



LUND UNIVERSITY

“No country would find 173 billion barrels of oil in the ground and just leave them there”

Examining the hegemony of fossil fuels in the Trudeau government’s discourse on the Trans Mountain Pipeline expansion project

Master of Science in Human Ecology: Culture, Power and Sustainability (Two Years)

HEKM51: Master’s Thesis (30 ECTS)

Human Ecology Division

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Term: Summer 2019

Abstract

As the world's fifth largest oil producer, and holder of the third largest proven oil reserves, Canada is poised to significantly impact future global carbon emissions. The present government, under the leadership of Liberal Prime Minister Justin Trudeau, is seeking to simultaneously position itself as a global climate leader while supporting the exploitation of Canada's extensive bitumen oil reserves. This support is exemplified, and pushed to an extreme, by the government's purchase in 2018 of the Trans Mountain Pipeline expansion project as an attempt to save the project from being shelved. Through a Critical Discourse Analysis applied to the current federal government's speeches on the Trans Mountain Pipeline expansion project, this thesis decrypts and dismantles the government's use of discourse. This discourse functions to maintain the hegemony of fossil fuels in the era of global heating, while foreclosing on possibilities of leaving the fuels in the ground and reinforcing Canadian bitumen's multi-dimensional carbon lock-in. Moreover, it reflects ecological modernist and environmental Kuznets curve tenets that serve to craft an apparent reconciliation between economic interests and environmental concerns. In effect, this use of discourse depoliticizes the social and environmental struggles surrounding bitumen extraction, including its global impact on climate change, and bolsters the hegemony of fossil fuels.

Keywords: *Trans Mountain pipeline, Canada, fossil-fuel hegemony, climate change, political ecology, carbon lock-in, Critical Discourse Analysis.*

Preface

I wish to first position myself within this research and recount how I came to this topic. I am Canadian born but raised outside of Canada, in France. Thus, I am both an insider and outsider, though nonetheless have some pre-existing cultural, historical and political understanding of the Canadian context. My parents were both born and raised in Canada, and I have grown up hearing of the political history of the country, in particular concerning the conservative/liberal/socialist divide in the country. This exposure has given me insight into the cultural grip of fossil fuels in Canada and its socially, economically and politically mediated hegemonic power. Moreover, I lived in Canada as an undergraduate student for four years, between 2013 and 2017, and was there at the time of the election of Justin Trudeau in 2015. I have experienced firsthand the kinds of discussions on climate change that were occurring in Canada at the time of the elections, and in particular the hopefulness surrounding Trudeau's rapid rise in popularity as a progressive and charismatic candidate who purportedly placed climate change in central focus in his platform. I first explored this topic during the course of an essay at the beginning of this master's program and have followed the developments of the case over the last two years. As a Canadian citizen, this thesis is personally meaningful as it helps me critically understand what is being perpetrated by this government. It is also meant as an act of dissent to the current government's approach to fossil fuel extraction in the era of global heating.

Acknowledgements

To my stunning supervisor Henner, simply, thank you! For your relentless encouragement, your empathy, your unwavering support, your swiftness in reply, your extensive proof-reads and comments and, naturally, for the positive possum. To Vasna, thank you for the time you carved out of your insanely busy schedule to help unstick me at a time when I sorely needed the help. Dad, Mom and Zena thank you for your support and for not letting me give up. A special thanks to Dad for your advice and help, as well as for the numerous conversations on Canadian politics and the role of oil therein; this thesis could not have been the same without you. To Nils thank you for supporting me and for showing me videos of koalas high on eucalyptus when I was in need of cheering. Oriana, thanks for being my booboo during these two years. Thank you, Ann, from the academic support center for your valuable input and encouragement. I also thank Lea, Johanne, Tibbe, Jakob and Annie for your proof-reads and comments on previous versions of this thesis. Finally, I thank my classmates and professors for being amazing and inspiring people. I have learned so much from all of you!

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Acronyms

BC	British Columbia
CCPA	Canadian Center for Policy Alternatives
CDA	Critical Discourse Analysis
CO ₂	Carbon dioxide
EM	Ecological Modernization
EKC	Environmental Kuznets Curve
GHG	Greenhouse Gas Emissions
IPCC	Intergovernmental Panel on Climate Change
INDC	Intended Nationally Determined Contributions
KM	Kinder Morgan
NEB	National Energy Board
NGO	Non-Governmental Organizations
NRCan	Natural Resources Canada
OPEC	Organization of the Petroleum Exporting Countries
PC	Progressive Conservative
PCF	Pan-Canadian Framework on Clean Growth and Climate Change
TMX	Trans Mountain pipeline expansion project
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
U.S.A.	the United States of America

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Introduction

As the world's fifth largest oil producer, and holder of the third largest proven oil reserves (NRCan, 2019c; NRCan, 2019b), Canada is poised to significantly impact future global carbon emissions. Located in the province of Alberta, 97% of remaining Canadian oil reserves are composed of bitumen sands (NRCan, 2019b), a low-quality raw material that requires extensive conversion, dilution and refinement to become usable oil products.¹ The present federal government, under the leadership of Liberal Prime Minister Justin Trudeau, seeks to position Canada as a global climate leader (Trudeau, 2015), while simultaneously supporting the exploitation of its immense bitumen reserves.²

The Canadian government's support for bitumen extraction is exemplified by its controversial purchase, in 2018, of the Trans Mountain Pipeline expansion project (TMX) from the American multinational Kinder Morgan (Harris, 2018).³ If realized, TMX would add a second twinning pipeline along the pathway of the existing one and triple the current capacity to transport fossil fuels from Edmonton, Alberta to the Pacific Ocean port of Vancouver in the neighboring province of British Columbia (Transmountain, n.d.b.).⁴ TMX has faced mounting resistance to its construction due to both its local impacts on the environment and its global impact on climate change (Brake, 2019; Larsen, 2018).

Spanning over 1000 kilometers in length, and traversing the rugged Rocky Mountains, TMX would cross numerous Indigenous communities' territories and sensitive environmental zones, while also significantly increasing oil tanker traffic in Vancouver harbor and the treacherous narrow inland passages of the Salish Sea (Ghoussoub, 2018; Sacred Trust Initiative, n.d.; The Globe and Mail, 2017). The benefits of the project, which would largely be financial, would disproportionately be staked in Alberta, while the risks, largely environmental, would be relegated to British Columbians as well as Indigenous communities in both provinces (Transmountain, 2017; Ghoussoub, 2018; Sacred Trust Initiative n.d.; The Globe and Mail, 2017). In turn, construction of the TMX would also ensure the "lock-in" of bitumen production and the

¹ Shrivastava and Stefanick (2015, p.11) highlight that the name of the sands is the topic of a longstanding debate in Canada. Pro-extraction actors including the oil industry, mainstream media and government officials use the term "oil sands" because it is less controversial and less negatively connotated. Anti-extraction and anti-pipeline actors prefer to call them "tar sands" to point to the reality and extremity of the extracted substance. While Shrivastava and Stefanick exclusively use "bitumen sands", in this paper I adopt both "tar sands" and "bitumen sands" interchangeably.

² From this point onward, the term "the government" refers exclusively to the current federal government of Canada under Justin Trudeau. When referring to another government, I will specify which.

³ It is important to distinguish between the original Trans Mountain Pipeline, which was constructed in the 1950s, and has been in operation since (Transmountain, n.d.a.) and the current Trans Mountain pipeline expansion project, which is pending and proposes, among other changes, to build a second pipeline. The acronym TMX refers exclusively to the Trans Mountain Pipeline expansion project.

⁴ The transport capacity would increase from 300,000 to 890,000 barrels a day (Transmountain, n.d.b.).

associated carbon emissions for decades to come (cf. Seto et al., 2016, p.431) while indicating that this government is moving further away from meaningful responses to mitigating climate change.⁵

The Canadian government's vocal and public support of TMX suggests that discourse plays a central role in maintaining the *hegemony of fossil fuels* in the era of global heating (cf. Nyberg et al., 2018, pp.236-237; Carrington, 2019). Discourse both describes and constructs the world and becomes power-laden when wielded to serve the interests of some over those of others (Fairclough, 1992, p.62). It can be argued therefore that the present government's discursive support of TMX reinforces the hegemony of fossil fuels, which entails making the continued extraction of fossil fuels appear as a given, even necessary (cf. Nyberg et al., 2018). Reinforcing a fossil fuel hegemony in turn supports the interests of fossil fuel corporations and governments that "remain tied to the growth of fossil-fuel-driven economies" over and above those of present and future generations who are, and will be, impacted by climate change (Ibid., p.235).

It is undeniable at this point that to avert the worst of the climate crisis will require the majority of remaining fossil fuel reserves to be left in the ground (McGlade and Ekins, 2015, p.187; Kartha et al., 2018, p.119). Nonetheless, the exploitation of remaining "extreme" fossil fuel deposits that are often of lower quality, found in less accessible locations and extracted under more extreme conditions by fossil fuel corporations is still in full throttle (Nelsen, 2018; Klare, 2012), and governmental support in this endeavor largely persists (Klare, 2012). Already now Canada is disproportionately responsible for elevated atmospheric CO₂ levels due to historic emissions and its enduring status as a country with one of the world's highest per capita emissions of carbon (Environmental Justice Atlas, 2011; Malm, 2016b, p.220). As a core country and, simultaneously, holder of significant reserves of fossil fuels, Canada is in a unique position to demonstrate meaningful leadership in terms of stewarding fossil fuels in the era of global heating, but it is choosing instead to further tighten the stranglehold of fossil fuels and the fossil fuel industry (cf. Wallerstein, 2004, pp.10-12).⁶

Aim, purpose and research questions

In this thesis, I aim to expose how Canadian bitumen exploitation is being framed and naturalized through the government's discourse. The purpose of this thesis is to apply, by means of an instrumental case study, a critical discourse analysis focused on the Trudeau government's speeches in support of TMX, as TMX

⁵ The average lifespan of a pipeline is 40 years (Scott and Muttitt, 2017, p.1).

⁶ The core-periphery designation comes from Immanuel Wallerstein's world-systems approach. This designation serves to politicize the relations between so called "developed" or "core" countries and "developing" or "periphery" countries, as it spotlights that the wealth and status of the former depends on the multi-layered exploitation of the latter (Wallerstein, 2004, pp.10-12).

has come to epitomize debates and controversies surrounding bitumen extraction in Canada (Thomson, 2019). In particular, I examine and expose the Canadian government's contradictory rationale for reconciling bitumen extraction with climate change action. In so doing, I seek to unmask the discursive tools that prop up the hegemonic power of fossil fuel extraction in the Canadian context. As a major part of the global fossil fuel supply structure, Canada not only reflects global fossil fuel hegemony, it is also active in fabricating it. Through this thesis, I aim to contribute to the field of human ecology, to the critical examination of extractivism and to debates surrounding environmental political contestation that examine the cultural and political dimensions of extending the hegemony of fossil fuels in the era of global heating. In sum, I expose how a core country and major fossil fuel producer is discursively masking the controversies surrounding its extractive practices despite the ecological imperative to leave these fuels in the ground. To achieve these aims, I propose to answer the following research questions:

1. *How is bitumen extraction and export characterized in the government's speeches on the Trans Mountain pipeline expansion project?*
2. *How do the government's speeches address the option of leaving bitumen in the ground?*
3. *How does the government attempt to discursively uphold its claimed leadership position on climate change while simultaneously promoting the extraction and export of its bitumen reserves?*

Structure of the thesis

Chapter 1 serves as a background chapter that introduces TMX and gives insight into the political and economic dimensions of bitumen extraction in the Canadian context. In Chapter 2, I introduce the approach of political ecology and discuss the theoretical concepts of fossil fuel hegemony, carbon lock-in, fossil economy, depoliticization, carbon fetishism, scalar politics, ecological modernization and the environmental Kuznets curve. Chapter 3 presents the methodology, including the method of Critical Discourse Analysis (CDA) and how I apply it. Chapter 4 provides the results of the CDA. Finally, Chapter 5 ties the results with previous chapters and examines broader concerns on the hegemonic grasp of fossil fuels and its material implications.

Chapter 1 - Background

In the following section I discuss the political and economic dimensions of the Athabasca tar sands, present the case of TMX and introduce the Canadian government's historical and contemporary approaches to climate change and climate action.

1.1 Extreme oil in the Canadian context

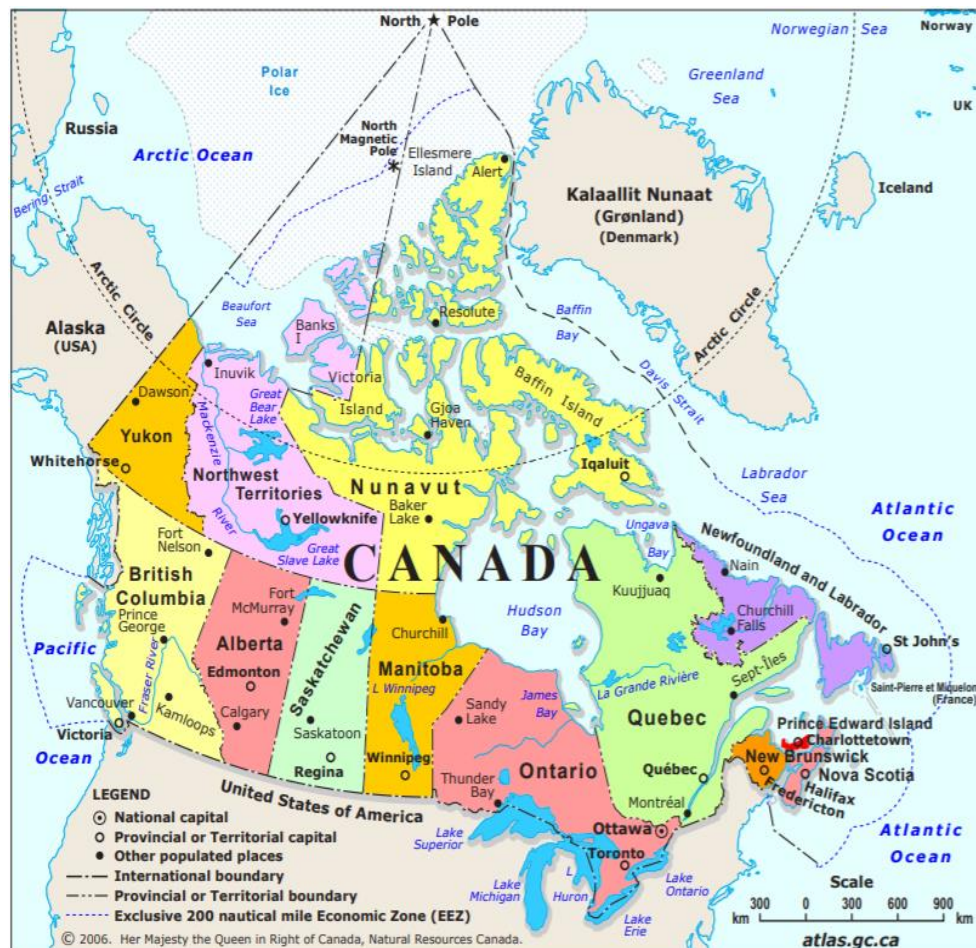
In the early twenty-first century, as the most accessible fossil fuels, also known as “conventional”, have peaked (Gordon, 2012, p.1), the fossil fuel industry, aided by governments, is expanding into “extreme” fossil fuels (Klare, 2010; Klare, 2012, p.10; Deutsch, 2014, pp.12-13), propelling the world into “an ever-deepening reliance on the least accessible, least desirable sources of oil, coal and natural gas” (Klare, 2010). The Alberta bitumen deposits are a prime example of these “extreme” fossil fuels, which are technologically more difficult, environmentally more degrading and more carbon emitting to extract (Klare, 2010; Klare, 2012, p.10; Deutsch, 2014, pp.12-13). Extreme fossil fuels are also known under the moniker “unconventional”, preferred by the oil industry and typically governments (Deutsch, 2014, p.11, p.15; Klare, 2012, p.93), a discursive feature that downplays the severe environmental and social impacts incurred by their extraction.

Despite historically contributing to only a marginal proportion of the Canadian GDP, extreme oil from the Athabasca tar sands is taking an increasingly central role in shaping cultural perceptions of the Canadian economy (Dalby, 2019, p.108). Indeed, according to Natural Resources Canada (NRCan), the federal department responsible for the management and regulation of natural resources, the Alberta bitumen sands are a “*vital part* of the Canadian economy” (NRCan, 2016a, italics by author). Successive federal and Alberta-provincial governments have been supportive of bitumen extraction, especially since the early 2000s when a steady rise in oil prices led to an increase in tar sands development activities in the region (Shrivastava and Stefanick, 2015, p.18; Pineault, 2018, p.144).⁷

As a democratic federation, political power in Canada is decentralized and divided between the federal level on the one hand and the provincial and territorial levels on the other (Harrison, 2010, p.5). This division of power is relevant to the issue of bitumen extraction, and thus also to the issue of climate response

⁷ Alberta bitumen is particularly costly to produce due to the difficulty of extraction conditions, as well as the low quality of the primary extracted substance, requiring significant refinement before use. The high cost of production for Alberta bitumen thus means that it is only profitable when oil prices are higher than these costs (Erickson, 2018, pp.2-5).

and mitigation, because provinces, not the federation, have jurisdiction over natural resources within their territorial boundaries and how to handle them (Ibid.). This in turn creates internal geopolitical struggles because some provinces have disproportionate amounts of certain resources compared with others, and in some cases must compete for federal support (Smith, 2008, p.52). In particular, the province of Alberta, located inland in the Canadian prairies holds the lion's share of fossil fuels, including the largest portion of the Athabasca bitumen sands, which at present account for 64% of total Canadian oil production (Israel et al., 2018, p.1) (See Maps 1 and 2 below).⁸ The presence of this resource has shaped Alberta politics for decades and its exploitation has had significant repercussions on the province's economy, leading Shrivastava and Stefanick (2015, p.3) to call Alberta a "one-industry economy, with agricultural interests having been replaced by those of the oil industry".



Map 1. Political divisions in Canada (NRCAN, 2006)⁹

⁸ A minor portion of the sands is found in the neighboring province of Saskatchewan (NRCAN, 2016a).

⁹ Though the map legend suggests that "in situ" is different from "mining", it is in fact a form of mining. The map is here distinguishing between "open pit mining", which occurs by scraping the sands at the surface and "in-situ" mining which occurs beneath the surface, by means of inserting pipes into the earth and releasing steam to break the earth's material and release the sandy bitumen substance (cf. Israel, 2016).



Map 2. Map of Canada showing bitumen sands area (NRCan, 2016b)

Canada's tar sands reserves are some of the few reserves in the world that are open to private ownership (NRCan, 2016a). Of the world's global supplies of oil reserves, 80% are overseen by national governments or state-owned oil companies (Ibid.). The remaining 20% are open to investment by private corporations, and half of those are located in the Athabasca tar sands region (Ibid.). According to Adkin (2016, p.3) the tar sands give Alberta a key role in the global political-economic system of *fossil capitalism*.¹⁰ Indeed, the region is susceptible to being economically and politically shaped by the interests of private extractive

¹⁰ Fossil capitalism, also known as petro-capitalism, serves to forefront the role of fossil fuels, in particular oil, in understandings of current political economic systems (Carter, 2014, p.24). It functions to highlight: 1) that modern capitalism is constructed around an economic logic that hinges on the combustion of fossil fuels; 2) that this system requires political interventions that entail undemocratic and unequal distributions of resources and; 3) that it inevitably leads to environmental degradation, particularly in the form of carbon emissions (Ibid., pp.25-26).

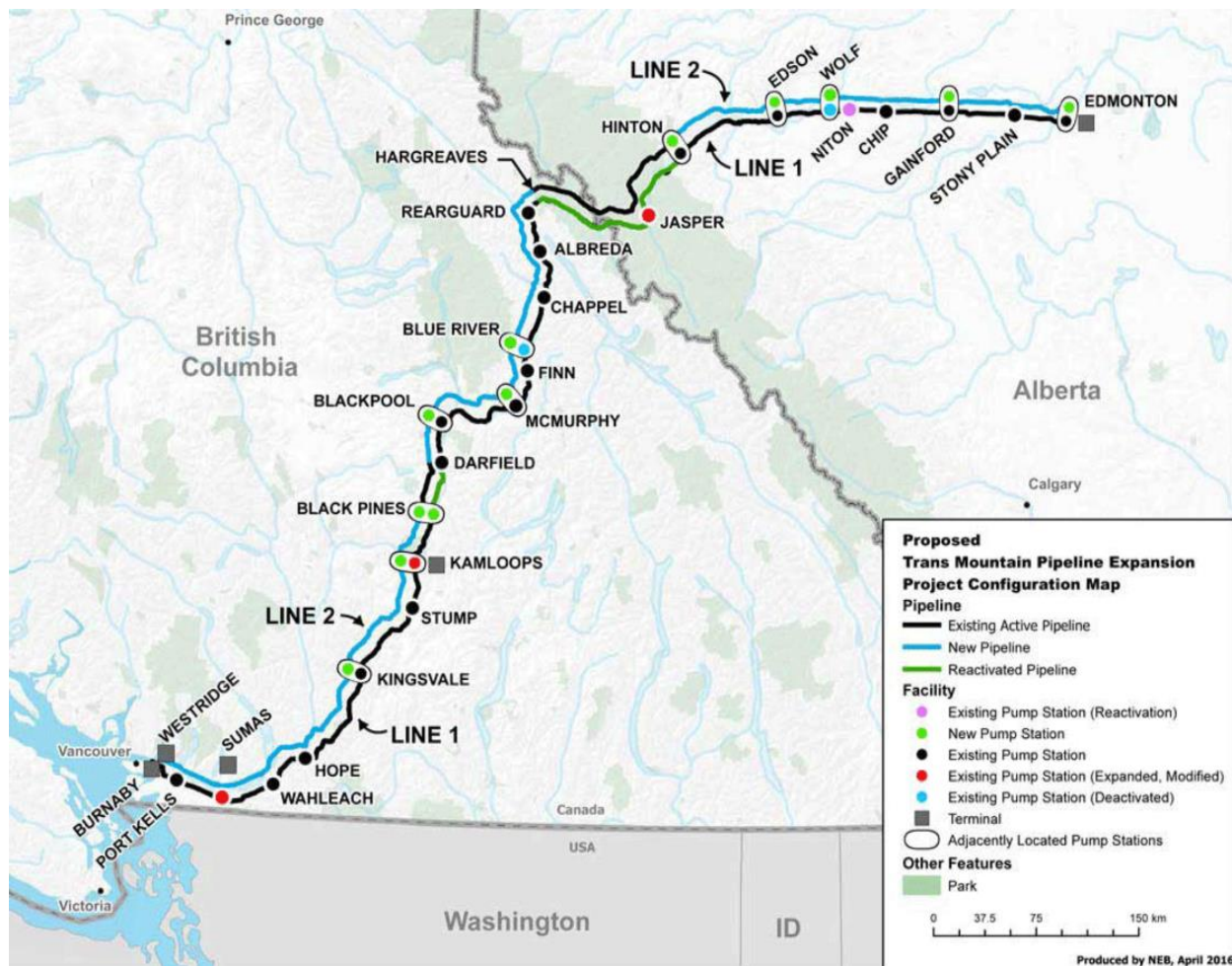
corporations and “extractive capital” (Pineault, 2018, p.130). Pineault (2018, p.138) advances that the companies that operate within the tar sands “are at the heart of the system of large, monopolistic corporations that shape the Canadian economy” and that this system directly influences “investment, employment, and production in Canada.”

Moreover, he argues that bitumen extraction in Canada is not merely a matter of growing consumer demand, as it is often publicly portrayed (Ibid., p.142). Rather it is intimately tied with the need of oil corporations to protect their already sunk capital investments, even when oil prices are below the cost of bitumen production (Ibid.). Once investments into the extractive infrastructure of the Athabasca region are made, a “capitalist pressure to extract” (Ibid., p.130), which is to say to get a return on the initial investments, is concomitantly created (Ibid., p.142). Proponents of the fossil fuel industry in Alberta have consistently sought to influence federal politics to their benefit (Shrivastava and Stefanick, 2015, pp.3-4). Shrivastava and Stefanick (2015, p.19) argue that “[t]he growing economic and political might of Alberta has made this province the barometer of political economic change in Canada”.

This has led some scholars to qualify the Alberta provincial government as being “captured” by the interests of the fossil fuel industry, a state of affairs wherein the policy logic of the government is largely determined by its perceptions of those interests (Adkin, 2016, p.xvii). Under the Progressive Conservative (PC) federal government of Prime Minister Stephen Harper, from 2006 to 2015, *state capture* by the fossil fuel industry could be seen to be operating at the federal level as well (Dalby, 2019, p.104). Under the rule of Harper’s successor, Justin Trudeau, support for fossil fuel infrastructure, such as TMX, has spurred similar concerns (Pineault, 2018, p.144).

1.2 The Trans Mountain Pipeline expansion project

TMX has come to epitomize the extent of this government’s support for fossil fuel extraction: first, through its initial approval of the project in 2016; second, by its nationalization of TMX in 2018; and, most recently, its reapproval of the project in June 2019 (Thomson, 2019). In addition to adding a second pipeline to the current transportation corridor, which has been in operation since the 1950s, TMX would expand infrastructure around the port area in Burnaby, B.C. (Transmountain, n.d.a.), leading to a seven-fold increase in oil tanker traffic through the Vancouver Bay area and the Salish Sea (See Map 3 below). This would pose a significant threat to the marine ecosystem, and to coastal Indigenous cultures (Ghoussoub, 2018; Sacred Trust Initiative n.d.; The Globe and Mail, 2017).



Map 3. Trans Mountain pipeline expansion project. (NRCan, 2019a)

The local environmental and social implications of the project demonstrate that the controversies surrounding TMX are wider than those pertaining to climate change. The expansion of the Athabasca sands, which TMX facilitates, implies the receding of the boreal forest (Rosa et al., 2017, pp.164-166) (See Map 2 above) and the threat to animal populations such as the forest caribou, whose population has decreased by 80% since the early 2000s (Way, 2017), and the southern resident killer whale in the Salish Sea (Ghoussoub, 2018). Extraction in the tar sands also requires the use of enormous amounts of water, sourced from the neighboring Athabasca river, which is then contaminated and placed into large tailing ponds, large artificial lakes in which the chemical residues from the extraction process are dumped (Rosa et al., 2017, pp.164-166; McNeill, 2017). Moreover, the current Transmountain pipeline already has a record of 84 spills throughout its years active (Transmountain, n.d.c; Thomson, 2019), suggesting that the purported safety of transport by pipeline may not ring as true as the government and oil industry would like.

TMX also affects the rights of the 120 First Nations communities on whose lands the pipeline crosses, and through whose waters increased tanker traffic would traverse (Markusoff, 2018a). The expansion project

has garnered both support and opposition from Indigenous communities (Ibid.). Some are yielding to the promised benefits and job opportunities proposed, first by KM and afterwards by the crown corporation that purchased the project (Connolly, 2019).¹¹ Others deem the threat to their lands, health and cultural practices posed by the project unnegotiable points, calling government consultants “glorified note-takers” (Connolly, 2019; Tasker, 2018), who only superficially listen as a means of paying lip service to Indigenous matters, while sidestepping meaningful engagement. Indigenous communities who are outraged by the government’s treatment of their claims have been at the forefront of resistance to TMX (Sacred Trust Initiative n.d.; Connolly, 2019).

Despite these issues, according to a recent poll, 56% of Canadians support the reapproval of TMX, while 24% oppose it and 21% remain undecided (Little, 2019), suggesting the relative effectiveness of the government’s, and other pro-extraction actors’, discourse in establishing and sustaining a *fossil fuel hegemony* in Canada (cf. Nyberg et al., 2018). Opposing constituencies, including Indigenous communities, local, national and international environmental groups, the provincial government of British Columbia (BC) and affected communities therein, have emerged and are resisting the project by means of peaceful protests, civil disobedience and through legal challenges. In September 2017, a coalition of anti-TMX actors opened a legal case against the federal government and the National Energy Board (NEB), the federal department in charge of energy regulation, for their approval and support of the project (Platt, 2018). While the court case put a brake on the project’s construction, KM began suggesting it would drop the project altogether in order to minimize its growing financial losses (The Globe and Mail, 2018). This led to the government buying TMX from KM in 2018, essentially nationalizing the piece of fossil fuel transportation infrastructure and shifting the financial risks onto Canadian taxpayers (Ibid.). For the sum of 4,7 billion dollars the Canadian government essentially bailed out KM’s private interests (Mikulka, 2018).¹²

Ruling in favor of the plaintiffs, in August 2018 the federal court of appeal quashed the government’s initial TMX approval (Hoekstra, Shaw and Chan, 2018). The ruling ordered that the federal government reinstate consultations with affected Indigenous groups and that the NEB’s Environmental Impact Assessment consider the effects of increased tanker traffic on the resident Orca whale population in the Salish Sea (Ibid.). Simultaneously, the federal government finalized its purchase of the pipeline from KM, leaving the Canadian people with an expensive piece of highly controversial and potentially unbuildable infrastructure (Mikulka, 2018). After months of additional consultations and a reauthorization by the NEB in February

¹¹ A crown corporation is an organization that functions like a private corporation, but which is fully owned by the federal or a provincial state (Tupper, 2006).

¹² To put this in perspective, Canada promised 2,65 billion dollars over five years as its share of climate funding for developing nations (Barton, 2015).

2019, the federal government of Canada reapproved TMX in June, one day after declaring a climate emergency in parliament (Bakx and Seskus, 2019; Mabee, 2019).

According to the government, and the oil industry, a major reason for TMX is that it would provide better entry point to tidewater, opening up accessibility for the tar sands to Asian markets (Government of Canada, 2019; Transmountain, n.d.b.). This would diversify the customer base for Canadian bitumen, supposedly rendering it more competitive and *ergo* fetching a better price (Government of Canada, 2019; Transmountain, n.d.b.). However, several independent studies suggest that this vision of TMX's purportedly positive effect on the price of Canadian bitumen is unfounded. For example, Scott and Muttitt (2017, p.18, italics in original) counter that "[b]uilding pipelines would [...] do nothing to improve the profitability of *existing* tar sands", as the "primary reason that tar sands bitumen continues to be worth less than other types of oil is its poor quality, something that no amount of pipeline capacity can change" (p.19). Rubin (2016, p.2) agrees with this assessment, noting that "bitumen is not conventional oil, and nowhere in the world does it command the same price", adding that neither present nor past market conditions support the argument that TMX will solve the economic conundrum of low bitumen prices (p.1). Additionally, Rubin (2016, p.4) highlights that, amongst other factors, the international commitments to mitigate climate change will undoubtedly have an effect on future oil markets, and that high priced oil (including from the bitumen sands) will be the first to be forced out of the market (p.1). Most importantly, Rubin (2016, p.3) and Scott and Muttitt (2017, pp.18-19) agree that the only viable reason for increased pipeline capacity at this point in time is actually for the oil industry to poise itself for future production growth in the Athabasca region, rather than increase the profitability of current production, an endeavor that completely ignores the implications of the climate crisis. I will now turn to the climate implications of the project as well as the state of climate politics in Canada.

1.3 Canada, TMX and climate change

One of the central controversies around TMX is whether the project is compatible with Canada's climate goals. The Pembina Institute, the Canadian Centre for Policy Alternatives (CCPA), and Oil Change International have penned considerable research that maps out the wide-ranging climate impacts and implications of the growing tar sands, and in particular the implications of increasing pipeline capacity, as proposed with TMX.¹³ Their findings show that TMX is 1) not compatible with Canada's climate goals

¹³ The Pembina Institute is a research institute based in Alberta that focuses on energy challenges and policy recommendations that seek to minimize the deleterious effects of fossil fuels while supporting the transition to a sustainable and safe energy system (Pembina Institute, n.d.). The CCPA is a policy think tank rooted in values of social and environmental justice that researches and recommends progressive policies (CCPA, n.d.). Oil Change

under the Paris Agreement (Hughes, 2016) and 2) that it (and other infrastructure projects) would *facilitate* the development of the tar sands production (Scott and Muttitt, 2017, pp.18-19), which would mean that Canada would appropriate a disproportionate amount of the remaining global carbon budget for its own purposes (Ibid., p.12).

Hughes (2016) examined different government scenarios for the expansion of the oil industry as exemplified in the NEB's yearly publication Canada's Energy Futures. He found that expanding the oil and gas sector as per the government's projection while meeting Canadian climate goals would imply a disproportionate contraction in all other economic sectors, as this sector's emissions would account for 53% of Canada's total emissions by 2030 (Ibid., p.5). He also points out that Canada has ample pipeline capacity to transport Paris-Agreement-compatible oil from currently operating projects, and thus does not require new pipelines unless it plans to expand production (Ibid., p.7), a climate-incompatible endeavor (McGlade and Ekins, 2015, p.190).

From a global perspective, a *carbon budget* is a measurement tool that allows scientists to estimate the remaining amount of carbon that can be emitted into the atmosphere without crossing the boundaries of climate safety (Scott and Muttitt, 2017, p.12).¹⁴ Drawing on the global carbon budget calculations provided by the Intergovernmental Panel on Climate Change (IPCC), Scott and Muttitt (2017, p.12) point out that under current expansion projections, the cumulative lifecycle emissions of the Canadian tar sands would amount to “a massively disproportionate share [that] could not be politically agreeable to other countries”.

15, 16

Moreover, the tar sands are climatically problematic because they require more energy (typically in the form of fossil fuels), and thus more carbon, at the moment of extraction and refinement than conventional crude oil. Israel (2017) highlights that the Canadian tar sands are amongst the most carbon intensive in North America, emitting on average 31% more carbon than conventional oil (Israel et al., 2018, p.1).¹⁷ He

International is an organization whose mission it is to lay bare the real extent of the impacts of fossil fuels and further support the transition to sustainable energy (Oil Change International, 2019).

¹⁴ In Scott and Muttitt's (2017, p.12) words: “Basic climate science shows us that the total cumulative carbon dioxide emissions (CO₂) over time determines how much global warming will occur. There is a set level of total cumulative emissions that can occur for each temperature limit we choose. By choosing the temperature limits in the Paris Agreement, we can determine the maximum amount of cumulative emissions we can release over time. This is our carbon budget.”

¹⁵ Cumulative lifecycle emissions represent the total amount of carbon emissions of an object, from its production, processing and transport through to its consumption and final disposal.

¹⁶ Scott and Muttitt (2017, p.12) esteem that share to be 16% of the global 1,5°C budget and 7% of the global 2°C budget.

¹⁷ To be more carbon intensive means to require on average more GHG emissions per barrel produced (Israel, 2016, p.1).

also notes that the emissions intensity of the tar sands will continue to grow considerably due to a shift to more carbon intensive extraction methods (Israel, 2016, p.4).¹⁸ Thus, not only is Alberta bitumen significantly more carbon emitting to begin with, it is becoming increasingly so due to changes in extraction methods. Furthermore, a recent article which has applied new methods for measuring carbon emissions suggested that the emissions from the tar sands are an additional 30% higher than what the oil corporations in the region have been reporting using the internationally approved measurement methods (Liggio et al., 2019, p.1). Finally, though a pair of IPCC authors urged the NEB to consider the climate impacts of TMX in its re-evaluation of the environmental impacts of the project in February this year (Sherlock, 2019), the regulatory agency declined to do so.

This comes despite the Trudeau government's claim to renewed climate leadership (Trudeau, 2015). Overall, since the beginning of the international climate negotiations in the late 1980s the federal governments of Canada's approaches to climate action have been outwardly inconsistent (Maciunas and de Lassus Saint-Genies, 2018; Smith, 2008). At times Canada has touted environmental leadership, while at others it has been perceived as purposefully stalling the climate negotiation process (Maciunas and de Lassus Saint-Genies, 2018). Yet in terms of how international agreements were implemented domestically, all successive federal governments displayed similarities in proposing weakly ambitious policies (Smith, 2008, p.49). Despite differences in rhetorical approaches, all federal Canadian governments signaled a "privileging of economics over the environment" (Ibid.).

Canada's public position took a turn for the worse with the arrival of Progressive Conservative, and oil supporting, Prime Minister Stephen Harper in 2006, who went so far as to withdraw Canada from the Kyoto Protocol in 2011 (CBC News, 2011). Harper and his government viewed bitumen extraction and climate engagement as conflicting objectives and opted to weaken Canada's climate ambitions to the benefit of his government's intentions to extract (Maciunas and de Lassus Saint-Genies, 2018, pp.6-9). His government actively reversed Canada's public leadership positioning in the international diplomatic sphere (Ciplet et al., 2015, p.45), placing Canada as a "generally obstructionist" force in the negotiations (Smith, 2008, p.58). Domestically, Harper turned the issue of climate change into a matter of "air quality" (Ibid., pp.57-58) and muzzled scientists attempting to speak out on the issue (Dalby, 2019, p.105). The Harper government side stepped climatic concerns "in favor of a supposedly continentalist energy security policy based on the logic that Canadian bitumen was a much more secure source of fuel than imports from elsewhere" (Ibid., p.102).

¹⁸ Extraction methods in the sands are shifting from easier to access *open-pit mining* to deeper and more carbon intensive *in-situ mining* (Israel, 2016) (See Map 2 above).

The political ideology of the Harper Conservatives was one in which environmental regulation and renewable energy were “an obstacle to the profitability of the petroleum sector” (Dalby, 2019, p.105). Harper’s government, whose explicit aim was to transform Canada into an “emerging energy superpower” (Harper, 2006, quoted in Taber, 2006), lent significant support to the oil and gas sector through “investment, subsidies, and tax breaks at both federal and provincial levels” (Shrivastava & Stefanick, 2015, p.18). Under Harper, the government thus took an *active* role in promoting oil sands development and, as Shrivastava and Stefanick (2018, p.18, italics by author) expound, “this government support *has spurred* the expansion and development of the unconventional oil industry, which in the past provided little profit because of the high cost of extraction and transportation”.

At the opening of the Paris Climate Conference in 2015, newly elected Liberal Prime Minister Justin Trudeau proclaimed: “Canada is back my friends. We are back and here to help” and that “Canada will take on a new leadership role internationally” (Trudeau, 2015). From early on, the Trudeau Liberals “invoked a geopolitical understanding of Canada as a good global ecological citizen which [was] sharply at odds with the previous Harper administration’s focus on Canada as a petroleum superpower.” (Dalby, 2019, p.101) At the Paris Climate Conference, Canada was among the advocates for including the more ambitious 1.5°C goal in the final agreement (Payton, 2015). Nonetheless, though this government is significantly improving its presence and participation in international climate diplomacy, under Trudeau Canada’s national emissions remain exorbitantly high and one of the primary growing sources are the bitumen sands (CTI, 2019; Hughes, 2016).

Under Justin Trudeau, Canada’s Intended Nationally Determined Contributions (INDC) would amount to a 30% reduction of greenhouse gas (GHG) emissions below 2005 levels by 2030 (Government of Canada, 2016a). Domestically, the federal government translated its Paris commitment into the *Pan-Canadian Framework on Clean Growth and Climate Change* (PCF), the first nationwide climate plan (Government of Canada, 2016b). The PCF contains four core pillars for action: 1) pricing carbon pollution, 2) complementary actions to reduce emissions, 3) adaptation and climate resilience and 4) clean technology, innovation and jobs (Ibid., p.2). Moreover, the framework promotes Canada’s international leadership “to help reduce emissions around the world” (Ibid., p.26). However, not only is the eventual phase out of Canadian bitumen reserves not mentioned or discussed in the framework, the PCF’s policies allow for continued activities in the Athabasca region, and even expansion of activities therein. This is achieved by crafting a trade-off of emissions between economic sectors to allow for emissions within the tar sands to augment (Lee, 2016). Furthermore, the overemphasis on market mechanisms, pricing policies and carbon taxes, an approach which the Canadian government evidently embraces, has been criticized for diverting attention from “deeper political discussions about Canadian identity after petroleum” (Dalby, 2019, p.106).

In short, the Canadian imaginary must square with a “post fossil-fuel Canada” (Ibid., p.107), and the government’s discourse supporting TMX and bitumen extraction is playing an important role in holding it back. Finally, it is crucial to note that the federal government’s support for TMX was in fact based on a political compromise with the province of Alberta (McSheffrey, 2018). Alberta would support, and join, the PCF *in exchange* for federal backing of TMX (Ibid.), suggesting that in Canada, climate change is in part wielded as a political tool for continued fossil fuel extraction.

Chapter 2 - Thesis approach and theoretical framework

I use political ecology as an umbrella approach and draw on elements of several theoretical streams including fossil fuel hegemony and fossil economy, carbon lock-in theory, depoliticization, ecological modernization, the Environmental Kuznets Curve (EKC), carbon fetishism and scalar politics. Fossil fuel hegemony and fossil economy function as overarching theoretical linchpins, through which to make sense of my data. Carbon lock-in serves as a bridge for explaining the mechanism through which a fossil fuel hegemony comes to bear on the fossil economy. The concept of depoliticization functions as a means of elucidating the effects of fossil fuel hegemony on voices opposing the project, but also of illuminating a mechanism through which hegemony is established and sustained. Tenets from ecological modernization, the environmental Kuznets curve, carbon fetishism and scalar politics function as a means to analyze the discursive tools used in service of the fossil fuel hegemony through the mechanism of depoliticization.

2.1 Political ecology approach

In this thesis, I use a political ecological approach as a guiding framework because it emphasizes “how economic and political power shape social and environmental outcomes” (Bridge et al., 2018, p.164). I here use political ecology as a form of critique, which “seeks to expose flaws in dominant approaches to the environment favored by corporate, state, and international authorities” (Robbins, 2012, p.99) and serves to shed light on the voices of the most vulnerable (Ibid., p.20). This standpoint guides my analysis in revealing covert power dynamics and social relations inherent in the crafting of dominant narratives on bitumen extraction in the Canadian context and in the premise that fossil fuel extraction expansion and effective climate action are somehow reconcilable. Ultimately, political ecology assumes that there are more socially and environmentally beneficial, and just, ways of acting in the world, and the role of the political ecologist is not only to expose injustice but also to seek to rectify power imbalances (Ibid., p.12). Finally, this approach aligns well with my onto-epistemic framework, critical realism, and with my choice of method, Critical Discourse Analysis, as both of these also take a critical and normative stance, grounded in the

assumption that better and more sustainable forms of socio-material relations are possible (more on this in Sections 3.1 and 3.3).

2.2 Fossil fuel hegemony, fossil economy and carbon lock-in

A growing body of literature on *fossil-fuel hegemony* (Nyberg et al., 2018, p.247), also known as *petro-hegemony* (LeQuesne, 2019, p.192), applies Antonio Gramsci's theoretical concept of hegemony to the study of the fossil fuel industry's influence on dominant cultural and political beliefs, values and meanings. *Hegemony* refers to the cultural, political, economic and ideological domination of one, typically privileged, socio-economic class, or "bloc", over others, in particular by means of presenting the interests of that class as the interests of all (Gramsci, 2007, pp.181-182; Fairclough, 2013, pp.61-62). It is thus a covert form of *power* that operates through the incorporation of subordinate groups by "ideological means", in other words, through gaining the consent of subordinate classes and groups (Fairclough, 2013, pp.61-62). Total *hegemony* is never achieved but rather is always something that is struggled towards and is thus the locus of an "unstable equilibrium" (Fairclough, 2013, pp.61-62). Moreover, hegemonic struggles take place on multiple scales within society, from the macro level of state institutions to the micro level of families (Ibid.). However, for Gramsci (2007, p.259) hegemony is not only maintained through the covert manufacturing of consent, but is also reinforced through coercion, which is to say the threat of force if consent is broken.

LeQuesne (2019, p.192), who coined the term *petro-hegemony*, notes the limitations of the concept of hegemony in fully explaining the grip of fossil fuels on society. Building on Gramsci's conceptualization of hegemony as being comprised of consent and coercion, LeQuesne (2019, p.192) suggests a third mechanism, compliance, is at play, which the dominant class may establish through "structuring economic conditions such that a community's choice to actively consent or dissent is circumscribed by dependency upon those economic conditions". Moreover, he argues that *petro-hegemony* is premised on three other kinds of petro-mechanisms: "petro-culture" (e.g., Huber, 2013), "petro-states" (e.g., Mitchell, 2011) and "petro-capitalism" (e.g., Carter, 2014), each comprising a growing body of literature illuminating the nefarious implications and effects of fossil fuels across geographic and temporal scales (Ibid., pp.192-194).

The implications and effects of the Canadian federal government's discursive support of TMX also relates, on the global scale, to what Malm (2016a; 2016b) calls the *fossil economy*. The fossil economy is "an economy of self-sustaining growth predicated on the growing consumption of fossil fuels, and therefore generating a sustained growth in emissions of carbon dioxide" (Malm, 2016a, p.11). As Malm (2016a) explains, since the Industrial Revolution, the shift from flow energies in the form of water and wind to stock energy in the form of coal, and later oil and gas, facilitated the rise of the current global capitalist economic

order by way of transforming energy into something accumulatable and privatizable, to the benefits of the capitalist class. The privatizable and transportable nature of fossil, or stock, energy, compared with flow energy, allowed the capitalist socio-economic order to spread so widely, *but the fact that this new energy entails the emission of atmospheric carbon is what has now led to the crisis of climate change* (Malm, 2016b, p.216). Malm (2016a, p.11) argues that the fossil economy is the “main driver of global warming” and that it must be understood as having “real causal powers - most notably the power to alter the climatic conditions on planet Earth”, but “only as a function of its power to direct human conduct.” (Ibid., p.12) Applying a fossil economy lens to this research brings a wider context for understanding how decisions of a national government, made at a specific moment in time, on the extraction of its national fossil fuel reserves reverberates within the broader web of the climate crisis as a both global and systemic problem, by means of endorsing the deepening of the global systemic addiction to fossil fuels (cf. Huber, 2013, p.x).

Lock-in theory bridges the two previous theoretical concepts by providing an explanation for how fossil fuel hegemony translates into the perpetuation of the fossil economy. Lock-in theory posits that tools or technologies, once adopted, naturalized and developed within a society, become difficult to replace, even by an improved and more efficient form of technology (Unruh, 2000). This is due to the mutually reinforcing effects of user and institutional habituation, as well as of capital investment (Ibid.). Unruh (2000, p.817) contributes to lock-in theory by analyzing how carbon emitting technologies, once locked in, simultaneously lock in the associated emissions. Additionally, lock-in theory also explains part of why the government may be compelled to take this stance, since fossil fuels, as well as their supporting infrastructure and historical investments therein, are already heavily locked into Canadian society, and globally. However, a thorough analysis for how and why a pre-existing lock-in is driving the government’s current strides towards renewed support of fossil fuel extraction is beyond the scope of this thesis, which is limited to explaining the lock-in effects and implications of one discursive instance.

At stake in the Canadian government's nationalization of an oil-transporting pipeline expansion project are multi-tiered lock-in effects and their implications. To further understand how TMX specifically fits into carbon lock-in theory, I borrow from Seto et al.’s (2016) three-part differentiation of carbon lock-in. They distinguish between 1) *infrastructural and technological lock-in*, linked to the equipment that directly and indirectly contributes emissions; 2) *behavioral lock-in* that relate to the norms and habits of users surrounding fossil energy, and; 3) *institutional lock-in*, referring to decision-making and governance that impact production and consumption of fossil energy (Ibid.). New research from Buschmann and Oels (2019, p.1) argues that literature on carbon lock-in has so far overlooked the central role of what they call *discursive lock-in*, a fourth kind of lock-in that underlies the other three kinds (p.2). They argue that because discourse defines, and not merely describes, reality, studying carbon lock-in should compel researchers to

pay attention to the effects of discourse on lock-in and to study the four modes of carbon lock-in through an integrated approach (Ibid., p.2). They emphasize that “[e]nvironmental politics fundamentally involves a ‘struggle for ‘discursive hegemony’ in which actors seek to achieve ‘discursive closure’ by securing support for their definition of reality’” (Scarse and Ockwell, 2010, p.228, quoted in Buschmann and Oels, 2019, p.4). Discursive lock-in thus relates to covert forms of power inherent in the struggle for hegemonic dominance (Ibid., pp.3-4), since particular uses of discourse contribute to cementing fossil fuel hegemony (Nyberg et al., 2018), locking in associated emissions and hence exacerbating the climate crisis (Buschmann and Oels, 2019).

Lock-in type	Key characteristics
Infrastructural and technological	<ul style="list-style-type: none"> • Technological and economic forces lead to inertia • Long lead times, large investments, sunk costs, long-lived effects
Institutional	<ul style="list-style-type: none"> • Powerful economic, social, and political actors seek to reinforce status quo that favors their interests • Institutions are designed to stabilize and lock in • Beneficial and intended outcome for some actors • Not random chance but intentional choice
Behavioral	<ul style="list-style-type: none"> • Lock-in through individual decision making (e.g., psychological processes) • Single, calculated choices become a long string of non-calculated and self-reinforcing habits • Lock-in through social structure (e.g., norms and social processes) • Interrupting habits is difficult but possible
Discursive	<ul style="list-style-type: none"> • Lock-in through cultural beliefs and narratives • Form of lock-in that underlies, but also interacts with other three • Can be entry point for breaking other lock-ins

Table 1. Summary of four types of carbon lock-in and their key characteristics (Adapted from Seto et al., 2016, p.445)

2.3 Depoliticization

Depoliticization serves, in this thesis, as a theoretical tool for explaining how the hegemony of fossil fuels is propped up in the Canadian context by explaining the effects of the government’s discourse on TMX- and extraction-opposing voices. Depoliticization, which Fairclough (2009, p.173) qualifies as “the exclusion of issues and/or of people from processes of political deliberation and decision” marks a “post-political condition” (Swyngedouw, 2011, p.255). Applied to the environment, under this condition and by means of depoliticization, politics address environmental problems in such a way as to actually “suspend the proper political dimension” (Ibid.). Swyngedouw (2011; 2013), in particular, warns of a depoliticization of climate change by means of reducing the issue to questions of carbon emissions management. Dissent

and struggle over courses of action that could repair the structural roots of the climate crisis are palliated, while disagreement is maintained only to the extent of mediating “the choice of technologies, the mix of organizational fixes, the detail of the managerial adjustments, and the urgency of their timing and implementation” (Swyngedouw, 2011, p.267). Attention is thus brought away from the core societal problems that have caused and continue to propel the climate crisis, and diverted onto menial responses that serve merely to patch the symptoms of the issue (Ibid., p.264). Reproduction of power is simultaneously ensured, which is to say that those already in power, and who have largely made the decisions that have led to the current critical outcome generally maintain their grip (Ibid.). In this way, a “techno-managerial eco-consensus” is formed (Ibid.), the effect of which is to generate an approach to climate change that serves to perpetuate business-as-usual and maintain pre-existing and unjust social structures, which, if addressed, would garner true political engagement (Swyngedouw, 2011; 2013). The remaining concepts, which I discuss in the following section, should be understood as discursive, ideological and material tools for depoliticizing TMX and bitumen extraction, which in turn serves to propel fossil fuel hegemony, bolstering the fossil economy by means of locking in carbon emissions.

2.3.1 Ecological modernization, the environmental Kuznets curve, carbon fetishism and scalar politics

Ecological Modernization (EM) has been understood at times in a narrow sense as a source of technological innovation, at others as an approach to environmental policy, and in the widest sense, as a belief system or ideology (Christoff, 1996, pp.480-485). Given the pervasiveness of EM within mainstream environmental politics, in particular climate politics (Bailey et al., 2011), as well as in the present Canadian government's approach at responding to climate change (Dalby, 2019, p.107), I here understand EM as an ideology, surfacing in the government's discourse and arguments. Hajer (1995, p.26) outlines three core features of EM. First, under EM environmental problems are recast as monetarily quantifiable (Ibid.). Second, managing and remedying these problems is seen as a “positive-sum game” where “pollution prevention pays” (Ibid., p.3, p.26). Finally, and most importantly for this thesis, EM holds that the pursuit of economic growth and a healthy environment are not at odds (Ibid., p.26). Rather, according to EM, each can be harnessed as a means of enriching the other, in a symbiotic and mutually reinforcing relationship (Ibid.). Hajer (1995, p.32) explains that EM tenets and discourses reverse the implications of ecological crisis: “what first appeared a threat to the system now becomes a vehicle for its very innovation”. Compared with a political ecological approach, EM is considered an “apolitical” approach to considering human-environment relations and to responding to environmental problems (Robbins, 2012, pp.10-11; Bridge et al, 2018, pp.167-168).

The Environmental Kuznets Curve (EKC) is a conceptual measurement tool within EM, which posits that environmental quality and protection, on the one hand, and economic growth, on the other, follow the trend of an inverted U-curve (Yandle et al., 2002, pp.3-4; Stern, 2014, p.3). In the beginning, as a national economy is weak, environmental damage is concomitantly low (Yandle et al., 2002, pp.3-4; Stern, 2014, pp.3-5). As the country develops, and the economy begins to grow, environmental damage starts to rise until it reaches a peak point past which it begins to lower again, while economic growth continues to rise (Yandle et al., 2002, pp.3-4; Stern, 2014, pp.3-5) (See Figure 1 below).

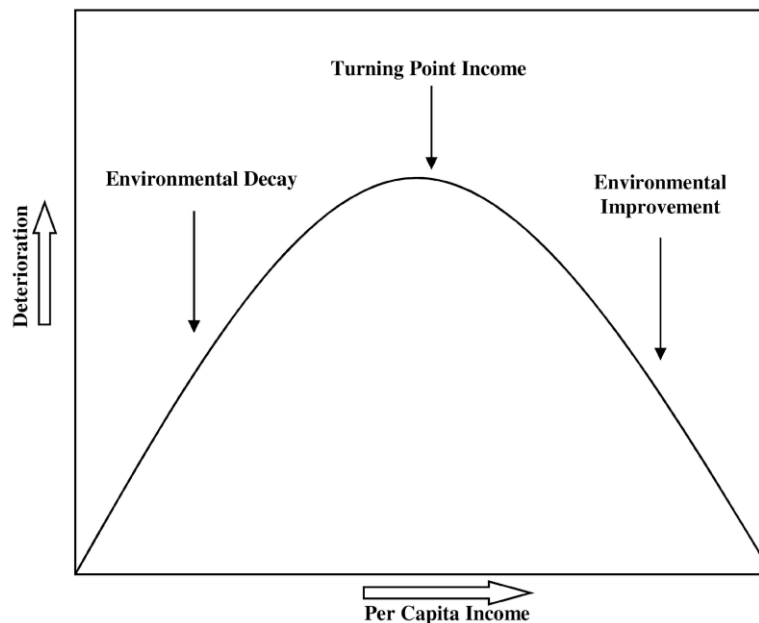


Figure 1. The Environmental Kuznets Curve (Yandle, Vijayaraghavan and Bhattari, 2002, p.3)

Economic growth is understood as a precondition for environmental protection and quality because increased economic development is connected with increased “environmental regulation, awareness and education”, leading to the benefit of environmental improvement (Yandle et al., 2002, pp.5-6; Stern, 2014, p.3). Under an EKC hypothesis, environmental quality becomes a preference of the wealthier and more educated, a “luxury good” of sorts (Yandle et al., 2002, p.6), rather than being understood as a precondition of ecosystem balance and life on the planet. Empirical research over the past thirty years has found little evidence for the presence of an EKC hypothesis for several environmental indicators (Malm, 2012, pp.147-148). In particular, trends concerning the relationship between carbon emissions and the wealth of countries overwhelmingly demonstrate that “[t]otal CO₂ emissions tend to rise secularly with income” (Ibid., p.148). Though EM and the EKC both help make climate change more tractable by reinterpreting the problem within the policy means and political tools currently available, they also both function within the bounds prescribed by the present capitalist world-system, and thus miss attending to the systemic features of

capitalism that make it “inherently wasteful and unmanageable” (Hajer, 1995, p.32; Bailey et al., 2011, pp.685-686; Bridge et al., 2018, p.165; Swyngedouw, 2011, pp.263-264).

Carbon fetishism, a concept coined by critical geographer Erik Swyngedouw, refers to the particular eco-consensus on the matter of climate change in which the sole emphasis is placed on the need to reduce and retract the amount of carbon emissions in the atmosphere without attending to systemic issues of unequal consumption and distribution that have led to this outcome (Swyngedouw, 2011, pp.216-220; Böhm, 2015). CO₂, which “simultaneously expresses our climate fears and around which the desire for change, for a better socio-climatic world is woven” becomes the focal point of responses to climate change, while underlying structural problems that scaffold the crisis are overlooked. This leads to a worldview “that simultaneously disavows radical change” (Swyngedouw, 2011, p.263), which is to say that we accept the need for change but only “within the contours of the existing state of the situation (...) so that nothing really has to change” fundamentally (Ibid., p.264). In this thesis, I use carbon fetishism to discuss the policy tools for carbon accounting and trading, which are used to justify the government’s dual approach to responding to climate change, while simultaneously extracting its bitumen reserves.

Finally, scaling was used by Nyberg et al. (2018) to explain how the hegemony of fossil fuels was sustained in the case of fracking in the UK and I argue that it is equally relevant for understanding fossil fuel hegemony in the Canadian context. Scaling is “a discursive process of producing spatial and temporal boundaries for understanding an object” such as climate change or fossil fuel extraction (Ibid.) Geographically scales can operate on local, national and global levels, while temporally scales can include the past, the present and the future (Ibid.). Scales are relevant to the problem of climate change because the problem is ascribed to one scale, while the responses and proposed solutions operate on other scales. Indeed, climate change is a fundamentally global problem, yet responses are tethered to “national, regional and organizational processes”, through which different actors can “seek to minimize actions that impede their short-term interests” (Ibid., p.236). Nyberg et al. (2018, p.238) argue that, in the case of fossil fuels in the UK, the use of scale helped the dominant bloc create a hegemonizing discourse by selectively appealing to the interests of various actors across society, thus building a patchwork of consent to support their practices (Ibid., p.247). The selective use of scales in addressing an array of interests can go so far as to instrumentalize responding to climate change as a rationale for promoting the further development of fossil fuel extraction (Ibid.). It is thus a powerful tool for sustaining fossil fuel hegemony amidst the crisis faced by the global fossil economy brought on by the climate crisis (cf. Carter, 2014, p.27).

Chapter 3 - Methodology: case study research and critical discourse analysis

In this chapter I discuss my onto-epistemic position before explaining my use of TMX as an instrumental case study. I then describe critical discourse analysis and the relevant concepts therein, after which I justify my choice of texts and my approach to coding and analysis. Finally, I raise some limitations to the present study and concomitantly suggest avenues for future research.

3.1 Critical realist onto-epistemology

In this thesis, I have taken a critical realist onto-epistemic position, which seeks to combine “*ontological realism, epistemological relativism and judgmental rationality.*” (Bhaskar, 1998, p.xi, italics in original) In other words, there is one reality, multiple possible explanations for it and rational judgement can examine the strengths in the explanatory power of the different possibilities and point to the best candidate. Critical realism thus distinguishes between the intransitive dimension, which is concerned with the objects as they exist out there in the world, and the transitive dimension, relating to the ideas and conceptualizations of those objects (Ibid., p.xii). In plain language, a critical realist understanding of climate change is that it is a materially real phenomenon which exists and has bearing on the world independently of our understanding of it, which is to say that the intransitive dimension is not dependent on the transitive (Malm, 2018, pp.127-128). Under a critical realist approach, examining discourse is a relevant and important endeavor as discourse has material bearing through the way it affects, and is enacted in, behavior, and is in this sense real (cf. Alvesson and Sköldberg, 2009, p. 41; Malm, 2016a, p.12). A critical realist onto-epistemic position thus fit well with my choice of CDA as method because CDA looks beyond purely discursive aspects in examining how the discursive and non-discursive interact (Fairclough, 2009, p.163).

3.2 Case study methodology

I have applied a case study methodology, “a qualitative approach in which the investigator explores a real-life, contemporary bounded system (a case)” (Creswell and Poth, 2018, p.96). Yin (2018, p.170) argues that case studies should draw on multiple forms and sources of data. Though my study only made use of documents, I have drawn on several kinds of documents, including speeches, government and independent reports, newspaper articles and policy documents to supplement my arguments, and thus diversify my data sources (Ibid., p.156). An *instrumental case study* helped me grasp something other than the particular case, and thus spoke to a larger and more general understanding than the scrutinized case (Stake, 1995, p.3; Creswell and Poth, 2018, p.98). However, though I am interested in the implications of the government’s

discourse for climate action, I did not take for object of study the Canadian government's climate change policies or energy policies generally. In this thesis, the instrumental case study is the government's speeches on TMX, while the broader understandings are two-fold. First, the government's discourse on TMX illuminates a wider understanding of how continued and expanded fossil fuel extraction in the Canadian context is justified. As such, the purpose here is not to directly examine the entire discourse, of multiple actors, on bitumen in Canada, an exercise well beyond the scope of one thesis. Second, the discursive treatment of bitumen by the Canadian government points to a more generalized instance of national government discourses supporting the hegemony of fossil fuels in other contexts, an occurrence that Nyberg et al., (2018) have empirically demonstrated in the case of fracking in the UK.

3.3 Critical discourse analysis

The method I chose to examine the government's speeches on TMX is *discourse analysis*, which I blended with elements of analysis focused on meaning (Kvale, 2007, p.5). In line with my political ecological approach, I selected Critical Discourse Analysis (CDA), which allows me to “investigate and analyze power relations in society and [...] formulate normative perspectives from which a critique of such relations can be made with an eye on the possibilities for social change” (Jørgenson & Phillips, 2002, p.2). In particular, I opted for Norman Fairclough's CDA because of its emphasis on how discourse analysis should also account for non-discursive elements to inform the discourse analysis (Fairclough, 2009, p.163). Non-discursive elements here include a historical and political appraisal of bitumen extraction in Canada and a characterization of Canada's shifting positions in international climate negotiations and domestic policies. I also adopted Fairclough's understanding of discourse as “a practice not just of representing the world, but of signifying the world, constituting and constructing the world in meaning” (Fairclough, 1992, p.64). In plain words, the same object may acquire different meanings depending on who is discussing it, or how it is being discussed. Bitumen, for example can be a substance, a resource, a source of wealth, a fuel, a primary contributor to climate change, a stolen good, and more. Additionally, different actors across society will emphasize or downplay divergent features of the same object to serve specific purposes, thus rendering discourse a politically infused and relevant tool (Ibid., p.67).

Methodologically, I drew on Fairclough's three dimensions of discourse, which are associated with three analytical steps: 1) the dimension of *text* and the step of *description* 2) the dimension of *discursive practice*

and the step of *interpretation* and 3) the dimension of *social practice* and the step of *explanation* (Fairclough, 1989, pp.24-26; Janks, 1997, p.329) (See Figure 1 below).¹⁹

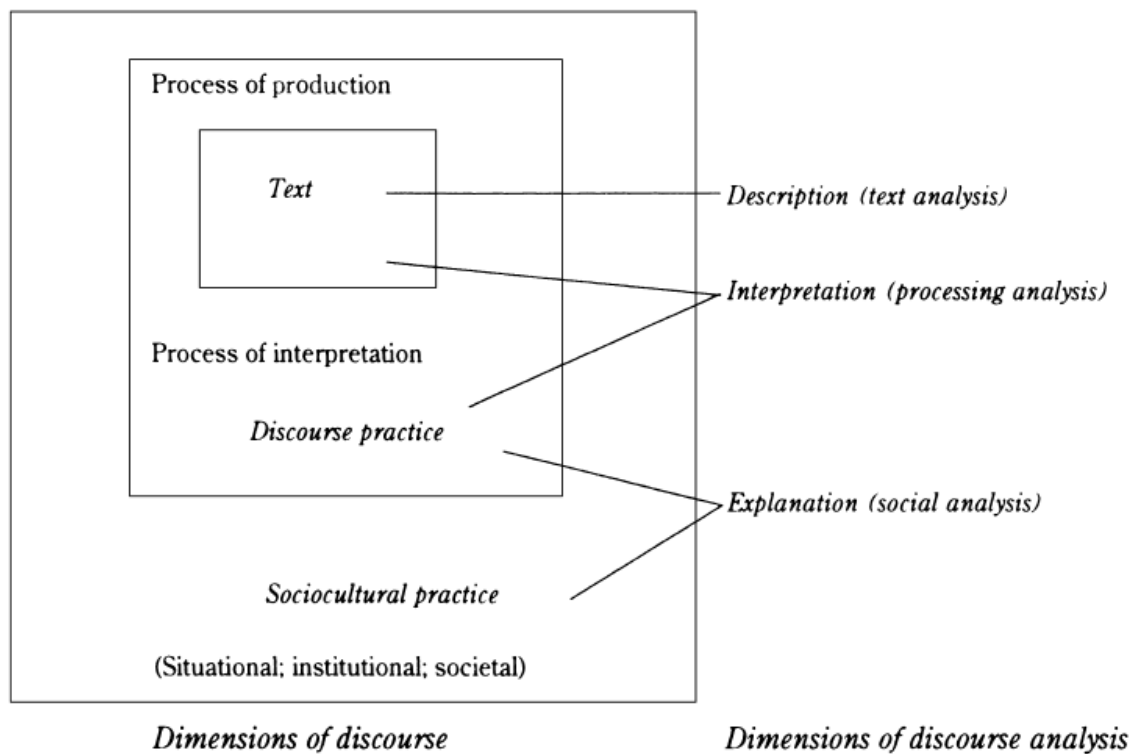


Figure 1. The three-dimensional model of critical discourse analysis according to Norman Fairclough (Fairclough, 2013, p.133)

I also made use of the concepts of *interdiscursivity*, *ideology* and *hegemony* in relation to *power*, which were relevant to my analysis. The procedure of CDA “should not be treated as holy writ - it is a guide and not a blueprint” (Fairclough, 1989, p.110) and I have thus constructed my own analytical tool kit through CDA. *Text* is not merely written artifacts but any instance of language, including spoken conversation and speeches (ibid., p.24). CDA attends to how the *text* is formed in terms of grammar, vocabulary and syntax and in this way excavates “the linguistic features of the text” (Jørgenson and Phillips, 2002, p.68). I drew on some features of linguistic analysis, such as *modality* and *verb tenses*, which can, for example, be wielded to give epistemic authority to an agent by presenting them as bearer of truth (Ibid., pp.83-85), and thus hold the potential to articulate power. At the level of *text*, my application of CDA also employed

¹⁹ Figure 1 refers to “sociocultural practice”, which is another term for “social practice”. Norman Fairclough changed his terminology from the former to the latter in his 1995 book *Media Discourse*, but the analytical dimension remains the same.

aspects of coding for meaning (Kvale, 2007, pp.5-6). My approach to analysis was thus akin to what Kvale (2007, p.5) calls analysis as “bricolage”, an “eclectic combination of multiple forms of analysis”.

The second dimension of analysis, examining the *discursive practice* surrounding the *text*, relates to the modes of production, distribution and reception (or interpretation) of the *text*, and thus brings the audience and medium of communication into the analysis (Jørgenson and Phillips, 2002, p.82). In CDA, discursive practices “contribute to the creation and reproduction of unequal power relations between social groups” (Ibid., p.63). Analysis at the level of discursive practice “focuses on how authors of texts draw on already existing discourses and genres to create a text” (Ibid., p.69), and thus relates to the concept of *interdiscursivity*. *Interdiscursivity* points to the fact that all texts, or individual communicative events, invariably draw on other discourses (Fairclough, 1992, p.73). The use of pre-existing discourses or the introduction of new discourses, in turn, signals either a reproduction or modification of power (Jørgenson & Phillips, 2002, pp.82-83), which simultaneously creates opportunities for discursive, and socio-cultural, resistance and change (Ibid., p.72). Discursive practice can also attend to how the intended audience receives and interprets the text (Ibid., pp.81-82). Though this would have been highly relevant and interesting to study it was beyond the scope of this thesis and would thus be an interesting avenue for future research. In this study, discursive practice thus primarily focused on the use of *interdiscursivity* in the analyzed texts and how it was used by the government to articulate power in the service of the hegemony of fossil fuels (cf. Nyberg et al., 2018).

Finally, the dimension of *social practice* connects the analyzed *text* to the broader socio-structural contexts in which it gains meaning (Jørgenson & Phillips, 2002, pp.86-87). Analyses at the dimension of social practice examine “whether the discursive practice reproduces or, instead, restructures the existing order of discourse and about what consequences this has for the broader social practice” (Ibid., p.69). It furthermore goes beyond the discourse analysis to encompass social and cultural theory (Ibid.) and connects the particular instance of discourse with broader considerations of *power* through *ideology* and *hegemony*. *Ideology* and *hegemony* are both key concepts when analyzing on the level of social practice. Drawing on Louis Althusser, Fairclough (1998, p.33) defines *ideology* as practices, and discourses, typically emerging from dominant groups which have become naturalized, and have been subsumed by the wider society as ‘common sense’, buttressing unequal power relations. He emphasizes that language, and discourse, are inherently implicated with both power and ideology (Ibid., pp.33-34), since language is not external to society, but rather exists in an “internal and dialectical relationship” with it (Ibid., p.23). Specific instances of discourse articulate dominant cultural values and “relations of domination” (Jørgenson and Phillips, 2002, p.75). Yet they do not merely passively reflect these relations of power, they also contribute to their reproduction (Fairclough, 2013, p.59). To Fairclough (2013, p.59) “language is a material form of

ideology”, and ideology is most powerful when it is subsumed into, and negotiates, the ‘common sense’, a process which links ideology to *hegemony* and *power*, which I discussed in Section 2.2. I will now present the speeches that were examined in this thesis and explain how I chose them.

3.3.1 Primary material

In line with purposive sampling (Bryman, 2012, pp.418-419; Creswell and Poth, 2018, p.100), I first searched all relevant government ministries’ websites for official statements by key governmental political actors and decision-makers on TMX, including: 1) the Prime Minister (Justin Trudeau), 2) the Minister of Finance (Bill Morneau), 3) the Minister of Environment (Catherine McKenna), 4) the Minister of Natural Resources (Amarjeet Sohi), and 5) the Minister of International Trade (James Carr). This preliminary scoping revealed that only the Prime Minister and the Minister of Finance had published longer and denser official statements specifically relevant to TMX. After having cross-checked with the shorter quotes that the same thematic contents were present in the longer speeches, and that I had thus achieved data saturation (cf. Bryman, 2012, p.426), I decided to only use a selection of longer speeches from these two sources. The statements used in this thesis were thus pared down to the following seven speeches (see Appendix A):

- 1) Prime Minister Trudeau announces decisions on major energy projects in Canada (November 2016)
- 2) Justin Trudeau to energy leaders on oil sands development (March 2017)
- 3) Justin Trudeau remarks on transmountain pipeline (April 2018)
- 4) Finance minister Morneau remarks on TMX pre-purchase (May 16th, 2018)
- 5) Finance minister Morneau post-purchase agreement (May 16th, 2018)
- 6) Finance minister Morneau after federal court of appeal (August 2018)
- 7) Prime Minister Justin Trudeau speech: Canada re-approves controversial Trans Mountain pipeline expansion (June 2019)

All speeches except for Trudeau’s March 2017 speech were directed towards the Canadian public. The March 2017 speech was addressed to a group of energy leaders at the CERAWEEK conference on energy, in Houston, Texas. Moreover, all texts except for Trudeau’s June 2019 speech were acquired from their respective ministerial websites, namely the official websites of the Prime Minister and the Minister of Finance. The June 2019 speech was acquired on YouTube through a video recording by the news channel Global News, which I transcribed.

3.3.2 Coding and analysis

I approached the primary material abductively (Alvesson and Sköldbberg, 2009, p.4), establishing categories for analysis through a literature and theoretical review but also through attending to what was present in the text and allowing some categories to emerge.

In the end, I coded along the following questions (see Appendix B.):

- 1) How is TMX characterized? (pink)
- 2) How are bitumen and its extraction and export characterized? (blue)
- 3) How are environmental issues, including climate change, characterized? (yellow)
- 4) Which actors are discussed, and how? (green)

And after having lifted quotes from the original texts into a spreadsheet categorized by the previous questions, I applied a second layer of coding and analysis for the following themes (see Appendix C):

- a) Presence of ecological modernist tropes and adherence to environmental Kuznets curve principles: *economy/environment reconciliation, technology advancements for sustainability, clean growth*
- b) Presence of neoliberal and neoclassical economic tropes: *investment, free market, corporate business, opportunities, innovation*
- c) Use of modalities or tone: *truth, imperative/necessity*
- d) Type of appeal: *crisis, threat, risk, security, nationalist, Canadian identity, extractivist, government's authority/the rule of law, energy security, job creation/security, temporal scale (past, present, future), geographical scale (local, national, global)*

3.3.3 Secondary material

I gathered secondary sources from: official government reports, policies and websites; academic journals; independent organizations and think tank reports, and; various news articles. In the main, I used: the government website Natural Resources Canada (Ministry of Natural Resources); the official government policy document on Canada's approach to climate change, titled the Pan-Canadian Framework on Clean Growth and Climate Change (PCF), and; reports from independent research institutes such as the Pembina Institute, the Canadian Center for Alternative Policies, the Centre for International Governance Initiatives and Non-Governmental Organizations including Oil Change International. All have contributed to my background, analysis and in particular to my discussion.

3.4 Limitations

Given the limited amount of material CDA research typically uses, the method has been criticized for reflecting the researcher's bias (Sriwimon and Zilli, 2017, p.135). Though a valid point, the material often used in CDA, and in the case of this thesis, are comprised of pre-existing texts, thus reducing the intrusion of the researcher's bias at the phase of data collection. Additionally, the documents used here are official documents, and should thus reliably reflect the position of official decision-making bodies. Moreover, in speaking to the strengths of the method, using smaller samples of material can allow for a deeper analysis.

Another potential limitation is the problem of generalizability, often associated with case study methodology (Creswell and Poth, 2018, p.102). Though this study reflects merely an instance of the discourse on fossil fuels in one country, it nonetheless speaks to a wider occurrence, which can be seen presently in multiple core countries, of governments claiming sustainability while perpetuating and masking business-as-usual, namely supporting and sustaining the extraction of fossil fuels. Permutations of fossil fuel hegemony will vary based on the conditions of a particular context, but the broader trend of uplifting this hegemony can be claimed to have a generalizable quality. Nyberg et al. (2018) have, for example, documented a similar trend in the case of fracking in the British context. Another example of a country that both possesses vast fossil fuel reserves and is seeking an environmental veneer is that of Norway, which has long profited from the sale of its oil reserves and is now attempting to re-green its image (Watkins, 2018). This thesis thus offers a contextually grounded case-based contribution to exposing that broader trend.

Finally, as mentioned previously, CDA gains part of its strength in not merely analyzing the produced text, but also analyzing the text's reception (Jørgenson and Phillips, 2002, pp.81-82). Due to space, time and access limitations, I was not able to incorporate an analysis of the text's reception, which could have been conducted through a combination of surveys and interviews. I nonetheless agree with Jørgenson and Phillips' (2002, pp.81-82) assessment that this is an important, and too often overlooked, part of CDA and thus suggest that this could be for future research.

Chapter 4 - Results and analysis

I now turn to the analysis of the Canadian government's rhetoric on bitumen sands expansion and export as shown through the case of TMX. The three analytical dimensions of Fairclough were here collapsed into three thematic categories following the lines of my three research questions: *How is bitumen extraction and export characterized in the government's speeches on the Trans Mountain pipeline expansion project? How do the government's speeches address the option of leaving bitumen in the ground? How does the*

government attempt to discursively resolve its purported leadership position on climate change while simultaneously promoting the extraction and export of its bitumen reserves?

4.1 Discursively naturalizing bitumen

The substance of bitumen is consistently euphemized throughout the government's speeches, at times referred to as a "traditional" energy resource (Trudeau, 2017), which is set in contrast with renewables, at others characterized as a "secure, reliable source of energy" (Trudeau, 2017). Even referring to bitumen as simply "oil" throughout all speeches, creates the illusion that there is no qualitative distinction in extraction and or difference in refining processes between conventional crude oil and the bitumen encased in the Athabasca tar sands (cf. Shrivastava and Stefanick, 2015, p.11). In fact, the term "bitumen" is not mentioned a single time, nor are the actual circumstances around the extraction process detailed or even broached. Obscuring the conditions of extraction of this extreme fossil fuel contributes to culturally *naturalizing* the substance by depicting it as an "unavoidable aspect of life that cannot be changed through politics or culture" (Huber, 2013, p.x). This in turn *depoliticizes* bitumen by discursively dissimulating its true characteristics as a contested and controversial "extreme oil" that, in actuality, entails a myriad of environmentally and socially deleterious consequences (cf. Swyngedouw, 2011, p.255; Klare, 2010).

Moreover, bitumen's extraction and export, through the characterization of TMX project, is couched in distinctly positive terms. On several occasions, TMX is referred to as "ambitious" (Trudeau, 2017; Morneau, 2018), as "progress" (Trudeau, 2017), as something that the government is "proud" of (Trudeau, 2017), and as a "big" and "important" project (Morneau, 2017). The positive tone surrounding TMX is augmented through the use of the adjective "vital". TMX becomes "the vital infrastructure that is critical to our ability to get Canadian resources to global markets" and a "vital strategic interest to Canada" (Trudeau, 2018), implying both a necessity and urgency to its construction.

The tone is further intensified when, on multiple occasions, TMX itself is presented as in the "national interest" (Morneau, 2018a; 2018b), implying that challenges to its construction are somehow disloyal to Canada. Interestingly, in the latest government speech on the project, what is characterized as in the "national interest" is no longer TMX itself, but rather the assumed positive outcomes of the project, namely "to protect our environment and invest in tomorrow while making sure that people can feed their families today" (Trudeau, 2019). TMX becomes implicit and even invisible in this formulation, which serves to emphasize the assumed benefits and keep at bay the potential negative connotations which have come to be associated with the controversial project. This in turn builds into *depoliticizing* the project by means of discursively obscuring its contentious aspects through emphasizing uncontested features with which everyone can agree (cf. Swyngedouw, 2011, p.255). In this way, the discourse serves to rally support for

the project from different societal camps and consolidate a hegemonic front in support of bitumen extraction (cf. Nyberg et al., 2018).

In their characterization of bitumen, the federal government also draws on a discourse of exploitation, which in turn enables their use of a market discourse. Bitumen is primarily designated as a “resource” (Trudeau, 2017, 2018, 2019; Morneau, 2018a, 2018b, 2018c), a specific form of valuation which sees natural objects as extractable and exchangeable entities (Junka-Aikio and Cortes-Severino, 2017), that the Canadian government can and should exploit. While bitumen is primarily viewed as a resource, it simultaneously becomes intended for “new markets” and “world markets” (Morneau, 2018a; Trudeau 2019) and requires a “fair price” (Morneau, 2018a; 2018b). This signals that the discourse on bitumen is marketized, a process in which “market discourses colonize the discursive practices of public institutions” (Jørgenson and Phillips, 2002, p.72) and through which pricing is assigned to “phenomena that were previously shielded from market exchange” (Castree, 2008, p.142). The neoliberal marketizing undercurrent of the federal government's discourse is bolstered by casting the country of the United States of America (U.S.A.) as a “customer” and that of Canada as a “businessperson” that provides the product bitumen. Indeed, the U.S.A. becomes “our only customer” (Trudeau, 2019, translated from the original French by author), a situation which “[e]very businessperson knows” weakens the seller’s position as you become “vulnerable to that customer’s desires and to changes in their market and policy orientation” (Trudeau, 2019). The use of a market discourse is reinforced in Finance Minister Morneau’s speeches when he prioritizes the specific quality of Canada as “a great place to invest” (Morneau, 2018a). Morneau (2018b) even directly appeals to potential investors: “To investors who are considering Canada as a place to build big, important, transformational projects like the Trans Mountain Expansion - know that you have a partner in Ottawa.” Throughout the speeches, companies and “investors” are cast in the markedly positive role of benefactors, who will “*help* get Canadian resources to global markets” (Trudeau, 2018, italic by author), and with whom the federal government wishes to “partner” (Morneau, 2018b).

Conversely, actors who disagree with the government’s approval of TMX are negatively portrayed, or simply kept at bay. For example, some important, and TMX-contesting, actors in the debate simply go unmentioned, such as environmental NGOs that attempt to bring the global concerns surrounding climate change more squarely into the discussion. Indigenous communities who oppose the project’s construction are smoothed over with appeals to “indigenous economic prosperity”, perhaps through “[i]ndigenous ownership” of the pipeline, while their concerns for their health and cultural security are unmentioned (Trudeau, 2019). The government of BC, and its First Minister John Horgan, who represent one of the strong opposing fronts to the project, are overwhelmingly negatively portrayed, their actions described as “unconstitutional” (Morneau, 2018a). The government furthermore alludes to the delays in construction of

TMX, brought on by the BC provincial government's political dissent and legal challenges, as well as civil society protests, as a war-evoking "time of need" (Trudeau, 2018), castigating these attempts to block its construction. This portrayal is further reinforced as a point through which Canadians should band together in support of the pipeline's construction: "There are times in the life of a country when we come together in common purpose for the good of the country. This is one of those times." (Trudeau, 2018) In attempting to craft a "common" front, through using the all-encompassing "we", Trudeau *depoliticizes* the conflict surrounding the project by discursively antagonizing, marginalizing or excluding dissenting voices that resist TMX (cf. Swyngedouw, 2011, p.255). The overall effect of this discourse is to make bitumen and its extraction appear as a *natural* and normal part of life and society (cf. Huber, 2013, p.x). As we will now see, its extraction is also portrayed as a necessity.

4.2 The imperative to extract: discursively foreclosing on leaving bitumen in the ground

As seen in the previous section, the government's discourse attempts to *naturalize* bitumen, and by further extent TMX as the preferred means of transportation, in the public's mind, seeking to defuse the politically contentious aspects of both. In this section, I show that this discourse makes the extraction of bitumen appear as both unavoidable and necessary, with the effect of discursively foreclosing on alternatives to extraction, namely leaving the fuels in the ground.

To begin, religious metaphor serves to portray bitumen as God-given, and its extraction as a religiously endowed prerogative of the Canadian people: "We're a country that is *blessed* with natural resources" (Morneau, 2018a, bold by author), a notion that is repeated in Trudeau (2019, italics by author): "Canada is *blessed* with natural resources." The Canadian prerogative is further strengthened through the nationalist implications of calling the bitumen sands "*our* existing resources" (Trudeau, 2019, italics by author). This notion taps into a pre-existing nationalist rhetoric in Canada that is tied to extractivism and which relies on "assumptions of a vast hinterland with a superabundance of resources" (Dalby, 2019, p.103), promoting a "consolidated Canadian identity centered around resource extraction" (Danive et al., 2017, quoted in Dalby, 2019, p.103).

The government's discourse deepens and escalates the Canadian prerogative to extract through the use of imperative verbs. When Trudeau (2018) states: "As a country, Canada must be able to develop our resources", the verb 'must' implies that sovereign states are entitled to make use of the resources available to them on their territories. The rationale entails that Canada is justified in continuing extraction domestically because it is still accepted that resource extraction, including of climate change inducing resources, are the prerogative of a nation state. The discursive imperative is reinforced by the use of the

future tense in stating that “the project will be built” (Trudeau, 2018), implying that alternatives to construction are off the table. Throughout the speeches, emphasis is placed on how the current government’s approach will have TMX built in the “right way” (Trudeau, 2018; 2019). The question of whether it should in fact be built at all is never explicitly addressed, contributing to building the impression that there are no alternatives to construction itself, concomitantly invalidating reasons for contesting the project, and thus *depoliticizing* it. Moreover, this foreclosure of alternatives to extraction is supported by Trudeau’s (2019) statement: “Fundamentally, this isn’t a choice between producing more conventional energy or less. It is a choice about where we can sell it and how we get it there safely.” Explicitly diverting the “choice” from the more political point of discussing how much, if any, fossil fuels we can still pump into the global system to the less political point of “how” to do so in the safest way possible *depoliticizes* extraction.

The discursive crafting of an imperative to extract is reinforced through the government’s portrayal of bitumen as necessary for the “prosperity” of the Canadian economy (Trudeau, 2017). The sale of bitumen in international markets through the increased transport capacity offered by TMX, when built, will supposedly entail “billions in public funding for healthcare, for infrastructure, for the environment” (Trudeau, 2018), things that all could agree are important and needed. TMX, and bitumen extraction, are moreover connected with “growing our economy” (Trudeau, 2018) as well as with the means to “strengthen” the economy (Trudeau, 2016), giving the impression that the Canadian economy would suffer without them. Relating bitumen and TMX to the health of the economy contributes to portraying both as necessities, placing the extraction and transport of bitumen as a binary choice. On the one hand, TMX and bitumen extraction offer the desirable outcome of economic growth, prosperity, and even environmental protection. On the other hand, their absence leads to economic stagnation, in which public services and infrastructure do not get further developed, and the Canadian people and environment suffer as a result. In this way, bitumen also becomes a kind of benefactor, and the Canadian public, who depend on these services and infrastructure, is summoned to grasp the necessity of its extraction, and by further extent, the necessity of constructing TMX. This point is brought home when Trudeau (2019) explicitly states: “We also believe that TMX could solve a core economic challenge we currently face”. The challenge here referred to is that of the low returns on Canadian bitumen exported primarily to the United States. Discursively placing TMX as the way to solve this “core economic challenge” contributes to cementing the idea that construction of TMX must happen.

Over and above the general connection between bitumen and the strength of the Canadian economy, continued extraction is qualified as “vital” because of the need to protect already existing jobs in the oil industry, but also because extraction holds the promise of future jobs. In fact, this argument is the most

recurring throughout the speeches, invoking a *geographically local* and *temporally imminent or near scalar logic*:

It means that thousands of Canadians who work long hours every day to put food on their table, and to build this country, depend on this project getting built. It means people in the oil patch are hurting, have been hurting for years, and we stand with them, just as we stand with forestry workers in B.C., aerospace workers in Quebec and auto workers in Ontario. [...] It means every single Canadian's family and future and dreams, matter. (Trudeau, 2018).

This project has the potential to create thousands of solid middle-class jobs for Canadians, people in B.C., Alberta and right across the country would have more opportunities to earn a good living. (Trudeau, 2019)

These statements invoke slightly different scalar logics. On the one hand, the first statement invites the audience to grasp the necessity to attend to the needs of currently suffering oil-industry workers, invoking a *geographically local* and *temporally present scale*. Job security is an easily relatable argument for many people, and thus goes beyond appealing merely to the affected workers. People who do not work in the oil-industry are summoned to empathize with oil-patch workers by way of supporting TMX, reinforcing the homogenizing effect of the government's discourse (cf. Nyberg et al., 2018). On the other hand, the second statement, while still placed within a *geographically local scale*, invokes the *temporal scale of the near- to mid-future* by hinting to the promise of coming financial benefits for more potential workers. Nonetheless, both scalar logics bolster the notion of the necessity of TMX and bitumen by inviting actors from different societal camps to empathize with present and future oil-industry workers, and thus reinforce a *fossil fuel hegemony* in the Canadian context.

Finally, the apparent necessity of TMX is brought to its apogee as the government reveals the lengths to which it will go in defense of the project by invoking the government's formal authority. While Trudeau (2018) appeals to "the Government of Canada's constitutional authority to complete this vital project", Trudeau (2018) and Morneau (2018a; 2018b) both resort to "the rule of law" as a tool that provides the government with a quasi-authoritarian tone on the matter of TMX:

We're also a country where we have – and where we respect – the rule of law. That's critically important, because the rule of law provides certainty for investors, and is one of the reasons Canada is such a good place to invest, and do business. If we give that up, we give up some of what gives us an advantage in a competitive world. (Morneau, 2018a)

In this case, the “rule of law” has the goal of sustaining investor confidence rather than, for example, protecting the rights of Canadian citizens who are, and will be, negatively impacted by the oil industry and its expansion, or stewarding fossil fuel reserves with the intention of meaningfully mitigating climate change.

4.3 Subsuming climate change into the narrative of bitumen extraction expansion

In this section I demonstrate how the government discursively reconciles the opposing interests of bitumen extraction and climate action through two main mechanisms. On the one hand, the government’s discourse distances the real scope of climate change and its implications from the discussion on bitumen. On the other hand, the discourse emphasizes a narrowed and reduced understanding of climate change, which is subsumed into the government’s narrative to reinforce the need for extraction.

Overall, climate change is sparsely mentioned, with explicit references featuring six times in the seven speeches and contributing to a small proportion of the government’s argument on TMX. In contrast, as shown in Section 4.1, the government emphasizes the role of bitumen as a “resource” without explicitly acknowledging the reality that bitumen is a climate-change-inducing fossil fuel. The diminishment of the inherent tension between the reality of bitumen and its portrayal in the government’s discourse is enhanced by the misrepresentation of the causal relationship between bitumen and climate change: “As a country, Canada must be able to develop our resources, while protecting our environment, including safeguarding our oceans and combating climate change” (Trudeau, 2018). Bitumen extraction is placed as the key imperative, rendering climate change mitigation as secondary, while ignoring the main causal connection: that bitumen is a fossil fuel that exacerbates climate change. Moreover, the simultaneous use of multiple *geographical scales*, lumping together *local and global environmental issues*, suggests that there is no qualitative difference between mitigating the impact of TMX on local environments, such as protecting the ocean from oil tanker spills, and the broader global issue of climate change. This creates the illusion that climate change can and could be addressed with similar policy tools as applied to local environmental problems. Without underappreciating the complexity of developing effective policy tools to prevent and manage localized environmental problems, conflating these kinds of issues and that of climate change ignores the heightened complexity of climate change as an inherently global and systemic problem.

Only in Trudeau’s June 2019 speech is the connection between TMX and climate change directly addressed, though in a way that diverts attention from meaningfully engaging with the implications that climate change has on fossil fuel extraction:

Some are asking themselves how I can claim to be a climate leader while at the same time building a pipeline. [...] Thus I tell them this: we need to look at the facts. The aim of the project is not to augment our oil production, but rather to expand our options. With TMX, Canada will be less dependent on the United States, which is presently our only customer, and will have access to the growing Asian market. [...] I think that our priorities are clear and that they are very different from the choice proposed by the Conservatives. (Trudeau, 2019, translated by author from the French original, italics by author)

This statement is problematic on different levels. First, the Prime Minister's assurance that the "aim of the project is not to augment our oil production" is misleading. As stated in Section 1.3, since Canada already has ample pipeline capacity to service existing oil production (Hughes, 2016, p.7), the only possible reason for constructing new pipelines at this moment is to expand oil production in the Athabasca tar sands region (Scott and Muttitt, 2017, pp.18-19). Second, even when explicitly acknowledging the contradiction between bitumen extraction and climate leadership, the Trudeau government misses the point that *should* be addressed: carefully and justly managing the phase out of Canadian bitumen. The government's mischaracterizing stance is reinforced when Trudeau states: "Canada is blessed with natural resources, and with that comes major responsibility. As the world transitions to a cleaner economy, there will be demand for our existing resources." (Trudeau, 2019) Ironically, as Trudeau here discusses the "responsibility" that accompanies managing climate change inducing resources, he does so to argue not for climate change mitigation but rather for meeting the assumed growing "demand" for fossil fuel energy. This illustrates again his government's misrepresentation and misdiagnosis of the problem of climate change as well as what constitute effective responses to that problem in terms of fossil fuel management.

The government's miscomprehension of the problem of climate change and its relation to fossil fuel management is also apparent in Trudeau's misrepresentation of the timeframe of climate change as distant (cf. Nyberg et al., 2018, p.248). As Trudeau (2017) states: "There will come a day, far off but inevitable at some point, when traditional energy sources will no longer be needed." This approach at justifying the present and continued extraction of bitumen bypasses the fact that the question is not one of whether or not the need for bitumen will eventually expire. He is thus exploiting *temporal scales* as a means of *depoliticizing* TMX and the extraction and burning of bitumen it will facilitate. Indeed, the discourse side-steps the fact for the climate crisis's deepening to be averted, the largest portion of existing fossil fuel reserves will need to remain unburned.

Not only does the government ignore the causal chain of bitumen as a climate change inducing fossil fuel, it actively constructs fossil fuel extraction and climate action, as a subset of environmental protection, as

mutually supportive and dependent. Throughout all speeches, the most recurring point concerning the environment broadly speaking is that of the interconnectedness between a strong economy and healthy environment, one of the *primary tenets of EM* (cf. Hajer, 1995, p.26), which is also supplemented by the *EKC premise* that a healthy environment is a good that comes to be desired as the wealth of a country increases. This is made evident in the following statements:

We are showing that environmental leadership and economic growth are inseparable. They are one. (Trudeau, 2017)

Fundamental to this strategy is the truth that protecting our environment and growing our economy are not opposing values. On the contrary, each makes the other possible. (Trudeau, 2018)

In the 21st Century, Canadians will not accept that we have to choose between a healthy planet and a strong economy. People want both. And they can have both. (Trudeau, 2017)

In this last statement, a “healthy planet” is cast as a good that people “want” and “can have”, and the government is simultaneously cast as the business that will provide that good. Moreover, from this perspective, the planet’s health is positioned not as a vital substrate to human (and other species’) existence, but rather as a kind of appealing bonus. This point is further reinforced in Trudeau’s 2019 speech: “[T]o those who want sustainable energy and a cleaner environment, know that I want that too. But in order to bridge the gap between where we are and where we’re going, we need money to pay for it.” (Trudeau, 2019, italic by author) Here again, sustainability and a healthy thriving environment are cast as commodities that some people in Canada may “want”. The EM premise of the interconnectedness of the economy and the environment is taken further when the money from bitumen extraction is presented as a precondition for environmental protection, including climate change mitigation, a tenet of the EKC hypothesis (cf. Yandle et al., pp.5-6):

[W]e should take advantage of what we have and invest the profits in what comes next, building the clean energy future that is already at our doorstep. (Trudeau, 2019)

It is in Canada’s national interest to protect our environment and invest in tomorrow while making sure that people can feed their families today. By moving forward with the Trans Mountain expansion and investing the profits in our clean energy future we are doing exactly that. (Trudeau, 2019)

Trudeau and his government are making a claim at having their cake and eating it too. Their argument suggests that there is no internal inconsistency, or even justice related issues, in first extracting, exporting and profiting from as much carbon dioxide producing bitumen oil as Canada could muster, and then using those profits to alleviate the problem of climate change which is caused by the burning of fossil fuels. Ironically, in the 2018 speech by Trudeau, and incidentally, the only speech addressed to supposed energy leaders in Houston, the logic appealed to above is reversed, and acting on climate change counterintuitively becomes the way to facilitate fossil fuel extraction: “We could not have moved on pipelines had we not acted on climate”. Here Trudeau is attempting to convince these so-called energy leaders that acting on climate change will actually be beneficial to extracting fossil fuels.

Moreover, Trudeau’s discourse on bitumen extraction also draws on a securitizing discourse, “whereby threats to the energy sector [...] are presented as national security threats” (Newell and Lane, 2018, p.8). In particular, Canada’s bitumen sands are invoked through a frame of energy security for the United States: “Nothing is more essential to the U.S. economy than access to a secure, reliable source of energy. Canada is that source.” (Trudeau, 2017), reinforcing the necessity to extract from a geopolitical standpoint. While the discourse of security is used to support bitumen extraction, the discourses of risk and threat serve to condemn opposition to bitumen and TMX. The framework of risk is wielded in reference to financial risk caused by political struggles meant to block the pipeline’s construction, rather than environmental, social and financial risks associated with not responding meaningfully to climate change. This risk is furthermore used as a justification for the government spending taxpayer money on purchasing TMX, as demonstrated in Morneau’s (2018b) statement: “as a government we can manage risks that, in these particular circumstances, would have been difficult for any private sector company to bear.” Finally, the government’s discourse makes climate change itself appear as a threat to TMX’s construction. Instead of being portrayed as a threat to survival, which is directly caused by the extractivist and capitalistic system, climate change is portrayed as a threat to unity and collaboration: “Climate change, income inequality, the rise of extreme politics of both the right and the left: these are all forces with the potential to pull us apart.” (Trudeau, 2018) The unity demanded here is in acting to accept and construct the pipeline, thus climate change is placed as a threat to TMX rather than the opposite.

Lastly, compared with all the previous speeches, the 2019 speech by Trudeau is interesting in the focus placed on the contrast between Trudeau’s government and the previous PC government under Harper. Trudeau contrasts his methods of governing with those of the Harper government in order to highlight the divergence in approach. Trudeau’s government is portrayed as trustworthy and cooperative while Harper’s government is painted as antiquated and brutish. Yet Trudeau draws this contrast to argue that the flaw in

Harper's strongarm approach is that it was *this* that in fact prevented the previous government from constructing a pipeline.

Conservatives under Stephen Harper tried and failed. They have had ten years to join new markets, and have done so unsuccessfully. And this is because the conservatives are stubbornly trying to move backwards. They want to answer today's problems with yesterday's solutions. They determinedly exclude indigenous peoples and continue to ignore environmental preoccupations, preoccupations which are in fact perfectly legitimate. (Trudeau, 2019)

Failure is here understood as failure to build a pipeline to new markets. Trudeau is not criticizing the Conservative government for its jaded attachment to nefarious extractivism rather than for its indecorous methods, which prevented it from successfully building a pipeline. Though the differences in approach between the Trudeau Liberals and the Harper Progressive Conservatives is undeniable, the ideology around extractivism itself is never questioned across Canadian conservative-liberal ideological boundaries.

Chapter 5 - Discussion

This discussion examines some implications of the government's discourse which has 1) naturalized bitumen; 2) foreclosed on the option of leaving bitumen in the ground; and 3) subsumed climate change into a narrative that supports continued extraction. It shows that the government's discourse bears material implications resulting in continued extractive business-as-usual, through multi-dimensional lock-in mechanisms, a *depoliticization* of the controversies of TMX and bitumen, and the abuse of *scalar politics*. These discursive tools and mechanisms function to deepen *fossil fuel hegemony* in the Canadian context. I then suggest some *justice* perspectives as a means of repoliticizing the debate and shedding light on avenues for overcoming fossil fuel hegemony.

5.1 From discourse to lock-in implications

The Canadian government's vocal support of TMX signals a *discursive lock-in* of bitumen and its supporting infrastructure. Discursive lock-in underlies and props up the other three forms of lock-in and the clearest understanding of lock-in mechanisms occurs when all mechanisms are accounted for (Buschmann and Oels, 2019, p.2). Expanding the pipeline capacity will evidently lead to *infrastructural lock-in*, as pipelines are fossil fuel "supporting" infrastructure, which "indirectly" contribute to emissions (cf. Seto et al., 2016, p.431). Moreover, as extraction in the Athabasca tar sands region will contribute to pumping more oil into the global system, it will also enhance *behavioral lock-in* on several levels as it will slow down user

dishabituation from fossil fuel intensive technologies, as well as disincentivize the development of alternatives to fossil fuels (cf. Seto et al., 2016, pp.438-440).

The fact that the government has approved, purchased, as well as reapproved TMX, demonstrates a process of *institutional lock-in* (cf. Ibid., pp.433-435), supported by the discourse which I have analyzed in this thesis. Unruh (2000, p.825) identifies government intervention and support as a particularly significant form of institutional lock-in. He argues that “truly major impacts occur when the government uses formal justifications for overriding market forces”, such as “national security”, “public safety” or “universal service” (Ibid.). Morneau and Trudeau call TMX a “vital” piece of infrastructure that is in the “national interest”. This is a pristine example of discursive lock-in buttressing institutional lock-in, with the potential for infrastructural lock-in, if the pipeline gets built. Furthermore, “direct government ownership can stifle innovation by redirecting incentives towards rent-seeking” (Ibid.). The government’s purchase of TMX thus provides an additional, and more intense, form of institutional lock-in.

The government’s facilitation of multi-dimensional lock-in mechanisms furthermore supports the interests of the corporations who operate the Athabasca tar sands region and who have substantial investments tied into existing bitumen production and transport infrastructure.²⁰ According to Pineault (2018, p.130, p.142), continued extraction in the sands is mediated by the need of the sands corporations to retain the value of their already sunk assets, a need that is propped up by the nature of the capitalist economic system, which must continuously and perpetually reproduce itself in order to be sustained. Illustrating this point, Lee (2018, p.118) notes that exports from the sands in fact increased rather than decreased as international oil prices declined in 2015. This “suggests that major oil producers increased production to get positive cash flow,” (Ibid.) thus corporations in the Athabasca region will make up for decreases in prices per barrel by augmenting the quantity of barrels sold. The different, yet mutually reinforcing, lock-in mechanisms also bear the effect of sustaining and reinforcing the *fossil economy* by increasing the likelihood of more oil being pumped into the global system as a means of sustaining growth within national economies (cf. Seto et al., 2016; Malm, 2016a, p.11).

5.2 Creative carbon accounting in the service of business-as-usual

The government's discourse, reflecting *EM* and *EKC tenets*, serves the purpose of *depoliticizing* the handling of Canada’s vast bitumen reserves by crafting a narrative of the climate compatibility of bitumen extraction, simultaneously subsuming critical voices that seek to question *whether* the sands should be exploited at all. The ostensive validity of this discourse is in turn dependent on the assumption of a carefully

²⁰ C\$243 billion to be precise (NRCan, 2019b)

juggled trade-off of carbon emissions between economic sectors within Canada (Hughes, 2016). The material result is in fact continued rising emissions worldwide, and in the Canadian context, also missing the Paris targets (Hughes, 2016; Muttitt, 2016). Approaching and responding to climate change by reducing it to the single matter of carbon emissions demonstrates what Swyngedouw's (2011, pp.216-220) calls *carbon fetishism*. Several layers of "creative carbon accounting" (Böhm, 2015) help support Canada's rhetoric on expanding bitumen extraction while purportedly meeting climate goals and even leading climate action internationally. Domestically, as demonstrated in Section 1.3, the government's juggling of carbon emissions between economic sectors implies restraining all other sectors' emissions to the benefit of those of the expanding oil industry. Thus, carbon fetishism here translates into convoluted carbon accounting mechanisms and systems that allow for the continuation of business-as-usual, even as it is applied to the extraction and use of fossil fuels.

Internationally, because of the way carbon emissions are calculated and attributed to nation states, Canada is able to wash its hands of the responsibility of the majority of emissions from its bitumen reserves, which is to say the emissions at the points of its refinement and final consumption (Lee, 2018). Indeed, Lee (2018, p.116) points out that the main method of emissions attribution used under the UNFCCC is "territorial emissions", also known as "production emissions", which happen within national borders. Thus, the Paris Agreement only accounts for domestic emissions, "but not the carbon extracted at home and burned elsewhere", constituting a loophole that evidently and conveniently benefits those countries who still have vast fossil fuel reserves, such as Canada (Lee, 2018, p.115, p.119). Canada's approach at juggling emissions is also thus tacitly allowed and sustained by the mainstream global consensual approach of the UNFCCC and its plethora of agreements (cf. Swyngedouw, 2011, p.265). Combining the domestic and international levels of carbon accounting, the government is able to craft a discourse that supports domestic fossil fuel extraction, while claiming the broader climate compatibility, and even leadership, of its actions. If the government were to acknowledge the real and full implications of releasing the carbon encased in the bitumen it intends to extract and sell, it would be clear that its climate argument is nonsensical. Yet this narrow domestic focus allows the government to subsume climate action in its narrative, concomitantly *depoliticizing* the issue while supporting bitumen extraction.

5.3 Fossil fuel hegemony and lessons from perspectives on climate justice

The government's speeches on TMX exemplify that Canada and the federal Canadian government must still square with "the big long-term questions of transforming Canada from a fossil fuel producer and wasteful consumer, to a sustainable society" (Dalby, 2019, p.106). A big impediment to this task is the government's unwavering commitment to extractivism, mediated by its hegemonizing discourse in support

of Canadian bitumen oil. Nyberg et al. (2018, p.247) find that abuses of *scale* can make a strong contribution to expanding the “hegemonic project to discursively support the development of fossil fuels”. The government and oil corporations can be seen as forming a ‘dominant bloc’ that “claims to simultaneously represent local, national and global interests” instead of “connecting their interests with particular groups of actors” (Ibid.). For example, the temporal scale of the *present* and the geographical scale of the *local* are emphasized through the overwhelming focus on job security, appealing to the interests of fossil fuel industry workers, but also calling on Canadians of all trade to empathize with their plight. The *national* scale is also invoked by means of connecting bitumen extraction and TMX with the strength of the Canadian economy. The *global* scale is present in the appeal to mitigating and adapting to climate change, with responses to climate change being re-crafted as immediately accessible through profits from bitumen sales, demonstrating “how fossil fuel hegemony is maintained through the absorption of climate critique” (Ibid.). As in the case of the UK, the problem of climate change in the Canadian government’s discourse is also stretched across scales, concomitantly rendering it a less tangible issue compared with the immediate and palpable benefits derived from bitumen production and sale (cf. Nyberg et al, 2018, p.244). Thus, in the Canadian case, scales also represented a powerful tool for sustaining fossil fuel hegemony.

Breaking the *hegemony of fossil fuels* requires, in part, new discourses that acknowledge the full scope of the climate crisis and its necessary implications for weaning off from fossil fuels. In line with my political-ecological approach, which assumes that there are more socially and environmentally beneficial, and just, ways of acting in the world (Robbins, 2012, p.12), I now turn to how perspectives of justice, in particular *climate justice*, can help us subvert fossil fuel hegemony. Climate justice in a nutshell is “the recognition that the historical responsibility for the vast majority of greenhouse gas emissions lies with the industrialized countries of the global north” (Petermann, 2009, pp.135-136). I here place emphasis on 1) a *just transition* for oil industry dependent communities and 2) Canada’s *supply-side responsibility*, as these aspects of climate justice relate most to the issues reflected in the speeches. From the perspective of a *just transition*, managing energy transitions will require safeguarding vulnerable communities that currently depend on the fossil fuel industry for their livelihoods (Heffron and McCauley, 2018; Kartha et al., 2018, pp.124-125). The Trudeau government's discourse on TMX’s supposed inevitability effectively negates the discussion surrounding the need for a just transition for energy workers and communities. Instead, it turns the argument on its head by wielding their job security as a key point for supporting bitumen extraction and TMX’s construction. Kartha et al. (2018, p.118) suggest that ignoring such equity considerations, can lead the affected actors to come to perceive climate change mitigation as the threat, rather than climate change itself, thus increasing the constituency of fossil fuel hegemony. Though job security within the coming energy transition is, in itself, a crucial point that must be attended to, emphasizing the job risk for the

average worker of the fossil fuel industry should not be wielded as a justification for perpetuating fossil fuel extraction. Rather it should be used as a tool for propelling the energy transition in a just manner by 1) ensuring the creation and provision of alternative job opportunities for affected communities; 2) providing access to retraining for new skills and posts; and 3) ensuring the necessary investment to support the local economies of these communities, and thus safeguard against a transition shock (Ibid., p.125).

Taken from a global perspective, a focus on justice also brings to the table the *supply-side responsibility* of fossil-fuel-producing countries in mitigating climate change. The question of how fossil fuel producing countries should handle their resources in light of the climate crisis and the ecological imperative to leave the majority of fossil fuels in the ground is of growing concern (e.g., Piggot et al., 2018; Verkuijl et al., 2018). Though supply-side responsibility, also known as “extraction-side” responsibility, reflects the same equity problems as its “emissions-side” or consumption-side counterpart, the ethics and policy ramifications of these two facets differ (Karthä et al., 2018, p.119). Assuming that countries are seriously attempting to follow through on their commitments to the Paris Agreement, and that the remaining global carbon budget, calculated by the IPCC for both the 1,5°C threshold and the 2°C limit, guide decisions about how much fossil fuels should be left in the ground, equity considerations provide a guide for examining which sources, and from which countries, could still be tapped based on two main principles: *historical responsibility* and the *principle of capabilities* (Ibid., pp.122-123).

Historical responsibility applied to extraction would take the form of an “extractor pays principle”, which entails that “those who have extracted fossil fuels have a greater responsibility to contribute to a transition away from extraction” (Ibid., p.122). The principle of capabilities, in turn, would entail that those with the most economic, physical and institutional capacity to weather a transition off fossil fuels as an economic source, should do so first and most quickly (Ibid., p.123). Applied to the case of Canada, one can easily see how, from this perspective, Canada has little merit in arguing for its own continued bitumen exploitation. Even from a less political and more market oriented perspective, which posits that the free market should determine which fossil fuel sources can still be extracted within the boundaries of the IPCC carbon budgets, Canada’s bitumen, as one of the most carbon-intensive and costly sources of fossil fuels, must be among the first reserves to remain in the ground. Indeed, from this standpoint, McGlade and Ekins (2015, p.190) point out that 85% of the bitumen sands need to remain in the ground to not overpass even the less stringent 2°C limit. Thus, from a global, birds eye view, Canada must leave its extractive history and practices in the past, starting with the shelving of fossil-fuel-extraction-supporting projects like TMX.

Conclusion

This research aimed to examine the Canadian government's discourse in support of bitumen extraction and TMX, and the implications of this discourse in sustaining the hegemony of fossil fuels amidst a climate crisis. A critical discourse analysis of the government's speeches on TMX over the past three years revealed in the main that the discourse does not question *whether* to extract and export bitumen. Rather the issue is framed in terms of *how* to do it, claiming that responsible and sustainable extraction methods are attainable, while simultaneously discursively foreclosing on the option of leaving the fuels in the ground. This discourse also serves to paradoxically and counterintuitively place bitumen extraction as the best way to protect the environment, including climate change. Overall the government uses a blend of discursive tools and disingenuous arguments to naturalize bitumen, thus extending its societal legitimacy, while discursively relegating environmental and social issues, including climate change, into secondary positions. Moreover, the speeches have made evident the presence of a discursive lock-in of bitumen, while this lock-in facilitates and bolsters institutional, infrastructural and behavioral lock-ins. Though this would in fact be a perfect moment for the Canadian government to show leadership in climate action, it is opting to assert that the very notion of leaving bitumen sands unexploited is inconceivable. This research contributes to the new research field of discursive lock-in, and more broadly speaking to research on the hegemony of fossil fuels in the era of global heating. To un-wedge the fossil economy and meaningfully address the climate crisis, national governments with vast fossil fuel reserves will need to adopt an unrelenting commitment to phasing out fossil fuels. As mentioned previously in the methodology, future research could look into the discourse's reception by different actors across society. Moreover, research should also delve deeper into the hegemonic grasp of fossil fuels in different national and socio-economic contexts.

From the perspective of resistance, Nyberg et al. (2018, p.247) found that fossil-fuel-opposing voices struggled to create scalar harmony within their discourse, weakening their argumentative position and losing their footing in trying to formulate a counter-hegemonic project. Moving forward, attention must be brought to the crafting of counter-hegemonic discourses, and in particular to how scales will contribute. Indeed, dominant discourses of climate change still depict the crisis as one which will occur in the future, despite effects of the crisis evidently already occurring (Ibid., p.248). Yet, just as discourse has long been a robust means of sustaining the hegemony of fossil fuels, it offers a powerful entry point for breaking their hegemonic stranglehold. Social movements, including 350.org, Extinction Rebellion and Fridays for Futures, and voices from Indigenous groups who have long sustainably stewarded their lands and environments and who are now on the frontlines of resistance to fossil fuel extraction projects, offer one of the strongest opportunities for averting the crisis by holding governments, and the international diplomatic effort to respond to climate change, accountable for their thus far insipid actions (Ciplet et al., 2015;

Monbiot, 2019). While the leader of OPEC has stated that social movements represent the “greatest threat” to the oil industry (Watts, 2019), fossil fuel companies maintain that a “strong societal license to operate” is a key strategy for their success (Shell’s chairman quoted in Monbiot, 2019). Our best chance at restraining the damage of the climate crisis lies in ripping up fossil fuel companies’ societal license to operate their business-as-usual and stand up to the governments that support them. The hegemony of fossil fuels must be broken and if our governments will not take it upon themselves to do it, then we are left with no choice then to pick up their slack. It begins with discourse.

Let us talk a better world into being – George Monbiot (2018)

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Appendices

Appendix A. Contextual information on analyzed documents

Document title	Document type	Source/ Speaker	Number of pages	Date published	Date accessed	Audience
Prime Minister Trudeau announces decisions on major energy projects in Canada	Political statement	Prime Minister of Canada, Justin Trudeau	3	November 29th, 2016	March 30th, 2019	Canadian public
PM speaking notes for the annual international gathering of energy industry leaders	Political statement	Prime Minister of Canada, Justin Trudeau	3	March 9th, 2017	March 30th, 2019	Energy leaders
Prime Minister Trudeau delivers remarks on the Trans Mountain Expansion pipeline project	Political statement	Prime Minister of Canada, Justin Trudeau	2	April 15th, 2018	March 30th, 2019	Canadian Public
Remarks on the Trans Mountain Expansion Project	Political statement	Member of Parliament and Minister of Finance, Bill Morneau	3	May 16th, 2018	March 30th, 2019	Canadian Public
Agreement Reached to Create and Protect Jobs, Build Trans Mountain Expansion Project	Political statement	Member of Parliament and Minister of Finance, Bill Morneau	3	May 29th, 2018	March 30th, 2019	Canadian Public
Minister Morneau Statement on the Trans Mountain Expansion	Political statement	Member of Parliament and Minister of Finance, Bill Morneau	2	August 30th, 2018	March 30th, 2019	Canadian Public
Canada re-approves controversial Trans Mountain pipeline expansion	Political statement	Prime Minister of Canada, Justin Trudeau	4	June 18th, 2019	June 18th, 2019	Canadian Public

Trudeau (2019) Canada re-approves controversial Trans Mountain pipeline expansion

<https://www.youtube.com/watch?v=BqG8hCkGUA>

Global News

In 2015 we were elected on a promise to Canadians. We made a commitment to make real change happen in this country and grow the middle class. We also committed to building a real plan to protect our environment and fight climate change. We do not see these goals as irreconcilable, we see them as complimentary. You can't have a real economic plan, a real jobs plan in the 21st century unless you have a real climate change plan. We want good middle-class jobs now and good middle-class jobs for our kids. To do that, we need to create wealth today, so we can invest in the future. We need to invest in Canadians so they can take advantage of the opportunities generated by a rapidly changing economy, here at home and around the world. The policies of the last century will not serve Canadian in this one. That is the approach we take in everything we do, including decisions we make about resource development. In 2016, we announced an approval for the Trans Mountain expansion project. The Trans Mountain pipeline has been in operation for more than 65 years. We approved the twinning of that pipeline, so running a single additional pipe along side the one that is already there. This project has the potential to create thousands of solid middle-class jobs for Canadians, people in B.C., Alberta and right across the country would have more opportunities to earn a good living.

C'est ce qu'on cherche à faire depuis le début de notre mandat. On appui les canadiens pendant qu'ils travaillent fort pour créer des emplois et pour bâtir nos communautés. Et notre plan fonctionne. Il a aidé les canadiens à créer plus d'un million d'emplois et nous a permis de sortir 825000 canadiens de la pauvreté. Créer des emplois, créer les conditions qui permettent aux gens d'améliorer leurs vies, c'est là-dessus qu'on travail chaque jour. Et notre démarche a bien sur un impact sur la façon dont on analyse les propositions de projets comme TMX.

Appendix C. Example of second layer of analysis along 4 themes on a quote from Trudeau's (2019) speech

How is TMX characterized?				
How are bitumen and its extraction and export characterized?				
How are environmental issues, including climate change, characterized?				
Which actors are discussed, and how?				
	Presence of ecological modernist tropes and adherence to environmental kuznets curve principles: economy/environment reconciliation, technology advancements for sustainability, clean growth	Presence of neoliberal and neoclassical economic tropes: investment, free market, corporate business, opportunities, innovation	Use of modalities or tone: truth, imperative/necessity	Type of appeal: crisis, threat, risk, security, nationalist, Canadian identity, extractivist, government's authority/the rule of law, energy security, job creation/security, temporal scale (past, present, future), geographical scale (local, national, global)
But in that same speech, I said that in order to get that job done, Canada needed to have its act together on the environment. Well, 6 years later I believe that just as strongly today as I did then. My friends, we are a government that cares deeply about the environment, and we care just as deeply about the economic success of Canadians. Contrary to what some politicians will tell you, that isn't an either-or proposition. It is in Canada's national interest to protect our environment and invest in tomorrow while making sure that people can feed their families today. By moving forward with the Trans Mountain expansion and investing the profits in our clean energy future we are doing exactly that. Environment AND economy, good middle-class jobs, this is how Canada will succeed now and into the future.	x only way to get a pipeline built the "right way" is to do so in an environmentally adequate way --> protecting environment becomes way to get pipelines built rather than question if appropriate to build pipelines at all given environmental consequences x EKC: "By moving forward with the Trans Mountain expansion and investing the profits in our clean energy future we are doing exactly that." --> money from TMX becomes way to tackle climate change through investment x EM: "that isn't an either or position" and " we are a government that cares deeply about the environment, and we care just as deeply about the economic success of Canadians."	x "By moving forward with the Trans Mountain expansion and investing the profits in our clean energy future we are doing exactly that."		x change of target of "national interest" from previous speeches --> before TMX directly connected to national interest, now, the supposed outcomes of TMX which are much more relatable on an individual level, i.e. "protect out environment and invest in tomorrow while making sure that people can feed their families today" is what is connected with "national interest", TMX becomes implicit, which in fact reinforces the point the point of its goodness/necessity because all bad things it could be connected with through directly mentioning it take a backstage position x past/present scale: "in that same speech, I said that in order to get that job done, Canada needed to have its act together on the environment. Well, 6 years later I believe that just as strongly today as I did then." x present/future scale: "It is in Canada's national interest to protect our environment and invest in tomorrow while making sure that people can feed their families today. By moving forward with the Trans Mountain expansion and investing the profits in our clean energy future we are doing exactly that."+ "this is how Canada will succeed now and into the future."