors the situation in the United States, since the federal government has been reluctant to take action on the climate change file, provinces and even municipalities have moved into climate change policy in the absence of federal leadership" (2013, p.77).

The same goes for the fossil fuel industry, which is highly decentralized, while also varying greatly across provinces. Indeed, Montpetit (2002) explains that, "as studies of federations indicate, the political costs that federal policy-makers must bear for targeting an industry as polluting tend to be higher than the political gains associated with environmental protection, a responsibility often easy to leave with subnational governments" (p.12). Based on these arguments, Canada's federalist structure seems to be a major factor causing climate policy inaction.

However, there have been numerous instances in recent years in which the federal government has intervened in fossil fuel industry development – most often in its favour. Notably, this has often been surrounding oil sands and pipeline projects, and through international trade and export agreements, despite the fact that the responsibility over natural resource exploitation is constitutionally delegated to provincial governments (Neubauer, 2018; Stoddart, Smith, & Graham, 2018). In these cases, the federal government meddling in provincial energy affairs did not seem so problematic. As such, it seems that the federalism aspect of climate policy implementation has been framed at times as a constitutional issue as a means for Canadian

governments to avoid taking ownership of the climate crisis (Carter, 2018; Harrison, 1996; Hessing et al., 2005; Mildenberger & Stokes, 2019; Montpetit, 2002). Indeed, "both provincial and federal governments use the Constitution's ambiguity to justify their reluctance to act, when the reality is that environmental authority overlaps" (Boyd, 2003, p.263). Interestingly, federal inaction in terms of environmental policy and fossil fuel industry regulation is observed across both major federal political parties (Carter et al., 2017; Lukacs, 2020; Wood et al., 2010). While the Conservative government of Stephen Harper (in office between 2006-2015) has been idiosyncratic in terms of removal of environmental regulation and strong support of the fossil fuel industry, the transformation of Canada into an increasingly oil-dependent country "can be traced to free trade agreements adopted by both Conservative and Liberal governments since the late 1980s, as well as long-standing efforts by previous Liberal governments to decentralize environmental policy to the provinces and offer fiscal incentives for fossil fuel development" (Carter et al., 2017, p.63). Thus, this leads to the observation that "the primary obstacle to national leadership on the environment is a lack of political will on the part of successive federal governments rather than constitutionally imposed jurisdictional constraints" (Wood et al., 2010, p.1017). In all, while Canada's federal arrangement is an important aspect to consider in the case of implementing stringent, nationwide climate policy, it is also not enough to explain the entire issue of climate inaction within Canadian governments. Notably, it fails to consider other factors limiting the willingness of federal and provincial governments to take necessary action regarding this crisis.

The executive-parties dimension, Lijphart's second component, may help fill these gaps. This dimension defines political power concentration, notably the configuration of executive power, party, and electoral systems, within a democratic system. For Canada, its Westminster-style

parliamentary system[53], also known as a 'majoritarian model', implies that political power is controlled by the majority, or, most often than not, a plurality of parties, which can make this political system rather competitive and adversarial (Lijphart, 2012). As such, majoritarian democracies are associated with the presence of a strong plurality of independent interest groups gravitating around political institutions, as opposed to a model with greater consensus, which is more likely to be coordinated in a corporatist system aimed at compromise and concertation. Consequently, studies on Canada's parliamentary structure have shown that such pluralism of interest groups has had significant effects on Canadian politics (Atkinsom et al., 2013). Indeed, "the proliferation of interest groups could be partially explained as a consequence of the diffusion of power within the executive and the administrative branches; that a tendency toward bureaucratic pluralism has led agencies to develop extra-governmental support at the interest group level" (Pross, 1985, p.264). Moreover, other scholars have pointed to a further increase in interest group influence within Canadian politics since the adoption of a neoliberal ideology in the 1980s and 1990s, which had significant effects on the political dynamics in Canada's parliament (Atkinson & Thomas, 1993; Smith, 2005). For instance, Smith (2005) points to the increased organization of business associations and use of collective action as new political strategy – notably with the creation of the Business Council on National Issues (BCNI) in the late 1970s and its growing influence in Canadian politics by the end of the 1980s – as a focal point which deeply changed political dynamics within Canadian governments:

> "Canadian business has consistently pushed for every measure that has de-democratized the Canadian political system, from its opposition to election financing laws to buying

[53] A Westminster system means that both the legislative and executive branches of government are merged into one entity – the parliament. See Hessing et al. (2005).

> and fueling the services of professional lobbying firms. […] Collective actors, such as business groups, have directly contributed to the restructuring of political institutions, thus reducing and recasting the access of other collective actors to the state and undermining the legitimacy of collective action." (Smith, 2005, pp.185-186)

Furthermore, oil industry-based pressure onto Canada's political system has been dramatically increased through the adoption of neoliberal reforms, which represents a main source of the democratic deficits discussed earlier. Indeed, numerous studies on the level of political influence wielded by the Canadian fossil fuel industry emphasize the consequences of the gradual adoption of a neoliberal approach[54] to economic development across provincial and federal governments since the 1980s. Accordingly, neoliberalism is considered as a central component of the current political inaction regarding climate change adaptation or regulation of the Canadian fossil fuel industry (Clarke, 2018; Shrivastava & Stefanick, 2015).

Neoliberal governance emerged as the opposition to populist democracy and Keynesian economic measures during the 1930s, such as the New Deal in the United States (Evans, 2020; Mitchell, 2013). Its emergence as a dominant economic ideology is largely attributed to the influential work of European intellectuals, notably Friedrich Hayek, as well as American economist Milton Friedman[55]. Particularly, "neoliberalism proposed an alternative ordering of knowledge, expertise

[54] Defined here as a "political ideology or a discourse of governance that informs the economic separation of democratic spheres and considers the economy as a nonpolitical self-regulatory space of individual enterprise immune to the intervention of the state" (Shrivastava, 2015b, p.393). See also Evans (2020).

[55] It is worth mentioning the extensive works edited under Mirowksi & Plehwe (2015), which have uncovered the degree of influence wielded by anti-New Deal businessman Harold L. Luhnow and the Volker Group on the Chicago School of Liberal Economics and the Free Market Society, founded by Hayek, during the 1930s and 1940s. This corporate control stemming from the financing of Hayek's projects eventually morphed the neoliberal thought collective away from the initial tenets of the 'new liberalism' under Hayek, into a definition where "political "freedom" became increasingly conflated with economic freedom for the capitalist" (Steiner, 2015, p.194), rather than freedom for the individual.

and political technology – the political apparatus that it named 'the market'" (Mitchell, 2013, p.141). It enforces specific preferences over governmental structures and economic development. Particularly, it is most known for the privatization and financialization of public services, a laissez-faire approach to governance, massive market deregulation and its prioritization over social goods, the removal of trade barriers, and monetarism (Adkin, 2016b; Clarke, 2018; Buch-Hansen, 2018; Evans, 2020; Gutstein, 2018; Harvey, 2005; Schmelzer, 2015; Shrivastava, 2015a; Wong, 2020).

Moreover, Pirani's (2018) historiography of the global oil industry describes the wave of deregulation and liberalization of oil markets in the 1990s under a neoliberal approach as one of the main factors of the subsequent oil boom. However, these new "energy policies were aimed not at conserving or shifting away from fossil fuels, but at liberalising and expanding markets" (p.141). Similarly, Mitchell outlines the relationship between neoliberalism and fossil fuel production, in which the rise of an oil-fueled modern world in the middle of the 20th century has led to a few families accumulating vast amounts of wealth, which has then been directed towards the advancement of the neoliberal doctrine, notably through the creation and financial support of right-wing think tanks[56]. The relationship between neoliberal ideology, conspicuous oil wealth, and their effects on political structures, are brilliantly explained by Mitchell (2013, p.197):

> "The success in increasing oil prices undermined the Keynesian management of the economy, easing the way for the development of market-based devices promoted as an alternative to an 'excess' of democracy and the 'failures' of democratic government. A long struggle unfolded through the 1970s and beyond, to today, in which oil companies

[56] For instance, the Mellon family heavily funded the Heritage Foundation, the American Enterprise Institute, and many more, while the Koch brothers supported the Cato Institute and the American Libertarian Party. See Mitchell (2011), and Leonard (2019).

> continually use their political connections to defeat legislation aimed at restricting their influence or at managing natural resources. The market-based solutions offered tools and arguments for derailing alternative efforts at regulation."

Neoliberalism reached Canadian politics gradually under different Prime Ministers; Brian Mulroney (1984-1993), Jean Chrétien (1993-2003), and Paul Martin (2003-2006). Across this time period, a significant reshaping of public services unfolded, leading to the rollback and decline of the national welfare state[57]. However, the implementation of neoliberal concepts was drastically increased under Stephen Harper (2006-2015), and in Alberta under the Progressive Conservative Party, particularly under Ralph Klein (1993-2006)[58] (Adkin, 2016b; Harrison, 2015; Shrivastava & Stefanick, 2015; Wood et al., 2010). During this period of Conservative governments, significant deregulation ensued within Canadian industries, with a focus on primary sector activities, decentralization and privatization of public services or their transfer to non-profit and volunteer-types of organizations, which had significant consequences notably onto resource management and economic policy focus (Gutstein, 2018; Shrivastava, 2015b; Stefanick, 2015b). In Alberta, Premier Klein's neoliberal approach gravitated around precepts of 'results-based management', aimed at the streamlining of public functions in order to reduce provincial debt and

[57] Prominent examples of the shrinkage of the welfare state are the dissolution of the Crown Corporation Petro-Canada and the elimination of the National Energy Program (NEP) under Mulroney. These two entities, initially implemented under PM Pierre Elliot Trudeau (1968-1979), represented Canada's national energy strategy. They have not been replaced by any similar form of national strategy since. See Gutstein (2018) and Stefanick (2015a).

[58] It is worth mentioning here that Ralph Klein held office for only a small portion of the Progressive Conservative's rule. Interestingly, Alberta politics are quite unique in Canada, where political parties have held power for unusually-extensive ruling periods; Liberals (1905-1921), United Farmers of Alberta (1921-1935), Social Credit (1935-1971), Progressive Conservative (1971-2015), New Democratic Party – the exception to the rule – (2015-2019), and now United Conservative (2019-present). Additionally, Klein is not to be made solely responsible for the provincial building policy strategy that led to the transformation of Alberta into a seemingly petro-state. It was rather done through a gradual transformation of the province across social, political, economic, and cultural issues over the course of several decades. However, Klein's neoliberal approach exacerbated these issues further, which played a key role in the contemporary oil dependence seen in Alberta through the corporatization of the province. See Harrison (2015).

make the government as a whole 'more efficient' (Graefe, 2018; Harrison, 2015; Stefanick, 2015b; Wood et al., 2010).

Where 'efficiency gains' are achieved through neoliberal reforms, it is often done at the expense of democratic accountability, as advanced by Susan Strange in her influential work, *The Retreat of the State* (1996). The general transition to market-based economies and the subsequent rise of private and transnational corporations led to a shift of authority from the state to non-state actors over economic and social decisions. Consequently, "the net result of the diffusion of authority […] from the state to other states and to non-state authorities adds up to a democratic deficit" (Strange, 1996, p.197), especially since non-state actors are not democratically governed. This is also emphasized by Stefanick (2015b, p.367), where "governance without some measure of democratic accountability will result in a public policy process that becomes captive to dominant coalitions of nonstate actors". Accordingly, the entrenchment of neoliberal ideology and reforms across Canadian governments are important factors in causing an erosion of Canada's democratic system, while contributing to increasing – and extensive – socioeconomic inequalities felt across the country (Graefe, 2018; Shrivastava, 2015a). Notably, this integration of market values within the Canadian political system has had important consequences:

> "Canada is experiencing an unprecedented wave of market values, and ideals from the private sector successfully penetrating the state. The separation of powers (between different governmental agencies like the legislative, the executive, and the judiciary) in a liberal democracy is supposed to protect the governing elite and their institutions from societal encroachment, and vice-versa, in the interest of both state and society. Yet the significant inroads of market interests into the very locus of the powers from which they

> are to be protected blurs the boundaries with respect to the exercise of political power." (Shrivastava, 2015a, pp.40-41)

Recall earlier that the guarantee for an efficient and successful federal-style of government rests on the fundamental division of power – and its protection – between different jurisdictions and branches of governments, which are elected and represent the population. In the current situation, the transfer of legislative and political power onto market-based actors following the wave of neoliberal reforms in Canada thus comes directly in opposition to the nation's conception of its democratic system, and in turn has damaged it significantly.

Particularly in Alberta, the intensity of the deregulation and privatization of the state through neoliberal measures have been described as the 'hollowing-out of the state' and the 'corporatization' of the provincial government through the alignment of the public sector with corporate values and ideas (Carter et al., 2017; Graefe, 2018; Harrison, 2015; Stefanick, 2015a; Stefanick, 2015b; Strange, 1996; Williams & McNutt, 2013; Wood et al., 2010). Through it all, these reforms:

> "…exacerbated problems of accountability in the public service through the out-sourcing of public services, taking them out of the jurisdiction of legislative oversight. Government spending cuts resulted in the downsizing of the government's intellectual capital that has traditionally produced fulsome public debate about policy direction. Without this, governments ceded control of the definition of the public interest to private sector interests." (Stefanick, 2015b, p.384)

In turn, this economic approach has been described as completely incompatible with the type of action deemed necessary for climate change mitigation and adaption (Foster, 2019), given that it

greatly diminishes state autonomy and policy capacity, while further empowering transnational corporations engrained with, for the great majority of them, deeply individualistic and short-term interests.

Thus, it is here that the consequences of the neoliberal political ideology and the highly decentralized structure of Canada's federation combine and exacerbate themselves. Given the highly decentralized structure of the Canadian federal system, the 'hollowing-out' of the state appears to further worsen. The decreasing power of an already fragmented set of political institutions further empowers non-state actors, leading to great difficulty in developing and implementing policies with long-term perspectives to existing problems (Howlett & Wellstead, 2012).

However, despite of all this, the adoption of a neoliberal ideology within Canadian political institutions cannot fully represent the trend toward the erosion of Canadian public institutions. Other underlying forces have had far-reaching effects onto political and economics forces. As such, it would be inaccurate "to put undue causal influence on neoliberalism, as opposed to the influence of more general characteristics of capitalism, or of the long-run institutionalization of capitalism" (Graefe & Hudson, 2018, p.312), which greatly affected Canadian policies. Particularly, the deep reliance of capitalist forms of development on hydrocarbons as energy sources that emerged in the 20th century and led to the concept of 'fossil capitalism' (Carter, 2020; Carter et al., 2017; Drache, 2014; Shrivastava & Stefanick, 2015; Stefanick, 2015b).

Initially described by Altvater (2009), 'fossil capitalism' classifies carbon-based energy production as a foundational component of capitalist accumulation and expansionism following the Second World War, which in turn led to the ecological exploitation and degradation witnessed

today (Carroll, 2020a; Guerrerro, 2018). As Altvater (2009, p.39) contends, “at the center of the analysis of capitalism’s relation to nature is its inherent and unavoidable dependence on fossil fuels and particularly on oil”. This is similar to the ‘missing link’ within rentier state theory discussed earlier. Fossil capitalism explains that the heavy reliance on fossil fuel extraction and exports also led governmental institutions and corporations to begin developing systemic processes and barriers protecting their interests and maintaining the conditions to continue – or even increase – their accumulation of fossil capital (Carroll, 2020b; Graham, 2019). In other words, carbon capital becomes invested into political and civil society actors, leading to important effects: despite the fact that the fossil fuel sector represents a relatively small portion of the state’s economy and revenues, it nonetheless enjoys disproportionate influence onto provincial and federal governments, in turn making it one of the most powerful industries in politics at the provincial, national – and even international – levels. This is explained by Gliedt & Larson (2018), where “in contrast to sustainability transition in many European countries where socio-technical solutions could be created and implemented independent of political differences, politics in North America are arguably the biggest bottlenecks to sustainability transitions and has served to lock in the existing regime subsystems for decades” (p.221), notably the fossil fuel industry.

Based on this, fossil capitalism outlines two important contributions. First, it connects the unsuccessful global efforts to tackle the climate crisis with the dominant capitalist worldview. Second, it further explains the deep reliance of capitalism onto fossil fuel for economic growth. This arrangement thus outlines the level of threat that an energy and economic transition towards non-fossil fuels induces on the global oil industry. This threat is then a major incentive for the industry to limit further climate and energy regulation, and to consolidate its corporate interests within the political sphere. This seems to explain an important aspect of the political inaction in

Canada regarding the climate crisis, as explained by Carter (2018), who depicts widely ineffective policies for emission reduction through a three-party framework of institutional structure, interest group interplay, and selected ideologies:

> "Given this framework, we would expect far less effective carbon mitigation policy where 1) state institutions have been structured to foster fossil fuel extraction given longstanding economic dependence on this sector; 2) the fossil-fuel sector has wielded political power to resist policy changes that would constrain its extractive activities, whereas groups opposing this mode of development are weak or non-existent; and 3) fossil-fuel extraction has been predominantly conceptualized as an economic good – a necessary one, even – whereas the risks of extraction have been overlooked in public discourse." (p.153)

In turn, this argument would lead to suggest the existence of a powerful interest group linking private and public actors in a system of interdependencies, resulting in a hegemonic[59] alignment of the corporate interests of fossil fuel companies with the 'national interest'. The mention of such a hegemonic group is one of the most recurring themes across the ecological transition literature. For instance, several studies providing a critical analysis on economic growth will describe the often unquestioned assumption of the need for capitalist expansionism and relentless economic growth as the 'growth paradigm'[60], a "specific ensemble of societal, political discourses, theories, and statistical standards that jointly assert and justify the view that economic growth as

[59] The concept of hegemony is derived from the works of Antonio Gramsci, defined here by Evans (2003) who sees it as a combination of an "ideological vision of 'what is everyone's interests' that is largely accepted as 'common sense' with effective ability to apply coercion when necessary to preserve the existing distribution of privilege and exclusion" (p.657). See Evans (2003, 2008) and Pillay (2018).
[60] Term initially coined by Daly (1972).

conventionally defined is desirable, imperative, and essentially limitless" (Schmelzer, 2015, p.264), thus calling for an economic paradigm shift (Buch-Hansen, 2018; Carroll, 2020b; Fioramonti, 2017; Jackson, 2018; Mitchell, 2013; Schmelzer, 2015). This kind of engrained assumption is also strongly present in fossil capitalism literature, in which the collective efforts done by fossil fuel industry actors to undermine ecological regulation for the energy transition is seen as a "paradigmatic case" (Hughes, 2019, p.9). Meanwhile, Pillay (2018) points directly to capitalism and its deep integration – and dependence – of fossil fuel as the source of a transnational, hegemonic elite "united by their common interest in maintaining the essential features of the growth paradigm" (p.150). Additionally, Pineault (2018) and Carter (2018) use the concept of 'hegemonic complex', where plummeting oil prices and widely opposed development projects have failed to challenge the continued growth of the fossil fuel industry. In turn, Pineault (2018) reviews the 'capitalist inducement to burn fossil fuels' through his analysis of the oil sands developments, notably given the contention surrounding 'extreme energy'[61] extraction:

> "Hydrocarbons are use-values central to the development of capitalist relations because they provide the energy needed by this mode of production. This is neither a necessary nor inevitable outcome, but once fossil fuels were integrated into capitalist production relations as use-values, once the forces of production and circulation have adapted to their existence, their expanded reproduction became dependent on this energy form.

[61] 'Extreme energy', or 'unconventional oil', refers to sources of fossil fuel that are more difficult to access and extract, resulting in lesser-quality fuel since more energy must be invested in its extraction. It also refers to the era in-between the 'golden age' of fossil fuel extraction characterizing the 20th century, of abundant and easily accessible sources, and the fully-renewable future. This 'extreme era' is notably characterized by an increased reliance on these more carbon-intensive sources of energy, which in turn further accelerates the effects of the climate crisis. See Pineault (2018) and Mitchell (2013).

> Given this contingent historical trajectory, extreme oil became an "inevitable" outcome of advanced capitalist development as it took place in the twentieth century." (p.137)

Similarly, the concept of 'oil complex' is used to explain an arrangement between government and oil and gas industry, which concentrates political power in a handful of corporations and associations, enabling them to structure the state's political economy to create an environment in their favour, while marginalizing populations and ecological systems (Haluza-Delay & Carter, 2016). This arrangement would further exacerbate a 'carbon lock-in' of a state's economy and political institutions (Carroll & Daub, 2018; Gliedt & Larson, 2018).

In all, these various – yet highly similar – mentions of the dominating extractive capitalist order outline the cause of the 'business as usual' mentality explained in the previous section, and emphasize the need to challenge the dominant actors generating this mentality. Notably, "neoliberal capitalism's structure and institutions have perfected the art of sustaining the status quo and the leadership of hegemonic powers, not only through their control of the policy process but, more importantly, in presenting themselves as knowledge-bearers and experts of the economy, poverty, climate change and society" (Guerrerro, 2018, p.42-43). Additionally, under this Gramscian approach, civil society is also viewed as an arena where hegemonic powers can be contested regarding economic and social life (Bebbington, 2008; Howell & Pearce, 2002). This is particularly important given the high level of activity of fossil fuel industry actors in civil society, as attempts to influence the public opinion towards a favourable stance regarding oil and gas development (Carroll & Huijzer, 2018; Carter, 2018; Graham, 2019; Hughes, 2019; Neubauer, 2018; Pillay, 2018; Satgar, 2018).

As such, it seems apparent that the transition towards a low-carbon economy, required to tackle the climate crisis, would require a deeper transformation of capitalist political economies and industrial systems (Carroll & Daub, 2018; Carroll, 2020b; Fioramonti, 2017; Haluza-Delay & Carter, 2016; Jackson, 2017; Pineault, 2018; Vasey, 2014). Particularly, this transformation is likely to require more meaningful solutions than the current technological fixes that proponents of the fossil fuel industry advocate for, such as carbon capture and storage (CCS). Indeed, Carroll (2020b, p.11) explains that this 'obstructing' through advocating "technological and market-based fixes [buys] time for continuing to ramp-up carbon extraction while creating new profit-making opportunities". This seems to encapsulate the current Liberal federal government's approach to the climate crisis, where, in 2016, Prime Minister Justin Trudeau approved two pipeline projects *only nine days after* creating the Pan-Canadian Framework on Clean Growth and Climate Change. As such, "the inability of nation-states to exercise their sovereignty in the face of international corporate and political pressures to grant investment concessions (for extractive activities or other 'mega-projects') further discredits the possibility for radical social change from within" (Barkin & Sánchez, 2019, p.9). In other words, it seems unlikely that the transformational change needed would stem from within the political sphere under this state/non-state actor arrangement.

To conclude, the current situation can be summarized through a few key points. First, the sharp increase of oil production for economic growth in Canada, accompanied by international trade agreements, have 'locked' the country in a form of neostaples trap. In turn, this creates a strong dichotomy for the federal government between further economic development and respecting international climate obligations, notably the reduction of GHG emissions under the Paris Agreement. Second, the highly decentralized political system of the country's federal structure leaves provincial governments – already with limited political capacity – with important

responsibility over climate and energy policy within their respective jurisdictions. Third, while these factors have greatly empowered the Canadian oil industry within national politics, their effects have been further exacerbated by decades of governmental privatization and market deregulation under a neoliberal political ideology since the 1980s. These factors are further emphasized by Doern & Gattinger:

> "…the regulatory governance of energy in Canada has been transformed [into a] complex, dense, and opaque system of multiple sectoral and horizontal regulators regulating the activities of a large number of diverse energy companies. In this sense, contemporary energy regulation constitutes a power switch from a relatively centralized and jurisdictionally insulated governance arrangement to a far more decentralized governance structure, in which power, in the form of information, financial and other resources, and statutory jurisdiction, is distributed among multiple public, private, and civic players." (2003, p.201)

The depiction of several 'players' having significant power within the energy governance structure represents the large space for interest groups in Canadian politics to influence policy decisions. More specifically, "in all of the Canadian provinces, representative democracy and traditional executive power arrangements promote hierarchal governing structures. These governing arrangements are, however, being challenged by multilevel policy networks in which power is distributed" (Atkinson et al., 2013, p.151). As such, these networks appear to play a significant role in Canadian federal and provincial politics (Compston, 2009a; Craft & Howlett, 2013; Howlett, 2002; Montpetit, 2002, 2005; Rayner et al., 2013; Williams & McNutt, 2013). They are therefore of particular importance in understanding policy outcomes in specific national or subnational industry domains. Particularly, Canada's federal structure has been shown as a critical

factor supporting the emergence of policy networks across the country's multi-level governance arrangement (Montpetit, 2002; Tronconi, 2018). For instance, Montpetit (2002, p.2) argues that "federal arrangements multiply policy networks, influence the distribution of policy capacities among network actors, and – not least – contribute to the shaping of policy preferences. The imprint of federalism on policy networks is more important in Canada but is observable in both countries [Canada and the United States]". Simply put, policy networks "are significant as they provide an understanding of collective processes through which policy briefs, policy preferences, policy discourses and policy decisions are constructed" (Montpetit, 2005, p.362). Thus, from the various factors of inaction reviewed in this chapter, it seems critical to study the Canadian oil and gas industry within a policy network approach to better understand its ties with Canadian governments – both provincial and federal. The next chapter delves further into policy network theory.

4. Policy Network Theory and its Application in the Canadian Fossil Fuel Industry Domain

From the literature reviewed in the previous chapter, it appears that political influence wielded by non-state actors from the oil and gas industry, regrouped into 'policy networks', would be an important source of the political inaction regarding the climate crisis. This chapter then delves further into the policy network approach used to understand the dynamic between state and non-state actors within Canadian politics, more specifically in the context of the climate crisis. Prior to this, however, the first section introduces the main characteristics of policy networks within PN literature. Subsequently, the second section locates the current study within the policy network discourse by critically reviewing recent studies using a policy network approach to outline the links between key non-state actors, notably from the oil and gas industry, as a possible cause for the political inaction in tackling the climate crisis in Canada. There are nonetheless notable limitations to these studies, which lead to this study's analytical gap, described in the third section.

4.1. Policy Network Theory

The concept of policy network emerged in political science in the 1970s, under assumptions that policymaking processes were influenced by interdependencies, informal relationships, and arrangements between interest groups, political institutions, and other actors involved, in order to reach specific policy outcomes (Compston, 2009a; Howlett, 2002; Thatcher, 1998). This mode of thinking differed heavily from the particular focus on methodological individualism that was at this point prominent in political science (Victor, Montgomery, & Lubell, 2017), as the network approach argued that the important unit of study is not simply an individual or a group, but particularly the relationships between such individuals and groups. Moreover, network analysis cuts through the enduring 'micro- vs. macro-level' debate regarding the proper scope of analysis in research, by suggesting instead a meso-level approach (Atkinson & Coleman, 1989; Rhodes,

2009; Victor et al., 2017). Indeed, a network analysis can be characterized as "a meso-level concept that links the micro level of analysis, dealing with the role of interests and government in particular policy decisions, and the macro level of analysis, which is concerned with broader questions about the distribution of power in modern society" (Marsh & Rhodes, referenced in Rhodes, 2009, p.3). This is linked with the emphasis on a multilevel analysis, since different network structures and types of relations can widely differ across policy domains or levels of political organization (Adam & Kriesi 2019; Atkinson & Coleman, 1989; Braunstein, 2015; Wilder, 2019). Thus, a meso-level analysis is quite important in the context of network analysis.

Early network analysis studied specific relational configurations of key policy actors – also known as policy subsystems – and the state. This approach was used in the United States to develop the concept of the 'iron triangle', meant to represent the three-way relationship between federal interest groups, congressional committees, and governmental agencies (Adam & Kriesi, 2019; Bevir, 2020; Howlett, 2002; Rhodes, 2009). This kind of subsystem was described to have 'captured' extensive legislative and regulatory power, thereby generating strong concerns over the democratic integrity within policymaking processes, as this closed and rigid group advanced their self-interests above the general public's in terms of policy choices and outcomes (Carroll, 1984; Hessing et al., 2005; Howlett, 2002). However, the application of the iron triangle in other political settings was highly limited, leading to an important transition in the network literature. The subsequent network approach took on various 'types' of networks, ranging from rigid and stable 'policy communities' to more flexible and open-ended types of interest groups known as 'issue networks' (Marsh & Rhodes, 1992). The former was characterized by a narrow, hierarchical, and interdependent group of actors with strong consensus over values, ideologies, and policy preferences, interacting together to achieve specific policy objectives that may benefit them. The

latter was in direct contrast, represented by a looser, more diverse type of network – and thus more prone to internal conflict (Bevir, 2020; Howlett, 2002; Marsh & Rhodes, 1992; Rhodes, 2009; Thatcher, 1998). Issue networks were described as less politically powerful as policy communities. They were more informal and non-hierarchical, and constituted of a higher number of actors, thus limiting the level of consensus within the network, through the presence of a wider set of views and perspectives over policy decisions (Börzel, 1998; Hessing et al., 2005; Rhodes, 2009; Thatcher, 1998).

Overall, Compston (2009b, p.9) explains that the "most prominent dimension of variation in [policy network] literature is described as continuum between small, closed, consensual policy communities and larger, looser, more conflictual issue networks". In other words, these two types of networks represent both extremes of the spectrum, enabling researchers to define studied networks within this spectrum based on the degree of integration and cohesion of network actors (Börzel, 1998; Compston, 2009b; Rhodes, 2009). As such, their combination "encouraged disaggregation (of policymaking, the state and interest groups), insisting that the interactions of actors be examined in detail. They offered distinct, identifiable categories of state-interest group relations whose defining characteristics could be applied in studies" (Thatcher, 1998, p.392).

However, early network studies faced substantial limitations and criticism. Notably, it was argued that these approaches lacked explanatory power, were under-developed, and included in their analysis a set of factors influencing policy processes too narrow to be used for adequate policy analysis (Carroll, 1984; Thatcher, 1998). Indeed, it was unclear whether network characteristics were preconceived or more naturally – or randomly – generated, leading to question the actual impact of such networks onto the political sphere (Bond & Harrigan, 2014). Moreover, the varying number of approaches resulted in a lack of consensus – and even significant contradiction – over

definitions and specific use of the approach. Consequently, the strong contention surrounding early PN research, notably over the practicality and efficiency of policy network analysis, led to major improvements of the field over time. Although there is still no universal definition of the concept of policy network, Börzel (1998) notes certain features that appear as commonly agreed on within contemporary network literature, notably that networks are characterized by non-hierarchical, interdependent, and relatively stable relationships between actors, all sharing common policy interests and choices, and exchange resources to achieve these shared interests. Alternatively, the purpose of a policy network analysis is particularly well-defined by Braunstein:

> "A PN [policy network] analysis offers a way to map the organisations involved in policy making, and it allows the relating of this map to policy outcomes. This facilitates the exploration of the domestic politics behind different policy outcomes within countries and across countries. Policy network theories maintain that policy outcomes, and thus institutional choices, emerge from the structure of state-society relations. The structures of these relations shape the interactions among actors, thereby influencing consultation, negotiation, and bargaining in formal and informal institutional arrangements. This makes it an excellent framework for investigating policy processes that are characterised by the involvement of peak organisations and that lead to policy choices that do not follow formal political institutional logic or reflect the underlying economic power of interest groups." (2015, p.54)

From the early policy network literature, two main analytical approaches emerged: typological and interorganizational (Börzel, 1998; Braunstein, 2015; Thatcher, 1998; Rhodes, 2009; Wilder, 2019). First, the network typology approach focuses on the configuration of state-society relations that represent structural conditions for the emergence of specific policy network structure, in turn

having an impact on policy content and outcomes (Atkinson & Coleman, 1989; Börzel, 1998; Dunn & Perl, 1994; Thatcher, 1998). In this case, 'policy network' becomes a generic term, thereby using a given typology based on specific variables of state-society arrangement to determine a specific form of network. In turn, the type of policy network present in a specific policy domain may then affect the policy process or its outcomes. Over time, this focus on state-society configurations has led to the development of multiple typologies using varying numbers of dimensions or terminology to define policy networks[62], using a varying number of dimensions and variables for determining state-society relations, thus either extending or limiting the number of different types of policy networks possible.

For instance, of particular interest is Atkinson & Coleman's (1989) network typology, using three variables – degree of mobilization of business interests; state autonomy; and state concentration – to develop seven distinct types of sectoral policy networks (see Table 4.1). Here, state concentration and autonomy correspond to the "degree to which ultimate decision-making power is concentrated in the hands of a relatively small number of officials [and] the degree to which these are able to act autonomously" (p.51), which is then compared to the extent to which the "business community in a particular sector [is] mobilized to assume a role in the making and implementing of policy" (p.53).

Table 4.1: Conditioning Factors for Policy Networks

Mobilization of Business Interests	State Structure			
	High Autonomy High Concentration	Low Autonomy High Concentration	High Autonomy Low Concentration	Low Autonomy Low Concentration
Low	State-Directed	Pressure Pluralism	Pressure Pluralism	Parentela Pluralism
High	Concertation	Clientele Pluralism	Corporatism	Industry-Dominant Pressure Pluralism

Source: Atkinson & Coleman, 1989

[62] Main typologies that enjoyed particular attention are Atkinson & Coleman (1989), Marsh & Rhodes (1992), Jordan & Schubert (1992), and van Waarden (1992). See Thatcher (1998).

At one end of the typology is the state-directed structure, in which poorly mobilized business interests have limited influence over decision-making, against a highly autonomous and concentrated state organization. Meanwhile, the opposite end describes a situation of industry-dominant pressure pluralist PNs, in which policymaking is severely influenced by a highly mobilized business sector, and where state organization has little authority due to low degrees of autonomy and concentration of institutions (Atkinson & Coleman, 1989; Braunstein, 2015). Across this spectrum, the authors depict different types of networks; concertation, corporatism, and various forms of pluralism – pressure, parentela, and clientele pluralism – for a total of five different networks between the two extremes already outlined.

However, the typological approach faces some analytical limitations. Thatcher (1998) points to conflicting definitions and subsequent ambiguity across the different typologies, a certain difficulty in obtaining empirical evidence regarding some of the variables used in typologies, thereby making them quite unwieldy for further analysis. In all, "the utility of network typologies is open to question in situations in which there is rapid change (both institutions and actors), a lack of clear sectoral/subsectoral boundaries, complexity of decision-making and a potentially large number of actors drawn from different levels of policy formation" (Thatcher, 1998, p.398).

The second approach considers policy networks and their interactions with state institutions as a form of governance. The increasing dependence of governments on non-state actors across various policy domains resulted in greater negotiation and coordination between state and business interests, notably due to the growing dominance of non-state actors in policymaking[63] (Thatcher, 1998). In this sense, interorganizational relationships become highly important for understanding

[63] Especially in the case where a privatization and financialization of previous government institutions occurred under the adoption of neoliberal principles.

contemporary policymaking processes (Börzel, 1998; Rhodes, 2009; Thatcher, 1998; Victor et al., 2017). In this case, the majority of interorganizational network studies analyze the links between actors and groups through quantitative data about these specific links, with the results depicting intricate map diagrams of the network, also known as 'social network analysis' (SNA) (Victor et al., 2017; Ward, Stovel, & Sacks, 2011). A main benefit of this approach is that it provides empirical evidence of the blurring of the boundaries between state and non-state actors, as the resulting network maps specifically inter- and intraorganizational relationships across political institutions, industry companies and associations, as well as civil society organizations (CSOs) (Adam & Kriesi, 2019; Heaney & Strickland, 2017; Knoke & Kostiuchenko, 2017; Rhodes, 2009; Thatcher, 1998; Ward et al., 2011). Consequently, it is often argued that the interorganizational approach holds more explanatory power, methodological rigour, and legitimacy than the typological approach, notably due to its use of quantitative data and the visualization of network structures through SNA maps, particularly in comparison to the broad and generalized conceptions of state-society structures within network typologies.

Nonetheless, this approach also faces certain limitations. The extent of the validity and accuracy of the configuration of a certain mapped network developed through quantitative analysis remains challenged. Indeed, the extent of a network and its relevant relationships may be too large to be easily studied. Network researchers must often apply 'boundaries' to their networks – for instance, either through a network analysis within a specific sample of actors, or the use of exclusive data to limit the breadth of the network (Bond & Harrigan, 2014; Thatcher, 1998; Ward et al., 2011). Consequently, the depicted network may differ from the actual network configuration. Furthermore, this type of analysis is only possible with 'visible' relationships – through industry share ownership, interlocking directorates, and other forms of data – which limits the degree of

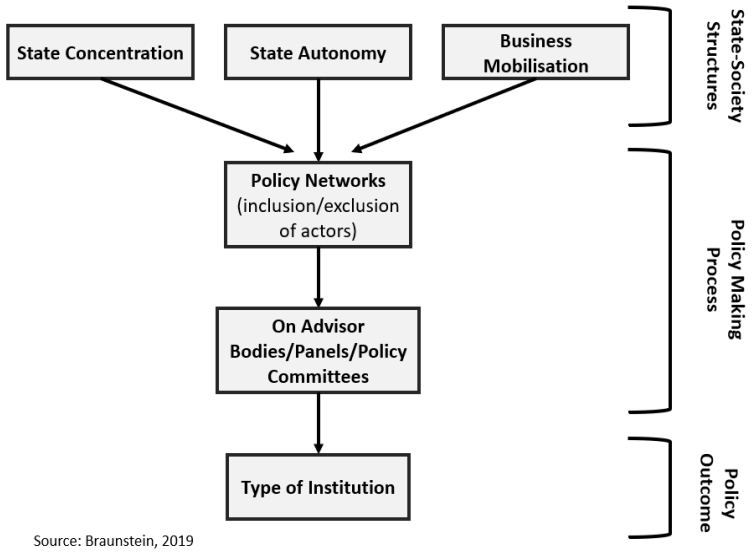
validity regarding the studied network. Particularly, Thatcher (1998, p.402) explains that "only visible decisions and actors are taken into account, often together with the actors' own view of power relations; as a result, many of the criticism of standard pluralism apply, notably that the role of non-decisions in setting agendas is ignored, whilst non-participants in decisions may enjoy great power thanks to, for instance, systemic power and the mobilization of bias". Finally, this approach also tends to focus too heavily on the relationships between actors, thus sometimes neglecting the effect of the characteristics of specific actors within the network (Adam & Kriesi, 2019).

Furthermore, while both approaches face distinct limitations, these critiques represent concerns over the study of networks as a whole. One of the main arguments against policy networks – and of great relevance here – is whether their analytical framework provides significant explanatory power, or if it is merely a descriptive tool. Indeed, despite improved methodological rigour since early PN research, the purpose of network analysis remains unclear, aside from some potential for descriptive assessment – in which Dowding (1995, 2001) is a prominent figure representing these concerns (Börzel, 1998; Braunstein, 2015, Knoke & Kostiuchenko, 2017; Monpetit, 2005; Thatcher, 1998). For instance, in relation to the criticism that policy networks lack explanatory power, Börzel (1998, p.266) explains that "the general inability of the interest intermediation school [i.e., typological approach] to formulate hypotheses which systematically link the nature of a PN with the character and outcome of the policy process seems to confirm the judgment that PNs are not more and not less than a useful toolbox for analysing public policy". In turn, this line of criticism has direct effects over the legitimacy of the causal mechanisms between policy network structures and policy processes and outcomes. In other words, the understanding of how policy networks may affect policy outcomes remains unclear – and is one of the most understudied aspects of policy networks overall (Braunstein, 2015; Heaney & Strickland, 2017; Howlett, 2002;

Rhodes, 2009; Thatcher, 1998). As such, Compston (2009b, pp.35-36) contents that "the issue for policy network theory as a theory of policy change, therefore, is to provide a logically coherent and empirically plausible account of what causes changes in the pre-existing policy preferences of relevant public actors and/or in the nature of resource exchange over public policy". Another notable criticism is of an apparent neglect of important contextual, environmental, and socioeconomic factors within network analysis, which may greatly affect the PN's structure, the policy process, or the relationships between actors (Braunstein, 2015; Thatcher, 1998).

However, despite considerable criticism found across network literature and the attributed methodological limitations of PN studies, this type of analysis is still considered to provide important contributions to contemporary public policy research. Particularly, the 'hollowing out' of welfare states, along with the privatization of public services and an increasing reliance on market forces, make PN research much more important, given the significant increase of the degree of political power of non-state actors following these trends (Knoke & Kostiuchenko, 2017). Indeed, "policy is not made in the electoral arena or in the gladiatorial confrontation of Parliament, but in the netherworld of committees, civil servants, professions, and interest groups" (Marsh & Rhodes, referenced in Knoke, 2018, p.540). Furthermore, there have been significant contributions in the study of causal mechanisms between network structure and policy outcomes in recent years, which was a main point of contention regarding the applicability of the PN approach. For instance, Braunstein's (2015) work shows that the impact of policy networks on policy processes and outcomes can be linked through the components of a PN – defined by the state-society structure and configuration of relevant institutions for a specific domain –by determining which actors are included and excluded, and which benefit from the institutions set up (see Figure 4.1).

Figure 4.1: Factors Shaping Policy Networks and Types of Institutions



Source: Braunstein, 2019

In turn, Braunstein's model points to an alternative beyond the typological and interorganizational approaches – which Thatcher (1998) initially described as the 'diversified' approach. This third form of PN research still considers the formal institutional structures that can impact policy networks, but it also integrates the previously omitted factors mentioned earlier, and extends the framework of analysis to improve the causal relation between network structure and policy outcomes. The diversified approach can then be considered a form of integration of the typological approach, in which defining state-society configuration remains relevant[64], with the focus of the interorganizational approach on empirical evidence and measurable data. In turn, this combination of both approaches seems to have the most analytical potential, as it appears to minimize the respective flaws associated to initial approaches (Adam & Kriesi, 2019; Börzel, 1998; Braunstein, 2015; Thatcher, 1998). In addition, Thatcher outlines the combination of other frameworks and theories within the diversified network framework, such as theories of power and the use of

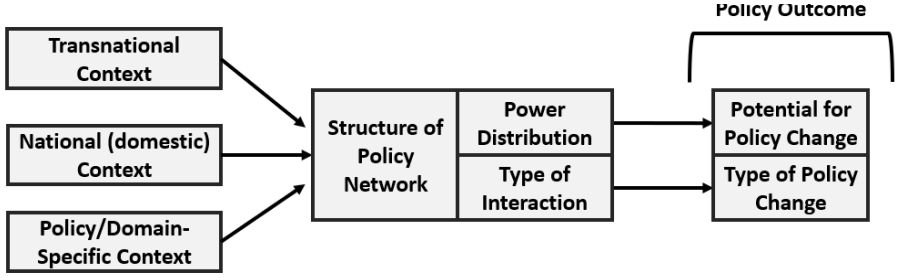
[64] For instance, Braunstein (2015) uses the typology developed by Atkinson & Coleman (1989) and applies it to his own research context in a multilevel and domain-specific approach.

historical institutionalism. Further research also supports this integration, which can allow a better understanding of power distribution within the network and the state, along with how the studied network emerged and changes and adapts over time:

> "As policy change is a function of exogenous and endogenous factors […], only a simultaneous analysis of both types of factors can show whether and how policy networks can resist, alter, or accept environmental stimuli and thus serve as a core variable for understanding policy outcomes. Only when the understanding of how external factors and internal network dynamics influence policies and their changes is improved may we be able to specify which types of policy networks increase the legitimacy and efficiency of policy making." (Adam & Kriesi, 2019, pp.148-149)

As such, Adam & Kriesi (2019, p.130) explain that "external factors such as institutions, ideas, values, strategies, and technologies are now also taken into account as independent determinants of network structures". This concept was adapted into a model linking various factors affecting PN structure, in influencing policy outcome – shown in Figure 4.2. In turn, this model represents this study's analytical ecclecticism approach. Notably, the review of multilevel factors in the previous chapter favour the creation of large and politically powerful networks – therefore further supporting the importance of studying climate policy inaction through a PN approach.

Figure 4.2: Representation of the Network Approach



Source: Adam & Kriesi, 2019

Policy network analysis represents a particularly effective approach for understanding the extent to which policy processes and outcomes can be affected by politics and non-state actors. It is also considered to be very useful to study the politics surrounding the global climate crisis. For instance, "the policy network approach allows the empirical observations to somewhat more closely approach the 'wicked' complexity of social and political causality, so very much evident in climate change problems" (Broadbent, 2017, p.2). This approach has been greatly enriched over multiple decades of research, and has been shown to have particular value in the study of state capacity in the context of a growing number of non-state actors with increasing political power. Finally, the contribution of a PN approach to public policy is categorized under three fundamental roles: 1) describing the network structure and the linkages between actors; 2) measuring the effects of different factors on actor exchange types (where the network is the dependent variable, and the focus of such research is on monitoring how a network changes and adapts over time), and; 3) studying the causal mechanisms between policy network and policy processes and outcomes (in which the network becomes the independent variable for this role) (Thatcher, 1998). Through these distinct roles, network research can provide a significant contribution to the field of public policy. From the assessment of the roles, strengths, and limitations of PN research, the next section critically reviews recent network studies within the Canadian context.

4.2. Critical Review of Recent Canadian Oil & Gas Policy Network Studies

As mentioned in Chapter 2, a number of recent studies have used a network approach within the Canadian fossil fuel industry domain, particularly as an effort to better understand the close relationship between this industry and Canadian politics. Five are of significant importance here. They are critically reviewed below to better understand the extent of the research on oil and gas industry PNs.

First, Graham (2019) analyzes financial reports of the ten biggest fossil fuel companies in Canada to determine whether these organizations have made important investments in renewable energy in order to determine the existence of a corporate transition strategy. Particularly, the study includes a social network analysis to outline intersectoral relations between the fossil fuel industry and the renewable energy industry. The findings provide evidence of particularly high social and political barriers to an energy transition, therefore questioning "whether capitalism can 'decarbonize'" (p.229). Indeed, the fossil fuel companies reviewed appear to have hardly invested in renewable energy technologies. In fact, these companies seem to have instead focused on a short-term strategy of delaying energy transitions and 'business as usual'. Notably, Graham (2019) points to the investments of the largest Canadian fossil fuel companies in renewable sources of energy as quite marginal, even more so in comparison to these companies' investments directed in the expansion of their non-renewable operations. However, despite these small figures of investments in renewables, Graham points to their aggrandizements by several of these companies, used in 'greenwashing' practices:

> "While fossil fuel corporations like Enbridge have made significant investments in renewables, the benefits of some green initiatives can be outweighed by misleading conclusions that these corporations are green saviors. Coupled with dubious yet increasingly common pronouncements that energy system transformation is now well underway, these relatively minor investments can justify inaction. In this way, their investments become a component of the "new denialism"." (p.244)

These findings lead Graham to challenge the current market-based approach of the energy transition in Canada, which is seen as critically insufficient in comparison with the increasing level of urgency of the climate crisis. In turn, he also acknowledges that more research must be done

regarding the fossil fuel policy network's structure and the extent of its related actors – particularly within the financial sector.

Carroll & Huijzer's (2018) work specifically focuses on this point. Their study comprises of a SNA using share ownership data from a sample of the 200 largest Canadian oil-producing companies to map corporate ownership interrelations within these companies. This analysis reveals disproportionate concentration of the fossil fuel industry's ownership and economic power around only a few private actors[65], which "represents a massive centralization of economic power in the hands of private investors accountable only to themselves" (p.8). Moreover, the study outlines strong ties and the prominent role of Canada's large banks[66], along with five US-based asset management firms[67], in the fossil fuel industry[68]. Carroll & Huijzer explain that these "major financial institutions participate in overlapping constellations of interest in a close symbiosis of fossil-fuel capital and financial capital. The interlinked stakes within the various firms give these financial institutions an obvious interest in the vitality of the entire sector and in resisting efforts to wind down fossil-fuel capital and to expand renewables" (pp.28-29). Moreover, there is further consolidation of interests of these financial institutions, notably due to the fact that each of these banks hold a certain ownership of each other. In all, the level of concentration of the fossil fuel industry is described by the authors as "nothing short of oligarchical" (p.29), urging for energy democratization and pressuring Canadian financial institutions and governments to divest from the

[65] Carroll & Huijzer emphasize the increasing concentration of the Canadian economy within a smaller core of large firms over the years; in 2015, only 0.156% of all Canadian firms accounted for nearly 60% of all corporate revenue. In the fossil fuel industry, the three largest oil producers (Enbridge, Suncor, and Imperial Oil) accounted for more than 30% of total yearly revenue in 2015, the top 10 largest firms accounted to 60% of revenue, and the top 25 producers held 80% of the revenue.
[66] Royal Bank of Canada, Toronto-Dominion Bank, Bank of Nova Scotia, Bank of Montreal and Canadian Imperial Bank of Commerce.
[67] Capital Group, Vanguard, Franklin Resources, Fidelity Management and Research, and Blackrock.
[68] Of noticeable interest is the Royal Bank of Canada, which has investments in 30 out of the top 50 fossil-fuel firms, making it the most central Canadian investor within the ownership network. See Carroll & Huijzer (2018).

oil industry. Thus, this study extends the fossil fuel network structure beyond the oil industry and into Canadian (and global) finance, through empirical evidence of the deep integration and consolidation of interests within various groups and actors through overlapping investments and strong interrelation of financial groups and institutions within this network.

Indeed, Canadian banks and financial institutions play an important role in the fossil fuel industry. For instance, a recent study published by the Canadian Center for Policy Alternatives and the Corporate Mapping Project in late 2019 (Rowe et al., 2019) revealed that the Canadian Pension Plan was still heavily investing in the fossil fuel sector, which has been described as "both a moral failing and a financial risk" (p.21). Notably, the maturity and potential decline of the oil and gas industry is likely to lead to considerable stranded assets for investors. The report points to the shift in energy production towards renewable sources, resulting in a potentially decreasing demand for fossil fuels, which then seriously hinders the capacity of such investments to flourish in the long-term – while already posing some risk today. Furthermore, the report argues that such strategy equals to investing "in companies whose financial worth depends on overshooting their carbon budget" (p.17), which goes against the global effort to remain below a 1.5^{o}C temperature increase. As such, "banks, government pension and investment funds and other institutional investors can be held as much accountable for continued and escalating carbon emissions as producer companies" (Carroll & Huijzer, 2018, p.29). These findings also further reinforce the argument that Canada has fallen into a neostaples trap. Having a considerable portion of assets invested in the fossil fuel industry, the Canadian banking and financial sectors have become accomplices of the industry's resistance towards ecological regulation and reduced carbon emissions, as these institutions attempt to protect their investments (Carroll & Huijzer, 2018; Carter, 2018; Neubauer, 2018; Pineault, 2018; Rowe et al., 2019).

Another approach for network mapping is through the analysis of overlapping professional positions – network actors simultaneously holding top decision-making positions – across different organizations (Bond & Harrigan, 2014; Brownlee, 2020). Notably, "interlocking positions and persons are important for the cohesion of two main institutions: politics and economy. […] Interlocking directorates treat positions as a structural feature of importance for investigation" (Knoke & Kostiuchenko, 2017, p.4). This approach is found across the important works of sociologist William K. Carroll, specifically directed towards the network and ties between Canadian oil industry actors and other spheres of Canadian society (Carroll, 2020a; Carroll et al., 2018; Gray & Carroll, 2018; Carroll, Graham, & Yunker, 2018). For instance, one of his recent works (Carroll et al., 2018) outlines the role of civil society organizations (CSOs) in aligning the corporate interests of this network with the 'national interest' through a SNA of interlocking directorships and board memberships between fossil fuel industry corporations and key CSOs. Through a sample of 238 large Canadian fossil fuel companies and 112 civil organizations (regrouping industry associations, business advocacy groups, think tanks, academic institutions, and research institutes), the study outlines deep, intricate relationships between a number of fossil fuel corporations and CSOs. In turn, these interrelated actors are engaged in a 'second-stage denialism' strategy, characterized as proposing "policies that appear as credible responses to the scientific consensus but do not harm big carbon – the three most typical being greater efficiency in carbon extraction and consumption, new technology, and incremental change inadequate to the scale of urgency of the problem" (Carroll et al., 2018, p.428). This strategy is performed by the blurring of the boundaries between market and civil society organizations through the aforementioned interlocking directorships, along with significant fossil-fuel industry funding directed towards knowledge-producing organizations, leading to an increasing alignment between

public-service institutions' opinions with business interests[69]. Based on this, "the traffic in interlocking reveals an elite network in which directors of carbon-capital corporations participate in governance of key knowledge-producing organizations" (Carroll et al., 2018, p.434). Moreover, the study adds:

> "Corporate power reaches into civil and political society with generally debilitating implications for democracy. At the center of a robust democracy is an ongoing public conversation in which everyone with a stake in an issue gets a say. As it reaches into the public sphere, concentrated corporate power distorts the communication, privileging the interests and perspectives of those who own and control capital." (p.426)

This is similar to another study on the effects of the corporatization of Canadian universities (Gray & Carroll, 2018), which also reviewed interlocking directorates to map strong ties between certain oil companies and associations with academic institutions – notably the universities of Alberta and Saskatchewan. Furthermore, the study points to a report from the Canadian Association of University Teachers, in which the "industry representation on academic governance boards and corporate research funding has been found to influence the direction and scope of research undertaken within the academy, at the expense of academic freedom and integrity (Gray & Carroll, 2018, p.494). These studies reveal extensive relationships between the oil industry and Canadian civil society organizations.

Overall, the evidence provided by these studies point to a network with seemingly unprecedented characteristics in Canada's political history. This extraordinary situation is thus one of the main

[69] On that matter, Carroll, Graham, & Yunker (2018) emphasize the consequences of the growing 'corporatization' of public-service and academic institutions in Canada over the last few decades, resulting in the adoption of commercial values, practices, and corporate priorities.

factors motivating additional research in order to understand this network and its effects onto Canadian politics. Carroll`s findings emphasize the hegemonic structure of this group, as "the varied practices and forms of knowledge comprising such an organizational ecology offer the strategic advantage of diversity" (Carroll et al., 2018, p.447). While the high number and diversity of actors may point to a pluralist set of different views, it is argued that the strong interrelation and interlocking of key fossil fuel actors allow for this network to wield substantial influence over the ideas and knowledge being produced at various levels, ultimately making corporate interests synonymous to 'common sense' or 'public interest'. These elements are particularly important to the 'denialism 2.0' introduced earlier, in which are promoted "policies and practices, convivial to profitable corporate revenue streams, which appear to be credible responses to the scientific consensus – as in the promise to phase out coal production by 2030 (while ramping up infrastructure and carbon extraction overall)" (p.447).

Another valuable area of study is in the lobbying practices of the oil and gas industry in Canadian politics (Graham et al., 2019). Lobbying is defined by the *Federal Lobbying Act* as "communicating, with public office holders, for payment with regard to: the making, developing or amending of federal legislative proposals, bills of resolutions, policies or programs; the awarding of federal grants, contributions or other financial benefits; and the awarding of a federal government contract" (Office of the Commissioner of Lobbying in Canada, referenced in Graham et al., 2019, p.15). Moreover, it is a practice that has been used by various interest groups to influence policymakers and political officials over specific legislation and policy choices, from personal or business interests to civil rights issues, which can lead to improved policy process and outcomes aligned with the public interest (Graham et al., 2019; Victor, 2019). However, concerns over the use and legitimacy of lobbying became particularly significant in the 21st century,

following growing research on the subject that pointed to an apparent overrepresentation of corporate actors and associations into the lobbying industry (Goldberg et al., 2019; Graham et al., 2019; Victor, 2019).

Consequently, Graham et al. (2019) build on previous research on oil industry lobbying at the federal level through an analysis of data from the Canadian Registry of Lobbyists[70]. From this, a sample of 239 fossil fuel companies and 21 industry associations is used to make a social network analysis, with the results mapping a highly concentrated network linking 32 oil companies and 14 industry associations[71]. The report reveals that the fossil fuel industry is far more active in lobbying activity in comparison with other major Canadian industries – namely the forestry, automotive, and renewable energy industries. Moreover, the fossil fuel industry's lobbying is mostly directed on environmental issues, in which its lobbying efforts were more than five times greater than opposing environmental non-governmental organizations (ENGOs) within the studied time period (Graham et al., 2019).

From these findings, the authors emphasize a lack of democratic accountability within lobbying activities, notably given that the bulk of an industry`s lobbying activities is concentrated within a specific group of industry actors. Moreover, the study also denotes a form of 'continuity-in-change', as the transition from the Harper to the Trudeau administration in 2015 appears to have had very little effect on the oil industry's lobbying behaviour, besides an increased focus on key

[70] The authors mention the work of Cayley-Daoust & Girard (2012), which examined the oil industry's lobbying practice from 2008 to 2012. The current report thus continued the approach of the previous authors, reviewing lobbying practices between 2011 and 2018. This time period also allows for a measure of whether the change in federal administration in 2015 effected lobbying practices by the fossil fuel industry.

[71] According to Graham et al. (2019), the most active lobbyists were the Mining Association of Canada (MAC) and CAPP, the latter already identified by Carroll & et al. (2018) as being of central importance in this oil network.

agencies like Natural Resources Canada and Environment Canada. Thus, such practice can further exacerbate the erosion of democratic policy processes within public policymaking:

> "The diminished role of members of Parliament as a focal governmental target under Trudeau, and the growing significance of senior public servants and mid-level staff within the former state agencies, indicate a strategy of targeting key decision-makers and state actors that remained after the change of government. This points to a "deep state", a form of co-government, far outlasting election cycles whereby key state institutions and actors within them develop long-term relationships with leading corporations and private interests that contribute to strategy elaboration, policy formulation and implementation." (Graham et al., 2019, p.50)

However, while this study sheds light on the lobbying practices of the oil industry into the federal government, it is not possible to directly link lobbying efforts with specific policy outcomes. Furthermore, the limited information that can be found in the Canadian Registry of Lobbyists restricts the ability to further study lobbying activities. In other words, the findings of Graham et al. (2019), like previous similar ones, may only reveal important lobbying activities and outline key relationships between certain state officials and non-state actors.

Finally, the last study reviewed here extends the analysis of the ties between the fossil fuel industry and Canadian CSOs (Neubauer, 2018). Notably, Neubauer outlines such ties as 'discourse coalitions' (p.250), in which actors from different fields and sectors provide coherence and legitimacy in arguments for the continued development of the fossil fuel industry. Indeed, "because oil and gas comprise a relatively small share of Canadian GDP, employment, and export earnings, and because the sector is structured by the unequal distribution of risk and benefit, sectoral

expansion requires constant public legitimation" (Neubauer, 2018, p.251). To represent the hegemonic aspect of this 'oil development status quo', Neubauer adapts Gramsci's concept of historic bloc[72] into the 'Canadian petrobloc': "a decentralized yet interlocked constellation of state, civil society, and corporate actors jointly dedicated to tar sands expansion" (p.249).

This petrobloc is represented by a SNA of interlocking boards of directors and key staff of relevant private and public organizations with cabinet members of former Prime Minister Stephen Harper, followed by a discourse analysis of the identified actors' communications. The study shows important connections between civil society organizations and government actors, notably in framing opponents to the oil industry and its expansion in Canada (in the forms of pipeline projects or oil sands development) as anti-Canadian, 'foreign-funded radicals'[73]. Moreover, the study also outlines ways in which the 'petrobloc' changed and adapted through the change in government following the 2015 federal election:

> "The petrobloc concept is not as ephemeral as this change in government would seemingly imply. While the heavy-handed actions of the Harper government had alienated many voters from the petrobloc's export market diversification strategies, the Liberals have in some ways emerged as industry's new best friend. Despite the 2014 oil price crash, the Liberals have continued along the path of their predecessors, publicly advocating for pipeline capacity to tidewater to secure Canada's national economic interest. Despite rejecting Gateway, they have approved several contentious bitumen

[72] The original historic bloc is defined as "the constellation of dominant institutions, social groups, and ideas around which an economic system and political system are organized" (Gramsci, 1996, p.263).
[73] This expression was notably used by former Natural Resources Minister Joe Oliver, referring to various First Nations, ENGOs and other opposing groups during the Enbridge Northern Gateway pipeline project. The close relationship between Oliver and the fossil fuel industry is discussed by both Neubauer (2018) and Carroll et al. (2018).

transport and export market diversification projects, including the Kinder Morgan Trans Mountain extension in British Columbia." (Neubauer, 2018, pp.260-261)

The studies reviewed above point to growing evidence and clarity over the existence of an extensive policy network spanning across oil and gas companies and industry associations[74], financial institutions, national economic elites, civil society organizations (notably some neoliberal and conservative think tanks, foundations and advocacy groups funded, directly or indirectly, by fossil fuel industry actors), as well as some government officials and political parties (notably the Conservative Party of Canada, but also extending in recent years to the federal Liberal Party). While these studies suggest that this network enjoys considerable political influence on climate and energy policy decisions, it has nonetheless been contested by different activist groups on those issues. However, these PN studies also face some limitations that need to be addressed. In turn, their identification shows the analytical gap of this study. This process is presented in the following section.

3.3. Limitations of Oil & Gas Policy Network Studies and Analytical Gap

The network studies reviewed above provide a distinct picture of the structure of the oil and gas PN, spanning across CSOs, financial institutions, political actors, and fossil fuel industry companies and associations, while providing some explanatory evidence over how this network emerged, and how it is able to change and adapt over time – and elections. However, while these

[74] The oil and gas industry is particularly consolidated through large associations, notably the Canadian Association of Petroleum Producers (CAPP), the Mining Association of Canada (MAC), or the Canadian Energy Pipeline Association (CEPA). These associations are some of the industry's largest lobbyists, and enable a certain coordination of multiple companies in the advocacy of specific policy or the dissemination of information favorably to the industry. See Carroll & Huijzer (2018), Carter (2018), and Graham et al. (2019).

studies are highly useful in understanding the structure and extent of this network within Canadian politics, they still face a number of limitations regarding policy network analysis.

First, the majority of the studies discussed above have analyzed ties between political actors and institutions at the national level. However, it was established in the previous chapter that a subnational level framework is particularly important in the context of a highly decentralized federal system, such as in Canada, where provincial governments have significant power within their own jurisdictions. Second, aside from Neubauer's (2018) discourse analysis, the studies outlined above have focused primarily on determining the structure of the oil and gas policy network. However, the need to research and understand the content of the network and its implications onto politics is heavily emphasized within policy network literature (Heaney & Strickland, 2017; Victor et al., 2017). Finally, and of most importance here, each of these studies fit within the interorganizational approach defined by Thatcher (1998), characterized by extensive use of quantitative methods – notably through SNAs – to provide analytical rigour and objectivity within policy network research. However, this approach also faces a number of criticisms, as seen earlier in this chapter. Notably, the interorganizational approach contains inherent flaws due to the necessary research boundaries applied in mapping a network – which may result in a network with differences to the actual one. Moreover, network data and the connections between actors must still be interpreted, in which case some relationships or indicators may be over- or undervalued by the researcher. This is explained by Thatcher:

> "Measures for activity may not reflect the distribution of power, the frequency of information does not necessarily show the importance of such exchanges whilst being on the periphery of an information or exchange network may not mean a lack of influence over outcomes. The content of exchanges calls for analysis, whilst identifying linkages

> and providing quantification are no substitute for specifying causal relationships, and indeed depend on hypotheses concerning such relationships." (1998, p.403)

In other words, while the recent network analyses introduced in this section depict quite vividly (especially when put together) the existence and significance of the oil and gas policy network through their interorganizational approach, it remains unclear how this network directly affects policy processes and outcomes, notably in terms of increased oil production, deregulation of the fossil fuel industry, or in limiting policy change for stronger environmental regulation that supports climate crisis adaptation and mitigation. Therefore, the lack of research on causal mechanisms between this policy network's structure and relevant policy outcomes represents the analytical gap of this research project.

All the tools needed to conduct this study have now been identified. The previous chapter situated and justified the value of adopting a policy network approach within Canadian politics – notably in the context of the climate crisis. Subsequently, this chapter delved further into the policy network literature, thus allowing a critical review of the recent PN studies on the Canadian fossil fuel network. It then outlined this study's analytical gap, which the second chapter presented the methodology used to tackle it. The next chapter outlines the research findings.

5. Findings

This chapter presents the findings of the study, conducted using Howlett's model of network and policy change and semi-structured interviews of key individuals related to Canadian climate and energy policy. The first two sections present each component of Howlett's model; beginning with the evolution of network membership for both the provincial and federal case in the first section, then followed by policy change in the second. Subsequently, the analysis conducted revealed some limitations to Howlett's model, which are discussed in the third section. The fourth section combines every component of the model introduced in the previous sections in order to outline the network configurations for both cases. Finally, the fifth section presents the thematic analysis from the primary data collected during the semi-structured interviews, along with a discussion of key themes brought up by several interview participants.

The findings outline limited inclusion of various actors in the province of Alberta for most of the observed period, with oil and gas industry actors overrepresented in climate and industry development policy processes in comparison to other groups of actors. Combined with limited policy change over time, these components point to the Alberta provincial subsystem as a closed network. Meanwhile, a sharp increase in both the number and diversity of actors involved in federal policy processes, along with slightly more significant policy change, suggests that the federal subsystem has gone from a closed to a contested network.

5.1. Network Membership Change

As mentioned in Chapter 2, policy network membership variation for Alberta was determined by observing the inclusion and exclusion of actors within key institutional bodies (such as standing committees, task forces, multi-stakeholder consultations). Key institutional bodies, along with

their subsystem membership, are presented in the table below (Table 5.1). The table also looks at the effect of the main contributions of each institutional body on policy, as previous studies on public participation in policymaking in Alberta have shown that a greater inclusion of different non-state actors has not necessarily led to policy change (Hoberg & Phillips, 2011).

Table 5.1: Institutional Bodies, PN Membership, and Effect on Policy in Alberta, 1995-2019

Year	Institutional Body	Key Contributions	PN Membership		Effect on Policy Outcomes
			Included	Excluded	
1995	National Task Force on Oil Sands Strategies	*The Oil Sands* report (1995)	Oil industry, federal and Alberta provincial and governments	ENGOs, First Nations, no public hearing conducted	Recommendations virtually fully accepted by Alberta government
2000	Cumulative Environmental Management Association (CEMA)	7 management reports and hundreds of reports	Oil industry, provincial and federal agencies, ENGOs, First Nations, community groups	Numerous resignations from ENGOs and First Nations	Limited effect
2005	Multi-stakeholder Wetland Policy Project Team	Recommendations for a new Alberta Wetland Policy (2008)	Provincial government, ENGOs, oil industry, public consultations	Oil industry (non-consensus)	Recommendations not adopted by government in 2010
2006	Oil Sands Consultation Multi-Stakeholder Committee (MSC)	Final report (2007), with 120 recommendations	Oil industry, provincial government, ENGOs, First Nations		Recommendations largely not followed by government
2006	Oil Sands Ministerial Strategy Committee	Radke report (2007), focused on facilitating oil sands development	Oil industry, provincial government, ENGOs, First Nations, municipalities		Recommendations largely accepted by government
2015	Alberta Climate Change Advisory Panel	Climate Change Advisory Panel report (2015)	Oil industry, ENGOs, First Nations, municipalities, public consultations		Significant effect; led to the Climate Leadership Plan
2016	Energy Diversification Advisory Committee (EDA)	"Diversification, Not Decline" report (2018)	Oil industry, ENGOs, First Nations, labour unions, public consultations		Led to the *Energy Diversification Act, SA 2018, c E-9.6*
2016	Oil Sands Advisory Group (OSAG)	OSAG Report (2017)	Oil industry, ENGOs, First Nations, community groups		Limited effect (mostly due to UCP election in 2019)
2019	TIER roundtables	Recommendations for the new TIER emissions regulation	Oil and other industries and associations	ENGOs, First Nations, community groups	Enactment of the new TIER regulation, replacing the CCIR

From this table, the changes in interest group involvement in climate and energy policy in Alberta can be regrouped in four different eras. The first one, which ends around the mid-2000s, demonstrates a rather highly exclusive policy process regarding fossil fuel development. This period is mostly characterized by the work performed by the National Task Force on Oil Sands Strategies, given its lasting impact on oil sands development in Alberta, and its exclusion of key stakeholders aside from corporate actors. In addition, Lemphers (2020, p.123) explains that "consultation with industry is clearly necessary when enacting industrial policy reform. However, in this case, there was arguably an imbalance with broader societal needs as no voices beyond industry and government were included in the [National Task Force on Oil Sands Strategies] governance or consultations". Hoberg & Phillips (2011, p.511), who conducted extensive research on public participation in Alberta, characterized this period as "a clear case of a closed, bipartite policy subsystem historically dominated by two groups of actors: government and industry", where non-governmental and non-industry actors (such as environmental groups or First Nations organizations) were systematically excluded.

There are multiple accounts of poor consultation processes from both federal and provincial governments prior to the late 2000s, which were even acknowledged by the government of Alberta (Government of Alberta, 2007a). However, growing pressure over environmental concerns from ENGOs and the public in the mid-2000s led to an expansion of the policy network, with a series of multi-stakeholder consultations related to oil sands development: the Oil Sands Consultation Multi-Stakeholder Committee (MSC), which focused on the long-term development of the oil sands; the Oil Sands Ministerial Strategy Committee, mandated with a developing a short-term plan of action for the government; and the Cumulative Environmental Management Association (CEMA), which addressed cumulative effects of increased fossil fuel production in Northern

Alberta. These consultations included a broader range of actors, including environmental and Indigenous groups.

Indeed, it is possible to denote in the table above a shift in consultation processes starting around the end of the 2000s, where there is an increase of both overall stakeholders attempting to get involved in oil & gas and climate policy. However, the true diversity and 'opening' of policy consultation was still questioned (Paskey, Steward, & Williams, 2013). For instance, multiple First Nations and environmental groups had resigned from CEMA at different times following their criticism of industry representatives holding most of the decision-making power (Carter et al., 2017; Paskey et al., 2013). In addition, a notable case of limited inclusion is the 2013 *Pembina Institute v Alberta* court ruling[75], in which Justice Marceau pointed to deliberate attempts by the Alberta Environment and Sustainable Resources Development (ESRD)[76] to limit standing to environmental organizations opposing further oil sands development. Notably, he also expressed strongly worded concerns in the fairness of the hearing process. Of particular importance in this case was the existence of a 2009 internal briefing note from the director of the ESRD to the Deputy Minister of Alberta Environment, undisclosed to the public, which attempted to prevent the Pembina Institute and the Oil Sands Environmental Coalition (OSEC)[77] from further participating in oil sands consultations given their opposing views to industry development, which represented "a formula of rejection of future submissions of Statements of Concerns from Pembina and OSEC"[78], as voiced by Justice Marceau.

[75] *Pembina Institute v Alberta (Environment and Sustainable Resources Development), 2013 ABQB 567*.
[76] The ESRD was then merged with the ERCB in 2012, under REDA, to form the AER.
[77] The Coalition was constituted at the time of the Pembina Institute, the Fort McMurray Environmental Association (FMEA), the Alberta Wilderness Association, and Toxics Watch Society of Alberta.
[78] The quote was extracted from the written analysis, prior to the decision. Refer to *Pembina Institute v Alberta*.

Similarly, during that time, the creation of the Alberta Energy Regulator (AER) under the *Responsible Energy Development Act* (REDA) led to significant concerns regarding the accountability and transparency of the new regulator, and particularly towards public engagement in oil and gas developments (Davidson, Edou, & Robinson, 2018). This issue was also reported by an interview participant, commenting:

> "…if you read the [REDA] on paper, it appears that the Alberta Energy Regulator is to regulate the oil and gas industry in the public interest. But in effect, what the Alberta Energy Regulator does is regulate the public in industry's interest… they really regulate the public, to protect the industry." (P01)

Having a more inclusive policy process is important. As such, the opening of a previously closed policy process was seen as rather promising. However, several accounts also question the true impact of this inclusion at the time. More specifically, the broader representation within these consultations was largely only symbolic, given that the consultations' concluding reports[79] resulted in either no change in policy direction, or were consequently never implemented by the government (Hoberg & Phillips, 2011). In all, Hoberg & Phillips explain that:

> "…participation in consultation bodies was expanded to incorporate new actors but without significant change in the location of authority or the distribution of power. The multi-stakeholder consultations were established simply to recommend actions to the provincial cabinet, where authority has effectively remained. […] While multi-

[79] The MSC led to the "Responsible Actions: A Plan for Alberta's Oil Sands" Strategic Plan, the Ministerial Strategy Committee released the "Investing in our Future: Responding to the Rapid Growth of Oil Sands" report, also known as the Radke report, while the CEMA published numerous documents over the years.

> stakeholderism has definitely increased in the oil sands subsystem, relatively little policy change has occurred thus far." (p.524)

Indeed, even in the limited instances where environmental, community, and Indigenous groups were in fact represented within a consultation process, there have been various accounts of these groups facing tokenism from government – the practice of including more diverse groups more for the appearance of having an inclusive process rather than giving theme actual decision-making power. For instance, the *Alberta Land Stewardship Act* (ALSA) requires that regional plans be developed through public consultations. However, the integrity of these consultations has been criticized for limiting the scope of the topics addressed:

> "There was indeed broad public consultation in developing the LARP [Lower Athabasca Regional Plan, under ALSA]. However, the Government of Alberta restricted the conversation to three future development scenarios – a current state scenario that maintained new production plus some new developments, and two additional scenarios with higher levels of oil sands production. Discussion of reducing oil sands production was precluded." (Davidson et al., 2018, p.306)

As such, during this period, Carter (2020, p.114) explains that "Alberta implemented a new form of public consultation that gave the illusion of improving regulation through public participation, while serving to control the message and public expectations in the interests of continued extraction". Similarly, one interview participant, who has been involved in some of these public consultations in Alberta, shared similar views from personal experience. The interviewee especially suggested reforms to improve representation within such consultations, so that "…you don't have twenty industry folks versus one [ENGO] person, which I've certainly been that one

person, or another time when there was 50 or 60 industry CEOs and I'm the only one dissenting. That's not a very democratic policy process in my experience" (P07).

Moreover, there have been other instances of oil & gas companies or associations circumventing the multi-stakeholder group's decisions or recommendations following their publication. This was also reported by one interviewee involved in the methane reduction oversight committee, a multi-stakeholder group set up by the AER and Alberta Energy for methane regulations in 2017:

> "…after a nine-month process […] we didn't reach perfect consensus, but we got to a place where people generally agreed on what the regulations look like. And then, the following November, we got a notice from AER saying "well, the industry is not happy with the modeling that was done as part of those discussions. So, we're going to relook at it". […] You know, to be fair on that one, they actually kind of held the ground on the regulations that did finally come up […] but again, it was just, you know, industry bypassing multi-stakeholder processes… and I'll just point out that those multi-stakeholder processes […] were all under NDP. There just aren't those multi-stakeholder… that step's now been out. Now, it's just industry." (P01)

As the interviewee explains, the third period is characterized by significant change in the participation process, which began to emerge in 2015 following the election of the NDP under Rachel Notley. Accounts of the Alberta Climate Change Advisory Panel and the Oil Sands Advisory Group generally denote a period of multi-stakeholderism – at least in a more meaningful way than in previous efforts. This shift also had a significant effect onto industry groups, where, "for the first time in Alberta, you had industry that had no solid connections to the government of

the day, on the political side" (P04). Another interviewee, a director of an industry association in Alberta, also shared this view:

> "…when the NDP was in power […] we couldn't get a meeting. Like, they wouldn't even say no, they would just ignore you. And so, the tables were kind of turned there. Which is probably not a bad thing. […] So, it was super challenging for an industry that had access, good access, for a long time. I'm not suggesting we had that much influence, but we had access. Back then [under the NDP], we didn't even have access." (P10)

However, this pluralist approach to policy consultations did not last. The election of the United Conservative Party (UCP) under Jason Kenney in 2019[80] has had important repercussions to the general degree to which certain actors would be welcome – further expressed with the TIER roundtables, which were conducted exclusively with corporate actors from the oil & gas industry (Lothian, 2019; Riley, 2019). This government change represents the fourth period in the table, noted with a decrease in the degree of inclusion of policy consultation processes. "As [Premier] Kenney demonstrated […] Alberta is incredibly insulated to populist pressure, or democratic pressure" (P07). Consequently, while there has been a sharp increase in various actors involved in climate and energy policy processes in Alberta between 1999 and 2019, the analysis of the effects of network inclusion undertaken here shows that there has been, overall, limited change to the policy subsystem membership in Alberta.

[80] A representation of the stark change between the NDP and UCP is the launch of the Public Inquiry on Anti-Energy Campaigns by the current conservative government, first introduced in Chapter 3. See Russel & Rusnel (2021).

For the federal subsystem, network membership change was determined through Howlett's model, using policy briefs submitted to relevant legislative committees. The following table (Table 5.2) presents the source of each of the policy briefs by organization type.

Table 5.2: Federal Subsystem Membership Change by Organization Type, 1997-2019

Organization Type	1997		2019	
	Number of Members	Share of Total Briefs (%)	Number of Members	Share of Total Briefs (%)
NGOs & civil organizations	2	13.3%	38	23.2%
Individuals	0	-	27	16.5%
Industry associations	9	60.0%	23	14.0%
Corporate actors	2	13.3%	20	12.2%
Government	1	6.7%	19	11.6%
Academic/think tanks	1	6.7%	16	9.8%
First Nations	0	-	14	8.5%
Unions & workers' associations	0	-	6	3.7%
Political parties	0	-	1	0.6%
Total	15	100%*	164	100%*

*: Percentages may not total 100% due to rounding.

While the total number of actors involved in the policy process (by submitting policy briefs) is initially quite low, it is worth noting that the majority of the actors involved within the policy process are corporate actors and industry associations. This points to the general theme of a policy process with exclusive industry representation, even aside from this specific policy within the NRGO Committee. For instance, in his 2014 Fall report, the Commissioner of the Environment and Sustainable Development of Canada signaled concerns about the degree of exclusion regarding oil and gas regulations. Notably, "although detailed regulatory proposals [for oil and gas] have been available internally for over a year, the federal government has consulted on them only privately, mainly using a small working group of one province and selected industry representatives" (Commissioner of the Environment, 2014, s.1.13).

Table 5.3 shows the extent of the variation of the federal subsystem between 1997 and 2019 based on the policy briefs data analyzed.

Table 5.3: Federal Subsystem Change, 1997-2019

	Original Size	End Size	Percent Change	Original Members Remaining	Percentage of continuing members
Federal Subsystem	15	164	+993%	4	26.67%

Of the 15 initial actors who initially submitted policy briefs in 1997, four had also submitted policy briefs in 2019. Together, these two tables directly outline a sharp increase of actors involved in energy and climate policy decisions at the federal level. This element was also emphasized by another interview participant, doing research on policy networks in Canada, in which "in terms of networks, they [the newly-elected Liberal government in 2015] started opening them up, it was a different cast of characters that were in Ottawa" (P07).

Aside from this increase in different actors, interview participants also pointed to a decrease in the alignment between oil and gas industry actors over time. The high levels of cohesion and capacity for mobilization have been a key component of oil and gas PN studies, which can lead to an overgeneralization of the industry as a single, homogeneous entity. One participant, a senior director from an energy organization, emphasized that misconception:

> "…oil and gas [industry] has such a diversity in membership. Like, you have one-man shops, you have 10-men companies who are looking at flipping their company in 12-18 months and make a profit, you have midsize companies who have a little longer view, and then you have [larger companies] who want to be around for a century. […] You also have vertical integration differences. So, you have those that just produce, those that kind of move it, those that refine it, and those that sell it. You have such different fundamental interests, from an economic standpoint, that it's almost unimaginable for all those companies to try and agree on anything." (P08)

There was nonetheless greater cohesion in the past, as seen with EPIC or the National Task Force. However, increasing pressures onto the industry, largely related to the climate crisis and the need to reduce GHG emissions, began causing a divergence of perspectives across industry actors:

> "There was much more alignment in the '90s, and early 2000s in oil and gas, in general, globally. […] And then, as we moved through the Kyoto Protocol, […] you saw people with longer perspectives […] view it as an opportunity. […] And you had other companies either working covertly or overtly, still trying to undermine climate science." (P08)

Consequently, this diversity of interests within the oil and gas industry is worth acknowledging. Some of the most forward-thinking energy companies have indeed taken strong initiatives regarding the climate, which deserve to be commended[81]. However, although some companies are seen as "sustainability leaders", they are still moving too slowly. Indeed, while a research participant pointed to the fact that climate "expectations of the world have changed dramatically, relatively quickly", the interviewee also emphasized that industry leaders, for the most part "are not generally moving fast enough…" (P08). Moreover:

> "Some [oil and gas companies] are moving faster than others. Particularly European international majors are moving faster. [Canadian leading companies] are moving at an

[81] Studies monitoring sustainability efforts of oil and gas companies often name Shell, Total, and Repsol as leaders, notably for their integration of sustainability measures in corporate performance, and doubling down on emissions intensity and absolute GHG emissions. See Good (2020) and Parafiniuk & Smith (2019). However, these initiatives by these 'leaders' are drastically overshadowed by the negative stance of some of the greatest sustainability laggards in the oil and gas industry – particularly Koch Industries, ExxonMobil, Chevron, which Parafiniuk & Smith describe as being "a serious threat to the planet. They create a ripple effect; other companies use the same strategies to either deny climate science or use the purported doubt to postpone any meaningful change" (2019, p.9).

> ‘okay’ speed, but could go faster. And then there’s some other companies stuck in ‘90s, unfortunately.” (P08)

Thus, the existence of forward-thinking companies supporting political efforts to reduce emissions, and their positive contributions, do not outweigh the consequences of large groups of industry actors that have failed to follow suit, especially as the Alberta provincial government has systematically supported further development of the industry. As explained by another industry actor, “…there was lots of money coming in [Alberta resource industries], and lots of projects were being built, and then the world around us changed, and we didn’t necessarily change as quickly as we should have” (P10).

This component is further exemplified by other actors that continue to resist energy transition efforts. Particularly, such actors are reported to enjoy considerable political access and influence, especially in Alberta:

> “…without question, you typically have right-of-center governments […] in Alberta with close ties between not just the oil and gas industry, but those parts of it that are in denial about climate change, and the global energy transition that is underway. As opposed to the progressive companies who know that a transition is happening, and they’re preparing for it, investing in it, I would say, […] have weak influence on the current provincial government.” (P04)

In other words, it is important to acknowledge the diversity of actors within the oil and gas industry itself. There is a tendency to refer to the oil and gas policy network and the industry interchangeably, which generates the misconception of seeing the industry as one homogenous entity. However, recent climate pressures have led to a decrease in industry cohesion over time,

which is observed within both the provincial and federal subsystems. This aspect of the PN is important for the final analysis of both subsystems, presented in the following sections.

5.2. Policy Change

The categorization of policy change for both subsystems for the observed period is summarized in Table 5.4. A more detailed description of each policy change is included in the appendix section.

Table 5.4: Policy Change by Subsystem, 1999-2019

Subsystem	Change Type				**Total**
	Policy Goals	Programme Specifications	Policy Instrument Types	Instrument Components	
Provincial	0	2	5	17	24
Federal	1*	3	5	9	18
Total	1	5	10	26	42

*: See Appendix 2.

As the table shows, policy change in Alberta within the observed period is mainly depicted by continuance – represented by a strong majority of the policies analyzed as incremental changes to instrument components. Important legislation was enacted between 1999 and 2015, such as the *Climate Change and Emissions Management Act* (CCEMA) in 2003[82], ALSA in 2009, or REDA in 2012. However, they mostly further entrenched the province into its policy goal of economic development through fossil fuel exploitation, while providing limited effect on environmental protection or emissions reduction. For instance, when asked about the pieces of legislation within that time period (1999 to 2015), an environmental lawyer, with nearly two decades of experience in Alberta legislation, qualified these acts and their respective regulations as "more of the same" and "the continuation of the energy development status quo" (P01):

> "If you read on the surface, […] the *Land Stewardship Act* [develops] overarching regional land use plans that will consider and manage cumulative impacts. And the

[82] Now known as the *Emissions Management and Climate Resilience Act* (EMCRA).

> government will be bound to only make decisions that are consistent with those plans. But if you read the details of the plans, and also into the Act, you see suddenly that the only part of the plans that are enforceable are what are called the regulatory details of the plans, which had very limited application and has a lot of discretionary language. […] *Responsible Energy Development Act* is a meaningless revision… it was a change on paper. […] The Alberta Energy Regulator is established under REDA and is just a continuation of the previous regulator…" (P01)

Of particular interest is also the enactment of the *Specified Gas Emitters Regulation* (SGER) in 2007, which is essentially the first form of carbon pricing system in Canada (Government of Alberta, 2007a). One interviewee, from an energy company in Alberta, recalls the SGER, at the time, as:

> "…one of the most advanced policies in the world. Now, the price was relatively low, at $15 a ton, and the target was 12% [of emissions reduction]. But it put a consistent price on carbon across such a large swath of industry that, other than the EU emissions trading system, which was then just being developed, there wasn't really anything close to that." (P08)

While this initiative was applauded as a progressive shift from the conservative provincial government, it has also been framed by several as more of a political move by Alberta to reaffirm and consolidate its constitutional power to regulate its economy within its jurisdiction prior to the ratification of the Kyoto Protocol by the federal government (Blue et al., 2018; Leach, 2012). A governmental official in Alberta explained that "it [SGER] was put through very quickly to kind of change the tone and change the reputation and occupy the policy space, because there was a risk

of federal intrusion into that space if there was a vacuum" (P03). In addition, the effectiveness of the SGER to reduce GHG emissions from the industry sector has been questioned. Indeed, one of the provincial government's mistake was failing to "really progress that policy in a material way. So, they essentially left the base flat, the target flat forever" (P08). Other critics also pointed to the regulation's intensity-based approach to emission reduction instead of putting an absolute limit on them, as well as its limited scope, targeting less than 45% of the province's total emissions, as the main shortfalls of the policy (Blue et al., 2018; Bramley et al., 2011; Read, 2014)[83].

More significant policy change is observed after 2015, with the election of the NDP government, and notably with the enactment of the Climate Leadership Plan (CLP), implemented in 2016. This historical government change, ending a 44-year rule of the previous Conservative governments, was quite disruptive on several respects, which brought contention from multiple groups – as explained in the previous section by an industry interviewee. At the same time, ENGOs and other civil society groups also criticized the government's initiatives regarding the climate crisis for falling short of stringent enough measures. This was also explained by one environmental lawyer:

> "…the NDP was supportive of industry, no doubt, but also was willing to regulate and was willing to take some actions. […] You know, oil & gas is big business in Alberta and they [NDP], as much as anybody else, didn't want to kill that. But they at least made some reasonable steps in the direction, through the Climate Leadership Plan, setting the 100-megaton limit, setting the methane reduction target, you know, all good stuff. Still

[83] For a more positive view of the SGER, see Leach (2012, p.898), who states that "the SGER provides equivalent or weaker incentives to undertake emissions reductions than would a carbon tax, but that these are not as weak as is often suggested by environmental groups".

would never have got us anywhere near where we will need to be by 2030 or 2050. But they were steps in the right direction." (P01)

Thus, despite mixed accounts regarding the NDP's energy and climate initiatives during their short time in government, this period represents nonetheless a significant shift from the previous Conservative governments. However, several of the NDP's policies had very limited effects – along with a very short existence. The election of Jason Kenney's UCP in 2019 saw the repeal of several NDP climate initiatives, notably the CLP. Following this change in government, Alberta has seen a renewed interest in its oil and gas industry as the main factor of economic growth for the province. For instance, several participants voiced strong concerns with the resistance to change by the current government of Alberta:

"[Policy changes, moving away from the oil & gas industry] aren't going to be happening under the current government… and would they happen under an NDP government, which is the most likely alternative? I don't know. It certainly didn't happen under the Notley government. […] Alberta's policymakers and some of the people are increasingly out of touch […] but the rest of the world is changing…" (P07)

"…many of [the UCP's policies] seem to be for short-term economic gain, but it may just be short-term political gain, and not really thinking about even a 5- or 10-year horizon, let alone longer implications for the prosperity of our province in relation to income of individuals, economics of the province, the implications of […] how climate change is going to affect our province in so many ways…" (P02)

> "[Premier Kenney] is a good advocate for the energy industry. I mean, he is. But sometimes, it's a bit too much… you've got to acknowledge these other pieces and show what you're really doing on it. So, what are you *really* doing on energy transition?" (P10)

In contrast, federal policy change is much more dispersed across the different types of change – although incremental change to instrument components also represents a majority. On one hand, there are positive policy changes that have occurred, such as the 2012 regulations enforcing a coal phase-out across the country[84], and notably their amendments in 2018 which accelerated the phase-out timeline from 2053 to 2029[85]. On the other hand, there are several cases of environmental regulatory rollbacks, notably under the 2012 *Jobs, Growth and Long-Term Prosperity Act* (also known as Bill C-38), which drastically changed the environmental legislation landscape of the country[86]. One interviewee, a former senior federal energy official, stated that right from the beginning of the federal environmental assessment and review process [EARP, established under Cabinet Directives of 1973 and 1977[87]], there were calls to revise and strengthen the process. Critics in ENGOs favoured establishing the legalistic process under the U.S. Environmental legislation accomplished in the early 90s. But given that environment is a 'shared jurisdiction' in Canada's federation, duplication and overlap were bound to emerge. There was a growing chorus from Premiers, industry, and others for streamlining and removing policy duplication within the CEAA. However, the reforms under Harper "went too far" (P09). Moreover, the research participant pointed to Bill C-38 as a clear example of fossil fuel industry influence on federal

[84] *Reduction of Carbon Dioxide Emissions from Coal-Fired Generation of Electricity Regulations*, SOR/2012-67.
[85] *Regulations Amending the Reduction of Carbon Dioxide Emissions from Coal-Fired Generation of Electricity Regulations*, SOR/2018-263.
[86] The extent of the impact of this legislation was extensively covered by previous authors. See Doelle (2012) and Gibson, (2012), as well as the Appendix section.
[87] See Fenge & Graham Smith (1986).

policy: "I think probably one of the most blatant examples of [industry] influence on policy was that of EPIC[88], a body set up and funded by industry subscribers to push for an energy policy in general but within that initiative, streamline and reduce federal provincial duplication in environmental assessment. […] Basically, many of the changes to the Fisheries Act, Navigable Waters Act and NEB Act were promoted by EPIC" (P09).

Consequently, the recent efforts to improve climate and energy policies by the current Liberal government have been questioned. For instance, several policy decisions taken by Prime Minister Trudeau's government are seen as quite conflicting; from signing the Paris Agreement and launching the *Pan-Canadian Framework on Clean Growth and Climate Change*, which has the potential of deeply reshaping Canada's economy towards decarbonization, while also supporting increasing oil & gas development. An interviewee explained:

> "…the inability of the Liberals to deliver on their [climate policy] promises is partly a function of the Liberals and their capacity, and partly a function of just the legacy, the inertia of the state as well… I think for me, the Trans Mountain pipeline decisions was also pretty bubble-bursting […] which showed that there was a lot of lip service paid to these reforms. But, when push came to shove, they [Liberals] were able to protect the people that needed to be protected, to use the risk-bearing capacity of the state to maintain the status quo." (P07)

However, the allegedly dichotomous position of the federal government on climate and energy policy does not seem to be restricted to the current government. Indeed, federal energy and climate policy between 1999 and 2019 is framed as a series of changes in policy directions, which resulted

[88] EPIC was initially introduced in Chapter 1.

in a period of high political uncertainty and limited change regarding the climate crisis. “The federal government has had a lot of false starts and a lot of challenges. […] I think it’s been a shame to see all the false starts that happened at the federal level, and even something that’s not very ambitious, if you can just get it in place, and start and then make it better. I think you’re a lot better off” (P03).

This situation of limited policy action and ‘false starts’ can be seen as having lacked the initial requirements of policy *stickiness* in order to generate a path-dependent process toward effective climate change policy (Levin et al., 2012). This element was also mentioned by another participant, a former governmental environmental commissioner:

> “How could we take climate action that wouldn't be reversed by the next government? Because the flip flops are immensely destructive. Climate action, and a lot of environmental action requires investment in long-lived equipment and infrastructure that only pays off over a longer period of time than the normal election cycle. China doesn't have any problems with this, but for a parliamentary democracy, it's really hard.” (P05)

Interestingly, this pattern is seen in both provincial and federal cases. In Alberta, several of the NDP climate initiatives lacked such policy entrenchment, as the UCP repealed important parts of the CLP less than four years later. Subsequently, this “back and forth” policy component highlights some limitations to Howlett’s model, which need to be further discussed.

5.3. Research Contributions to Howlett’s Model

During the analysis of both case studies, there were numerous instances of climate and energy policies – acts, regulations, governmental frameworks or reforms – that were either heavily modified, blocked, or repealed altogether within short periods of time – too short to have had an

impact on the fossil fuel industry. In turn, these "blocked" policies do not seem to fit in the typology of policy change used in Howlett's model, which only considers actual changes in various policy components. However, it would be a mistake to disregard these elements altogether – the mere existence of an observable number of blocked policies has a direct effect onto the interpretation of the entire political process. Thus, from the four categories of policy change of the initial typology, it would be necessary to add a fifth one. From a historical institutionalist perspective, these blocked policies represent various forms of policy drift, "changes in the operation or effect of policies that occur without significant changes in those policies' structure" (Hacker, 2004, p.246). Furthermore, Lemphers (2020) emphasizes that such policy drift occurs particularly once a certain group of powerful actors resists policy change, even in the face of substantial democratic pressure. Moreover, he adds that, "unlike positive feedback which spurs reactive change, policy drift stresses policy status quo. As the climate crisis deepens, more ambitious climate policy is needed that results in much faster rates of absolute emissions reduction. Yet, policy drift is omnipresent" (2020, p.277).

This category would thereby compose of instances of policy retrenchment, causing discontinuity in regulatory trajectories (Streeck & Thelen, 2005). This is represented in the form of enacted legislation that has been either heavily modified to limit its effect or quickly repealed, legislation that has been enacted but failed to have any effect whatsoever on the policy domain (i.e., 'symbolic' legislation), or that failed to be enacted, amended, or repealed, despite strong public or political support for it. Consequently, there are 8 notable instances of blocked policies in the context of Alberta, and 11 at the federal level. These instances are introduced in the table below (Table 5.5). A more detailed description of these blocked policies can be found in Appendix 3.

Table 5.5: Blocked Policies by Subsystem, 1991-2019

Year	Blocked Policy Description
- Province of Alberta -	
2002	Recommendations of the Tuer Commission
2007-2011	Premier Stelmach oil & gas royalty system review
2008-2010	AWC recommendations for Alberta's new wetland policy
2015-2016	NDP oil & gas royalty system review
2016-2019	Reforms to the Alberta Environmental Monitoring, Evaluation and Reporting Agency
2016-2019	Enactment and repeal of the Climate Leadership Plan
2018-2019	Blocked transition of the province's electricity generation system
2019	*An Act to Repeal the Carbon Tax, SA 2019, c 1*
- Federal Government -	
1991-1995	First efforts of the federal government to introduce a carbon tax
1994	National Action Plan on Climate Change
2002-2011	Kyoto Protocol
2006-2007	Bill C-30, *Canada's Clean Air Act*
2007	"Turning the Corner" action plan
2009-2014	Copenhagen Accord
2010	Bill C-311, *Climate Change Accountability Act*
2013-2016	Second sustainable development strategy
2014	Bill C-634, *An Act to establish a Canadian Environmental Bill of Rights*
2015	First budget of the new Liberal federal government
2016	Implementation issues of several components of the *Pan-Canadian Framework on Clean Growth and Climate Change*

Admittedly, these examples of blocked policy change shown above are each caused by a whole range of factors and cannot be attributed to a specific one. A critical and historical analysis would be required for each of these blocked policies – which was beyond the scope of this research. However, they nonetheless represent an additional type of policy change that should be considered when studying the impact of PNs onto policy outcomes.

There seems to be somewhat of an irony here. On one hand, both federal and provincial governments seem to lack political power to enact stringent climate and energy policy, as the consistent failures to reach any emissions reduction target for nearly three decades would suggest. On the hand, it is quite puzzling to see, in the meantime, oil industry-based targets being reached in record-breaking time. Oil sands production reached the target of 1 million barrels per day in 2004, a whopping *16 years ahead of schedule*, while the ambitious $25-billion capital investment

target for the oil sands, expected to be reached in 25 years, *was instead done in three*[89]. Since then, the Alberta oil sands have attracted approximately more than $325 billion-worth of capital investments (Natural Resources Canada, 2020a).

On the other hand, it is worth mentioning that there have been successful cases of governmental climate policies. For instance, one interviewee from the government of Alberta pointed to the current coal phase-out running ahead of schedule. Indeed, one government official in Alberta interviewed pointed to the province now expecting to remove any form of electricity production from coal by 2023, instead of the initial timeline ending coal use only in 2030 (P03). However, instances of blocked policies outnumber – by far – such successful cases.

Consequently, the entries in this fifth section can reinforce the 'closed' subsystem structure, in which there are such levels of insulation and asymmetry between the network and the entire policy discourse community that even incremental changes fail to occur. The lack of policy change regarding environmental law and policy have already been outlined nearly two decades ago by Boyd (2003):

> "Industry has blocked and weakened many important environmental law and policy initiatives. […] In effect, the government consistently puts the economic concerns of the private sector ahead of the need for the public health protection. […] Every time government proposes a new or improved environmental law or policy, those with a vested interest in maintaining the status quo raise economic objections." (p.253)

[89] These objectives were part of the 1995 Final report of the National Task Force on Oil Sands Strategies which, as previously mentioned, included only oil industry leaders, governmental agencies such as NRCan, Finance Canada, and Alberta Energy, as well as other corporate actors like the Canadian Imperial Bank of Commerce. The report was also notorious for barely mentioning effects of such growth on GHG emissions or the environment. For a detailed discussion of the impact of the Task Force, see Hoberg & Phillips (2011) and Lemphers (2020).

For instance, Boyd points to the significant political influence wielded by the Business Council of Canada, which significantly weakened the *Canadian Environmental Assessment Act, 1999*. Moreover, Boyd denotes the 'symbiotic relationship' between resource industries and federal and provincial governments which has led either to policies largely favourable to such industries, or blocking further environmental regulation. An example of the latter is the early federal elections of 1997 and 2000 by former Prime Minister Jean Chrétien, which removed numerous newly proposed environmental laws as Parliament was dissolved.

5.4. Results of Subsystem Cases

From the analysis of membership and policy change, the resulting subsystem change can be determined (see Table 5.6).

Table 5.6: Resulting Network Structure Change, 1999-2019

Subsystem	Network Membership Change	Dominant Policy Change	Resulting Network Change
Provincial	Mostly limited	Instrument components	Closed
Federal	Decreased symmetry, High insulation	Instrument components & policy instruments	Closed to contested

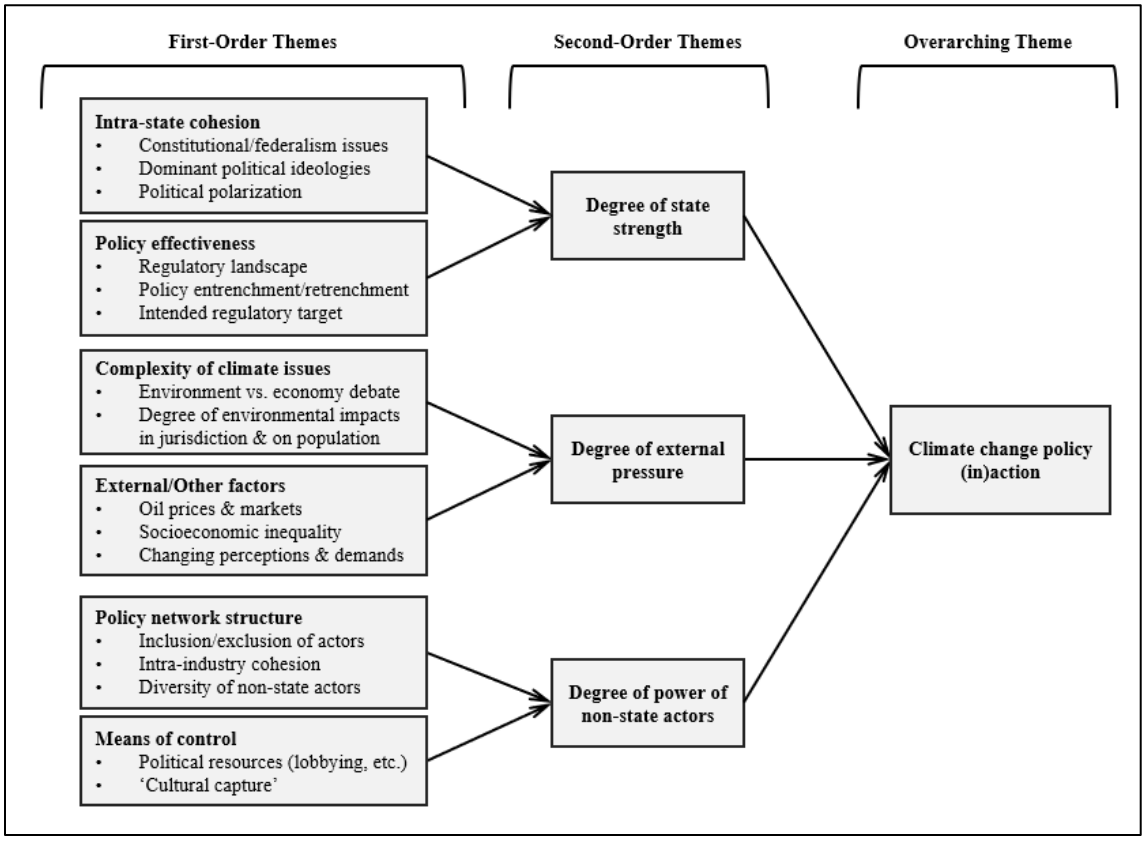
For the provincial subsystem, the alternative method used to determine membership change does not allow for measuring the degree of insulation and symmetry. However, by observing the inclusion and exclusion of different groups of actors across various institutional bodies, it is shown that membership change has been rather limited between 1999 and 2019 – although short periods of greater inclusion occurred during that time (especially from 2015 to 2019). Thus, the limited membership change, along with dominant incremental change of instrument components, would denote a closed network. Meanwhile, network membership change within the federal subsystem is much more pronounced, with a decreased symmetry due to the large increase of actors involved in the policy process. There remains a relatively high degree of insulation, as nearly a third of actors were involved from 1997 to 2019. At the same time, this increase in actors was also

combined with a number of policy change, mostly in the form of instrument components and policy instruments. These elements, put together, would point towards an initially closed network becoming much more contested over time.

5.5. Primary Data Thematic Analysis

Following the study of the two cases, the interviews were further analyzed to determine recurring themes linked to climate energy action (or inaction) in Canada. These themes correspond to key variables and characteristics that appear to have an impact to the degree of policy action of the Canadian federal government. The themes and their relationships are presented below (see Figure 5.1), followed by a general description of these themes and their relationships. Finally, some of the main themes brought forward by the interview participants are discussed in more depth.

Figure 5.1: Thematic Analysis of Climate Change Policy (in)Action



The thematic analysis shows strong similarities with previous PN research, notably Atkinson & Coleman's (1989) network typology, which combined state structure with the degree of mobilization of business interests to determine the political 'strength' of a state[90]. Here as well, whether a state enacts and implements significant action to tackle the climate crisis is incumbent to the dynamic between the state's strength and its relation to the extent of political power from non-state actors[91]. External components that are largely outside of the control of both the state and non-state actors (such as variations in oil prices, environmental impacts affecting the state, or shifting consumer demands of a population's perceptions on the climate crisis, among many others) are added as a third important variable, which seems to act as a catalyst to the state/non-state actor dynamic.

Two components were identified as defining the degree of state strength: intra-state cohesion, which implies the alignment of the federal and provincial governments regarding climate and energy policy decisions (discussed further later); and the effectiveness of implemented policy in reaching climate objectives. The greater the discrepancy between current policies and the environmental targets, the more a state will have to muster political strength to enact policy change in order to meet its objectives. For the degree of power of non-state actors, two defining components were also identified. The first refers mainly to the level of organization of interest groups, represented by the network`s structure. The more organized and aligned various actors are, the more likely are they able to collectively put pressure on policy processes and outcomes. This degree of organization is thereby incumbent on which actors (from different industries or CSOs)

[90] Refer to the section in Chapter 4 discussing Atkinson & Coleman (1989).
[91] The term 'non-state actors' refers not just to the fossil fuel industry, but any market or civil society actors involved in the policymaking process.

are included within such network, and the degrees of cohesion and diversity of a PN regarding specific policy decisions. Secondly, the network`s political power is also determined by the various tools and resources at its disposition to exert influence on policymaking. Interviewees referred to various means, including political lobbying, public communications strategies, industry access to state actors, and so on. Interestingly, some participants also described the concept of 'regulatory capture', in which the fossil fuel industry allegedly exerts such influence onto some governmental institutions that it would essentially 'control' some of them in order to maximize its private interests, with respect to industry development project approvals or environmental regulation. This controversial concept is further discussed later in this section.

Within the dynamic between the second-order themes and their relations with respective first-order themes described here, some themes were particularly discussed by most participants: the importance of cohesion between the federal and provincial governments for state strength; the recent increase of political polarization and its relation to political conservative views; and industry political power, which includes the concept of 'regulatory capture'. These themes are presented and discussed below.

State Strength & Intra-State Cohesion

State strength is crucial for the adoption and entrenchment of stringent climate policy. However, the Canadian federal government is not known to be 'powerful', largely due to the decentralized aspect of the Canadian Confederation, discussed earlier. As stated by a research participant: "the federal government has, in many cases, weak jurisdictional authority relative to the provinces. […] The success of [meeting international climate obligations] can be largely determined by the actions of provinces…" (P04). Therefore, this power dynamic between the federal and provincial

governments makes the former greatly reliant on the degree of cohesion and policy alignment within every Canadian governments – referred here as intra-state cohesion.

The degree of intra-state cohesion in Canada has varied considerably over time. An example of high cohesion is the "Pan-Canadian Framework on Clean Growth and Climate Change", in which strong consensus across all provinces and territories occurred (Government of Canada, 2016). However, intra-state cohesion seems to have declined in recent years, notably between the federal government and Alberta, under Jason Kenney. One participant emphasized the uniqueness of the current situation, which does not seem to fit with the traditional views of diverging political parties in Canada:

> "Jason Kenney uses a level of rhetoric that we did not hear from, you know, Jim Prentice, in his short position, or from Stelmach or Redford. Now, there's just a level of rhetoric that comes from Jason Kenney that is above and beyond what there was in previous… you know, if you want to go back as far as Lougheed, you can probably say we would have all been on the same page." (P01)

In turn, several participants saw this decreasing cohesion between Canadian governments on climate policy (as well as across a broad range of issues) as the result of increased political polarization in recent years, mainly stemming from conservative parties.

Political Polarization & Conservatism

A recurring theme across nearly every interview was the recent polarization of Canadian politics, although it has also been a common trend across numerous countries in recent years. The gravity of this issue is worth acknowledging here. Polarization has occurred at each end of the political spectrum, thus both Left- and Right-leaning parties ought to take some responsibility for the

current situation. The climate crisis seems to be an important factor for this polarization, especially the debate surrounding policy choices to tackle the issue, as different interest groups have been advocating for different – and often conflicting – sets of climate and energy policies to adopt. "As soon as you start putting lines in the sand that are not economically viable, you create tremendous polarization" (P08).

However, while a few interview participants shared some criticisms over both sides, nearly every interviewee who mentioned political polarization pointed to right-wing rhetoric as an important, if not critical, source for it. Indeed, "you saw the polarization within conservative parties around carbon [pricing], where, starting in about the late 2000s, you saw the attack on carbon pricing as a fundamental principle of conservative policy." (P08). This dynamic declined in the 2010s, for instance with Alberta Premier Jim Prentice, a conservative, who proposed a carbon tax in the province as well.

However, the decline of oil prices in recent years, notably by 2014 and in 2020 following the COVID-19 pandemic, further exacerbated that perspective. The consequences of these price drops were particularly felt in Alberta, with considerable job losses and decreasing economic stability. This upheaval in the province's welfare had dire consequences on some Albertans, in which some political actors saw it as an opportunity:

> "… people are mad, they're scared, and they've got politicians, and particularly ones on the right side of the spectrum, that are telling them "the reason you're unemployed is not because of macroeconomics, or the price of oil […]. The reason you're unemployed is because of […] that pipeline activist, or that environmental NGO." […] And that's an easy sell […] because you still have a lot of people in denial, especially in this province,

about what's happening in global energy markets, and how the best days are behind us now." (P04)

As such, climate and energy policy further became a point of contention. Indeed, "we've seen Jason Kenney come back and basically revert to kind of, I would say, conservative principles of attacking carbon [pricing]. And, since he was elected on a kind of platform of anger, he's been attacking the federal government on climate" (P08), thus further eroding intra-state cohesion, a key component for state strength. In turn, another participant bemoaned the current situation across conservative governments in Canada:

> "We have an established pattern that when conservative governments are elected, they destroy laws, policies, institutions, staff, research, the entire range of public actions […]. That hasn't always been true. […] But it's become in some ways even worse now, that there doesn't seem to be any environmental cause that today's conservatives don't damage. It wasn't always like this." (P05)

It is unclear how polarization will affect Canadian politics in the future – which is beyond the scope of this research. However, the interrelations between the climate crisis, conservatism, and political polarization are important to outline and further study.

Industry Political Control and 'Regulatory Capture'

By and large, fossil fuel industry actors appear to have an extensive range of resources at their disposition for influencing political decisions regarding climate or energy policy. Previous studies have pointed to lobbying as a main source of influence from industry actors (Cayley-Daoust & Girard, 2012; Graham, 2019). However, there is very little evidence available to prove that specific lobbying activities have direct effects on a certain policy decision. In addition, most industry actors

interviewed denoted a reduced access or capacity to be listened to by political officials in recent years. However, lobbying does not represent the full extent of the fossil fuel industry's means of influence. One participant denotes that, on top of political lobbying, oil and gas actors use a breadth of communications tools to frame narratives around key issues and policy debates:

> "Big companies have a lot of money and a lot of incentive, given the impact that policy and regulations have on their profitability, to go in and lobby hard, […] banding together, spending a lot of money, […] running newspaper ads, basically encouraging people to write op-eds [opinion editorials] and all that. And the government, then, […] usually capitulates." (P04)

The use of media platforms to frame policy debates and the dissemination of information also represents an important source of political influence for this industry policy network, as shown by previous studies described in Chapter 4. Moreover, one participant explained:

> "There is consensus building, and a building of analysis, a building of a repertoire of language in research […]. And there are key influencers along the way that end up developing these ideas and these forms of language and research, and it is able to pervade society. And this has, in fact, happened across successive provincial and federal elections, if you really dug into it. This has very clearly happened with particular social media groups, or particular think tanks that are connected into these broader elite political and economic networks." (P02)

In turn, the discussion of this topic led some interview participants to describe the concept of 'industry-captured' regulators[92], notably regarding the AER and the NEB (now CER). This concept has also been used in previous studies in the context of Canadian environmental or industry regulation (MacLean, 2016, 2019; Wood et al., 2010). However, there seems to be some misconceptions with this concept. For instance, Carpenter & Moss (2014) explain that regulatory capture is often 'misdiagnosed' or 'mistreated'. While multiple scandals of malpractice or conflict of interest in government institutions – of which both the AER and the former NEB have had their share – may represent possible examples of such 'capture', "plausibility, however, lies quite a distance from proof" (Carpenter & Moss, 2014, p.4).

Further investigation during the interview process outlined a similar misconception of the concept of 'regulatory capture'. This allowed to clarify the usage of the term by some participants regarding Canadian energy regulators:

> "… I've met some of the [AER] regulatory people within, you know, and I've dealt with them on things like the methane oversight committee and that, and there's some really good people in that organization. They're trying to do good stuff. But generally, it's just not an effective regulatory of anything. Because they're getting their direction from the government, and they won't do much to target the industry." (P01)

> "They [AER] are a regulator, they're not a policymaker. So, the failings, where they exist – of lack of policy stringency – that's government, that's not AER's problem. […] But

[92] The concept is defined here as "the result or process by which regulation, in law or application, is consistently or repeatedly directed away from the public interest and toward the interests of the regulated industry, by the intent and action of the industry itself" (Carpenter & Moss, 2014, p.13).

in terms of the staff themselves, I think, you know, they're not industry captured. They're just as diligent as public servants as exists outside of the AER." (P03)

The case studies and interview process pointed to little evidence of an explicit form of regulatory capture or systemic corruption. Rather, the use of the concept here seems to refer instead to 'cultural capture', a nonmaterialist form of capture in which the worldviews of state or regulatory actors are largely induced by industry members, and where "those regulators might make decisions because their conception of the public interest has been colonized by industry" (Kwak, 2014, p.79)[93]. Consequently, one participant specified that concept, notably in the context of Alberta's current Premier, Jason Kenney, and his relentless focus on fossil fuel industry development:

"I wouldn't go to the level of corruption. I don't think, you know, Jason Kenney is going home with millions of oil sands dollars in his pocket or anything like that. I think he's a true believer […] this is the way that things should operate." (P01)

Indeed, the assumption that oil and gas development is unilaterally good for the economy, or that, at least, its benefits outweigh the environmental costs, is particularly dominant in Canada – especially in Alberta. Based on this, it is possible to see the interrelation between oil development, the specific paradigm of economic growth, and the climate crisis:

"…the birth of the economy – a dematerialised conception of economic flows – was enabled by the arrival of oil, an energy source so cheap and so plentiful, from the 1930s,

[93] Interestingly, Kwak explains that social capture is rather inevitable, stemming from "the unavoidable byproduct of necessary interactions between human beings" (p.95). However, he emphasizes that the regulatory landscape may provide more room for such capture. "If the only problem we guard is material self-interest, we will have a regulatory process protected from bribery, but not from other influences wielded by motivated interest groups. We should not doubt that sophisticated interest groups are doing what they can to achieve cultural capture wherever possible, because it is certainly in their interests." (p.80). See Kwak (2014).

> that a system of general economic calculation could be devised that made no reference to questions of the exhaustion of non-renewable resources or the cost of energy. This made possible the idea of growth without limits." (Mitchell, 2013, p.247)

The emergence of the climate crisis thus comes to challenge the relationship between oil and the economy, especially as it imposes explicit ecological limits – which represents a fundamental disruption of the economic paradigm of constant, 'limitless' growth. Thus, the multiple points of friction outlined here – the issues surrounding government inaction as well as the polarization of Canadian politics – can be interpreted as the significant disruption stemming from the deconstruction of previous economic beliefs as part of a paradigmatic shift surrounding dictating economic principles (Buch-Hansen, 2018). However, this transition seems to be limited from industry groups using various means of influence to shape the worldviews of both state actors and the general public.

In short, the political inaction of Canadian governments regarding the climate crisis is represented as a function of the degree of state strength in relation to the degree of strength of non-state actors. In this case, Canada's strength and intra-state cohesion have remained largely weak for the past twenty years. Meanwhile, fossil fuel industry actors, regrouped in a cohesive network both at the provincial and federal level, appear to have wielded significant influence for specific policy outcomes – although this cohesion seems to have waned down since the 1990s.

6. Conclusion

> "Moving beyond fossil fuels is more akin to quitting a sect than breaking an addiction."
>
> – Pulitzer-winning author Greg Grandin

This chapter represents the analysis of the findings presented in the previous chapter. The first section combines the findings of both cases and the interviews to return to the initial research question and hypotheses, and concludes with a discussion on the implications of the study's findings. Subsequently, the second section describes the main research contributions. The third section outlines the limitations to this study, while pointing to areas for further research. Finally, the fourth section presents the study's concluding remarks.

6.1. Implications of Findings

The case studies' findings of the previous chapter point to the provincial subsystem being a closed network, while the federal subsystem evolved from a closed to contested one. Consequently, these findings now allow to review the initial question of this research: *To what extent do the policy changes applied by the federal and Alberta provincial governments onto the country's fossil fuel industry between 1999 and 2019 reflect the interests of the Canadian oil and gas industry policy network?* In addition, two hypotheses were developed: 1) networks would have limited actors and high insulation from the policy community, resulting in strong resistance from proposed policy change; and 2) policy change is limited to incremental change to policy instruments, in turn pointing to closed network structures. The findings presented above show a strong alignment between fossil fuel industry interests and policy outcomes. However, the analysis of the provincial and federal case also shows that this alignment has not been completely fluid over the observed

period. The table below (Table 6.1) presents the results of each subsystem in comparison to the initial hypotheses, which are partially confirmed.

Table 6.1: Subsystem Network Findings & Initial Research Hypotheses

Subsystem	Hypothesis #1	Hypothesis #2
Provincial	Partially confirmed	Confirmed
Federal	Partially confirmed	Rejected

For the provincial subsystem, despite the fact that membership change was rather limited between the beginning and the end of the observed period, it is nonetheless punctuated by greater inclusion and diversity of actors involved in the policy process. Additionally, the current trend would suggest that this closed network may become increasingly contested over time, leading to more significant policy change. In turn, this theme was widely assessed by interview participants, pointing to a shift of the political landscape in Alberta. "While I think there's a lot of sort of "buckling down and doing what you've always done" mentality in Alberta, […] I think the politics in Alberta is changing. […] I think the demographics of the province are changing significantly" (P07). However, this denotation of political shift was also seen as being mostly halted by the current UCP government – as explained earlier. It is for these reasons that the first hypothesis is seen as partially confirmed. Meanwhile, the high resistance towards policy change, leading to limited, incremental changes to instrument components, confirm the second hypothesis.

In the context of the federal subsystem, the first hypothesis is also only partially confirmed. As explained above, this subsystem was initially a closed network, as predicted. However, the shift towards a contested network indicates a degree of network insulation from the discourse community that is lower than expected. Finally, this network shift rejects the second hypothesis. In turn, the broadening of the federal subsystem was also expressed by an industry participant: "…to suggest that somehow or other, we've [industry actors] gotten everything we wanted… back

in the 90s, sure. But in this day and age, I don't think that's the case. I don't think the power always rests with us. […] I think now it's far more open" (P10). It was similarly explained by the vice president of another energy industry association in Canada who pointed to a record of limited ability to influence policy decisions in recent years: "[Are we] active as a lobbyist? Yes, absolutely. […] but, you know, just because we engage with them on a regular basis [federal government officials] – I would point to the government's policies of the last four or five years, […] where it would be evident that certainly the government hasn't accepted the majority of [the association's policy recommendations]" (P06).

Consequently, these findings also further consolidate Howlett's initial model in terms of causality mechanisms between network change and policy outcomes. Indeed, in both cases, membership change corresponded to the policy change expected as per the initial model. This further supports previous studies pointing to the explanatory value of adopting a policy network approach in the study of policy decisions.

Furthermore, the findings also emphasize the importance of having an inclusive and diversified policy process. This component was particularly advanced by Blue et al. (2018, p.106); "when fossil fuel interests define the contours of climate policy, the pursuit of economic growth will continue to trump environmental protection. […] The role played by the fossil fuel industry in shaping climate policies is deeply problematic, particularly at a time when bold climate policy that will reduce GHG emissions is most urgently needed." Similarly, the growing pressure to increase policy network inclusion could, inversely, require the exclusion of the fossil fuel industry in climate and energy policy processes. Indeed, the extent of the climate crisis outlines a deep contradiction between the measures deemed necessary to tackle this global emergency, and the development of the fossil fuel energy industry. This point was also iterated by one interviewee:

> "…at what point do we start excluding the fossil fuel industry from the policymaking table that's designing policies that will hasten its end? So, at what point was the tobacco industry excluded from discussions around setting health guidelines for tobacco? I think those questions will need to start happening pretty quickly… but I don't think we're at that point as a society." (P07)

Admittedly, reconciling both economic imperatives and the climate crisis is no small feat – a challenge most countries have struggled with. Indeed, while the analysis here shows the poor ability of Canadian governments to tackle the climate crisis, their poor performance for the last twenty years also reflects that of the rest of the world. "I don't think Canada's been any different than other parts of the world. In a very general but similar way, all countries have struggled with [the climate crisis]" (P06), of which the interviewee pointed to the dichotomy between the urgent need to reduce GHG emissions, while still sustaining a world largely built around the use of fossil fuels for energy. Consequently, most industry-related interview participants emphasized the need for "environmental improvements, on the one hand, and the economy on the other hand. […] You can achieve both" (P06).

Another also pointed to a "spectrum of energy opportunity" (P10), suggesting a transition that considers economic and environmental factors at the same time, which may have less dire consequences than drastic corrective measures. "To suggest that you're going to, all of a sudden, go off one [source of energy] and go to the other, I think is naïve. And so, how do we support that, where you're supporting an economy, […] but you're also saying, "we recognize and acknowledge that the world around us is changing, here's all the things that we are doing"?" (P10). While such discussion is urgently needed, it is however beyond the scope of this research.

6.2. Research Contributions

This research has three main contributions. First, the study contributes to policy network research, by providing additional empirical evidence to extant PN literature on the importance and value of this approach in the analysis of policy decision-making. Second, the study also contributes to Canadian political economy literature, notably through its eclectic analytical framework of multiple factors affecting policy decisions, especially in the context of Canada's efforts to tackle the climate crisis. Notably, the study provides further evidence regarding the political dynamics and some of the sources of inactions within the federal and Alberta provincial governments. Finally, the study contributes to the field of ecological political economy.

This study joins other works advocating the explanatory use of PNs in the analysis of policy decision-making, by providing additional empirical evidence that further suggests that policy network structure does have a significant impact on policy processes and outcomes. There are nonetheless several challenges in doing this, as this study revealed some of the difficulties in observing direct causality between the existence of an oil and gas policy network and actual policy outcomes within the federal and Alberta provincial governments. The climate crisis is such a multi-faceted issue, with so many variables, that one cannot conclude that the oil and gas network is directly the sole or main cause for political inaction from Canadian governments regarding the climate policy, notably with reaching previous and current GHG emissions reduction targets (such as the Kyoto Protocol or the Paris Agreement). However, the evidence provided through the analysis of these two case studies shows that the fossil fuel PN nonetheless wields *substantial* influence over Canadian governments. Therefore, targeting this power dynamic would be a priority in order to enact further climate and energy policy that would have the capacity to transition the Canadian economy towards a low-carbon economy.

These findings were determined notably through the application of Howlett's model observing causal mechanisms between network dynamics and their effects on policy outcomes. Consequently, this study's findings also support the use of Howlett's model, notably by reinforcing the initial model through its application within an additional policy domain (i.e., the oil and gas industry). Furthermore, the research conducted also provides ways to enhance Howlett's model, particularly by observing beyond policy change, and reviewing instances in which policy change has failed to occur – characterized as policy drift. Further research using this model could include in their analytical corpus rejected policies as a new way to investigate inaction in numerous fields.

Secondly, it also contributes more specifically to recent works in the Canadian political economy, using a policy network approach to outline the close relationships between oil and gas industry actors and political actors. For instance, this research suggests that this PN approach has a valuable meaning both at the national and subnational level, by reviewing network ties within provinces themselves. The research also pointed to little evidence highlighting lobbying activities as having a direct effect on policy decisions, or to explain the relationship between the industry and governments. It is particularly difficult to outline such relationship – although further research on lobbying practices may help better understand their effects within Canadian politics. However, the study outlined a breadth of different means for political influence at the disposal of the oil and gas PN, notably regarding media relations and issue framing, as well as 'cultural capture'.

Finally, this research contributes to the contemporary field of ecological political economy, a subfield within the broader Canadian political economy. Notably, it further outlines ways in which extractive capitalism and the political influence of the oil & gas industry has entrenched policy decisions towards its own benefits. For instance, while the study refutes arguments of 'industry capture' of government institutions (especially energy industry regulators), it instead points to the

concept of ‘cultural capture’ to explain the deeply ingrained belief that further oil and gas industry development is critical to the Canadian economy – and steadily outweighs social and environmental costs. Moreover, this study suggests that the combination of adopting a policy network approach within an ecological political economy lens could further enhance this field of research.

6.3. Limitations and Further Research

The scope and time constraints of a master’s thesis have put certain limits on this research project. There are then key limitations to acknowledge. In turn, some of these limitations may also point to areas to be addresses through further research.

One of the study’s main limitations is its time period. While reviewing policy change over twenty years provided valuable information, going further back in time may be necessary to fully understand some of the policies enacted during the observed period. As such, more research using a different or broader timeline, for instance going back to the 1970s or even earlier, would allow a greater understanding of the evolution of fossil fuel PNs in the Canadian context, which may greatly contribute to outline critical energy development policy that led Canada onto a path-dependent trajectory towards further oil and gas extraction and production.

The impact of the COVID-19 pandemic restricted traveling to Alberta, which limited the capacity to undertake an exhaustive policy network analysis of the fossil fuel PN in Alberta, in the likes of the previous studies that have done so at the federal level. Additionally, as this study emphasized the importance of conducting PN research at a subnational level, it focused largely on Alberta, despite the fact that other provinces extract and produce various fossil fuels. As such, further research may adopt a similar approach to this study in a different jurisdiction to observe network

dynamics, for instance in Saskatchewan, Manitoba, Newfoundland and Labrador, as well as British Columbia.

For various reasons, this study was unable to include members of energy labour organizations or Indigenous groups during the interview process. However, this does not imply that their perspectives and the role they play in energy and climate policy decisions (from a local to a national level) are irrelevant – quite the contrary. As such, the multiple contributions from this study previously described may be enriched by further research that includes labour groups and Indigenous communities in its scope of analysis.

Furthermore, the thematic analysis presented in the previous chapter represents a wealth of concepts and themes to study. Each of the themes outlined, as well as their interrelations and their implications on climate and energy policy (in)action, may be enriched with further research. For instance, a few interview participants described the link between climate policy inaction and increasing socioeconomic inequality in Canada. Indeed, never in the history of this country has the economic gap between different social groups been so large – and is still likely to continue to widen (Peters, 2020). In turn, while inequality and the climate crisis are two important problems in themselves, they are seldom studied in relation to each other.

Another important area of research would be the impact of the climate crisis (and the subsequent need for low-carbon energy sources) onto political systems. Particularly, “a larger limit that oil represents for democracy is that the political machinery that emerged to govern the age of fossil fuels, partly as a product of those forms of energy, may be incapable of addressing the events that will end it” (Mitchell, 2013, p.7). Is climate inaction also caused by political institutions that, by design, lack the means to address this crisis? And if so, how can they be changed? More critically,

is such change possible within a reasonable time frame, before reaching an environmental tipping point leading to ecological collapse? These questions may become critical as more states begin increasing their efforts to meet their 2030 sustainability targets.

6.4. Concluding Remarks

This study analyzed climate and energy policy change of the Canadian federal and Alberta provincial governments for over twenty years, using a policy network approach following Howlett's model of determining causal mechanisms between PN structure (and its evolution over time) with policy outcomes. As such, this study is amongst the few that have observed the evolution of policy networks over time, let alone in the Canadian oil and gas industry policy domain. It also emphasized the need to put climate and energy policy outcomes within a historical context. The findings corroborate with other studies showing the alignment between the oil industry's interest and policy decisions in Alberta, as well as with the federal government. For instance, Carter et al. (2017, p.63) show that "Canada's transformation into a globally significant fossil fuel producer and exporter coincided with a transformation in federal governance and environmental policy in support of oil and gas activity during the Harper administration of 2006-2015" – albeit this study shows that policies from other federal governments have contributed to this alignment. Similarly, Davidson et al. (2018, p.308) argue that "Alberta has historically paid homage to the fossil fuel industry and thus has prioritized development over environmental protection as a matter of course". Finally, this study also joins others who have demonstrated that "the structure of policy networks has a clear impact on climate policy" in Canada (Lemphers, 2020, p.267).

Indeed, the findings of this research point to an important alignment of interests between industry and both the Canadian federal government and provincial government of Alberta, since at least the

1990s. However, the study reveals nonetheless growing contestation over policy processes and outcomes within federal climate and energy processes (as well at the provincial level, but to a lesser degree). There are mainly two reasons for this growing contestation. First, there has been in recent years an increase in both population and diversity in the stakeholders involved in policy processes, notably as the effects of the climate crisis exert growing pressure on governments to tackle and mitigate it. Second, this increase in the number and diversity of actors is also combined with decreasing cohesion within the oil and gas industry, which may further hamper its capacity to mobilize and wield political influence over key climate and energy policy decisions. However, it still appears that oil and gas industry actors regrouped under a policy network with a vested interest in the continued future development of the industry remains highly closed and continues to wield disproportionate influence on Canada's climate and energy politics – which may explain the limited actions undertaken by Canadian governments to tackle the climate crisis and reach a low-carbon society. This issue calls into question the integrity of the democratic function of Canadian political institutions, as well as their capacity to tackle such a complex and critical issue such as the climate crisis.

Overall, the performance records of Canadian governments on tackling climate change have been critically unsatisfactory. This is caused largely from decades of limited policy initiatives, as well as general inaction on policies that were actually enacted, aside from expressed engagements and 'willingness to do something' – even if that 'something' has rarely been specifically defined and combined with tangible actions. However, the usage of the term "maintenance of the oil development status quo" generates some misconceptions.

While, on the surface, the last twenty years of policymaking may seem to be characterized essentially by inaction, the deeper analysis conducted here outlines a greater complexity of the

situation than the term 'status quo' would imply. There has been more significant change in policy, perceptions, and political platforms since the beginning of the observed period. Some progress has been made in some areas, while others have regressed – and sometimes quite dramatically. By the same token, it is inadequate to neglect the increasing change within the fossil fuel industry, as some companies have been rather forward thinking, while others less so. Alas, while it is important to acknowledge these differences and the complexity of the cases studied here, the fact remains that progress towards reducing GHG emissions has been critically insufficient – as with a strong majority of other nations.

However, recent news may provide a bit of optimism. The new Biden administration in the United States has been campaigning on strong promises of new environmental legislation and tackling the climate crisis head on – which is a drastic change in tone from the previous administration. As Canada's main trading partner, new climate and energy policy in the U.S. is likely to influence Canada's own climate approach – although there may be some friction along the way, as seen recently with the Keystone XL pipeline issue where the U.S. administration rejected the project despite the Canadian government's support of it.

In addition, the Canadian federal government released in December 2020 an updated climate plan, titled "A Healthy Environment and A Healthy Economy" (Environment and Climate Change Canada, 2020b). Of particular interest in this Plan is the federal government's announcement to increase the national carbon tax to $170 per ton by 2030[94]. By today's standard, the resulting

[94] Currently at $30 per ton, the Plan proposes an increase of the carbon tax by yearly increments of $10 until it reaches $50 per ton by 2023. The tax would then increase by $15 every year, until it reaches $170 by 2030. See the Climate Plan (Environment and Climate Change Canada, 2020b).

carbon price would be higher than any of the current carbon pricing systems across the world[95] (World Bank, 2019). Consequently, such initiatives could potentially put Canada as a contender to become a global leader in tackling the climate crisis[96].

It is undeniable, then, that the world is changing. That is not the question. Rather, the question now would be, *is the world changing in time before an ecological tipping point is reached?* The optimism expressed here is grounded in the fact that, despite the historical announcement of the federal government in December 2020, no implementation plan or legislation have yet been presented to actualize this progress. And, if the analysis of the last twenty years of climate and energy policy at the federal level done for this study has taught anything, it is that it would be naïve to put too much hope on announcements before seeing implementation.

At the same time, this global change seems to be full of contradiction. For instance, the government of Alberta rescinded in spring of 2020 the 1976 Coal Development Policy, which protected large areas of the Rocky Mountains from coal mining. Particularly, the rescinding was done without any public consultation – while the fossil fuel industry was informed in advance of the public announcement (Croteau, 2021). The provincial and national public outrage that followed forced the government to reinstate the initial Policy in early 2021, until a new version will be introduced (Government of Alberta, 2021b; Ramsay & Croteau, 2021). Regardless, upon the announcement of the initial rescinding of the Policy, Robin Campbell, former Alberta minister of Environment and current president of the Coal Association of Canada, stated that "coal's not going away, as

[95] As of 2019, the World Bank denotes 57 carbon pricing initiatives implemented or scheduled in the short term, spread across 46 countries. While the majority of these initiatives have a price below CAD$37 per ton, Sweden currently has the highest tax, at about CAD$155 per ton. See World Bank (2019).

[96] It is worth acknowledging, however, that the implementation of such a high carbon tax by 2030 will only have limited effects on the climate crisis at this point, given that global warming is *already* significant. In other words, while a $170 carbon tax would have proved highly effective decades ago, it is highly insufficient on its own today, given the level of emergency of the crisis at hand. See Fluker (2015) and Stiglitz (2017).

much as people think it is" (Fletcher & Omstead, 2020)[97]. Similarly, during the 2021 Scotiabank CAPP Energy Symposium, CAPP president and CEO, Tim McMillan, stated that "our [fossil fuel] industry still has its best days ahead of it" (Healing, 2021). While most likely a call for optimism in the face of the impacts of the COVID-19 pandemic on the industry, this statement remains in direct contrast with the reality of the climate crisis and the eventual decline of the fossil fuel industry. Another contradiction was also witnessed during the study's interview process. While acknowledging the eventual decline of fossil fuel demand worldwide, one industry participant suggested that Canada should nonetheless seek to increase its market share of the decreasing global oil and gas industry – and even aim to be the country to sell the very last barrel of oil down the line.

The next challenge, then, appears to be over the rate of change. In the first chapter, the term 'denialism 2.0' was introduced to describe the current stance of the fossil fuel industry towards climate change, having moved from pure climate denial in the 1980s and 1990s to the illusion of progress. Are we about to witness the birth of 'denialism 3.0', in which the energy transition is carried over too long of a timeframe to prevent cataclysmic ecological disaster? Is this form of denialism going to be practiced by both industry and governments alike?[98] These questions may prove fundamental in order to effectively prevent further climate policy inaction. The future of the next generations, as well as our own, depend on it.

[97] The contradiction is particularly strong given the province's boasting of its phasing-out of coal for generating electricity. Granted, some of the coal projects in the Rocky Mountains are directed for exporting industrial coal, used, for instance, in steel production. Regardless, this policy decision remains widely inconsistent with calls to decrease overall coal use worldwide given the high rate of emission of this fossil fuel.

[98] Similarly, during the 2019 federal election leaders' debate, NDP Leader Jagmeet Singh criticized both (former) Conservative Leader Andrew Sheer for his anti-carbon tax platform, as well as Liberal Prime Minister Justin Trudeau for failing to take more action on the climate crisis since he was elected in 2015. Singh notably referred to them as "Mr. Deny" and "Mr. Delay", respectively. See Winfield (2019).

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Appendix Section

Appendix 1. Summary of Policy Change Data Sources – Alberta Provincial Subsystem

Policy Goals

Pre-1999: the economic development of the province is primarily done through the expansion of the oil industry, particularly oil sands projects. The province's economic development focus was already directed towards increasing oil production under Premier Lougheed (1971-1985). However, this period also saw the enactment of Alberta's landmark environmental legislations, leading to the province's oil and gas industry regulatory framework as being one of the strictest in North America. Premier Klein (1992-2006) drastically changed the province's policy goals through his neoliberal, pro-market approach, which led to a wave of deregulation and laissez-faire governance, along with an increased focus on oil industry expansion[99]. This resulted in Alberta's oil boom, while simultaneously following a series of streamlining and policy drift of the industry's regulations, notably affecting environmental regulations.

Programme Specifications

- 2016 – Energy Efficiency Alberta Act
    - Creates the new Crown corporation *Energy Efficiency Alberta*, which has the mandate to, among multiple objectives, raise awareness to energy consumers, develop programs for energy conservation and small-scale renewable energy generation[100].
- 2018 – Methane Emission Reduction Regulation, Alta Reg 244/2018

[99] This is often represented through the National Task Force on Oil Sands Strategies.
[100] It is worth mentioning that this Act was repealed in 2020 under the UCP's *Red Tape Reduction Implementation Act*, despite accounts of significant returns in both energy conservation and reduced emissions for households and small businesses (Efficiency Canada, 2019). However, this Act is still considered here since it was repealed passed this study's time period.

- Following the initial plans under the NDP's CLP, the methane reduction regulation is enacted in 2018, aiming to reduce methane emissions by 45 per cent from 2014 levels by 2025. However, the regulation is scheduled to come into effect only on January 1st, 2020 and, as of December 2020, is still under equivalency review with the federal methane reduction regulation.

Policy Instrument Types

- 2000 – Energy Resources Conservation Act (ERCA)
  - Mainly a renewal of the Act's previous 1980 version, it brings forward the "consideration of the public interest" within the development of energy resources[101]. However, the interpretation of the 'public interest' for this Act and other related regulations implies that the development of the province's energy resources is automatically in the public's interest.
- 2003 – Emissions Management and Climate Resilience Act (EMCRA), formerly known as the Climate Change and Emissions Management Act (CCEMA)
  - New legislation for the implementation of Alberta's action plan on climate change, targeting emissions reduction through 'energy intensity', but with little impact on the fossil fuel industry's absolute emissions output (emissions actually increased under this legislation).
  - The legislation is also meant to reaffirm Alberta's jurisdictional power over its natural resources, enabling the contestation of future federal GHG regulation – as seen earlier.
- 2009 – Alberta Land Stewardship Act (ALSA)

[101] *ERCA, RSA 2000, c E-10, s 3.*

- Abstract ‘super-legislation’, amending 27 provincial Acts. Legal instrument for the implementation of the Land-Use Framework (LUF), enacts significant changes to the province’s land-planning and development law. Criticized for leading to legislative slippage and providing extensive discretionary power to the province Cabinet and limiting public participation for energy projects and development of regional plans (notably with the rejection of policy recommendations from the CEMA and MSC).

- 2011 – Mine Financial Security Program (MFSP)
  - Significant improvements of the previous land conservation and reclamation legislation regarding oil sands projects.
- 2012 – Responsible Energy Development Act (REDA)
  - Following the recommendations of the Regulatory Enhancement Task Force, repeals and replaces the Energy Resources Conservation Act (ERCA). The Act is meant for the improvement of energy regulation for landowners, industry, and the environment, and streamlining of approval process for oil and gas projects. As seen earlier, this act reshapes the approval process of oil and gas industry projects, in a way that largely hinders public participation in these matters, while removing regulatory decision-making from the AER to the provincial government.
  - Centralization of regulation for all energy projects within the AER, criticized as being a “one-stop shop” by merging the Energy Resources Conservation Board (ERCB) and the Alberta Environment and Sustainable Resource Development (ESRD) into the AER[102]. Raises substantial concerns: reduced public participation to energy project

[102] The AER is seen as widely prioritizing industry development over its mandate of environmental protection. Refer to Chapter 5.

hearings and process, limits procedural fairness, alleged reduced independence of regulator and further alignment with interests of the fossil fuel industry.

Instrument Components

- 2004 – Specified Gas Reporting Regulation (SGGR)
    - Requires Alberta oil and gas facilities emitting more than 100,000 tonnes of GHG per year to file annual emissions reports.
- 2007 – Specified Gas Emitters Regulation (SGER)
    - Enforcement of SGRR for emissions reduction of large emitters. Despite being the first carbon pricing system in Canada, it is criticized for targeting less than 45% of the province's emissions, having a carbon price level too low to generate a financial incentive for emissions reduction, and, under its intensity-based approach to emissions reduction, still allows for substantial increase in absolute GHG emissions.
- 2008 – "Alberta's 2008 Climate Change Strategy: Responsibility / Leadership / Action"
    - The Strategy includes three themes: energy efficiency and conservation; carbon capture and storage; and sustainable energy production. It calls for the intensity targets set in the 2002 plan to be reached by 2010; for GHG emissions to be stabilized by 2020; and for an absolute GHG emission reduction of 14% below 2005 levels by 2050 – with two thirds of this reduction relying on CCS projects. Overall, the plan is seen as too weak to constrain emissions, in fact allowing emissions from oilsands to continue to increase significantly.
- 2009 – Surface Rights Amendment Act
    - Streamlining of the regulatory process, increase in efficiency, empowering of the Surface Rights Board (SRB) for issuing decisions.

- 2009 – Carbon Capture and Storage Funding Act
    - Creates an annual plan and budget for the development of carbon capture and storage projects in the province.
- 2010 – Carbon Capture and Storage Statutes Amendment Act
    - Develops the province's legislation for CCS technology implementation, as main approach for reduced GHG emissions. Criticized for being largely ineffective, with little to no emissions reduction so far.
    - The CCS approach represents largely the provincial government's sustained effort to further develop the fossil fuel industry for economic growth. Even if CCS projects were to significantly offset GHG emissions (which they have yet to do), this approach to carbon emissions removes some of the imperative to decrease oil and gas production and consumption.
- 2011 – Alberta Land Stewardship Amendment Act
    - Designed to further clarify some of the criticisms to the initial Act, but is argued to further add ambiguity onto the Act's mandate and purpose. It also fails to address issues of discretionary power and limited public participation.
- 2012 – Lower Athabasca Regional Plan (LARP)
    - Developed under the Land-Use Framework (LUF) and *ALSA* to provide objectives for land and water use, as well as cumulative effects assessments. However, the regional plan is mostly seen as a continuation of previous policies, and ensures the sustained growth of the oil sands in the region.
- 2013 – Protecting Alberta's Environment Act

- Establishes the Alberta Environmental Monitoring Evaluation and Reporting Agency, mandated with obtaining credible and relevant scientific data regarding the condition of the environment in Alberta. However, the Act is largely criticized for failing short of creating an independent agency, while giving government with the discretion to appoint the agency's directors. Additionally, the 18 amendments proposed to correct the outlines flaws of the bill were all rejected by government.

- 2013 – Alberta Wetland Policy
  - The new policy, under the *Water Act*, replaces the 1993 interim policy[103]. While the 2013 version is an improvement of the previous policy, it represents mostly only incremental changes that have been criticized as falling short from a comprehensive wetland protection policy.
- 2015 – Specified Gas Emitters Amendment Regulation
  - Amends the SGER to extend its duration until 2017. It also improves regulation for large emitters: stricter intensity-based emissions reduction requirements and increased per-tonne price for exceeding emissions, but fails to broaden the SGER's limited scope for targeted emitters.
- 2016 – Oil Sands Emissions Limit Act
  - Legislates an annual cap of 100 Mt on emissions from oil sands production. While such an absolute limit on emissions is a major change in fossil fuel industry regulation, the current limit still allows for a significant increase of oilsands development and emissions, while also including several exemptions for specific as well as discretionary

[103] See Government of Alberta (1993).

oil sands projects. The Act also lacks substantial information regarding its implementation, monitoring, and enforcement.

- 2016 – Royalty Review Panel
    - The newly-elected NDP government launched a royalty review panel to reform the previous regime, still criticized for being too low. However, the review resulted in only minor adjustments to the existing royalty regime.
- 2017 – Carbon Competitiveness Incentive Regulation (CCIR), Alta Reg 255/2017
    - Replaces the previous SGER as the new GHG reduction regulation and adds further regulation instruments for the provincial carbon pricing system. Although the CCIR is viewed as an improvement from the SGER, it is far from perfect – it notably has little effect on limiting the growth of the oil and gas industry.
- 2018 – Energy Diversification Act
    - Authorizes the Minister of Energy to launch programs focused on the economic growth and energy diversification of the province, totalling $2 billion in investments in petrochemicals, petrochemical feedstocks and bitumen partial upgrading.
- 2018 – Growth and Diversification Act
    - Amends the *Investing in a Diversified Alberta Economy Act, Promoting Job Creation and Diversification Act*, and the *Alberta Corporate Tax Act*, in support of the previously enacted Energy Diversification Act.
- 2019 – Technology Innovation and Emissions Reduction Implementation Act
    - Renames the CCEMA into the EMCRA, adds the Technology Innovation and Emissions Reduction (TIER) regulation (Alta Reg 133/2019) to the EMCRA, which replaces the previous CCIR as the new carbon emissions reduction regulation in the

province. It was largely criticized for reducing pressure on large emitters and polluting industries, notably oil & gas, to reduce their emissions, and also for having been designed through a consultation process nearly exclusively with industry actors.

Appendix 2. Summary of Policy Change Data Sources – Federal Subsystem

Policy Goals

Pre-1999: Despite growing ambition of PM Chrétien's liberal federal government (1993-2003) towards sustainable development and tackling climate change, notably following the objectives of the Kyoto Protocol, it admittedly had little action to show for. Instead, this period is more characterized by drastic budget cuts to Environment Canada (30% between 1988 and 1998), increased focus on free trade and pro-market policies leading to considerable energy commitments and fossil fuel industry expansion, and an overall lack of national climate or energy strategy, instead combined with increased devolvement of energy and environmental governance from the federal level to the provinces[104].

- *2015/2016 – Signature of the Paris Accord on Climate Change & *Pan-Canadian Framework on Clean Growth and Climate Change*
    - Sets the objectives to cut emissions by 30 percent from 2005 levels by 2030. Following the signature of the Accord, the *Pan-Canadian Framework,* which represents Canada's first true climate change plan, outlines specific actions that would sustain economic growth while reducing GHG emissions (new building codes, promoting electric vehicles, smart-grid technologies, reducing methane emissions, protecting natural carbon sinks, reducing emissions from government operations). The framework is then used as a benchmark for provinces and territories (where each can either adopt it or use their own plan as long as it is at least as stringent as the Framework).
    - If fully implemented, the Pan-Canadian Framework could represent a significant change in Canada's overall policy goals regarding economic development and climate

[104] See Doern & Gattinger (2003) and Lemphers (2020).

policy. However, the fact that Canada is currently unlikely to meet its 2030 INDCs under the Paris Agreement comes to question the extent of the federal government's commitment to the Framework. It therefore remains to be seen if this will represent an actual change in policy goals.

Programme Specifications

- 2012 – Reduction of Carbon Dioxide Emissions from Coal-Fired Generation of Electricity Regulations, SOR/2012-67
    - Coming into effect in 2015, this regulation enforces a performance standard of 420 tonnes of carbon dioxide emissions per Gigawatt hour (t/GWh) onto new and end-of-life facilities, in order to induce a coal phase-out across the country by 2053.
- 2015 – Pipeline Safety Act
    - A major development in the regulation of pipelines in Canada, the Act amends the *Canada Oil and Gas Operations Act* and the *National Energy Board Act*, and enacts multiple new regulations. It expands liability limits for pipeline operators and oversight powers of the NEB over federally regulated pipelines and reinforces the 'polluter pays' principle. Operators also remain responsible for pipelines even when abandoned.
- 2018 – Regulations Amending the Reduction of Carbon Dioxide Emissions from Coal-Fired Generation of Electricity Regulations, SOR/2018-263
    - Amends the initial regulations enacted in 2012. The amended regulation now requires all coal-fired electricity generating units to comply with the performance standard. These changes would allow Canada to reach a complete coal phase-out by 2029, 24 years earlier than the initial regulations enforced.

Instrument Types

- 1999 – Canadian Environmental Protection Act
    - New and updated statute replacing the initial CEPA enacted in 1988. It strengthened several components of the law, notably regarding human health, environmental protection, and pollution prevention. While the CEPA is a very important and powerful law in the country, an internal review conducted by Environment and Climate Change Canada (ECCC) outlined several areas of improvement within the statute, especially with regards to GHG emissions reduction[105].
- 2009 – Budget Implementation Act, 2009
    - Significant deregulation of the NWPA legislation, significant reduction of waterways protected under the Act. Also provides broad discretion to the government to further exempt projects and waterways from the NWPA's approval process.
- 2012 – Jobs, Growth and Long-Term Prosperity Act
    - Following the 2012 "Responsible Resource Development Plan", this omnibus bill amends 69 laws, virtually all of the federal legislation for environmental governance, including the *National Energy Board Act*. Repeals the *Kyoto Protocol Implementation Act*, the *Canadian Environmental Assessment Act, 1995*, and the *National Roundtable on the Environment and the Economy Act*.
    - Enacts the *Canadian Environmental Assessment Act, 2012*, which removes the majority of the federal government involvement in EAs, severely limits public participation, and places regulation and assessment processes within government's powers instead of previous independent panels.

[105] Environment and Climate Change Canada, 2016.

- It is also worth mentioning that, following the presentation of this omnibus bill, 871 amendments were proposed by the opposition to the Conservative government – which *refused them all*[106].

- 2012 – Jobs and Growth Act
  - Amends the *Navigable Waters Protection Act* (NPWA) and renames it as the *Navigation Protection Act* (NPA). Significantly reduces the number and types of projects subject to NPA approval, while weakening the capacity to protect Canada's waterways, while nearly all Canadian lakes and rivers are exempted from federal oversight. This allows for large industrial development and infrastructure project to disrupt waterways with little regard to navigable waters or environmental rights.
- 2019 – 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
  - Repeals the National Energy Board Act, which is replaced by the Canadian Energy Regulator Act (CERA). Also repeals the CEPA, 2012, replaced with the Impact Assessment Act. Replaces the Canadian Environmental Assessment Agency with the Impact Assessment Agency of Canada. The new agency will assume an expanded role over impact assessments, considering 'effects' defined as changes to the environment, health, social or economic conditions. Redefines the CEPA, 2012's definition of 'public interest'.

[106] The absurdly large quantity amendment was regrouped in 159 votes. On 13th of June 2012, the House of Commons held an 'around-the-clock' session, which lasted 22 hours, to deliberate on each of those votes. The Conservatives, having a majority in the House, managed to block every single one of them. See Open Parliament (2013).

- Introduces the Canadian Navigable Waters Act (CNWA). Reverses several changes of the 2012 amendments to the Navigable Protection Act. CNWA expands the scope of navigable waters, thus expanding regulation powers over wider number of waters.
- While the replacement of the CEAA, 2012 is seen as an important improvement, the new IAA nonetheless falls short on several components of environmental protection. Additionally, the bill faced substantial controversy from the extensive lobbying from oil and gas industry actors and the subsequent 187 amendments proposed by the Senate Standing Committee on Energy, the Environment and Natural Resources to weaken the initial bill.

Instrument Components

- 2003 – An Act to amend the Canadian Environmental Assessment Act
  - Numerous changes which have provided positive improvements, but have failed to address the fundamental flaws of the EA process.
- 2008 – Federal Sustainable Development Act
  - Provides the legal framework for a Federal Sustainable Development Strategy, renewed every 3 years, in order to increase sustainable development in Canada. While the enactment of the FSDA was seen largely as a positive step towards sustainability, the contents of the law have failed to provide clear ways to meet its objectives. This is represented by the first two Strategies (2010-2013, 2013-2016), which had very disappointing records, as discussed earlier.

- The enactment of the FSDA was largely positive, although its effectiveness is largely incumbent to the impact of the consequential 3-year Sustainable Development Strategy frameworks.

- 2009 – Budget Implementation Act, 2009
  - Amends the Navigable Waters Protection Act, removing 'minor works' projects and projects in 'minor waters' from requiring EAs. This has significant implications to the energy sector, notably regarding the construction of power lines, pipelines, and water intakes and dredging. Further reduces public participation from such projects.
- 2009 – Environmental Enforcement Act
  - Amends numerous environmental laws (notably the CEPA) to strengthen their enforcement. Also enacts the *Violations Administrative Monetary Penalties Act* in the same effort. The improvements to enforcement of environmental laws were mostly welcomed, but also criticized for not being stringent enough for effective environmental enforcement and pollution prevention.
- 2010 – Jobs and Economic Growth Act
  - Amends the *Canadian Environmental Assessment Act, 1992* with significant changes: reduces capacity for legal challenge over EA process and decisions, decreases government transparency and public participation regarding EAs and projects submitted to the NEB – among others.
- 2015 – Energy Safety and Security Act
  - Amends the *Canada Oil and Gas Operations Act*, *Canada Petroleum Resources Act*, *Canada-Newfoundland Atlantic Accord Implementation Act*, and *Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation Act*. Further enforces "polluter

pays" principles into law regarding oil spills, increases liability limit to $1 billion, and other measures to enhance the liability regime for oil and gas extraction and nuclear operations.

- 2018 – Regulations Limiting Carbon Dioxide Emissions from Natural Gas-fired Generation of Electricity, SOR/2018-261
    - Regulations designed to support the conversion of coal-fired to natural gas-fired electricity generation facilities, as well as new natural gas-fired facilities, which, in combination with the amendments to the regulations for coal-fired facilities, are part of the efforts to accelerate the coal phase-out. However, the transfer from coal to natural gas makes Canada still reliant on a fossil fuel for a portion of its electricity.
- 2019 – Canadian Energy Regulator Act
    - Replaces the National Energy Board (NEB). However, there is little change to the structure and level of power of the new Regulator.
- 2019 – An Act to amend the Federal Sustainable Development Act
    - Amends the Federal Sustainable Development Act, mostly by increasing the accountability and transparency of the federal government to sustainable commitments.

Appendix 3. Summary of Blocked Policies – Alberta & Federal Governments

Provincial level:

- 2002 – The recommendations of the Financial Management (Tuer) Commission aimed to significantly change the role and increase the size of the Alberta Heritage Trust Savings, the province's financial asset supposed to offset the depleted value of fossil fuel resources, were not adopted by the government.
- 2005-2010 – Following a multi-stakeholder consultation process, the Alberta Water Council (AWC) submitted to the Minister of the Environment two reports[107] presenting recommendations for the new provincial wetland policy. After two industry actors wrote non-consensus letters against these reports[108], the AWC's recommendations were ultimately not adopted by the government in the subsequent new wetland policy in 2013.
- 2007-2011 – The newly-elected Premier Ed Stelmach launched a review of the province's oil and gas royalty system in 2007, leading to a new system intended to increase royalty rates and government revenues[109]. However, by 2010, the provincial government rolled back the new royalty regime, essentially reverting to the previous one.
- 2015-2016 – While the NDP's royalty review led to minor adjustments that are considered as one of the changes in instrument components, it is worth noting that the NDP had initially intended much larger reforms of the royalty regime. This review thus represented an important political shift from the NDP – in greater support of the oil and gas industry.

[107] Part of the Wetland Policy Project Team. See Alberta Water Council (2008).
[108] The Alberta Chamber of Resources and CAPP. See Alberta Water Council (2008).
[109] See "Our Fair Share" Report (Government of Alberta, 2007b). Additionally, the Auditor General of Alberta also expressed concerns regarding the province's royalty regime in his 2007 report. Particularly, aside from the royalties deemed too low, the Minister of Energy was also largely criticized for having failed to collect billions of dollars in royalties across a number of years. See Office of the Auditor General (2007).

- 2016-2019 – *An Act to Ensure Independent Environmental Monitoring r*epeals the *Protecting Alberta's Environment Act*, and s.15 of the *Environmental Protection and Enhancement Act*. This policy change returns the Alberta Environmental Monitoring, Evaluation and Reporting Agency under Alberta Environment and Parks. This Act was seen as positive change, ensuring that the Agency is fully independent in disseminating climate change scientific information. However, such changes were largely dissolved by the UCP government in 2019. The 2016 change is therefore not considered policy change.
- 2016-2019 – The enactment of the *Climate Leadership Implementation Act* and its subordinate acts and regulations (notably a carbon tax covering 90% of the province's emissions) would have represented a drastic change of policy goal in the environmental and economic direction taken by the government of Alberta. The results would have led to absolute limits on emissions on the fossil fuel industry, notably the oil sands, leading to the first initiative in decades to actually diversify the province's energy mix and economic drivers for prosperity. However, it was repealed in 2019[110] by the newly elected UCP. Given the limited effects of this Act on the province's emissions due to its very short duration, it is not considered as part of policy change.
- 2018-2019 – As part of the NDP's coal phase-out plan, the government enacted *An Act to Secure Alberta's Electricity Future*. The legislation was designed for the transition of Alberta's electricity system from an energy-only to a capacity electricity market, which is deemed critical to encourage electricity producers to transition towards renewable energy sources. This change was intended to have significant impact on Alberta's electricity generation, which is nearly entirely produced with fossil fuels, and is the largest emitting

[110] *An Act to Repeal the Carbon Tax, SA 2019, c 1*.

sector after the oil and gas industry[111]. However, the UCP government cancelled this transition of Alberta's electricity market toward renewables[112]. Since it was repealed less than a year after its enactment, it is not considered as policy change.

- 2019 – Along with the repeal of the *Climate Leadership* Act mentioned above, the first bill of the newly-elected UCP in Alberta repealed several other programs developed by the previous NDP government[113].

Federal level:

- 1991 – 1995 – Various attempts by the federal government during this period to develop and implement a federal carbon tax.
- 1994 – The multi-stakeholder Climate Change Task Group published its report with 88 recommendations for the 1995 federal-provincial "National Action Plan on Climate Change". While these recommendations have been criticized at the time, notably for being mostly voluntary-based and already representing mostly the industry's position on climate change, the majority of these recommendations were also never adopted.
- 2002 – 2011 – The debacle of Canada's commitment with the Kyoto Protocol, which lasted more than a decade, can be discussed in great length. From its ratification in 2002, the subsequent "Climate Change Plan for Canada" hardly ever actualized. Then, the *Kyoto Protocol Implementation Act* was enacted in 2007 by a minority Conservative government,

[111] As part of its recommendations for a transition to a capacity market, the Alberta Electric System Operator (AESO) explained that "the current EOM [Energy-Only Market] will not ensure the investment in new generation that Alberta will need in the future. Therefore, the AESO has concluded that Alberta must adopt a different electricity structure to meet its objectives for the electricity system". See Bellefontaine (2016).
[112] *Electricity Statutes (Capacity Market Termination) Amendment Act, SA 2019*.
[113] The Renewable Energy Program, Community Generation Program, and other programs funded by the province's carbon levy.

to which their actual commitments to the Protocol have been questioned[114]. Overall, the ambitious emissions reductions targets were never actualized into policy, and Canada, under Harper's Conservative federal government, officially withdraw from Kyoto in 2011.

- 2006-2007 – Bill C-30, *Canada's Clean Air Act*, which intended to amend the CEPA, 1999 to include greater climate change action, had a tumultuous existence. Its inception by the minority Harper government was seen as largely underwhelming, and was further strengthened after subsequent readings, only to be cancelled later in the year[115].
- 2007 – The Harper government released its climate plan, *Turning the Corner: An Action Plan to Reduce Greenhouse Gases and Air Pollution*, which notably included a cap-and-trade emission program and a nationwide coal phase out. The plan was subsequently delayed, and later abandoned entirely in 2011, favouring instead sector-based environmental regulations. This second approach was also never realized.
- 2009-2014 – In 2009, Canada signed the Copenhagen Accord, committing to lowering GHG emissions by 17 percent relative to 2005 levels by 2020[116]. However, in 2014, Environment Canada issued a report stating that the target will not be met, in fact expecting exceeding the emissions target by 116 megatonnes[117]. The emissions target, along with the *Federal Sustainable Development Strategy* (2010-2013) developed in concordance to provide a path to reach the emissions reductions, were never realized. Ironically, instead of representing the implementation of sustainable development principles at the federal level,

[114] According to Fluker (2015, pp.85-86), "the governing Conservatives had no intention of implementing measures under the legislation and, after a failed attempt by environmental groups in judicial review litigation to force the government's hand on its Kyoto commitments, the Kyoto Protocol Implementation Act was repealed." See also Lemphers (2020).
[115] See Open Parliament (2007) and May (2007) for greater context of the Bill.
[116] See Environment Canada (2011).
[117] See Environment Canada (2014).

this period is largely framed as one of policy retrenchment from the Conservative federal government, notably through the two historical omnibus bills C-38 and C-45, which saw extensive deregulation of virtually every environmental legislation in the country.

- 2010 – Bill C-311, *Climate Change Accountability Act*, sponsored by MP Bruce Hyer (NDP), was designed to ensure Canada's climate obligations and further strengthen GHG reduction targets. After being passed by the House of Commons, the legislation was blocked by a Conservative-controlled senate[118].
- 2013-2016 – The second version of the *Federal Sustainable Development Strategy* had the opportunity to make amends for the previous strategy, but also failed to generate any substantial form of policy change regarding GHG emissions or oil and gas production.
- 2014 – MP Linda Duncan (NDP) introduced as a private member's bill *An Act to establish a Canadian Environmental Bill of Rights* (Bill C-634), essentially a much more powerful and stringent CEPA. It did not become law[119].
- 2015 – Controversy surrounded the newly-elected Liberal federal government's first budget. Despite the election campaign promise of initiating a phase-out of fossil fuel subsidies, the budget instead not only cancelled this objective, but also locked the subsidies, representing approximately $3 billion per year, until 2025.
- 2016 – Following the release of the *Pan-Canadian Framework on Clean Growth and Climate Change* by the newly-elected Liberal federal government, the implementation of various parts of the framework (notably the Clean Fuel Standard, methane reductions, carbon pricing) was subject to significant delays and policy drift.

[118] See Open Parliament (2011).
[119] See Open Parliament (2015).

Appendix 4. List of Interview Participants

The interviews are identified in this study using a randomized alphanumerical code. In order to ensure confidentiality, every interviewee had control over the degree of their respective anonymity, as well as for the title used to represent them.

P01: Anonymous, environmental lawyer, Alberta

P02: Anonymous, research manager, think tank in Alberta

P03: Anonymous, senior official, government of Alberta

P04: Ed Whittingham, clean energy consultant and former executive Director of the Pembina Institute

P05: Dianne Saxe, environmental lawyer and former Environmental Commissioner

P06: Anonymous, Vice president, energy industry association

P07: Nathan Lemphers, Postdoctoral Fellow, University of Ottawa

P08: Anonymous, senior Director, major energy company in Alberta

P09: Robert Skinner, energy policy academic, formerly federal government energy department official, who established the department's environmental office in 1974, former Director of policy at the International Energy Agency, Director of the Oxford Institute for Energy Studies and oil & gas industry executive.

P10: Anonymous, Director, primary sector industry association in Alberta