Persuasion Strategies: Canadian Campus Fossil Fuel Divestment Campaigns and the Development of Activists, 2012-20

by

Milan Prazak Ilnyckyj

A thesis submitted in conformity with the requirements for the degree of Doctor of Philosophy Graduate Department of Political Science University of Toronto

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Abstract

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Starting in July 2012, the climate change non-governmental organization 350.org proliferated the idea of fossil fuel divestment campaigns at universities. They provided a "campaign in a box" with a common demand for divestment from the 200 corporations with the largest fossil fuel reserves over five years and a standard set of tactics, then supported individual campaigns largely by shaping the overall media narrative. Campaigns were launched across Canada with the strategic objectives of persuading universities to divest, delegitimizing the fossil fuel industry in the eyes of the public and decision makers, and recruiting and developing a new cadre of climate change activists. Using the contentious politics theoretical framework, this dissertation provides an anatomy of the campus fossil fuel divestment (CFFD) movement, including the political opportunity structure in which it arose, the mobilizing structures campaigns used to organize labour and make decisions, and the activist repertoires they employed. My chief research question is how involvement in the CFFD movement influenced the political beliefs and behaviours of activists. Based on my interviews with organizers in Canadian campaigns, a review of the journalistic media and published scholarship on divestment, and social media monitoring of campaigns, I conclude that the main effect of the CFFD movement on activist beliefs was to differentially socialize them into climate justice (CJ) and CO₂-energy (CO₂-e) worldviews. These differ in their account of the root causes of climate change, and most notably in the political project which they call for in response. For CJ advocates, climate change is one manifestation of profound global injustices including colonialism and racism. Eliminating the problem of climate change thus requires eliminating those causes, and thus a radical global programme of political and economic reform. CO₂-e advocates question whether the issue linkages at the heart of the CJ strategy are analytically convincing and, more importantly, part of a sound strategy for avoiding the worst projected effects of unconstrained climate change. While the CJ worldview has helped overcome some of the emotional and motivational problems that block effective climate action, it only speaks to a limited subset of the population that embraces the progressive assumptions behind it. Producing a sufficient coalition to enact effective climate change policies and keep them in place requires support from non-progressive flanking coalitions who share an interest in climatic stability but do not embrace the rest of the CJ agenda.

For my parents, Alena Prazak and Oleh Ilnyckyj

Acknowledgements

Land recognition

The cultural norm in Toronto and Canada is increasingly to acknowledge the prior Indigenous presence in what is now called Canada. It feels most appropriate and respectful to begin with the University of Toronto's land recognition and then provide some personal context.

The Land Acknowledgement Statement reads:

I (we) wish to acknowledge this land on which the University of Toronto operates. For thousands of years it has been the traditional land of the Huron-Wendat, the Seneca, and most recently, the Mississaugas of the Credit River. Today, this meeting place is still the home to many Indigenous people from across Turtle Island and we are grateful to have the opportunity to work on this land.

The protocol for using the statement is:

Statement of Acknowledgement of Traditional Land to be used at specific university ceremonies such as Convocation, Groundbreakings, and Building Openings. This statement was developed in consultation with First Nations House and the Elders Circle, some scholars in the field, and senior University officials. The statement is applicable to all three campuses — UTM, UTSC, and St. George — as well as the Koffler Scientific Reserve at Jokers Hill, the Institute for Aerospace Studies (UTIAS), and is available to all members of the University community for use at University events as appropriate.

I performed the research for this dissertation primarily beginning with the approval of my research protocol in August 2017, though the project is based upon my research during the earlier years of my PhD during which I lived at Massey College. Massey College is on land that is part of the Treaty Lands and Territory of the Mississaugas of the Credit. During my time in Toronto I have lived between College and Ossington, Bloor West Village, the U of T campus, the Harbord and Bathurst neighbourhood, and North York near Glencairn. Those are the places I have lived during my coursework and employment as a teaching assistant, the preparation of the research project with a theoretical framework and ethics protocol, the interviewing and data collection, data analysis, literature review, and writing up. I am grateful to all the Indigenous peoples who have shared the land where I lived during this project as well as where I have lived before in Vancouver, Oxford, and Ottawa, and to all the Indigenous people who have been fearless and selfless in defence of the Earth.

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This program has been immensely personally difficult for me, and I would not have made it through without the support of my family, especially my mother, and my committee, especially Professor Vipond and Professor Carens. I would never have gotten through the most painful parts alone, so finishing the PhD is a testament to the support and kindness that I have received.

The dissertation is dedicated to my parents, who shaped my life in a way that made doing this research possible, and who supported me with unwavering kindness and generosity all thorough the long process of the PhD.

My stellar committee helped me develop the initial manuscript, based on my thoughts and what I had learned in my interviews, into a fully realized document which speaks to areas of scholarly interest as well as activist strategy. As my supervisor, Professor Robert Vipond quarterbacked the committee and the project with great competence and sagacity. I am grateful to Professor Andrea Olive and Professor Kate Neville for their valuable contributions to the early development of this project. Professor Joseph Carens rescued this project during one of its most unpromising stages, and also has my gratitude as an ever-candid source of good sense and guidance, beyond academia and into in the realm of human relations. Extensive meetings and discussions with Professor Vipond and Professor Carens substantially reshaped this text and helped make it disciplined in discussing side issues and well structured for the reader. Professor Steven Bernstein I first remember from my assigned reading during my M.Phil in Oxford, and at the University of Toronto has been ever-generous in his guidance and assistance. My thanks as well to my internal and external examiners, Professor Matthew Hoffmann and Professor Robert O'Brien.

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Preface on positionality

Nobody's political ideas arise from nothing or from pure thought alone, and there is a noteworthy trend in scholarship — especially on social justice — to include a statement on the author's positionality based on their biography and experiences. Explaining my background will help the reader understand how I came to this topic and these conclusions.

I will provide that background here in part to emphasize that my aim is not to write a polemic, but rather an empirically-grounded description of what occurred accompanied by a statement of my normative position which is justified in detail through argument and references to sources. The hope is that even for those who disagree with me this critique will provide a mechanism for refining their own thinking. Nobody knows how to solve this problem, and we cannot run multiple trials to find out. As part of the process of combatting climate change as an unprecedented and existential problem, we must all be willing to evaluate our beliefs on the basis of empirical facts and logical arguments. Without question, my personal views affect my analysis and arguments, but the hope with a piece of scholarly writing is that the support for those arguments is also included, allowing for a sophisticated and nuanced response. Even where I am wrong, by writing in this scholarly format I hope it will be possible to isolate and engage with the steps and support in my argument, allowing us collectively to work iteratively toward an account that is more nearly correct, using the processes of intellectual deliberation and political strategizing.

My intent is that the chapters on political opportunity, mobilizing structures, and repertoires are factual and empirical rather than explicitly normative. These chapters make use of my interviews and other data sources to engage analytically with the questions of where the campus fossil fuel divestment (CFFD) movement arose from, how it organized itself, and what it actually did. While these chapters doubtless have some of my biases and conclusions embedded, I have tried to provide an empirical account based on facts, not unduly shaped by my own commitments, and supported by other sources. The high degree of overlap between my account and the empirical claims in other scholarly analyses — most important from Joe Curnow (2017) and her collaborators, Emilia Belliveau (2018), and Shadiya Aidid (2022) — provides some confidence that this effort to keep an empirical grounding has been successful, in part because these authors broadly do not share my normative conclusions. I will explicitly defend my normative position in the chapter on the merits and limitations of the climate justice (CJ) framing. Without question, I have a commitment that shapes my normative stance, but I believe that it is grounded in pragmatism and the need for a solution that addresses the problem of climate change. The critical problem with the CJ view is not that it lacks internal logic and coherence, but rather that it has not yet won sufficient popular support to be implemented in policy and, in my view, lacks a compelling pathway toward doing so.

I have been involved in environmental organizations since I attended a conference in Vancouver in 1995 organized by Leadership Initiative for Earth (LIFE) and two of their subsequent LIFEboat Flotilla marine

 $^{^{1}\}mathrm{See}$: Positionality in the CFFD literature p. 13

youth conferences. By the time I started at UBC in 2001, I knew I wanted to focus my academic work on environmental politics. I did work on fisheries and persistent organic pollutants (POPs) and then, during my MPhil at Oxford, I wrote my thesis on the role of science in global environmental policy making, and specifically in the areas of POPs and climate change. During my research into climate change science and policy, I began fully coming to terms with the magnitude of the threat and challenge facing us and the primacy of climate change mitigation among political and environmental projects. I had become convinced by that point that my work on climate change would be lifelong and it was with that aim in mind that I accepted a job at Environment Canada before leaving the UK.

As a civil servant I had sat in an office reading scientific reports while the bitumen sands and the oil and gas industry grew and grew. My colleagues were well-intentioned and had sensible and plausible strategies for having an influence by being involved in implementation in the long term, rather than an outside voice. I couldn't bear working in an environment where I felt like we were the shop with the name of the crisis on our door, and that most of what we were doing was waiting while dirty Canadian industries convinced politicians to adopt lacklustre and inadequate mitigation targets and diplomats over-worked themselves to invent fictitious forms of emission reduction: anything but actually getting aggressively and immediately off of fossil fuels by ending investment in new infrastructure. Quickly, and with increasing depth of feeling and concern over my time in government, I found that the role of civil servants under the politicians Canadians have elected to power has largely been the protection of *status quo* actors including the fossil fuel industry. Eventually I became convinced that I was temperamentally incapable of thriving or even enduring in a context where it was my job to implement policies that would lead the world toward disaster, and I therefore became convinced of the need to leave the public service.

The importance of chance and contingency in human affairs is often underestimated. I left the federal government in 2012 because they would not allow me to take part in the public debate about climate change policy. I chose to do a PhD in significant part because it would provide a platform where I would be able to advocate for effective policies to control the seriousness of climate change. In the summer of 2011, between leaving Ottawa and starting at the University of Toronto, I heeded a mass email invitation from Bill McKibben to come to Washington D.C. to protest the Keystone XL pipeline. For 15 days in August and September, I spent each morning photographing the day's group of protestors being arrested outside the White House and then being released from Anacostia jail; each evening, I photographed the training and non-violent direct action practice simulations for the people to be arrested the next day. When I was living in Toronto in June 2012, 350.org sent an email to their Toronto-based supporters explaining that a 350.org staffer was traveling with the band Radiohead and that 350.org was seeking volunteers at each performance to canvas and sign up new supporters. Before the park opened to the general crowd, the staffer and 350.org volunteers were sitting about 10 metres from the stage when the scaffolding above it began to shift and collapse, killing drum technician Scott Johnson right in front of us. The concert was cancelled, but that group of volunteers became the seed of Toronto350.org when we began meeting weekly on Tuesdays. To begin with, the group pursued a broad and entrepreneurial agenda, happy to provide assistance to the initiatives of members which supported our aim of building a movement to confront the climate crisis. I served as group president from when the group first began electing an executive until I needed to step back to focus on my comprehensive exam in Canadian politics in 2013.

In July 2012, McKibben published the *Rolling Stone* article which kicked off the fossil fuel divestment movement. As a first year PhD student at U of T dedicated to working on climate change, it made sense to commit a substantial amount of my effort to the undertaking. Along with a growing group of fellow students,

I worked to advance the U of T campaign by serving as the primary author of the divestment brief which we presented to the administration. I attended nearly every planning meeting, worked on outreach to the administration and faculty association, and wrote the speech for when the brief was formally presented. I photographed marches and protests and took part in hurried strategy sessions online and in U of T classrooms when significant developments took place. Inspired by my experience with the Keystone protests, my plan for my dissertation research was to study the pipeline resistance movement, and specifically the cross-border Keystone XL pipeline in comparison to proposed Canadian projects. Along with the focus on infrastructure resistance which my experiences in Washington cultivated, studying pipelines while working as an activist on divestment provided a measure of helpful compartmentalization between obligations and commitments to different organizations and purposes. Studying pipeline resistance remained the plan until the election of Donald Trump in 2017. At that point, I decided with my supervisor at the time that it would be infeasible to provide robust participant protection for Canadian and US activists opposing fossil fuel infrastructure while traveling across a border where devices could be seized or other means of surveillance could be brought to bear. Given the extent of my involvement in divestment by that time, I was urged to take divestment on as a new topic. The Toronto350.org divestment campaign at the University of Toronto had also ended in 2016 after President Meric Gertler's rejection of the demand to divest.

For the first five years of my PhD, it was not my intention to write my dissertation on fossil fuel divestment. While the contents of this text certainly reflect debates that transpired within the U of T campaign, I did not write the dissertation to correspond to the views I held during or at the end of the campaign. Indeed, the exact research question and line or argumentation shifted and evolved substantially through the process of working with my second and final supervisor. My earlier drafts provided more of a survey on the history of the movement, with engagement on specific points; the specific style of argument used and conclusions defended in the final document developed through that process of iterated critique and commentary from committee members and should not be considered preordained. By myself, I would have written a substantially different document.

My experience in the first U of T CFFD campaign made me want to comprehensively examine how it compared to other Canadian university campaigns. It also directed my interest toward the contentious politics literature, since a vital dimension of the climate change activist movement is internal contention about what ought to be done, at the same time as the movement is contentiously engaged in trying to change public policy and attitudes.

A note to the audiences of this text

Despite efforts to be as clear as possible and to repeat the point, I have found myself frequently misunderstood as a personal champion of the CO₂-energy (CO₂-e) framing and a critic of the CJ framing, with the implication drawn that I want CJ advocates to adopt a CO₂-e perspective.² In fact, I don't see encouraging such a progression (or reversion) as plausible or useful, given the deep commitments of CJ activists and the appealing and motivational features of the worldview which I discuss.³ What I cannot help drawing attention to is how politicians and political parties who hold power, and the general public who elects them, have not embraced intersectional analysis or an integrated progressive response to climate change. Where such proposals exist, they are at the progressive edge of what left-leaning parties support and have mostly not translated into policy. Where they have become policy, it is precarious because of the narrowness of its societal support: suggesting the ongoing risk of reversal when a change of government occurs and thus the

 $^{^2\}mathrm{See}\textsc{:}$ Interpreting contention between the CJ and $\mathrm{CO}_2\textsc{-}\mathrm{e}$ framings p. 177

³See: The appeal of the CJ framing for activists p. 187

inability of such policies to remain in place for long enough to avert catastrophic climate change. To CJ activists, my message is that a broader societal base of support is needed for effective climate policies. I call on them to heed Hayhoe's words quoted at the opening of chapter 5 about how convincing people of the need to act on climate change because of the values which they already hold is far more plausible than getting them to support such action for the reasons progressive CJ advocates do. My second point to CJ activists is that they have insufficiently explained why only a revolutionary structural change can mitigate climate change and, more importantly, exactly how the political and economic changes which they endorse will actually control climate change. It cannot simply be an expected result of overthrowing capitalism, justified only by the ways in which capitalism has encouraged fossil fuel use. Also, CJ advocates need to dedicate more effort specifically to deploying physical climate change solutions in the form of non-fossil energy. A progressive climate movement which rejects all of our imperfect non-fossil options because of their trade-offs and drawbacks will serve in effect to perpetuate the fossil fuel status quo.

 ${
m CO_2}$ -e advocates also do not have a ready-made and fully articulated solution to climate change. The oft-repeated points about how people aren't much motivated by scientific and statistical arguments are important for crafting an effective political solution to climate change. Whereas CJ advocates confront a gap between what their agenda calls for and what controlling climate change requires in terms of physical infrastructure replacement, ${
m CO_2}$ -e advocates face a gap between expressing the course of action which they portray as logical and desirable in human terms and achieving the intermediate political steps needed to turn that into an implemented agenda.

A quotation from a YouTube video about making collaborative art helps illustrate the nuance of my position:

When smart people disagree that's a gift, because when two smart people are talking about something and they don't agree that means they're both wrong. It means that the third thing that neither one of them has thought of yet has yet to be revealed, and this is the process by which it is revealed.⁴

At several points in the dissertation, I draw attention to how our political systems, political philosophies, and theories of ethics are all working to incorporate new scientific information about the Earth and the physical and biological systems that sustain us.⁵ Among the most notable features of this effort is its incompleteness, and the CJ / $\rm CO_2$ -e divide is an important example of an intellectual debate that engages with the insufficiency of our ideas and actions so far.

I know that this dissertation will be read by some in the climate activist community as a rejection of the core ideas and hopes which motivate them. What I would encourage and invite readers to do, however, is to see this dissertation as an effort to provide clear and cited justifications in support of my arguments, not in the hope that it will instantly convert anybody's way of thinking, but in the hope of encouraging them to evaluate the sources of support for their own positions and the ways in which they may be refined to help drive climate change solutions. In addition to being about the persuasion strategies activists use with their targets and among themselves, this dissertation is a persuasion strategy aimed at a cooperative undertaking with the reader. My work in refining the manuscript with Professor Vipond and Professor Carens has been immensely valuable in forcing me to focus on a specific intellectual argument and the supporting evidence which is necessary to make it credible, as opposed to my more undisciplined personal drafts which often found the interest of the subject matter reason enough for long asides and discussions of adjacent issues

⁴Alissa Mortenson. *Making Collaborative Art That Doesn't Suck.* 2011. URL: https://www.youtube.com/watch?v=9yRx-cW0gfA (visited on 07/11/2020).

⁵See: The long-term view: reconciling our political theories and philosophies with environmental science p. 40

and ideas. Just as my discussions with committee members immeasurably improved this dissertation as a coherent and readable text for a broad audience, I hope post-publication discussions with and within the activist community in response to this dissertation will play a part in us collectively making sense of what the CFFD movement achieved and how that relates to the top-level objective of sustaining stable and habitable conditions on Earth.

My involvement in the climate change activist movement has left me with the hope that success is possible, even though it cannot arise from the policy approaches which we have tried so far. Providing that hope, popularizing the concepts of a global carbon budget and bubble, and providing a template for the autonomous self-formation and governance of student activist groups have been world-changing achievements for the climate movement. For that hope to be realized, maintaining the Earth's stability must spread to being a broad aspiration in a population willing to accept the trade-offs of non-fossil energy. Bringing about that broadening — and confronting and undermining the implicit and explicit climate change denial in our politics — will be the next stage in our fight for a living planet.

Chapter 1

Research question and issue context

In 2011–12 organized student groups at a number of Canadian universities began to demand that universities divest from fossil fuel companies. Many of these groups shared such a common agenda that this development acquired a name: the campus fossil fuel divestment movement or CFFD for short. This thesis explores a number of questions about the CFFD movement. It asks why the movement emerged when it did and why it took the particular form that it did. In particular, the thesis explores questions about unity and division within the CFFD movement. In what ways was the movement unified and why? In what ways was it divided and why? How did those patterns of unity and division within the movement matter, and how should we evaluate the different perspectives within the CFFD that generated unity and division?^{1,2}

Questions about unity and division among activists concerned about climate change are not new. In Copenhagen, Denmark in 2009 the state parties to the United Nations Framework Convention on Climate Change (UNFCCC) met officially for the 15th time to discuss how to live up to their 1992 promise to prevent "dangerous anthropogenic interference with Earth's climate system." Delegates from states with divergent interests — which ranged from major fossil fuel producers to states with widespread extreme poverty to small island states threatened existentially by the rising seas — were accompanied by a vibrant civil society and activist presence.

In Networks in Contention, Jennifer Hadden studied the activist cleavages in Copenhagen.⁶ She consid-

¹The CFFD movement and its focus on private actors can be seen as an attempt to get around the structural barriers to climate change action, which include individual psychology, institutions ill-adapted to address long-term problems, and the huge investment in fossil fuel capital stock. These barriers are relevant in the university context as well, including the influence of status quo economic elites, and activist perceptions on their nature and potential to overcome them influenced CFFD strategy. For a detailed summary, see: Milan Ilnyckyj. Structural Barriers to Avoiding Catastrophic Climate Change. 2022. URL: https://www.academia.edu/75456821/Structural_Barriers_to_Avoiding_Catastrophic_Climate_Change (visited on 07/21/2022).

²Stephen Gardiner set out eight propositions on climate ethics which are also revealing about the barriers to action. He described how "our position is not that of idealized neutral observers, but rather judges in our own case, with no one to properly hold us accountable. This makes it all too easy to slip into weak and self-serving ways of thinking, supported by a convenient apathy or ideological fervor." He also warned that we are susceptible to self-serving "shadow solutions" "that do not respond to the real problem." Stephen M. Gardiner. A Perfect Moral Storm: the Ethical Tragedy of Climate Change. Oxford: Oxford University Press, 2011, p. xii–xiii.

³State Parties to the United Nations Framework Convention on Climate Change (UNFCCC) (1992). *United Nations Framework Convention on Climate Change*. 1992. URL: https://treaties.un.org/doc/Treaties/1994/03/19940321%2004-56%20AM/Ch_XXVII_07p.pdf (visited on 07/10/2022).

⁴Specifically, at COP13 in Bali in 2007 the delegates agreed to an action plan wherein the Copenhagen COP was meant to produce a successor to the 1997 Kyoto Protocol. Jennifer Hadden. *Networks in Contention: The Divisive Politics of Climate Change.* New York: Cambridge University Press, 2015, p. 29.

⁵State Parties to the United Nations Framework Convention on Climate Change (UNFCCC) (1992). Bali Action Plan. URL: https://unfccc.int/files/meetings/cop_13/application/pdf/cp_bali_action.pdf (visited on 07/21/2022).

⁶Hadden described how in prior UNFCCC COPs "civil society participation... had been managed by mild-mannered scientif-

ered how civil society organizations mobilized on climate change, how they chose their strategies, and what consequences followed. Hadden identified an important cleavage in the climate activist movement which related to each organization's position in an activist network. That cleavage was between a "traditional scientific approach" and "an issue framing that focuses on equity and justice issues." The climate justice approach differed in three areas: supporters placed priority on issues of justice over developing an environmentally sound climate treaty, were willing to reject a deal they saw as unjust, and were willing to proceed more slowly politically than urged by those focused on scientific urgency. 8,9,10

One of Hadden's goals was to explain why this cleavage had emerged within the climate change activist movement. Hadden argued that political process and organizational theories are important, but that they overlook the importance of relations within a network where social ties "allocate resources, information, and meaning differentially across populations of actors" while "patterns of interorganizational relations influence organizational strategic decisions." The choices that activist organizations make among the contentious tactics available to them are influenced by their peers through information sharing, resource pooling, and social influence, including changes in underlying identity. Hadden's argument was that the increased salience of climate change and changes in the political opportunity structure enlarged the network mobilized around climate change and complicated its membership, which led to a divided network with two main competing coalitions defined around conventional scientifically-based advocacy and climate justice. In the Copenhagen case, the two sides "rarely communicated or coordinated collective action." In the end, there was a "new cleavage in international politics" which added turbulence to the negotiations. ¹⁴

It is perhaps not surprising, at least in retrospect, that the organizations and activists whom Hadden examined were inclined toward contention with one another. Multilateral institutions must contend with complex challenges and patterns of interests, including conflicts between the global North and South, disagreements over who bears responsibility for climate change and what obligations that implies, and who might be owed compensation for climate damage or for forbearing to use fossil fuels in order to protect the climate.

One might have expected that a smaller and more homogeneous group of activists would be less divided than those studied by Hadden. The CFFD movement was composed only of campus organizations made up of activists who were university students in Canada. Moreover, the student organizations in the movement were largely fostered and shaped by one organization (350.org), which provided activists with a specific target (fossil fuel divestment) and with a specific organizing strategy (the "campaign in a box").

Nevertheless, the CFFD movement has been a site of internal contention for as long as it has existed. Specifically, there has been a philosophical, normative, and strategic division between two groups. Intersec-

ically sophisticated nongovernmental organizations" but at Copenhagen more radical groups which were "well versed in the politics of the global justice movement" brought in a confrontational style of direct action from the antiglobalization movement. Later, she noted that the effort to reframe climate change in broader justice terms led some activists to adopt a "risky outsider protest strategy inherited from the global justice movement." Hadden, Networks in Contention: The Divisive Politics of Climate Change, p. 2-3, 14.

⁷Hadden, Networks in Contention: The Divisive Politics of Climate Change, p. 154.

⁸Hadden, Networks in Contention: The Divisive Politics of Climate Change, p. 156.

⁹Even during the Kyoto Protocol negotiations, divides emerged in the activist network over "carbon markets, coalition governance, north–south equity, and the use of disruptive tactics." Hadden, *Networks in Contention: The Divisive Politics of Climate Change*, p. 26.

¹⁰Chad Carpenter. "Businesses, Green Groups and the Media: The Role of Non-governmental Organizations in the Climate Change Debate". In: *International Affairs* 77.2 (2001), pp. 313–328. URL: https://www.jstor.org/stable/3025543 (visited on 07/21/2022), p. 321.

¹¹Hadden, Networks in Contention: The Divisive Politics of Climate Change, p. 6, 8.

¹²Hadden, Networks in Contention: The Divisive Politics of Climate Change, p. 8–9.

¹³Hadden, Networks in Contention: The Divisive Politics of Climate Change, p. 10.

¹⁴Hadden, Networks in Contention: The Divisive Politics of Climate Change, p. 11.

tional climate justice (CJ) activists emphasized the linkages between climate change and other justice issues in both diagnosing the causes of climate change and in crafting their political strategy to control it, insisting that only revolutionary political and economic changes like the overthrow of capitalism will let humanity preserve a stable climate. This analysis and prescription is challenged by CO₂-energy (CO₂-e) activists who see climate change as fundamentally about fossil fuel energy, with a solution that lies in replacing coal, oil, and gas. So, in many ways the division within the CFFD movement mirrors the divisions among the global activists whom Hadden studied, despite the greater homogeneity one might have expected from the similarities among the activists and the coordinating role of 350.org.

One way to understand this basic division within the CFFD movement (as well as the wider global movement) is to think of the CJ and CO₂-e approaches as two different ways of framing the problem of climate change. Within the contentious politics theoretical framework, "framing" refers to broad efforts at making sense of the world and how to achieve change. Doug McAdam defined framing as "conscious strategic efforts by groups of people to fashion shared understandings of the world and of themselves that legitimate and motivate collective action" and Quintan Wiktorowicz defined it by saying: "Frames represent interpretive schemata that offer a language and cognitive tools for making sense of experiences and events in the 'world out there.'" This dissertation focuses on how activists within the CFFD framed climate change and its solutions and how differences in the frames affected the development of the movement overall.

Those who have studied the CFFD movement all agree that the climate justice perspective is the dominant frame of the movement today, but not all agree on when, how and why this happened or on whether or not this development is a good thing overall for the effort to address climate change. The existing literature on the CFFD gives rise to three basic narratives. First, there is Joe Curnow and Allyson Gross' narrative of a grassroots rebellion arising from campaign organizers and situated particularly at divestment conferences called 'convergences,' in which the overly narrow numerical framing of 350.org's campaign in a box was supplanted over time by an embrace of climate justice. Second, there is the narrative that 350.org cofounder Bill McKibben sent me by email in April 2022, which presented the change as a non-conflictual progression from weaker earlier ideas to strong later ones, part of a 'big tent' movement in which a variety of ideas were welcome. Third, there is the narrative which I think is most defensible: that throughout the CFFD movement there has been a persistent tension between the CO₂-e and CJ framings which is still not resolved at the time of writing.

Curnow's dissertation and her chapter with Gross present the move toward the climate justice framing as a productive, positive, and largely complete re-framing initiated by individual campaign organizers and by divestment proliferators other than 350.org, specifically the Divestment Student Network (DSN) where Gross was an organizer and the Canadian Youth Climate Coalition (CYCC). As described by Curnow and Gross, the climate justice framing "intentionally integrates an analysis of race, colonialism, and capitalism... and centers the experience of frontline communities" and has value precisely because of how it socializes divestment organizers into this worldview "shap[ing] a generation of activists to be more attentive to the racialized, classed, and gendered impacts of climate change." They emphasized how the prospects for such socialization arose in part from the inexperience of CFFD organizers, some of whom found "the language

¹⁵Doug McAdam. Political Process and the Development of Black Insurgency, 1930-1970. Chicago: University of Chicago Press, 1982, p. xxi.

¹⁶Quintan Wiktorowicz, ed. Islamic Activism: A Social Movement Theory Approach. Bloomington: Indiana University Press, 2003, p. 15.

¹⁷Quintan Wiktorowicz. "Islamic Activism and Social Movement Theory: A New Direction for Research". In: *Mediterranean Politics* 7.3 (2002), pp. 187–211. URL: https://www.tandfonline.com/doi/pdf/10.1080/13629390207030012 (visited on 06/26/2022), p. 202.

of colonialism" to be "completely new material for them," while settler students in general were "under-equipped" to "take on anticolonial and decolonizing work." ¹⁸

Curnow and Gross present the non-adoption of the climate justice frame by some CFFD organizers as a matter of not *understanding* "a political analysis that ties climate change to race and colonialism explicitly." As such, they present the move to climate justice as something all CFFD organizers can and should undertake, rather than recognizing that the progressive analysis underpinning the climate justice view remains substantively opposed by CO₂-e advocates who see and prefer a path to controlling climate change without such root and branch reorganization of global political and economic systems.

When I asked McKibben about where the shift in emphasis toward climate justice came from, he responded by email:

People just figured out lots more good arguments as time went on, and everyone figured out what worked in different circumstances. Different arguments might sway, say, Catholic universities and Norwegian pension funds and French insurance companies and Australian Christians. I don't remember any internal contention, then or now—many of the people who were working on it back then are still at work on it. Others have done remarkable things, like working out a Green New Deal.

movements are great—they learn as they go along.

What most distinguishes this account is the idea that the re-framing arose non-conflictually, through a collective process of evolution in thinking.

Without questioning the sincerity of the thoughts expressed, some consideration of context helps explain McKibben's interpretation. Curnow and Gross explicitly discuss the move toward climate justice as refocusing the movement away from McKibben personally as the DSN sought to "elevate frontline voices over the traditional leaders of the environmental movement." As the person most closely associated with divestment by the public and the media, McKibben needs to navigate the politics of the movement and how it relates to his personal legacy. He also likely wants to sustain the public perception that the movement is coherent and united. Thirdly, as suggested by Lee Ann Fujii, movement advocates are often hesitant to directly discuss conflict and likely to deny or downplay the presence of contention when asked directly about this. A researcher may nevertheless find revealing evidence of contention through the details of their accounts of how the movement progressed.

The narrative about the CFFD movement which I present and substantiate is that of two competing and contradictory worldviews 'warring in the bosom' of a single movement. While the CFFD movement has socialized most participants toward a climate justice framing, people who question the analysis and prescriptions of that view have been present throughout the movement and the contention between the two camps is evident at each stage of my analysis: in the ways they responded to the political opportunity structure in which divestment emerged, in how they organized and made decisions within campaigns, in

¹⁸ Joe Curnow and Allyson Gross. "Injustice Is Not an Investment: Student Activism, Climate Justice, and the Fossil Fuel Divestment Campaign". In: Contemporary Youth Activism: Advancing Social Justice in the United States. Ed. by Jerusha Conner and Sonia M. Rosen. Westport, Connecticut: Praeger, 2016. URL: https://web.archive.org/web/20200112025151/http://joecurnow.com/Curnow%20&%20Gross%202017.pdf (visited on 02/26/2017), p. 378.

¹⁹Curnow and Gross, "Injustice Is Not an Investment: Student Activism, Climate Justice, and the Fossil Fuel Divestment Campaign", p. 379.

²⁰Curnow and Gross, "Injustice Is Not an Investment: Student Activism, Climate Justice, and the Fossil Fuel Divestment Campaign", p. 376.

²¹See: Lee Ann Fujii. "Five Stories of Accidental Ethnography: Turning Unplanned Moments in the Field Into Data". In: *Qualitative Research* 15.4 (2015), pp. 525-539. URL: https://journals.sagepub.com/doi/abs/10.1177/1468794114548945? journalCode=qrja (visited on 01/11/2020).

the activist repertoires they favoured, and in the developed and articulated framings which they ultimately espoused.

1.0.1 The CFFD movement's three strategic objectives

Part of the challenge in interpreting the CFFD movement arises from how it has sought to advance three strategic objectives, each of which can be in tension with the others: persuading institutional investors to act by selling their fossil fuel holdings, delegitimizing the fossil fuel industry in the eyes of the public and decision makers, and recruiting and developing activists.²² CFFD campaigns had to manage trade-offs between messaging strategies and tactics that did the most to raise the odds of divestment at their institution with those that did the most to delegitimize the industry and fire up activists. These disagreements reflected the different analytical and normative commitments of movement organizers, with CO₂-e advocates more willing to tailor their messages to what university administrators would find convincing while CJ advocates put greater priority on movement building and stigmatizing the fossil fuel industry. The way in which CJ and CO₂-e activists prioritized different audiences is discussed in more detail in the chapter on repertoires. Movement-building through the recruitment of activists has always been an objective of 350.org. By 2011, their email footers included the mission statement: "350.org is building a global grassroots movement to solve the climate crisis." The 'campaign in a box' model for the divestment movement, discussed in detail in the mobilizing structures chapter, implicitly required that campaigns at universities would rely on volunteers that needed to be recruited, trained, and retained. In addition, volunteer recruitment and retention gained priority in the CFFD movement through learning by doing as campaign setbacks and rejections made it necessary to keep bringing in new people while keeping existing volunteers motivated. At every Canadian university except Laval so far, winning a divestment commitment has required multiple rounds of campaigning, and thus the activities required to sustain the effort have had their importance demonstrated.

1.1 How the research questions were explored

I have used categories and ideas drawn from the literature on contentious politics to frame my answers to the questions that I identified in my opening paragraph and to link these answers together in my overall analysis. These metaphors are theatrical, with activists in the role of performers working to persuade or influence an audience.²³ Chapter two uses the concept of political opportunities to consider why the CFFD movement emerged when it did and in the way it did.^{24,25,26,27,28} Chapter three uses the concept of mobilizing structures to explore the ways student campaigns organized themselves, the reasons behind those

²²Among other places, this three-part breakdown can be seen in the UBC campaign's post-success debriefing: Climate Justice UBC. *The UBC Divestment Story*. 2021. URL: https://docs.google.com/presentation/d/11R3WAxylIjYFuIaPOX-CRCXnU__P3frVHW8FtDUEGcY/edit (visited on 11/20/2022), p. 24, 74.

²³As Merelman explained: "all drama is concerned with the conveyance of impressions to a group of auditors. Such impressions are meant to be accepted as truthful and credible." Richard M. Merelman. "The Dramaturgy of Politics". In: *The Sociological Quarterly* 10.2 (1969), pp. 216–241. URL: https://www.jstor.org/stable/4104746, p. 217.

²⁴Tarrow described the relationship between the political opportunity structure and contentious politics. Sidney G. Tarrow. *Power in Movement: Social Movements and Contentious Politics, 3rd ed.* Cambridge: Cambridge University Press, 2011.

²⁵Hadden discussed political opportunities in the context of climate activism. Hadden, *Networks in Contention: The Divisive Politics of Climate Change*, p. 5.

²⁶Wiktorowicz also described the importance of opportunities and constraints on social movements. Wiktorowicz, *Islamic Activism: A Social Movement Theory Approach*, p. 13–4.

²⁷Tilly and McAdam also discussed the concept. Charles Tilly. *Contentious Performances*. Cambridge: Cambridge University Press, 2008, p. 5.

²⁸Doug McAdam, Sidney Tarrow, and Charles Tilly. *Dynamics of Contention*. Cambridge: Cambridge University Press, 2001, p. 14–5.

organizational choices, and the consequences of those choices. ²⁹ Chapter four uses the concept of repertoires to explore the question of what tactics and strategies campaigns used to interact with others outside the movement and how those choices reflected the shared understandings and commitments of activists as well as the divisions between them. ^{30,31} The concluding normative chapter asks what the likely consequences have been from the dominance of the CJ framing, what the $\rm CO_2$ -e framing has accomplished, and how the CJ approach needs to be supplemented in order to address climate change. ^{32,33} Using categories that grew from the social movement literature provided a way to structure the central questions of this dissertation, and also set up the answers to speak back to that literature.

Each chapter contributes an original argument, and they collectively build to the main argument of the dissertation. The political opportunities chapter describes three major factors that empowered the movement: the increased salience of climate change together with the structural barriers to conventional ways of bringing about public policy changes, the role of proliferators like 350.org, and the attractiveness of universities as targets for this sort of activism. The mobilizing structures chapter details how the form of organizing and desire for unity in the CFFD movement served to conceal the enduring presence of $CJ-CO_2$ -e contention. The repertoires chapter demonstrates how CJ and CO_2 -e activists prioritized different audiences for their contentious performances, and thus differed in their preferred messaging. The concluding chapter provides the central normative position of the dissertation: that a climate activist movement that appeals mostly to progressives won't be able to implement and sustain effective mitigation policies without the support of flanking political coalitions that share a commitment to climate stabilization but not the other political analysis and preferences of the intersectional progressive CJ movement.

1.1.1 Research empirics

With no central organization tracking or coordinating CFFD campaigns, it was necessary to identify campaigns based on their online and media presence, then identify and contact campaign organizers.

1.1.2 Identifying campaigns

The initial process to identify Canadian CFFD campaigns and organizers who could potentially be interview participants consisted of a survey of all Canadian universities listed in Statistics Canada's Revised Tuition and Living Accommodation Costs (TLAC) survey, which included 110 post-secondary educational institutions.³⁴ I identified whether campaigns existed through a number of means. To begin with, Fossil Free

²⁹Wiktorowicz described the importance of mobilizing structures in social movement theory, and particularly the emphasis on them prior to a scholarly reorientation toward ideational factors. Wiktorowicz, *Islamic Activism: A Social Movement Theory Approach*, p. 15.

³⁰Many scholars have examined activist repertoires as a way to understand social movements. For example, Soule did so in the context of "shantytown" protests against South African apartheid. Sarah A Soule. "The Diffusion of an Unsuccessful Innovation". In: *The Annals of the American Academy of Political and Social Science* 566.1 (1999), pp. 120–131. URL: https://journals.sagepub.com/doi/abs/10.1177/000271629956600110?journalCode=anna (visited on 01/04/2019), p. 124–5, 127–8.

³¹On the broader analogy between activist behaviours and theatrical repertoires, see: Merelman, "The Dramaturgy of Politics".

³²Wiktorowicz and McAdam, among others, emphasize the importance of framing in activist campaigns and contentious politics. Wiktorowicz, *Islamic Activism: A Social Movement Theory Approach*.

³³Doug McAdam. Political Process and the Development of Black Insurgency, 1930-1970: Second Edition. Chicago: University of Chicago Press, 1999.

³⁴The only campaign which I identified which isn't at a post-secondary institution included in the TLAC list was at the Mohawk College of Applied Arts and Technology in Ontario. Their Facebook page was created in April 2013 and was last updated in October 2014. The campaign did interact to some degree with others. In May 2013, two organizers from the Mohawk campaign took part in a divestment training event in Montreal. Divest Mohawk. Two Representatives from Mohawk

Canada (a project of 350.org) provided a simple online tool which would allow someone at any university to initiate an online petition.³⁵ Often these petitions have fewer than 100 signatures and I was unable to locate other information about the campaign. The website was used almost universally by campaigns which could be identified through other means, yet there are campaigns in Canada whose existence was only identifiable because such a petition had been established. In these cases, I tried to find contact information and contact the petition initiator but was unable to do so or to find any other reference to the campaign. As such, having such a petition is a reasonable minimum standard for the existence of a campaign, even if it generated no media attention and seems to no longer be active. ^{36,37,38,39,40,41} As of June 2019, I was able to identify 40 campaigns which at least met that standard. ^{42,43} Identifying participants in CFFD campaigns is challenging due to the lack of centralized and accessible records. In most cases, activist publications and news reports have provided a starting point for identifying campaign members who I contacted in turn to identify fellow volunteers. ⁴⁴

I also obtained information about campaigns by searching Facebook and Twitter for "divest", "fossil free", "sans fossiles", "désinvestir", and "désinvestissement" along with the names of all the TLAC schools; by similarly searching the Factiva and Canadian Newsstream Complete news databases; and by tracking all public references online to "campus" and "university" along with "fossil fuel divestment" via Google

Were Among the Amazing Divestment Trainers This Weekend in Montreal. 2013. URL: https://www.facebook.com/DivestMohawk/posts/426029640827445 (visited on 08/06/2019).

³⁵In a 2018 Facebook post, 350.org staffer Katie Perfitt noted: "350 is re-launching the 'Fossil Free' identity, which will include a revamped website which will host a Canada regional site that will have links to resources for campus divestment and contact information for further support (the Canadian Federation of Students will be stepping in more intentionally to offer campaigning resources)."

³⁶The Sheridan College Institute of Technology and Advanced Learning is an example, in that the only information I could find on it was such a petition and a Sheridan Sun news article with a screenshot of the petition, some quotes from the organizer, and a description of the broader movement. Jenn Mezei. *Divest Sheridan College from Fossil Fuels.* 2014. URL: https://campaigns.gofossilfree.org/petitions/divest-sheridan-college-from-fossil-fuels (visited on 07/13/2022).

³⁷Satyarth Mishra. Sheridan Student Leads Campaign Against Fossil Fuel Free. 2014. URL: http://sunarchives.sheridanc.on.ca/blog/2014/02/12/sheridan-student-leads-campaign-against-fossil-fuel-free/ (visited on 06/30/2019).

³⁸Other campaigns which were assessed as minimal by these standards include Camosun College, Okanagan College, St. Francis Xavier University, Saint Mary's University, and Laurentian University. I was unable to contact potential interview subjects from any of them and none of my inquiries to participants in more active campaigns within their provinces led to fruitful contact with organizers at those schools.

³⁹This search method is not infallible. One interview participant described having a role in the SFU campaign where they collaborated with UBC and Capilano University, but as of July 2019 the gofossilfree.org campaign listing for the Vancouver area shows only municipal campaigns for the City of Vancouver and Richmond and university campaigns at UBC, SFU, and Kwantlen.

⁴⁰I also missed the campaign at the University of Prince Edward Island. CBC News. *UPEI Delay on Fossil Fuels Investment Decision Frustrates Divest UPEI Head.* 2016. URL: https://www.cbc.ca/news/canada/prince-edward-island/upei-fossil-fuels-delay-1.3596416 (visited on 10/01/2020).

⁴¹Fossil Free Trent had a campaign history online, but I was not able to contact and arrange interviews with organizers there. Sustainable Trent. Fossil Free Trent. 2014. URL: https://web.archive.org/web/20201031075156/https://sustainabletrent.org/campaigns/fossil-free-trent-divestment/ (visited on 07/28/2022).

⁴²Using different methods and perhaps a different list of accredited universities, Maina-Okori et al. reported 37 active divestment campaigns across nine provinces in Canada. The article included a table showing universities with campaigns, the size of their endowments and fossil fuel investments, whether student and faculty referenda took place, and whether the university decided to divest. Naomi Mumbi Maina-Okori, Jaylene Murray, and Marcia McKenzie. "Climate Change and the Fossil Fuel Divestment in Canadian Higher Education: The Mobilities of Actions, Actors, and Tactics (journal pre-proof)". In: Journal of Cleaner Production (2019), p. 119874. URL: https://www.sciencedirect.com/science/article/pii/S0959652619347444 (visited on 12/31/2019), p. 2, 13.

⁴³An effort in July 2020 to connect active divestment campaigns in Canada attracted participants from U of T (Leap Manifesto campaign), Western, Fanshawe College, the University of Windsor, Brock, Niagara College, McMaster, Mohawk College, Guelph, Queen's, Waterloo, McGill, Lakehead, and Carleton.

⁴⁴For example: Jennifer Wilson, Trevor Nault, and Eleanor Clarke. Canadian Universities Leave Students In The Dark About Investments In The Oil Industry. 2017. URL: https://www.langaravoice.ca/canadian-university-still-dont-disclose-their-energy-sector-investments-to-students/ (visited on 08/22/2018).

Alerts. ^{45,46,47} Since nearly all interview participants made reference to campaigns at universities other than their own, the process of interviewing further validated that the list of campaigns identified through these methods was as complete as could be managed, though it may have missed very small or short-lived campaigns which did not establish an online presence or seek media attention. ⁴⁸ For example, one interview subject brought up "behind the scenes" negotiations at Concordia in 2013, taking place primarily in boardrooms between geography students and administrators without much of a public campaign. Websites previously maintained by more substantial campaigns like Divest Manitoba and Sustainable SFU are no longer online, but can sometimes be accessed via the Internet Archive's Wayback Machine. Both to find potential research participants and to be transparent about the existence and purpose of my research project I have consistently made information about it available through online forums frequented by CFFD activists, such as Facebook groups and Slack channels used to share information and coordinate between campaigns.

I continued to monitor social media on CFFD campaigns throughout the research and writing up process, until I mostly cut off social media monitoring to prioritize manuscript completion at the end of 2020. In addition to helping keep track of which campaigns were active, this provided some mechanisms to observe the behaviours of Canadian CFFD campaigns, both their 'performances' and their public self-justifications. A detailed review of public social media traffic in fall 2019 found activity from campaigns at UBC, UVic, McGill, Mount Allison, U of T (Leap Manifesto campaign), Guelph, Queen's, Waterloo, SFU, Concordia, McMaster, Dalhousie, Trent, and UWinnipeg. An effort in July 2020 to connect active divestment campaigns in Canada attracted participants from U of T (Leap Manifesto campaign), Western, Fanshawe College, the University of Windsor, Brock, Niagara College, McMaster, Mohawk College, Guelph, Queen's, Waterloo, McGill, Lakehead, and Carleton. In 2020, UVic uploaded a high-resolution photo of their first meeting of the term, with 25 people fully or partially visible in frame, and at least five more in reflections.⁴⁹

1.2 Position in the social movement literature

Even before conducting interviews, I structured my analysis of the CFFD movement using conceptual categories from the social movement and particularly the contentious politics literatures. My semi-structured interview questions were selected and sequenced based on these concepts. I asked about the origins and objectives of their campaign to better understand their perspective on the political opportunity structure; asked a series of questions about internal campaign dynamics, allyship, and decision making to get a sense of the mobilizing structures they employed; asked about their use of tactics to catalog their activist repertoires; and asked about their perspective on root causes, climate justice, and allyship to understand their framing

⁴⁵I received about 250 alerts for "university" and "fossil fuel divestment" between March 2017 and July 2020 and about 150 alerts for "campus" and "fossil fuel divestment." Many of these included as many as a dozen new websites which Google had found containing the terms, albeit referring to campaigns around the world and not only in Canada.

⁴⁶Maina-Okori et al. made use of a similar search process. Maina-Okori, Murray, and McKenzie, "Climate Change and the Fossil Fuel Divestment in Canadian Higher Education: The Mobilities of Actions, Actors, and Tactics (journal pre-proof)", p. 12.

⁴⁷On the use of Facebook for snowball sampling, see: Tomas Dosek. "Snowball Sampling and Facebook: How Social Media Can Help Access Hard-to-Reach Populations". In: PS: Political Science & Politics (2021), pp. 1-5. URL: https://www.cambridge.org/core/journals/ps-political-science-and-politics/article/snowball-sampling-and-facebook-how-social-media-can-help-access-hard-toreach-populations/0B52326E9D59AB1C2C1002B8F110853F (visited on 10/16/2021).

⁴⁸Potentially important campaigns may be absent from media coverage on the CFFD divestment movement. There was little public discussion of the Diocese of Nova Scotia and Prince Edward Island's decision to divest the endowment of the Atlantic School of Theology. At the University of Toronto's Massey College a committee was formed and a report written, all without any public notice or notice to community members at large that divestment was being considered.

⁴⁹This is relevant from a participant protection standpoint given the rise of automatic facial recognition technology. By the time of their March 2022 occupation, for example, Divest McGill had begun obscuring the faces of participants in their social media content.

of the issue. When I coded interview content in NVivo, my tags were broken down into these categories. These conceptual categories from the scholarly literature provided a mechanism to analyze the dynamics of the CFFD movement.

Wiktorowicz has provided an account of the evolution of social movement theory in political science.⁵⁰ The first generation, represented by McAdam's 1982 Freedom Summer, was based on a model where structural strains which cannot be accommodated in an existing political system lead to psychological discomfort which propels some people to engage in collective action.⁵¹ Social movements can therefore be seen as a mechanism for alleviating psychological discomfort. This perspective was subsequently criticized for seeing too inexorable a link from structural strain to movement contention. Strain is ubiquitous in all societies, but does not universally produce social movements. Furthermore, relatively affluent and stable societies with a strong civil society sector produce movements more than more strained societies. A second generation of theory focused on resource mobilization and the importance of mobilizing structures.⁵² Wiktorowicz highlighted pathways toward and away from formalization, as mature social groups with resources evolve toward "social movement organizations" (SMOs) characterized by bureaucracy and institutionalization. At the same time, informal organization remained important, especially for recruitment. Social movement communities, as opposed to SMOs, exhibit "fluid boundaries, flexible leadership structures, and malleable divisions of labour" — pointing toward the relevance of the garbage can model of organizational choice described by Michael Cohen, James March, and Johan Olsen in 1972 to informal social movements.^{53,54} Wiktorowicz noted how Piven and Cloward considered informal approaches preferable, since bureaucratized movements can become more focused on the survival of their organizations than the achievement of their aims. 55,56 By the 1980s, Wiktorowicz described a new focus on ideational factors and the development of a collective identity via framing:

As signifying agents engaged in the social construction of meaning, movements must articulate and disseminate frameworks of understanding that resonate with potential participants and broader publics to elicit collective action. 57

This shifts the emphasis on why people should participate in social movements — not as an automatic response to strain or a rational response to selective incentives, but as a result of storytelling which mentally reframes the nature of a problem and the mechanism for addressing it. Snow and Benford described three core framing tasks which move from diagnosing a problem to developing solutions and then a rationale to motivate support for collective action.^{58,59} They noted that motivational frames are needed even when participants agree about the causes of and solution to a problem, as well as that the frame must resonate with potential movement participants. Wiktorowicz highlighted the contest over framing as a core activist concern, since social movements "are embedded in a field of multiple actors that often vie for framing hegemony." ⁶⁰

⁵⁰Wiktorowicz, Islamic Activism: A Social Movement Theory Approach, p. 6–18.

⁵¹Wiktorowicz, Islamic Activism: A Social Movement Theory Approach, p. 6.

⁵²Wiktorowicz, Islamic Activism: A Social Movement Theory Approach, p. 9.

⁵³Wiktorowicz, Islamic Activism: A Social Movement Theory Approach, p. 12.

⁵⁴Michael D. Cohen, James G. March, and Johan P. Olsen. "A Garbage Can Model of Organizational Choice". In: *Administrative Science Quarterly* (1972), pp. 1–25. URL: https://www.jstor.org/stable/2392088 (visited on 04/04/2020).

⁵⁵Wiktorowicz, Islamic Activism: A Social Movement Theory Approach, p. 12.

⁵⁶Frances Fox Piven and Richard Cloward. Poor People's Movements: Why They Succeed, How They Fail. New York: Vintage, 1978.

⁵⁷Wiktorowicz, Islamic Activism: A Social Movement Theory Approach, p. 15.

⁵⁸Wiktorowicz, Islamic Activism: A Social Movement Theory Approach, p. 15–6.

⁵⁹David A. Snow and Robert D. Benford. "Ideology, Frame Resonance, and Participant Mobilization". In: From Structure to Action: Comparing Movement Participation Across Cultures, International Social Movement Research. Ed. by Bert Klandermans, Hanspeter Kriesi, and Sidney Tarrow. Greenwich, Connecticut: JAI Press, 1988, pp. 197–218.

⁶⁰Wiktorowicz, Islamic Activism: A Social Movement Theory Approach, p. 17.

In Paths to a Green World, Peter Dauvergne and Jennifer Clapp provided a typology of the environmental movement as of 2011 which highlighted the internal complexity among environmentalists. They identified a movement divided into distinctive worldviews, which can be distinguished in how they diagnose the origins of environmental problems, the policy approaches they favour to remedy them, and the issues beyond the environment which they take to be linked. Clapp and Dauvergne contrast market liberals with institutionalists, bioenvironmentalists, and social greens. 61 In particular, elements of their social green category are perceptible in the CJ worldview: skepticism about globalization and capitalism, a preference for the local, and strong willingness to link environmental with economic and justice issues. None of these four categories perfectly match with worldviews in the CFFD movement, but they do help to show the roots of CJ and CO₂e thinking and the important threads and characteristics that have carried through from earlier instances of environmental activism, particularly how a focus on justice and intersectionality has been both championed and criticized within the movement for decades. Clapp and Dauvergne's typology also considers tensions and contradictions between the four views. Market liberals see growth as inherently desirable, if not as the actual mechanism for improved environmental conditions (rich people can afford to care about greenery), while social greens and bioenvironmentalists tend to support an antiglobalization agenda that deprioritizes or does not seek GDP growth as a major objective. 62 There is also considerable debate about a question central to the deliberation of climate activists: whether incremental changes can solve environmental problems, or just amount to "bailing a few buckets of water as the *Titanic* sinks." 63

As described by Wiktorowicz, as social movement scholarship has evolved it has developed an increased focus on divisions within movements and the contest over framing. This approach is productive in the CFFD case, where longstanding disagreements about incremental versus radical action and the contest over framing have been notable features of the movement. In aggregate the CFFD movement has been a constructive enterprise with some agreement and some disagreement. This makes it a useful case study for evaluating and contributing to social movement theory.

1.3 Brief summary of the CFFD literature

Since about 2014 a succession of dissertations and scholarly articles have analyzed the campus fossil fuel divestment movement, both in Canada and other jurisdictions where campaigns were initiated.

In Canada, Joe Curnow conducted an intensive study of the CFFD campaign at the University of Toronto organized by Toronto350.org and later UofT350.org (also called Fossil Free U of T). This included getting permission from the campaign to film most of their planning meetings in a room with multiple high definition cameras covering the space, documenting the main discussion being held, side-discussions, and other behaviours by participants. In a news article, Curnow commented on the forms of learning which the detailed study of the first U of T campaign revealed, in which organizers "embraced an identity as environmentalists committed to climate justice," learned how to plan and organize actions in a more equitable way, and began questioning objectivity as "a Euro-Western construct" and pursuing knowledge through relation-

⁶¹Jennifer Clapp and Peter Dauvergne. Paths to a Green World: The Political Economy of the Global Environment. Cambridge: MIT Press, 2011, p. 3-14.

⁶²Clapp and Dauvergne, Paths to a Green World: The Political Economy of the Global Environment, p. 245.

⁶³Clapp and Dauvergne, Paths to a Green World: The Political Economy of the Global Environment, p. 256 (italics in original).

⁶⁴This added up to "15,000 minutes of video data collected from 3-4 angles." Joe Curnow et al. *All the Rage: Emotional Configurations of Anger as Feminist Politicization*. 2020. URL: https://repository.isls.org/bitstream/1/6780/1/82-89.pdf (visited on 08/01/2020), p. 84.

ships and experiences as endorsed in feminist and Indigenous philosophies.⁶⁵ With Allyson Gross, Curnow published a book chapter in 2016 describing the history of the CFFD movement and internal deliberations about emphasizing solidarity and climate justice.⁶⁶ In another book chapter in 2016, Curnow and Jody Chan discussed how gendered positioning produces "experts" within CFFD campaigns and argued that campaign participants are deemed experts "not through learning or achieving mastery of the core competencies of the community of practice" but "by performing dominant forms of masculinity, which are affirmed by other members of the community and recognized as authoritative".^{67,68,69} In a paper in the proceedings of the International Conference of the Learning Sciences Curnow et al. "examined how emotion, and particularly snarky rage, shaped the process of politicization" in the first U of T campaign, using analysis of video from Women's Caucus meetings initiated by the lead researcher.^{70,71} As Aaron Saad noted, CFFD organizers "examined privilege and power within the movement by considering matters like who speaks, who is spoken over, and who stays silent in meetings."⁷² In 2017, Curnow and Chan commented on the "lamentable lack of academic research on how hegemonic masculinity shapes environmentalism and how it interacts with embedded racism, colonialism, and sexism to construct an exclusionary climate", documenting micro-level practices within the first U of T divestment campaign including exclusive talk and establishing expertise.⁷³

Fiona del Rio's 2017 thesis examined how the strategies of climate change activists were informed by the four values of "crisis mitigation, social change, collective organizing and individual agency", and concluded that "climate activism can be thought of as a movement in terms of core values which are negotiated in and through the strategies activists employ."⁷⁴ Daniel Charrois' 2018 thesis examined divestment decisions at 22 Canadian post-secondary institutions, with decisions categorized as "full, partial, or rejected."⁷⁵ Emilia Belliveau's master's thesis used campaigns at the University of British Columbia, the University of Toronto, and Dalhousie University as case studies.⁷⁶

Naomi Mumbi Maina-Okori, Jaylene Murray, and Marcia McKenzie wrote the first comprehensive analysis

⁶⁵ Joe Curnow. Fridaysforfuture: When Youth Push the Environmental Movement Towards Climate Justice. 2019. URL: https://theconversation.com/fridaysforfuture-when-youth-push-the-environmental-movement-towards-climate-justice-115694 (visited on 09/18/2019).

⁶⁶Curnow and Gross, "Injustice Is Not an Investment: Student Activism, Climate Justice, and the Fossil Fuel Divestment Campaign".

⁶⁷ Joe Curnow and Jody Chan. "Becoming an 'Expert': Gendered Positioning, Praise, and Participation in an Activist Community". In: *Transforming Learning, Empowering Learners: The International Conference of the Learning Sciences 2016*. Ed. by Chee-Kit Looi et al. Singapore: International Society of the Learning Sciences, 2016.

⁶⁸See also: Janet K. Swim, Ashley J. Gillis, and Kaitlynn J. Hamaty. "Gender Bending and Gender Conformity: The Social Consequences of Engaging in Feminine and Masculine Pro-Environmental Behaviors". In: Sex Roles (2019), pp. 1–23. URL: https://link.springer.com/article/10.1007/s11199-019-01061-9 (visited on 12/26/2019).

⁶⁹Merelman noted that "large numbers are impressed by the appearance of absolute certainty in politics and are willing to grant legitimacy to the self-confident." Merelman, "The Dramaturgy of Politics", p. 223.

⁷⁰Curnow et al., All the Rage: Emotional Configurations of Anger as Feminist Politicization.

⁷¹On emotion in social justice organizing, see also: Joe Curnow and Tanner Vea. "Emotional Configurations of Politicization in Social Justice Movements". In: *Information and Learning Sciences* (2020). URL: https://www.emerald.com/insight/content/doi/10.1108/ILS-01-2020-0017/full/html (visited on 12/28/2021), p. 731, 744-5.

⁷²Aaron Saad. "The Fossil Fuel Divestment Movement". In: *Local Activism for Global Climate Justice: The Great Lakes Watershed.* Ed. by Patricia E. Perkins. New York: Routledge, 2019, (emphasis in original).

⁷³ Jody Chan and Joe Curnow. "Taking Up Space: Men, Masculinity, and the Student Climate Movement". In: RCC Perspectives 4 (2017), pp. 77-86. URL: http://www.jstor.org/stable/26241458.

⁷⁴Fiona Del Rio. "In a World Where Climate Change is Everything... Conceptualizing Climate Change Activism and Exploring the People's Climate Movement". MA thesis. McMaster University, 2017. URL: https://macsphere.mcmaster.ca/handle/11375/22508 (visited on 12/16/2018), p. iv, 51.

⁷⁵ Daniel Charrois. "Predicting the Fossil Fuel Divestment Decisions of Canadian Post-secondary Educational Institutions". MA thesis. Ottawa: University of Ottawa, 2018. URL: https://ruor.uottawa.ca/handle/10393/37951 (visited on 08/21/2018), p. 13.

⁷⁶Emilia Belliveau. "Climate Justice in the Fossil Fuel Divestment Movement: Critical Reflections on Youth Environmental Organizing in Canada". MA thesis. University of Victoria, 2018. URL: https://dspace.library.uvic.ca/bitstream/handle/1828/10052/Belliveau_Emilia_MA_2018.pdf (visited on 11/18/2020), p. 28.

of 38 active CFFD campaigns in Canada.^{77,78} Based on critical policy studies and the policy mobilities framework, they highlighted diffusion of messaging and tactics between campaigns and the role of proliferator organizations.⁷⁹ They explained that a "'policy mobilities' framing requires methodological attention to the role of actors and networks, as well as tactics or tools, in the uptake and movement of policy initiatives within and across sites."⁸⁰ Rowe, Dempsey, and Gibbs have also produced a high-level analysis of the CFFD movement from a Canadian perspective, emphasizing the importance of the enemy naming strategy.⁸¹

Significant research has also been undertaken on the CFFD movement as a whole. For instance, Todd Schifeling and Andrew Hoffman's analyzed the CFFD movement as an effort by 350.org to exploit radical flank effects. ⁸² Yiping Zhang examined the moral and financial arguments for divestment; Noam Bergman studied the effect of the movement on public discourse; Chelsie Hunt and Olaf Weber looked at the movement's financial impact and influence on portfolio carbon intensity; Auke Plantinga and Bert Scholtens studied global stock market returns at the industry level; and Tim Pfefferle studied the history and strategies of the FFD movement. ^{83,84,85,86,87}

Research on American campaigns includes work by Lila Singer-Berk, Jessica Grady-Benson, Brinda

⁷⁷Pre-published version: Maina-Okori, Murray, and McKenzie, "Climate Change and the Fossil Fuel Divestment in Canadian Higher Education: The Mobilities of Actions, Actors, and Tactics (journal pre-proof)".

⁷⁸Published version: Naomi Mumbi Maina, Jaylene Murray, and Marcia McKenzie. "Climate Change and the Fossil Fuel Divestment Movement in Canadian Higher Education: the Mobilities of Actions, Actors, and Tactics". In: *Journal of Cleaner Production* 253 (2020), p. 119874. URL: https://www.sciencedirect.com/science/article/pii/S0959652619347444 (visited on 11/13/2021).

⁷⁹Maina-Okori, Murray, and McKenzie, "Climate Change and the Fossil Fuel Divestment in Canadian Higher Education: The Mobilities of Actions, Actors, and Tactics (journal pre-proof)", p. 1, 4.

⁸⁰Maina-Okori, Murray, and McKenzie, "Climate Change and the Fossil Fuel Divestment in Canadian Higher Education: The Mobilities of Actions, Actors, and Tactics (journal pre-proof)", p. 10.

⁸¹ James Rowe, Jessica Dempsey, and Peter Gibbs. *The Power of Fossil Fuel Divestment (and its Secret)*. 2016. URL: https://www.academia.edu/14081780/The_Power_of_Fossil_Fuel_Divestment_And_its_Secret_ (visited on 08/22/2018).

⁸² Todd Schifeling and Andrew J. Hoffman. "Bill McKibben's Influence on US Climate Change Discourse: Shifting Field-level Debates Through Radical Flank Effects". In: Organization & Environment (2017). URL: https://journals.sagepub.com/doi/abs/10.1177/1086026617744278 (visited on 06/21/2019).

⁸³Yiping Zhang. "A New Perspective for the Rationality of Fossil Fuel Divestment — The Interaction between the Shifting of Capital Flow and Stranded Assets". MA thesis. Waterloo: Waterloo, 2020. URL: https://uwspace.uwaterloo.ca/bitstream/handle/10012/15942/Zhang%20Yiping.pdf (visited on 06/20/2020).

⁸⁴Noam Bergman. "Impacts of the Fossil Fuel Divestment Movement: Effects on Finance, Policy and Public Discourse". In: Sustainability 10.7 (2018), p. 2529. URL: https://www.mdpi.com/2071-1050/10/7/2529 (visited on 05/27/2020).

⁸⁵ Chelsie Hunt and Olaf Weber. "Fossil Fuel Divestment Strategies: Financial and Carbon-related Consequences". In: Organization & Environment 32.1 (2019), pp. 41-61. URL: https://journals.sagepub.com/doi/full/10.1177/1086026618773985 (visited on 05/27/2020).

⁸⁶ Auke Plantinga and Bert Scholtens. "The Financial Impact of Fossil Fuel Divestment". In: Climate Policy (2020), pp. 1–13. URL: https://www.tandfonline.com/doi/full/10.1080/14693062.2020.1806020 (visited on 08/21/2020).

⁸⁷Tim Pfefferle. "Between Morals and Markets — Fossil Fuel Divestment, Business, and the State". MA thesis. Oxford: University of Oxford, 2016. URL: https://www.academia.edu/31177213/Between_Morals_and_Markets_Fossil_Fuel_Divestment_Business_and_the_State (visited on 07/11/2020).

Sarathy, Theo LeQuesne, Robin Xu, Christopher Beer, Noel Healy, and Jessica Debski. 88,89,90,91,92,93,94,95 Work on UK campaigns includes Xaviera Ringerling and Nierika Hamaekers, while Linnenlueke et al. examined the campaign at the Australian National University. 96,97,98

1.3.1 Positionality in the CFFD literature

Many existing accounts highlight the personal involvement of the authors in the CFFD movement. Ringerling commented that: "as I was a participant of the movement myself this affected my approach to the study." Del Rio described how her thesis was "based on my ethnographic fieldwork with the Toronto People's Climate Movement as well as my own experiences as an activist living and working in Toronto." Delliveau discussed the "role of the researcher" and her involvement in Divest Dalhousie. Addid described how her master's thesis let her "create a study that could weave in my activism" and how she developed her research project as "an insider to the movement" and a "scholar-activist." She noted that research in the field is "commonly authored by participants in the movement" and described a goal of "creating research that can be applied outside the pages of a thesis and the gates of academia." She also described how iden-

88Lila Singer-Berk. Campuses of the Future: The Interplay of Fossil Fuel Divestment and Sustainability Efforts at Colleges and Universities. 2014. URL: https://www.oxy.edu/sites/default/files/assets/UEP/Comps/2012/2012/Singer-Berk,Lila_Campuses%20of%20the%20Future.pdf (visited on 03/13/2017).

⁸⁹Jessica Grady-Benson. "Fossil Fuel Divestment: The Power and Promise of a Student Movement for Climate Justice". B.A. Thesis. Claremont, California: Pitzer College, 2014. URL: https://core.ac.uk/download/pdf/70979158.pdf (visited on 01/11/2020).

⁹⁰Jessica Grady-Benson and Brinda Sarathy. "Fossil Fuel Divestment in US Higher Education: Student-led Organising for Climate Justice". In: *Local Environment* 21.6 (2016), pp. 661–681. URL: https://www.tandfonline.com/doi/abs/10.1080/13549839.2015.1009825?journalCode=cloe20 (visited on 01/11/2020).

⁹¹Eve Bratman et al. "Justice is the Goal: Divestment as Climate Change Resistance". In: *Journal of Environmental Studies and Sciences* 6.4 (2016), pp. 677–690. URL: https://link.springer.com/article/10.1007/s13412-016-0377-6 (visited on 03/13/2017).

⁹²Theo LeQuesne. "Revolutionary Talk: Communicating Climate Justice". MA thesis. University of California, Santa Barbara, 2016. URL: https://escholarship.org/uc/item/2499t7v1 (visited on 07/10/2017).

⁹³Robin Xu. "Looking Beyond Fossil Fuel Divestment: Combating Climate Change in Higher Education". In: The Contribution of Social Sciences to Sustainable Development at Universities. Ed. by Leal Filho and Michaela Zint. Springer, 2016, pp. 39–54.

⁹⁴Christopher Todd Beer. "Rationale of Early Adopters of Fossil Fuel Divestment". In: *International Journal of Sustainability in Higher Education* (2016). URL: https://www.emerald.com/insight/content/doi/10.1108/IJSHE-02-2015-0035/full/html (visited on 03/12/2020).

⁹⁵Noel Healy and Jessica Debski. "Fossil Fuel Divestment: Implications for the Future of Sustainability Discourse and Action Within Higher Education". In: *Local Environment* 22.6 (2017), pp. 699–724. URL: https://www.researchgate.net/publication/311487406_Fossil_fuel_divestment_implications_for_the_future_of_sustainability_discourse_and_action_within_higher_education (visited on 12/30/2019).

⁹⁶Xaviera Ringeling. "Transformative Reformism: a Study of the UK University Fossil Fuel Divestment Movement's Potential for Significant Change". MA thesis. University College London, 2015. URL: https://www.academia.edu/22146800/Transformative_reformism_A_study_of_the_UK_University_Fossil_Fuel_Divestment_Movements_potential_for_significant_change (visited on 01/11/2020).

⁹⁷Nierika Hamaekers. "Why Some Divestment Campaigns Achieve Divestment While Others Do Not: The Influence of Leadership, Organization, Institutions, Culture and Resources". Master's Thesis. Rotterdam, Netherlands: Rotterdam School of Management: Erasmus University, 2015. URL: https://thesis.eur.nl/pub/32244 (visited on 03/06/2017).

⁹⁸Martina K. Linnenluecke et al. "Divestment from Fossil Fuel Companies: Confluence Between Policy and Strategic Viewpoints". In: *Australian Journal of Management* 40.3 (2015), pp. 478–487. URL: https://journals.sagepub.com/doi/abs/10. 1177/0312896215569794?journalCode=auma (visited on 12/31/2019).

⁹⁹Ringeling, "Transformative Reformism: a Study of the UK University Fossil Fuel Divestment Movement's Potential for Significant Change", p. 20.

100 Del Rio, "In a World Where Climate Change is Everything... Conceptualizing Climate Change Activism and Exploring the People's Climate Movement", p. iv.

¹⁰¹In chapter 3 she discusses as important data sources: "my ethnographic fieldwork with climate activists in Toronto during the fall of 2016 as well as my personal experience as part of a campaign for fossil fuel divestment at the University of Toronto." Del Rio, "In a World Where Climate Change is Everything... Conceptualizing Climate Change Activism and Exploring the People's Climate Movement", p. 52.

¹⁰²Emilia Belliveau. "Climate Justice in the Fossil Fuel Divestment Movement: Critical Reflections on Youth Environmental Organizing in Canada". MA thesis. Dalhousie University, 2018. URL: https://dspace.library.uvic.ca/handle/1828/10052 (visited on 06/02/2019).

tifying herself as a fellow activist helped establish trust and rapport with interview participants. Perhaps most distinctly and creatively, Aidid opened her thesis with a poem called "I Believe in Climate Justice" and the closing couplet "I believe in climate justice / and I believe you should too." Curnow described her approach as "militant ethnography" which "extends the commitments of community based research and situates researchers within the social movements they participate in." Listing accounts are also notable for their generally strong normative stances in favour of the intersectional CJ framing. While such scholarly analyses certainly contribute rich and important information to understanding individual campaigns and the effects of involvement in them on student organizers, it is desirable to supplement them with analyses based on a larger number of cases.

1.4 Contribution

This dissertation provides a well-substantiated anatomy of why the CFFD movement emerged, why it took the form it did, and its strengths and weaknesses as a response to climate change. The explanations can chiefly be found in the conflict between the CJ and CO₂-e framings, each of which has strengths and limitations detailed in chapter 5. This builds upon a literature in political science about social movements. As with Hadden's work in the multilateral context, this dissertation is concerned with the dynamics of coherence and conflict in the climate activist movement and with the division between approaches to climate change that view it primarily through a scientific lens and approaches that view it primarily through a justice lens. The fact that the same basic division between approaches can be found in the context of campaigns at Canadian universities organized by activists who had much more in common than those studied by Hadden confirms that differences in framing can be of vital importance within social movements but also shows that such differences cannot always be explained by the focus on networks that did so much to explain the case that Hadden studied. Even within a movement organized around a "campaign in a box" by relatively similar participants, the deep contention that Hadden identified in Copenhagen was still present. Through close examination of the CFFD case, we will see how this contention arises chiefly from an ideological contest over how to frame climate change. The dynamics and consequences of that contest will be crucial for the impact CFFD has in the broader world, as well as within the politics of climate change activism. Finally, the dissertation also aims to make a positive contribution to thinking about how best to address the problem of climate change. Organizing rooted in the CJ framing has achieved important accomplishments by seriously raising the possibility of not using most of the world's remaining fossil fuels, as well as by developing activists committed to keep working on climate change. However, the CJ messaging does not have the cross-societal

¹⁰³ Shadiya A. Aidid. "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns". MA thesis. Lakehead University, 2022. URL: https://thesis.lakeheadu.ca/handle/2453/4957 (visited on 06/25/2022), p. iv, 5. 25. 44-5. 46. 61. 1.

¹⁰⁴ Joe Curnow. "Politicization in Practice: Learning the Politics of Racialization, Patriarchy, and Settler Colonialism in the Youth Climate Movement". PhD thesis. Toronto: University of Toronto, 2017. URL: https://tspace.library.utoronto.ca/handle/1807/98754 (visited on 08/23/2018), p. 36-8.

¹⁰⁵For more on Curnow's use of militant ethnography, see: Curnow and Vea, "Emotional Configurations of Politicization in Social Justice Movements", p. 734–5.

¹⁰⁶ For another example of militant ethnography, see Lindsey Hand's thesis on how "six educators use their agency to disrupt settler colonialism in their classrooms by creating anti-colonial, land-based learning activities." Lindsey Hand. "Classrooms as Sites of Resistance and Rebuilding: Constraints and Affordances of Washington Teachers Using the Since Time Immemorial Native Education Curriculum". Master of Education. University of Washington, 2020. URL: https://digital.lib.washington.edu/researchworks/bitstream/handle/1773/45950/Hand_washington_02500_21706.pdf (visited on 08/28/2020), p. 3.

¹⁰⁷Bergman argued: "The main limitation of this research is the favourable attitude of most research into Divestment. This limited perspective risks overestimating the movement's impacts and assigning causality to changes that were part of larger processes." Bergman, "Impacts of the Fossil Fuel Divestment Movement: Effects on Finance, Policy and Public Discourse", p. 14.

appeal to establish and sustain a regime protecting climatic stability. So, I argue that other analyses which share the determination to avoid catastrophic climate change have something important to contribute to the movement to address climate change, and there is evidence that the CFFD movement has helped spur the formation of non-progressive non-intersectional coalitions in favour of a rapid transition away from fossil fuels.

Chapter 2

Political opportunity

Why did the CFFD movement emerge? In other words, why did significant groups of students at many different Canadian universities become very concerned about climate change and what led many of these students to express that concern by trying to persuade their universities to divest from companies in the fossil fuel industry?

One way of answering these questions is to explore the political opportunity structure which gave birth to the CFFD movement. There were some background conditions and social developments that made the problem of climate change seem particularly urgent to the students who participated in the CFFD movement and led these students to think that they could address this problem in an important way by demanding that their universities change their investment policies and practices.

The CFFD movement and its focus on private actors can be seen as an attempt to get around the structural barriers to climate change action, which include individual psychology, institutions ill-adapted to address long-term problems, and the huge investment in fossil fuel capital stock. These barriers are relevant in the university context as well, including the influence of *status quo* economic elites, and activist perceptions on their nature and potential to overcome them influenced CFFD strategy.¹

This chapter describes three central phenomena that help to explain the emergence of the CFFD movement: the increased political salience of climate change, and specifically the idea of stranded assets and the carbon bubble; the role of 350.org as a vanguard organization and divestment proliferator; and the particular opportunities for movement-building and norm shifting through universities. 350.org and other divestment proliferators adopted the divestment strategy out of their perception of the political opportunity structure which they faced, and created a movement that is at least superficially unified in objectives and messaging, while not tied together by social or institutional linkages. This viral distribution of a campaign concept and strategy reflects an attempt to escape the ever-worsening outcomes of domestic and international climate change politics, through the mechanism of the new forms of transnational organization made possible by internet communication.² Public and elite concerns about climate change have been rising as unmistakable global effects are observed, and yet the structural barriers to climate change action have produced a political opportunity structure full of dead ends, with neither domestic democratic politics nor multinational diplomacy being capable of reorienting the world away from fossil fuel dependence, leaving climate activists

¹For a detailed summary, see: Ilnyckyj, Structural Barriers to Avoiding Catastrophic Climate Change.

²The CFFD movement is best understood as transnational, so activities and statements from outside Canada are relevant for understanding what happened here. For evidence of the similarity of campaigns in Canada, the US, the UK, and elsewhere see: International campus fossil fuel divestment efforts p. 239

searching elsewhere for political space to mobilize people and shift norms.³ Within this context, 350.org made its quick and unexpected appearance and then chose to make fossil fuel divestment a major focus of its efforts — with universities providing a perfect target because of their societal influence and susceptibility to activist persuasion.

2.1 The increased salience of climate change

CFFD campaigns at Canadian universities coincided with, and were fuelled by, the growing salience of climate change as a political issue. By salience, I mean essentially the perception that climate change is important and relevant, and particularly the willingness to prioritize action on climate change over other political objectives. Salience is observable in public, elite, and media discourse: in the focus on climate change as a factor which will profoundly affect the future that people will live in. At the most general level, this is reflected in the sheer level of communication about the subject. It is also reflected by the collection of actors and institutions purporting to take the problem seriously, from international multilateral institutions like the UN and World Bank to specific media outlets to armed forces and intelligence services. At the most abstract, it concerns how climate change affects our shared visions of the future, as manifested culturally in forms like the speculative fiction people create and consume and manifested in policy discussions by the visions of a desirable future that inform long-term planning decisions. While it can be readily and extensively demonstrated that the degree of concern about climate change has become immense in some segments of the population, the inescapable reality of ever-higher global CO₂ levels and continued investment in new fossil fuel production shows how concern has not effectively translated into public policy. The effort to end that disjuncture can be seen in the work climate activist organizations have done to try to motivate the public to make political choices based on climate change promises, as well as in efforts to create change through novel strategies and institutions outside of government.

This growing concern can be substantiated with many lines of evidence. This includes the seriousness of warnings issued by the Intergovernmental Panel on Climate Change (IPCC) and global scientific community; journalistic coverage; prominence in electoral campaigns; legislative discussion and action; corporate messaging; and public opinion.^{4,5,6,7} More and more citizens — and especially young people — see climate change as a danger to their societies and themselves. When set alongside the insufficient effort that conventional institutions have been dedicating to addressing the problem, this gap between the perceived need for action and the unwillingness or inability of the political system to provide it creates a political opportunity structure in which new strategies could be successful, including efforts to lobby private actors like

³Lakenen described interview subjects being disappointed by the static nature of the UNFCCC negotiations, driving them toward action at the local level since they "felt that their efforts were obstructed or insignificant at national or international levels." Raili Lakanen. "'A Battle for the Soul of the Climate Movement': The Expansion of the Intersectional Climate Justice Frame Among Young Activists in Canada". PhD thesis. Toronto: University of Toronto, 2019. URL: https://tspace.library.utoronto.ca/bitstream/1807/95883/1/Lakanen_Raili_201906_PhD_thesis.pdf (visited on 04/22/2022), p. 126, 142, 148.

⁴Hadden described how climate change was not a high-profile issue prior to the 1980s and 90s, and that much of the activism in the early 90s was about putting the issue on the international agenda. Participation by civil society groups in UNFCCC COPs steadily rose from about 200 groups in 1995 to over 1,300 at Copenhagen. Hadden, *Networks in Contention: The Divisive Politics of Climate Change*, p. 17–8.

⁵Similarly, in the 1980s the issue of second-hand smoke operated through the mechanisms of media attention, publicized scientific results, and NGO advocacy to drive greater tobacco regulation. Ronald J. Troyer and Gerald E. Markle. *Cigarettes: The Battle Over Smokina*. New Brunswick. N.J.: Rutgers University Press. 1983.

⁶See also: Constance A. Nathanson. "Social Movements as Catalysts for Policy Change: The Case of Smoking and Guns". In: *Journal of Health Politics, Policy and Law* 24.3 (1999), pp. 421–488.

⁷Donley T. Studlar. *Tobacco Control: Comparative Politics in the United States and Canada*. Toronto: University of Toronto Press, 2002.

universities.⁸ The increased salience of climate change is crucial for understanding the political opportunity structure presented to the CFFD movement. It was the basis for the argument that universities had to renounce their past practices; it established the context in which reporting about the movement was written; and it was powerfully personally motivational to CFFD organizers who have now been told for decades that the stability and security of their own futures depends on humanity's success in curbing the worst potential impacts of climate change.

Two time periods are relevant for considering the importance of the salience of climate change to the CFFD movement. There is the degree to which it had risen as a subject of public concern before and around the time when the CFFD movement was initiated in 2012 and then there is the degree salience continued to rise as the movement was ongoing. Material from the first period provides grounds for thinking that initiating the CFFD movement was a fruitful undertaking, while the continued increase in salience while the movement was ongoing helps explain why campaigns persisted and why some Canadian universities eventually committed to divest. Across time periods, it is also important to consider the intergenerational breakdown of concern about climate change and support for mitigation policies. The concentration of support among young people helps explain the appeal of universities as activist targets — both because young people are concentrated and hold influence there, and because other avenues for action through domestic politics and multilateral negotiations are seen as blocked after decades of failure. The leaders of the CFFD movement have grown up during a time when the ecological threats to humanity are increasingly recognized and lamented, but where the normal processes of politics have not created solutions in response. This opens the door for contentious forms of political action, and for a new focus on influential actors outside politics. 10 That includes universities which play an important and privileged role in the public discourse, as well as the financial sector which must choose between persisting with fossil fuel investments or seeking a new energy basis for the economy.

Among the lines of evidence for the increased and increasing salience of climate change, I believe the climate science is overwhelmingly the most important and the most necessary to describe in detail here as a foundation for my analytical and normative arguments. Just as without 350.org there would be no unified CFFD movement, without these scientific assessments there would be no climate change politics at all—just distributed bafflement about changing weather conditions around the world. The other lines of evidence discussed here are derivative from the science, since journalists, politicians, and the general public would not have made their own contributions to the salience of climate change without it.¹¹ Hadden noted the interdependent effect of several mechanisms raising the salience of climate change, including media attention, growing scientific certainty, and "the simple reality that the effects of climate change were becoming more apparent and threatening to citizens all over the world." This illustrates the crucial role of climate science and public awareness about it, since that is where journalists got their information and how citizens made sense of the new conditions they were experiencing. It is also important to describe the scientific evidence

⁸Bergman concluded that divestment "offers a novel form of non-state governance that can play a significant role in social steering and catalyzing effective climate change mitigation." Bergman, "Impacts of the Fossil Fuel Divestment Movement: Effects on Finance, Policy and Public Discourse", p. 15.

⁹On the ineffectiveness of the UNFCCC COP process and multilateral climate negotiations generally, see: Fiona Harvey. Thirty Years of Climate Summits: Where Have They Got Us? 2022. URL: https://www.theguardian.com/environment/2022/jun/11/cop-climate-change-conference-30-years-highlights-lowlights (visited on 06/16/2022).

¹⁰Aidid noted that climate organizing was perceived as contentious by prospective recruits to CFFD campaigns who saw climate organizing as "heavily reliant on protests and demonstrations." Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. 75.

¹¹In a speech at the Munk School in October 2022, Environment and Climate Change Canada Deputy Minister Christine Hogan described her time working as a junior policy analyst during the Rio summit and establishment of the UNFCCC and IPCC as "watching science put global environmental issues squarely on the agenda of governments."

 $^{^{12}\}mathrm{Hadden},\ Networks\ in\ Contention:\ The\ Divisive\ Politics\ of\ Climate\ Change,\ p.\ 19.$

in detail because political and normative conclusions depend on it. By providing a detailed account here, I can substantiate which sources those claims derive from.

The global scientific community has been sounding the alarm about climate change in increasingly strident terms for decades. In 1979, the US National Academy of Sciences first released a report on climate change. 13,14,15,16 They estimated that the climate would warm by 2.0–3.5 °C each time the atmospheric concentration of $\rm CO_2$ doubled beyond the pre-industrial level of about 280 ppm, with greater warming close to the poles. 17,18,19,20,21

In 1988, the World Meteorological Association and the United Nations Environment Programme established the IPCC to produce periodic reports on climate change science. The IPCC's most significant and substantial publications are a series of assessment reports, released in 1990, 1996, 2001, 2007, and 2014. In 2007, the Nobel Peace Prize was awarded to the IPCC and Al Gore.²² Between 2021 and 2022, they also published the three reports comprising the sixth assessment report (AR6).^{23,24,25,26,27,28,29} Each new

¹³National Research Council. Carbon Dioxide and Climate: A Scientific Assessment. 1979. URL: https://www.nap.edu/catalog/12181/carbon-dioxide-and-climate-a-scientific-assessment (visited on 03/09/2020).

¹⁴Mark Jaccard. The Citizen's Guide to Climate Success: Overcoming Myths that Hinder Progress. Cambridge: Cambridge University Press, 2020, p. 45.

¹⁵Naomi Oreskes and Eric M. Conway. "Challenging Knowledge: How Climate Science Became a Victim of the Cold War". In: *Agnotology: The Making and Unmaking of Ignorance*. Ed. by Robert N. Proctor and Londa Schiebinger. Stanford: Stanford University Press, 2008, p. 58.

¹⁶Sometimes called the Charney report, as it was written by a NAS task force under Jule Charney. Daniel Yergin links the emergence of climate activism in the US to this time period, with figures like Rafe Pomerance and Gus Speth. Daniel Yergin. The Quest: Energy, Security, and the Remaking of the Modern World. New York: Penguin Press, 2011, p. 449–51.

¹⁷National Research Council, Carbon Dioxide and Climate: A Scientific Assessment, p. 1.

 $^{^{18} \}mathrm{Samset}$ et al. used an equilibrium climate sensitivity of 3 °C – meaning 3 °C of warming per doubling of the atmospheric concentration of CO₂ above pre-industrial levels. B.H. Samset, J.S. Fuglestvedt, and M.T. Lund. "Delayed Emergence of a Global Temperature Response After Emission Mitigation". In: *Nature Communications* 11.1 (2020), pp. 1–10. URL: https://www.nature.com/articles/s41467-020-17001-1.pdf (visited on 07/15/2020), p. 4.

¹⁹Research published in July 2020 found a 2/3 chance that climate sensitivity is between 2.6–3.9 °C. S. Sherwood et al. "An Assessment of Earth's Climate Sensitivity Using Multiple Lines of Evidence". In: *Reviews of Geophysics* (2020). URL: https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/2019RG000678 (visited on 07/30/2020).

²⁰Paul Voosen. After 40 Years, Researchers Finally See Earth's Climate Destiny More Clearly. 2020. URL: https://www.sciencemag.org/news/2020/07/after-40-years-researchers-finally-see-earths-climate-destiny-more-clearly (visited on 07/30/2020).

²¹This logarithmic dependence of the climate on greenhouse gas concentrations (which must double from pre-industrial levels of about 280 ppm to 540 ppm to add the first estimated 3 °C and double again for each successive 3 °C) means that a Venus-like runaway warming scenario is probably impossible on Earth until the output from the sun is much greater billions of years from now, but also means that the earliest emissions have the greatest climatic impact. Robert L. Jaffe and Washington Taylor. *The Physics of Energy*. Cambridge: Cambridge University Press, 2018, p. 728.

²²The Nobel Foundation. The Nobel Peace Prize 2007. 2007. URL: https://www.nobelprize.org/prizes/peace/2007/summary/ (visited on 07/21/2022).

²³Intergovernmental Panel on Climate Change. Climate Change 2021: The Physical Science Basis: Summary for Policy-makers. 2021. URL: https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM_final.pdf (visited on 04/16/2022).

²⁴Intergovernmental Panel on Climate Change. Climate Change 2022: Impacts, Adaptation and Vulnerability: Summary for Policymakers. 2022. URL: https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_SummaryForPolicymakers.pdf (visited on 04/16/2022).

²⁵Intergovernmental Panel on Climate Change. Climate Change 2022: Mitigation of Climate Change: Summary for Policymakers. 2022. URL: https://report.ipcc.ch/ar6wg3/pdf/IPCC_AR6_WGIII_SummaryForPolicymakers.pdf (visited on 04/16/2022).

²⁶For a journalistic summaries, see: Matt McGrath. Climate Change: IPCC Scientists Say it's 'now or never' to Limit Warming. 2022. URL: https://www.bbc.com/news/science-environment-60984663 (visited on 04/16/2022).

²⁷Zoya Teirstein. Scientists Identify the Missing Ingredient for Climate Action: Political Will: The IPCC's Latest Report Finally Recognizes the Social Barriers to Climate Action. 2022. URL: https://grist.org/politics/scientists-identify-the-missing-ingredient-for-climate-action-political-will/ (visited on 04/16/2022).

²⁸Lina Tran and Joseph Winters. 'We are at a crossroads': New IPCC report says it's Fossil Fuels or Our Future. 2022. URL: https://grist.org/science/we-are-at-a-crossroads-new-ipcc-report-says-its-fossil-fuels-or-our-future/(visited on 04/16/2022).

²⁹The Economist. The Latest IPCC Report Argues That Stabilising the Climate Will Require Fast Action. 2022. URL: https://www.economist.com/science-and-technology/2022/04/09/the-latest-ipcc-report-argues-that-stabilising-the-climate-will-require-fast-action (visited on 06/30/2022).

IPCC report has expressed greater alarm at the potential consequences of unchecked climate change. The conclusions of the IPCC are remarkable given the involvement of governments in the process and the need for consensus on the content of the most widely read and influential documents. This allowed states like Canada, Russia, Australia, and Saudi Arabia — with governments that seek to support the fossil fuel industry — to soften their language, omit especially frightening projections, and restrict the scope of their calls for action. ^{30,31,32,33} Indirectly, this demonstrates how fossil-dependent governments perceive the risk to their traditional industries arising from climate science, which in turn demonstrates at least the possibility that concern arising from scientific understanding will feed into policy change. As with the efforts of fossil fuel corporations to distract from and disrupt any policy changes that would upset their business models, profossil governments have tried to shift global mitigation efforts away from policies that would challenge their industries. This is reflected in the outcomes of multilateral negotiations. Remarkably, the Paris Agreement never mentions fossil fuels — the cause of the problem it is meant to solve. ^{34,35,36}

The global scientific consensus on the causes and probable consequences of GHG accumulation in the atmosphere is remarkable for the range of independent lines of evidence and support, including what paleoclimatology reveals about past atmospheric composition, temperature, and sea levels; what a growing network of sensors across the surface of the Earth, in the oceans, and in orbit has been revealing about how the energy balance between Earth and space is changing; and what can be projected using climate models built using our understanding of the planet as a thermodynamic system and tested against paleoclimatic data and recent historical atmospheric and temperature data for refinement.³⁷ In a 2009 statement, the national scientific academies of the G8 states along with those of Brazil, China, South Africa, and India said:

The IPCC 2007 Fourth Assessment of climate change science concluded that large reductions in the emissions of greenhouse gases, principally $\rm CO_2$, are needed soon to slow the increase of atmospheric concentrations, and avoid reaching unacceptable levels. However, climate change is happening even faster than previously estimated; global $\rm CO_2$ emissions since 2000 have been higher than even the highest predictions, Arctic sea ice has been melting at rates much faster than predicted, and the rise in the sea level has become more rapid. Feedbacks in the climate system might lead to much more rapid climate changes. The need for urgent action to address

³⁰Scholarship on the politics of the IPCC includes: Hannah R. Hughes. "Practices of Power and Knowledge in the Intergovernmental Panel on Climate Change (IPCC)". PhD thesis. Aberystwyth, Wales: Aberystwyth University, Sept. 2012. URL: https://pure.aber.ac.uk/portal/files/10520425/ipcc_thesis.pdf (visited on 08/03/2022).

³¹Hannah Hughes. "Bourdieu and the IPCC's Symbolic Power". In: *Global Environmental Politics* 15.4 (2015), pp. 85-104. URL: https://direct.mit.edu/glep/article-abstract/15/4/85/14833/Bourdieu-and-the-IPCC-s-Symbolic-Power (visited on 08/03/2022).

³²Kari de Pryck. "Expertise under Controversy: The Case of the Intergovernmental Panel on Climate Change (IPCC)". PhD thesis. Paris: Institut d'études politiques de Paris (Sciences Po), 2018. URL: https://tel.archives-ouvertes.fr/tel-03419348/document (visited on 08/03/2022).

³³Kari De Pryck. "Intergovernmental Expert Consensus in the Making: the Case of the Summary for Policy Makers of the IPCC 2014 Synthesis Report". In: *Global Environmental Politics* 21.1 (2021), pp. 108–129. URL: https://direct.mit.edu/glep/article-abstract/21/1/108/95085/Intergovernmental-Expert-Consensus-in-the-Making (visited on 08/03/2022).

³⁴Parties to the United Nations Framework Convention on Climate Change. Paris Agreement. 2015. URL: https://treaties.un.org/doc/Treaties/2016/02/20160215%2006-03%20PM/Ch_XXVII-7-d.pdf (visited on 01/18/2020).

³⁵See also: Alex Rafalowicz. This is Why we Need a Fossil Fuel Treaty. 2021. URL: https://www.weforum.org/agenda/2021/08/this-is-why-we-need-a-fossil-fuel-treaty/ (visited on 09/05/2021).

³⁶Agreed at COP-26 in 2021, the Glasgow Climate Pact "calls upon Parties to" "accelerate efforts towards the phasedown of unabated coal power and phase-out of inefficient fossil fuel subsidies, while providing targeted support to the poorest and most vulnerable in line with national circumstances and recognizing the need for support towards a just transition." Parties to the Paris Agreement. Decisions Adopted by the Conference of the Parties Serving as the Meeting of the Parties to the Paris Agreement. 2021. URL: https://unfccc.int/sites/default/files/resource/cma2021_10_add1_adv.pdf (visited on 08/03/2022), p. 5.

³⁷Paleoclimatology allows for the estimation of past climatic conditions going back hundreds of thousands or millions of years using evidence including ice core samples from places like Antarctica and layers of underwater sediment. In addition to being able to directly analyze things like gas bubbles in ice, the ratios between isotopes within these materials can be used as proxies for temperature and the amount of ice on Earth. Jaffe and Taylor, *The Physics of Energy*, p. 716–20.

climate change is now indisputable. For example, limiting global warming to 2 °C would require a very rapid worldwide implementation of all currently available low carbon technologies.^{38,39}

A lack of agreement about 'the science' is apparently not an impediment to global action on climate change, though presenting a misleading view of absent scientific consensus has been a core climate denier strategy. 40,41,42,43,44,45

In addition to their six assessment reports to date, the IPCC released two documents in 2018 which speak powerfully to the level of policy and behavioural change necessary to stabilize the Earth's climate. Following the aspiration in the Paris Agreement of "keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels" and "pursu[ing] efforts to limit the temperature increase even further to 1.5 degrees Celsius" the IPCC produced a special report on the 1.5 °C target. 46,47,48 It explained the magnitude of global action necessary to constrain warming below that level:

In model pathways with no or limited overshoot of 1.5 °C, global net anthropogenic $\rm CO_2$ emissions decline by about 45% from 2010 levels by 2030 (40–60% interquartile range), reaching net zero around 2050 (2045–2055 interquartile range). For limiting global warming to below 2 °C $\rm CO_2$ emissions are projected to decline by about 25% by 2030 in most pathways (10–30% interquartile

³⁸Academia Brasileira de Ciencias, Brazil; Royal Society of Canada, Canada; Chinese Academy of Sciences, China, Academie des Sciences, France; Deutsche Akademie der Naturforsher Leopoldina, Germany; Indian National Science Academy, India; Accademia Nazionale dei Lincei, Italy; Science Council of Japan, Japan; Academia Mexicana de Ciencias, Mexico; Russian Academy of Sciences, Russia; Academy of Science of South Africa, South Africa; Royal Society, United Kingdom; National Academy of Sciences, United States of America. *G8+5 Academies' Joint Statement: Climate Change and the Transformation of Energy Technologies for a Low Carbon Future.* 2009. URL: https://web.archive.org/web/20090617040744/https://www.nationalacademies.org/includes/G8+5energy-climate09.pdf (visited on 05/14/2022).

³⁹See also: National Research Council. Advancing the Science of Climate Change. 2010. URL: https://www.nap.edu/resource/12782/Science-Report-Brief-final.pdf (visited on 12/29/2019).

⁴⁰Ignorance is normally thought of as something original and accidental which describes a state prior to the acquisition of knowledge. As Proctor points out, however, agnogenesis or the deliberate production of ignorance is a phenomenon with public policy relevance, with the tobacco industry, climate change denial, and the "doubt is our product" strategy from a 1969 Brown & Williamson Tobacco company memo serving as central examples. Jon Christensen. "Smoking Out Objectivity: Journalistic Gears in the Agnogenesis Machine". In: *Agnotology: The Making and Unmaking of Ignorance*. Ed. by Robert N. Proctor and Londa Schiebinger. Stanford: Stanford University Press, 2008, p. 266–7.

⁴¹Robert N. Proctor. "Agnotology: A Missing Term to Describe the Cultural Production of Ignorance (and Its Study)". In: *Agnotology: The Making and Unmaking of Ignorance*. Ed. by Robert N. Proctor and Londa Schiebinger. Stanford: Stanford University Press, 2008, p. 1.

⁴²Brulle et al. found that in the US between 2002 and 2010: "Promulgation of scientific information to the public on climate change has a minimal effect. The implication would seem to be that information-based science advocacy has had only a minor effect on public concern, while political mobilization by elites and advocacy groups is critical in influencing climate change concern." Robert J. Brulle, Jason Carmichael, and J. Craig Jenkins. "Shifting Public Opinion on Climate Change: An Empirical Assessment of Factors Influencing Concern over Climate Change in the US, 2002–2010". In: Climatic Change 114.2 (2012), pp. 169–188. URL: https://link.springer.com/article/10.1007/s10584-012-0403-y (visited on 01/10/2020).

⁴³Lakanen cited Young and Coutinho on how the referencing of different climate targets during the Harper government created "policy noise" for the "strategic production of ignorance." Nathan Young and Aline Coutinho. "Government, Anti-reflexivity, and the Construction of Public Ignorance About Climate Change: Australia and Canada Compared". In: *Global Environmental Politics* 13.2 (2013), pp. 89–108. URL: https://direct.mit.edu/glep/article-abstract/13/2/89/14623/Government-Anti-Reflexivity-and-the-Construction (visited on 04/25/2022).

⁴⁴Lakanen, "'A Battle for the Soul of the Climate Movement': The Expansion of the Intersectional Climate Justice Frame Among Young Activists in Canada", p. 104.

⁴⁵Another famous example is Republican party media advisor Frank Luntz's 2003 memo which said: "Voters believe that there is no consensus about global warming. Should the public come to believe that the scientific issues are settled, their views about global warming will change accordingly. Therefore, you need to make the lack of scientific certainty a primary issue in the debate." Oreskes and Conway, "Challenging Knowledge: How Climate Science Became a Victim of the Cold War", p. 74 (emphasis in Oreskes and Conway's text).

⁴⁶United Nations Framework Convention on Climate Change Secretariat. *Paris Agreement: Essential Elements.* 2015. URL: https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement (visited on 12/26/2019).

⁴⁷Intergovernmental Panel on Climate Change. Global Warming of 1.5 ° C. 2018. URL: https://www.ipcc.ch/site/assets/uploads/sites/2/2019/06/SR15_Full_Report_High_Res.pdf (visited on 12/26/2019).

⁴⁸See also: Nicole Mortillaro. Earth Set to Warm 3.2 C by 2100 Unless Efforts to Cut Emissions are Tripled, New UN Report Finds. 2019. URL: https://www.cbc.ca/news/technology/un-emissions-report-1.5373154 (visited on 01/04/2020).

range) and reach net zero around 2070 (2065–2080 interquartile range). 49,50,51,52,53

The Paris Agreement's temperature targets do not align with the commitments states made to reduce their emissions; indeed, even if every voluntary national target was met, temperatures would be expected to rise about 3.5 °C by 2100. ⁵⁴ The IPCC report argued that meeting its temperature objectives would "require rapid and far-reaching transitions in energy, land, urban and infrastructure (including transport and buildings), and industrial systems" which are "unprecedented in terms of scale, but not necessarily in terms of speed, and imply deep emissions reductions in all sectors, a wide portfolio of mitigation options and a significant upscaling of investments in those options." ^{55,56} Crucially, a global drop by 45% by 2030 and to zero by 2050 effectively requires much faster reductions in states like Canada which have the highest historical and per capita emissions.

The IPCC's second special report from 2018 documented the vast incompatibility between 2030 targets countries adopted through the United Nations Framework Convention on Climate Change (UNFCCC) and their actual fossil fuel use. ^{57,58,59,60} It noted that achieving the 1.5–2.0 °C temperature targets requires going beyond existing nationally determined contributions (NDCs – governments' self-chosen reduction targets) and that "[g]lobal greenhouse gas emissions show no signs of peaking." ⁶¹ It further stated:

Countries need to strengthen the ambition of NDCs and scale up and increase effectiveness of domestic policy to achieve the temperature goals of the Paris Agreement. To bridge the 2030 emissions gap and ensure long-term decarbonization consistent with the Paris Agreement goals, countries must enhance their mitigation ambition. 62

⁴⁹The reference to "overshoot" concerns the possibility that emissions may be removed from the atmosphere in the future through approaches like reforestation or carbon capture and storage (CCS). Intergovernmental Panel on Climate Change, *Global Warming of 1.5 ° C*, p. 12.

 $^{^{50}}$ Rogelj et al. found that "in the set of scenarios with a 'likely' (greater than 66%) chance of staying below 2°C, emissions peak between 2010 and 2020 and fall to a median level of 44Gt of ${\rm CO}_2$ equivalent in 2020 (compared with estimated median emissions across the scenario set of 48Gt of ${\rm CO}_2$ equivalent in 2010)." Joeri Rogelj et al. "Emission Pathways Consistent With a 2°C Global Temperature Limit". In: Nature Climate Change 1.8 (2011), p. 413. URL: https://www.nature.com/articles/nclimate1258 (visited on 12/28/2019).

 $^{^{51}}$ Tong et al. concluded that building any new fossil fuel infrastructure is incompatible with the 1.5 °C target. Dan Tong et al. "Committed Emissions from Existing Energy Infrastructure Jeopardize 1.5 °C Climate Target". In: Nature 572.7769 (2019), pp. 373–377. URL: https://www.nature.com/articles/s41586-019-1364-3 (visited on 05/05/2020).

⁵²Leah C. Stokes. Short Circuiting Policy: Interest Groups and the Battle over Clean Energy and Climate Policy in the American States. New York: Oxford University Press, 2020, p. 12.

 $^{^{53}} For an earlier analysis see: Malte Meinshausen et al. "Greenhouse-gas Emission Targets for Limiting Global Warming to 2 C". in: Nature 458.7242 (2009), pp. 1158–1162. URL: https://www.nature.com/articles/nature08017 (visited on 02/15/2020).$

⁵⁴Jaccard, The Citizen's Guide to Climate Success: Overcoming Myths that Hinder Progress, p. 66.

⁵⁵Intergovernmental Panel on Climate Change, Global Warming of 1.5 ° C, p. 15.

 $^{^{56} \}rm Every$ year of delay increases the peak rate at which emissions in the future must decline. See: Emission cuts far more rapid than those in the past are needed to avoid warming over 1.5 °C p. 41

⁵⁷The 'emissions gap' idea was not new. See: Kornelis Blok et al. "Bridging the Greenhouse-gas Emissions Gap". In: *Nature Climate Change* 2.7 (2012), p. 471. URL: https://www.nature.com/articles/nclimate1602 (visited on 12/27/2019).

⁵⁸Litfin identified how this concern about a gap goes back to Canada's submission at the first UNFCCC COP in 1995, which described Canada's commitment to stabilize GHG emissions at 1990 levels by 2000 and Environment Canada projections that they would actually rise to 13% above 1990 levels. Karen T. Litfin. "Advocacy Coalitions Along the Domestic-Foreign Frontier: Globalization and Canadian Climate Change Policy". In: *Policy Studies Journal* 28.1 (2000), pp. 236–252. URL: https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1541-0072.2000.tb02026.x (visited on 01/11/2020), p. 245.

⁵⁹Also, under Liberal and Conservative governments, Environment Canada employees called analyses of the disjuncture between Canada's projected emissions and its Kyoto Protocol and subsequent emission reduction targets "gapology." Political leaders have been much more willing to pledge distant emissions reductions targets somewhat compatible with safe limits estimated by scientists than to actually implement policies capable of meeting them. This process continues, with ever-fewer years before each target and thus higher costs and greater political resistance: Marieke Walsh. Canada on Track to Substantially Miss 2030 Emissions Reduction Targets, Government Data Shows. 2019. URL: https://www.theglobeandmail.com/politics/article-canada-on-track-to-substantially-miss-2030-emissions-reduction-targets/ (visited on 12/26/2019).

⁶⁰Douglas Macdonald. Carbon Province, Hydro Province: The Challenge of Canadian Energy and Climate Federalism. Toronto: University of Toronto Press, 2020, p. 216.

⁶¹Intergovernmental Panel on Climate Change. Emissions Gap Report 2018. 2018. URL: http://wedocs.unep.org/bitstream/handle/20.500.11822/26895/EGR2018_FullReport_EN.pdf (visited on 12/26/2019), p. xiiv, xv.

 $^{^{62}}$ Intergovernmental Panel on Climate Change, $Emissions\ Gap\ Report\ 2018,$ p. xiix.

In order to stay within the projected 1.5 °C carbon budget, emissions between 2020 and 2030 would need to fall globally by 7.6% per year – far beyond what has ever happened in an advanced industrial society. ^{63,64,65,66} The IPCC's conclusions that pledged actions are inadequate corresponds with the conclusions of Rogelj et al. who assessed intended NDCs under the Paris Agreement and found they "still imply a median warming of 2.6–3.1 degrees Celsius by 2100." Despite how many governments claim to have 'accepted the science' of the IPCC, this mitigation ambition is not evident. Indeed, even some of the apparent success of countries like Germany and Japan in constraining GHG pollution reflects how production of goods and services which their citizens consume has been shifted to other jurisdictions with increasing emissions, or represents the use of carbon offsetting mechanisms which may not have decreased emissions by the amount which states have been given credit for. ^{68,69,70,71}

Climate scientists and the IPCC employ global climate models (GCMs) to project the future impacts of climate change which must include assumptions about future human activity, which constitute the greatest source of uncertainty about future temperature change.⁷² This is an important point: the chief uncertainty about how much climate change humanity will experience arises from what trajectory we will follow in terms of fossil fuel use, not uncertainty about how much warming a given level of pollution would produce.

The projected consequences of greatly exceeding a 2 °C carbon budget are severe. In 2015, Ricarda Wikelmann et al. found that that: "Consistent with recent observations and simulations, the West Antarctic Ice Sheet becomes unstable with 600 to 800 GtC of additional carbon emissions."^{73,74} Describing the expected consequences of burning all the Earth's fossil fuels on Antarctica, Winkelmann says "To put it bluntly: if we burn it all, we melt it all" — echoing McKibben's claims in the "Terrifying New Math" article which helped

⁶³United Nations Climate Change. Cut Global Emissions by 7.6 Percent Every Year for Next Decade to Meet 1.5 ° C Paris Target — UN Report. 2019. URL: https://unfccc.int/news/cut-global-emissions-by-76-percent-every-year-for-next-decade-to-meet-15degc-paris-target-un-report (visited on 02/04/2020).

⁶⁴George Monbiot. Let's Abandon Climate Targets, and Do Something Completely Different. 2020. URL: https://www.theguardian.com/commentisfree/2020/jan/29/climate-targets-committee-on-climate-change-report (visited on 02/04/2020).

 $^{^{65}}$ The emissions of the USSR / Russia peaked in 1990 at 2.53 Gt of CO $_2$ and fell to 1.96 Gt in 1992, 1.64 Gt in 1994, and 1.48 Gt in 1997 before beginning to rise again. That amounts to a 41% drop in emissions over 7 years and an annual reduction rate of 5.9%. Hannah Ritchie and Max Roser. Russia: CO $_2$ Country Profile. 2020. URL: https://ourworldindata.org/co2/country/russia (visited on 10/12/2022).

 $^{^{66}}$ If global emissions had peaked in 2000, it would have been possible to maintain a 50% chance of staying below 1.5 °C of warming by cutting global emissions at a rate of 4% per year until they reached zero. By delaying the peak to 2019 and beyond, the reduction rate would now need to be 18% per year for the entire world, sustained until emissions are zero. See: Emission cuts far more rapid than those in the past are needed to avoid warming over 1.5 °C p. 41

 $^{^{67} \}rm Joeri~Rogelj$ et al. "Paris Agreement Climate Proposals Need a Boost to Keep Warming Well Below 2 ° C". in: Nature 534.7609 (2016), pp. 631–639. URL: https://www.nature.com/articles/nature18307 (visited on 02/04/2020).

⁶⁸On emissions embedded in trade flows see: Nadim Ahmad. A Framework for Estimating Carbon Dioxide Emissions Embodied in International Trade of Goods. 2004. URL: https://www.oecd-ilibrary.org/environment/measuring-sustainable-development/a-framework-for-estimating-carbon-dioxide-emissions-embodied-in-international-trade-of-goods_9789264020139-11-en (visited on 09/05/2021).

⁶⁹Kit Stolz. Made for the USA? On Who is Accountable for Chinese Greenhouse-gas Emissions. 2007. URL: https://web.archive.org/web/20080516174218/http://gristmill.grist.org/story/2007/11/15/102332/75 (visited on 09/05/2021).

⁷⁰ Jaccard discusses the limitations of offsets, including the self-serving biases of those who sell and verify them. There is a risk that poor quality offsets will be one of the shadow solutions Gardiner warns about, particularly because of their abstract nature. As Mark Schapiro describes them "the offset market is based on the lack of delivery of an invisible substance to no one." Jaccard, *The Citizen's Guide to Climate Success: Overcoming Myths that Hinder Progress*, p. 172–5.

⁷¹Mark Schapiro. Conning the Climate: Inside the Carbon-trading Shell Game. 2010. URL: http://citizensclimatelobby.org/files/Conning-the-Climate.pdf (visited on 08/01/2020), p. 32.

⁷² Jaffe and Taylor, The Physics of Energy, p. 703–4, 728.

⁷³Ricarda Winkelmann et al. "Combustion of Available Fossil Fuel Resources Sufficient to Eliminate the Antarctic ice Sheet". In: Science Advances 1.8 (2015). URL: https://advances.sciencemag.org/content/1/8/e1500589 (visited on 01/01/2020), p. 1-2

⁷⁴Shue discusses a global carbon budget of a similar approximate size, discussing "the trillionth ton" and a 1,000 GtC level of cumulative emissions estimated to correspond to about 2 °C of warming. Henry Shue. *Climate Justice: Vulnerability and Protection.* Oxford: Oxford University Press, 2014, p. 307.

launch the CFFD movement.⁷⁵ Bamber et al. calculated that melting the west Antarctic ice sheet would add 3.3 m to global sea level.^{76,77,78,79} Melting the entire Greenland ice sheet would add 7 m to global sea levels.⁸⁰ The IPCC projected that with warming of 1.5 to 2.5 °C, 20-30% of all species will be at increased risk of extinction, rising to over 40% of species at over 3.5 °C – representing a profound and irrevocable loss to the common heritage of humankind inherited by our descendants.^{81,82,83,84} The IPCC report calculated that "[w]arming is likely to exceed 2 °C for RCP6.0 and RCP8.5 (high confidence)" and describe that under the RCP8.5 scenario it is "more unlikely than likely" that temperature change by 2100 will be kept below 4 °C.^{85,86,87,88,89} A 2014 report from the World Bank Group projected the consequences associated with a 4 °C temperature increase, and concluded that:

climatic conditions, heat and other weather extremes considered highly unusual or unprecedented today would become the new climate normal—a world of increased risks and instability. The consequences for development would be severe as crop yields decline, water resources change, diseases move into new ranges, and sea levels rise. The task of promoting human development, of ending poverty, increasing global prosperity, and reducing global inequality will be very challenging in a 2 $^{\circ}$ C world, but in a 4 $^{\circ}$ C world there is serious doubt whether this can be achieved at all. 90,91

⁷⁵ Carbon Brief. Keep Coal, Gas and Oil in the Ground to Save Antarctic Ice Sheet, Study Warns. 2015. URL: https://www.carbonbrief.org/keep-coal-gas-and-oil-in-the-ground-to-save-antarctic-ice-sheet-study-warns (visited on 01/02/2020).

⁷⁶Jonathan L Bamber et al. "Reassessment of the Potential Sea-level Rise from a Collapse of the West Antarctic ice Sheet". In: *Science* 324.5929 (2009), pp. 901-903. URL: https://science.sciencemag.org/content/sci/324/5929/901.full.pdf (visited on 01/01/2020).

⁷⁷A 2016 update from the Scientific Committee on Antarctic Research (SCAR) found that a 2 °C temperature rise in the Southern Ocean would create a substantial risk of the collapse of the West Antarctic ice sheet over the next 1,000 years, with 1–3 m of sea level rise by 2300. Jaffe and Taylor, *The Physics of Energy*, p. 733.

⁷⁸Peter C. Convey et al. *Antarctic Climate Change and the Environment*. Cambridge: Cambridge University Press, 2009. URL: https://www.scar.org/library/scar-publications/occasional-publications/3508-antarctic-climate-change-and-the-environment-1/file/ (visited on 08/10/2020).

⁷⁹Scientific Committee on Antarctic Research (SCAR). Antarctic Climate Change and the Environment — 2016 Update. 2016. URL: https://www.scar.org/antarctic-treaty/actm-papers/atcm-xxxix-and-cep-xix-2016/2750-atcm39-ip035/file/(visited on 08/10/2020).

⁸⁰ Jaffe and Taylor, The Physics of Energy, p. 734.

 $^{^{81} {\}rm Jaffe}$ and Taylor, The Physics of Energy, p. 735.

⁸²S. Solomon et al. Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge: Cambridge University Press, 2007. URL: https://www.ipcc.ch/site/assets/uploads/2018/05/ar4_wg1_full_report-1.pdf (visited on 08/10/2020).

⁸³Similarly, scientists have warned that without drastic action to curb GHG pollution almost all the world's coral reefs will die by mid-century. Tim McClanahan et al. Forecasting Climate Sanctuaries for Securing the Future of Coral Reefs. 2022. URL: https://c532f75abb9c1c021b8c-e46e473f8aadb72cf2a8ea564b4e6a76.ssl.cf5.rackcdn.com/2022/04/11/2ei8gai5sx_Final_50_Reefs_Science_Whitepaper.pdf (visited on 04/18/2022).

⁸⁴ Alexandra Mae Jones. Earth's Coral Reefs Will be Gone in 30 Years Without Intervention: Experts. 2022. URL: https://www.ctvnews.ca/mobile/climate-and-environment/earth-s-coral-reefs-will-be-gone-in-30-years-without-intervention-experts-1.5865154 (visited on 04/18/2022).

⁸⁵Intergovernmental Panel on Climate Change. Climate Change 2014 Synthesis Report. 2014. URL: https://www.ipcc.ch/site/assets/uploads/2018/02/SYR_AR5_FINAL_full.pdf (visited on 01/02/2020), p. 10, 22.

⁸⁶In their 4th assessment report in 2014, the IPCC modeled a Representative Concentration Pathway (RCP) RCP8.5 scenario in which global emissions level off by 2100 but do not substantially decline. Intergovernmental Panel on Climate Change, Climate Change 2014 Synthesis Report, p. 8–9.

⁸⁷See also: Jaffe and Taylor, *The Physics of Energy*, p. 726.

 $^{^{88} \}rm Zeke$ Hausfather. Explainer: The High-emissions 'RCP8.5' Global Warming Scenario. 2019. URL: https://www.carbonbrief.org/explainer-the-high-emissions-rcp8-5-global-warming-scenario (visited on 01/01/2020).

⁸⁹G.P. Wayne. Now Available: A Guide to the IPCC's New RCP Emissions Pathways. 2013. URL: https://www.theguardian.com/environment/climate-consensus-97-per-cent/2013/aug/30/climate-change-rcp-handy-summary (visited on 01/01/2020).

⁹⁰World Bank Group. 4° Turn Down the Heat: Confronting the New Climate Normal. 2014. URL: http://documents.worldbank.org/curated/en/317301468242098870/pdf/927040v20WP0000ull0Report000English.pdf (visited on 01/01/2020), p. xvii.

⁹¹This is compatible with my argument that action to stabilize the climate should be prioritized in part because avoiding catastrophic disruption is a precondition for other political projects.

The report cited several assessments that continued inaction on climate change mitigation would lead to a world 4 °C hotter or more, including the International Energy Agency's (IEA) World Energy Outlook in 2012 and an assessment by the Climate Action Tracker. In a sample of 114 energy-economic model scenarios based on "the absence of further substantial policy action... climate-model projections reach a warming of 4.0-5.2 °C above pre-industrial levels by $2100.^{92}$ Other recent scientific work raises the possibility that, due to self-reinforcing feedbacks, the sensitivity of the climate to a doubling of CO_2 may be well beyond the 3 °C estimate often taken as typical, implying a smaller global carbon budget for any particular stabilization temperature and more risk of self-reinforcing feedback effects (akin to holding a microphone too close to an amplified speaker that it is connected to) that take the Earth's temperature out of human control. 93,94,95,96,97,98,99,100,101,102 Anderson wrote in 2012 that:

It is fair to say, based on many (and ongoing) discussions with climate change colleagues, that there is a widespread view that a 4 $^{\circ}$ C future is incompatible with any reasonable characterisation of an organised, equitable and civilised global community. A 4 $^{\circ}$ C future is also beyond what many people think we can reasonably adapt to. Besides the global society, such a future will also be devastating for many if not the majority of ecosystems. 103,104

On the basis of a paleoclimatic study of the Mid-Piacenzian Warm Period, Elwyn de la Vega et al. concluded that "at present rates of human emissions, there will be more CO_2 in Earth's atmosphere by 2025 than at

⁹²World Bank Group, 4 ° Turn Down the Heat: Confronting the New Climate Normal, p. 5.

⁹³K.D. Williams, A.J. Hewitt, and A. Bodas-Salcedo. "Use of Short-Range Forecasts to Evaluate Fast Physics Processes Relevant for Climate Sensitivity". In: *Journal of Advances in Modeling Earth Systems* 12.4 (2020). URL: https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2019MS001986 (visited on 06/20/2020).

⁹⁴Tim Palmer. Short-term Tests Validate Long-term Estimates of Climate Change. 2020. URL: https://www.nature.com/articles/d41586-020-01484-5 (visited on 06/20/2020).

⁹⁵ Jonathan Watts. Climate Worst-case Scenarios May Not Go Far Enough, Cloud Data Shows. 2020. URL: https://www.theguardian.com/environment/2020/jun/13/climate-worst-case-scenarios-clouds-scientists-global-heating (visited on 06/20/2020).

⁹⁶Alan Frank raises the possibility that feedback loops in the climate system could produce "delayed collapse" — "Push a planet too hard, and it won't return to where it began." Others have compared stressing the climate with GHGs to rocking a vending machine back and forth; when it's only tilted a little it rocks back into the normal orientation if released, but tipped too far it will fall into a new equilibrium on its side instead and will never return to the old arrangement on its own. Adam Frank. How Do Aliens Solve Climate Change? 2020. URL: https://www.theatlantic.com/science/archive/2018/05/how-do-aliens-solve-climate-change/561479/ (visited on 10/21/2020).

 $^{^{97}}$ As an example of a self-reinforcing feedback, as peat in the Arctic gets hotter and drier it becomes more susceptible to fires which add CO $_2$ to the atmosphere. CBC Radio. Peat Fires, Like Those Raging in Siberia, Will Become More Common in Canada. 2020. URL: https://www.cbc.ca/radio/whatonearth/peat-fires-like-those-raging-in-siberia-will-become-more-common-in-canada-1.5670662 (visited on 08/02/2020).

⁹⁸ Maddie Stone. Arctic Fires Released More Carbon in Two Months Than Scandinavia Will All Year. 2020. URL: https://grist.org/climate/arctic-fires-released-more-carbon-in-two-months-than-scandinavia-will-all-year/ (visited on 08/13/2020).

⁹⁹On the danger melting permafrost will significantly worsen anthropogenic warming, see: Jannik Martens et al. "Remobilization of Dormant Carbon from Siberian-Arctic Permafrost During Three Past Warming Events". In: Science Advances 6.42 (2020). URL: https://advances.sciencemag.org/content/6/42/eabb6546.abstract (visited on 10/20/2020).

¹⁰⁰ Chelsea Harvey. If Past Is a Guide, Arctic Could Be Verging on Permafrost Collapse. 2020. URL: https://www.scientificamerican.com/article/if-past-is-a-guide-arctic-could-be-verging-on-permafrost-collapse/ (visited on 10/20/2020).

¹⁰¹The Moscow Times. Slight Arctic Warming Could Trigger Abrupt Permafrost Collapse — Study. 2020. URL: https://www.themoscowtimes.com/2020/10/20/slight-arctic-warming-could-trigger-abrupt-permafrost-collapse-study-a71805 (visited on 10/20/2020).

 $^{^{102}}$ Other worrisome feedbacks include rainforests drying out and turning to grassland and forest fires releasing carbon from biomass into the atmosphere.

¹⁰³Kevin Anderson. "Climate Change Going Beyond Dangerous — Brutal Numbers and Tenuous Hope". In: *Development Dialogue* 61.1 (2012), p. 16. URL: https://pdfs.semanticscholar.org/af23/7a0deead53d1cfb1c88c7924ea2ff3727488.pdf (visited on 01/01/2020), p. 29.

¹⁰⁴Or, as James Gustave Speth put it: "How serious is the threat to the environment? Here is one measure of the problem: all we have to do to destroy the planet's climate and biota and leave a ruined world for our children and grandchildren is to keep doing exactly what we are doing today, with no growth in the human population or the world economy." James Gustave Speth. The Bridge at the Edge of the World: Capitalism, the Environment, and Crossing from Crisis to Sustainability. New Haven: Yale University Press, 2009, p. x.

any time in at least the last 3.3 million years," replicating the conditions in the Pliocene Epoch 2.6 to 5.3 million years ago when temperatures were about 3 $^{\circ}$ C warmer than at present and sea levels were 20 metres higher. 105,106

Taken together, these sources substantiate the claim that climate change could be an existential threat to human civilization, particularly when knock-on effects of migration and conflict are considered. ^{107,108} Such unconstrained climate change would surely cause grave and extensive damage to the common heritage of humanity (or the "cultural heritage of all mankind" as referenced in the 1954 Convention for the Protection of Cultural Property in the Event of Armed Conflict; 1970 Declaration of Principles Governing the Seabed and Ocean Floor; and 1982 United Nations Convention on the Law of the Sea). ¹⁰⁹ Human settlements have always been built on oceanfront and navigable rivers, so dramatic changes to sea level, precipitation, snow and glacier levels, and river flow threaten to damage a heritage which has been accumulating since the first permanent human communities. ¹¹⁰

The 2021–22 AR6 report of the IPCC only added to the reasons for concern, level of scientific confidence in climate change risks, and need for major policy and infrastructure changes to prevent severe or catastrophic outcomes. The physical science report explained: "Global warming of 1.5 °C and 2 °C will be exceeded during the 21st century unless deep reductions in $\rm CO_2$ and other greenhouse gas emissions occur in the coming decades" and that "limiting human-induced global warming to a specific level requires limiting cumulative $\rm CO_2$ emissions, reaching at least net zero $\rm CO_2$ emissions, along with strong reductions in other greenhouse gas emissions." The impacts and adaptation report stated: "Approximately 3.3 to 3.6 billion people live in contexts that are highly vulnerable to climate change (high confidence)", that "[c]limate change impacts and risks are becoming increasingly complex and more difficult to manage", and that "[e]vidence of observed impacts, projected risks, levels and trends in vulnerability, and adaptation limits, demonstrate that worldwide climate resilient development action is more urgent than previously assessed in AR5." The mitigation report stated: "Total net anthropogenic GHG emissions have continued to rise during the period 2010–2019", that "[t]here has been a consistent expansion of policies and laws addressing mitigation since AR5." It also stated that existing and planned fossil fuel infrastructure will be sufficient to breach the 1.5 °C limit:

 $^{^{105} \}mbox{Elwyn}$ de la Vega et al. "Atmospheric CO $_2$ during the Mid-Piacenzian Warm Period and the M2 glaciation". In: Scientific Reports (2020). URL: https://www.nature.com/articles/s41598-020-67154-8 (visited on 07/12/2020).

 $^{^{106} \}rm Jonathan~Watts.~\it CO_2~in~Earth's~\it Atmosphere~\it Nearing~\it Levels~of~15m~\it Years~\it Ago.~2020.~\it URL:~https://www.theguardian.com/environment/2020/jul/09/co2-in-earths-atmosphere-nearing-levels-of-15m-years-ago~(visited~on~07/12/2020).$

¹⁰⁷As Jacobs noted, the degree to which governments invest in sustainable technologies and livable environments "will largely determine how nasty and brutish the distributive battles of tomorrow will be." Alan M. Jacobs. *Governing for the Long Term: Democracy and the Politics of Investment.* Cambridge: Cambridge University Press, 2011, p. 268.

¹⁰⁸Richard Rhodes, Pulitzer prize winning historian of nuclear weapon programs around the world, wrote in 2018 that climate change "looms over civilization with much the same gloom of doomsday menace as did fear of nuclear annihilation in the long years of the Cold War." Richard Rhodes. *Energy: A Human History*. New York: Simon & Schuster, 2018, p. xiii.

¹⁰⁹ The United Nations Declaration on the Rights of Indigenous Peoples also references "the diversity and richness of civilizations and cultures, which constitute the common heritage of humankind." United Nations General Assembly. *United Nations Declaration on the Rights of Indigenous Peoples*. 2007. URL: https://www.un.org/development/desa/indigenouspeoples/declaration-on-the-rights-of-indigenous-peoples.html (visited on 01/18/2020).

¹¹⁰Projected consequences of extreme unmitigated climate change begin to resemble those which Harry Truman warned in his farewell address would arise from nuclear war: it could "demolish the great cities of the world, wipe out the cultural achievements of the past—and destroy the very structure of a civilization that has been slowly and painfully built up through hundreds of generations." Richard Rhodes. Arsenals of Folly: The Making of the Nuclear Arms Race. New York: Vintage Books, 2008, p. 79.

¹¹¹Intergovernmental Panel on Climate Change, Climate Change 2021: The Physical Science Basis: Summary for Policy-makers, p. 14, 27.

¹¹²Intergovernmental Panel on Climate Change, Climate Change 2022: Impacts, Adaptation and Vulnerability: Summary for Policymakers, p. 14, 20, 31.

¹¹³Intergovernmental Panel on Climate Change, Climate Change 2022: Mitigation of Climate Change: Summary for Policy-makers, p. 5, 15.

Projected cumulative future CO_2 emissions over the lifetime of existing and currently planned fossil fuel infrastructure without additional abatement exceed the total cumulative net CO_2 emissions in pathways that limit warming to 1.5 °C (>50%) with no or limited overshoot.^{114,115}

The report highlighted the inadequacy of existing policies: "Without a strengthening of policies beyond those that are implemented by the end of 2020, GHG emissions are projected to rise beyond 2025, leading to a median global warming of 3.2 [2.2 to 3.5] °C by 2100" and that: "[a]ll global modelled pathways that limit warming to 1.5 °C (>50%) with no or limited overshoot, and those that limit warming to 2 °C (>67%) involve rapid and deep and in most cases immediate GHG emission reductions in all sectors." The AR6 also affirmed the carbon bubble and stranded assets argument popularized by McKibben's "Terrifying New Math" article:

Limiting global warming to 2 °C or below will leave a substantial amount of fossil fuels unburned and could strand considerable fossil fuel infrastructure (high confidence)... The combined global discounted value of the unburned fossil fuels and stranded fossil fuel infrastructure has been projected to be around 1–4 trillion dollars from 2015 to 2050 to limit global warming to approximately 2 °C, and it will be higher if global warming is limited to approximately 1.5 °C (medium confidence). 117

Other sources corroborate the IPCC's conclusions and demonstrate the strength of the underlying science. In November 2019, the secretary general of the World Meteorological Association noted that: "the last time the Earth experienced a comparable concentration of CO₂ was 3–5 million years ago. Back then, the temperature was 2–3 °C warmer, sea level was 10–20 meters higher than now."^{118,119,120} Xu et al. projected that: "depending on scenarios of population growth and warming, over the coming 50 y[ears], 1 to 3 billion people are projected to be left outside the climate conditions that have served humanity well over the past 6,000 y[ears]."^{121,122} A 2020 survey of 106 experts predicted a likely sea level rise of "0.30–0.65m by 2100, and 0.54–2.15m by 2300, relative to 1986–2005" and under the RCP8.5 scenario a rise of "0.63–1.32m by 2100, and 1.67–5.61m by 2300."^{123,124} Hausfather et al. found that the projections for

¹¹⁴Intergovernmental Panel on Climate Change, Climate Change 2022: Mitigation of Climate Change: Summary for Policy-makers, p. 20.

¹¹⁵This underscored how the Canadian government's view that it can continue to develop fossil fuel resources while making a fair contribution to climate change mitigation is unjustified.

¹¹⁶Intergovernmental Panel on Climate Change, Climate Change 2022: Mitigation of Climate Change: Summary for Policy-makers, p. 22, 33.

¹¹⁷Intergovernmental Panel on Climate Change, Climate Change 2022: Mitigation of Climate Change: Summary for Policymakers, p. 37–8.

¹¹⁸World Meteorological Association. *Greenhouse Gas Concentrations in Atmosphere Reach Yet Another High.* 2019. URL: https://public.wmo.int/en/media/press-release/greenhouse-gas-concentrations-atmosphere-reach-yet-another-high (visited on 05/08/2020).

¹¹⁹ World Meteorological Association. WMO Greenhouse Gas Bulletin (GHG Bulletin) — No. 15: The State of Greenhouse Gases in the Atmosphere Based on Global Observations through 2018. 2019. URL: https://library.wmo.int/index.php?lvl=notice_display&id=21620 (visited on 05/08/2020).

¹²⁰ Al Jazeera News. Climate Change: The State of our Atmosphere. 2019. URL: https://www.aljazeera.com/news/2020/03/climate-change-state-atmosphere-200311123221535.html (visited on 05/08/2020).

¹²¹ Chi Xu et al. "Future of the Human Climate Niche". In: *Proceedings of the National Academy of Sciences* (2020). URL: https://www.pnas.org/content/early/2020/04/28/1910114117 (visited on 05/08/2020).

 $^{^{122}}$ Jonathan Watts. One Billion People Will Live in Insufferable Heat Within 50 Years — Study. 2020. URL: https://www.theguardian.com/environment/2020/may/05/one-billion-people-will-live-in-insufferable-heat-within-50-years-study (visited on 05/08/2020).

¹²³ Benjamin P. Horton et al. "Estimating Global Mean Sea-level Rise and its Uncertainties by 2100 and 2300 from an Expert Survey". In: Climate and Atmospheric Science (2020). URL: https://www.nature.com/articles/s41612-020-0121-5 (visited on 05/08/2020).

¹²⁴ Jonathan Watts. Sea Levels Could Rise More Than a Metre by 2100, Experts Say. 2020. URL: https://www.theguardian.com/environment/2020/may/08/sea-levels-could-rise-more-than-a-metre-by-2100-experts-say (visited on 05/08/2020).

increased surface temperatures from climate models accurately correspond with observed data.^{125,126} The scientific literature also demonstrates the threat of climate change to non-human nature. Trisos, Merow, and Pigot conclude that climate change projections imply "a potentially catastrophic loss of global biodiversity is on the horizon."^{127,128} Under an RCP 8.5 scenario, they expect abrupt disruption of tropical oceans as most species are shifted into climatic conditions beyond their realized niche, with similar effects in tropical forests and higher latitudes by 2050.

The possibility of harmful tipping points within the climate system also affects the ethics and politics of climate change, since they add to the risk of catastrophic or runaway climate change scenarios. 129,130,131,132,133,134 Much climate change policy is made as though only deliberate anthropogenic emissions harm the climate and that a global carbon budget only needs to consider those. Unfortunately, there are powerful natural forces which the IPCC warns may be set off by a certain level of human-caused warming and then continue to cause further warming even if human emissions cease. For example, losing the reflectiveness of Arctic summer ice causes that part of the world to retain more heat and cause more warming. There are also vast stores of carbon dioxide and methane in ecosystems like tropical rainforests and boreal forests, the Arctic permafrost, and subsea methane clathrate deposits. 135,136,137,138,139,140,141,142 These threatened

¹²⁵ Alan Buis. Study Confirms Climate Models are Getting Future Warming Projections Right. 2020. URL: https://climate.nasa.gov/news/2943/study-confirms-climate-models-are-getting-future-warming-projections-right.amp (visited on 01/28/2020).

¹²⁶ Zeke Hausfather et al. "Evaluating the Performance of Past Climate Model Projections". In: Geophysical Research Letters 47.1 (2020). URL: https://agupubs.onlinelibrary.wiley.com/doi/pdfdirect/10.1029/2019GL085378 (visited on 04/16/2022).

¹²⁷ Christopher H. Trisos, Cory Merow, and Alex L. Pigot. "The Projected Timing of Abrupt Ecological Disruption from Climate Change". In: *Nature* (2020), pp. 1-6. URL: https://www.nature.com/articles/s41586-020-2189-9 (visited on 04/11/2020).

¹²⁸ See also: Toronto 350.org. The Fossil Fuel Industry and the Case for Divestment: Update. Toronto: Asquith Press, 2015. URL: http://www.uoftfacultydivest.com/files/fossil-fuel-divest-new.pdf (visited on 01/30/2017), p. 47-50.

¹²⁹ See: Timothy M. Lenton et al. "Climate Tipping Points — Too Risky to Bet Against". In: *Nature* (2019). URL: https://www.nature.com/articles/d41586-019-03595-0 (visited on 01/18/2020).

¹³⁰Anthony D. Barnosky et al. "Approaching a State Shift in Earth's Biosphere". In: *Nature* 486.7401 (2012), p. 52. URL: https://www.nature.com/articles/nature11018 (visited on 12/28/2019).

¹³¹Timothy M. Lenton et al. "Tipping Elements in the Earth's Climate System". In: *Proceedings of the National Academy of Sciences* 105.6 (2008), pp. 1786–1793. URL: https://www.pnas.org/content/105/6/1786 (visited on 01/01/2020).

¹³²Toronto350.org, The Fossil Fuel Industry and the Case for Divestment: Update, p. 54–6.

¹³³Catriona McKinnon. Climate Change and Future Justice: Precaution, Compensation, and Triage. New York: Routledge, 2012, p. 47–50.

¹³⁴Jaffe and Taylor, *The Physics of Energy*, p. 701–2.

¹³⁵The IPCC's special 1.5 °C report stated: "Potential additional carbon release from future permafrost thawing and methane release from wetlands would reduce budgets by up to 100 GtCO₂ over the course of this century and more thereafter (medium confidence)." Intergovernmental Panel on Climate Change, *Global Warming of 1.5* ° C, p. 12, 221.

¹³⁶ See also: Juan C. Rocha et al. "Cascading Regime Shifts Within and Across Scales". In: Science 362.6421 (2018), pp. 1379—1383. ISSN: 0036-8075. DOI: 10.1126/science.aat7850. URL: https://science.sciencemag.org/content/362/6421/1379 (visited on 12/01/2019).

¹³⁷ Jonathan Watts. Risks of 'Domino Effect' of Tipping Points Greater Than Thought, Study Says. 2018. URL: https://www.theguardian.com/environment/2018/dec/20/risks-of-domino-effect-of-tipping-points-greater-than-thought-study-says (visited on 12/01/2019).

 $^{^{138}}$ Fiona Harvey. Australian Bushfires Will Cause Jump in CO $_2$ in Atmosphere, say Scientists. 2020. URL: https://www.theguardian.com/environment/2020/jan/24/australian-bushfires-will-cause-jump-in-co2-in-atmosphere-say-scientists (visited on 01/28/2020).

¹³⁹ The Economist. The Brazilian Amazon has Been a Net Carbon Emitter Since 2016. 2022. URL: https://www.economist.com/interactive/graphic-detail/2022/05/21/the-brazilian-amazon-has-been-a-net-carbon-emitter-since-2016 (visited on 05/30/2022).

 $^{^{140}}$ On the risk of climate change converting tropical forests into grasslands, releasing large amounts of CO₂, see: Arie Staal et al. "Hysteresis of Tropical Forests in the 21st Century". In: Nature Communications (2020). URL: https://www.nature.com/articles/s41467-020-18728-7 (visited on 10/06/2020).

¹⁴¹Fiona Harvey. Amazon Near Tipping Point of Switching from Rainforest to Savannah — Study. 2020. URL: https://www.theguardian.com/environment/2020/oct/05/amazon-near-tipping-point-of-switching-from-rainforest-to-savannah-study (visited on 10/06/2020).

¹⁴²Lynas concluded that: "Society may be lulled into a false sense of security by smooth projections of global change. Our synthesis of present knowledge suggests that a variety of tipping elements could reach their critical point within this century

carbon sinks are relevant insofar as they highlight the urgency of climate change mitigation, since delayed action carries a greater risk of crossing tipping points. They also affect the politics of emissions reductions, with countries jostling to get credit for carbon sinks like forests within their territory, and thus to secure the right to more GHG emissions, but not yet giving thought to whether they may later need to buy credits for unintended emissions from their territory. 143,144,145,146 These self-reinforcing feedbacks also raise the risk that humanity will choose to gamble on geoengineering — deliberate manipulation of the climate system intended to counteract GHG-driven warming — after delaying too long on mitigation and starting to see atmospheric GHG concentrations exploding beyond human control. 47 Geoengineering would impose its own unknown risks on humanity and non-human nature.

Even a concise summary of economic analyses of the potential costs of climate change and the economics of mitigation would take us far afield from the short summary needed here. It is sufficient therefore to mention the 2006 Stern Review on the Economics of Climate Change, which emphasized that: "The benefits of strong, early action on climate change outweigh the costs." In the Canadian context, it is also worth mentioning that former Bank of Canada and Bank of England governor Mark Carney argued in 2021: "We have both too many hydrocarbons, enormous stranded assets, whether it's in coal, three-quarters of coal, half of gas, roughly the same of oil, we have too many fossil fuels." Such statements

under anthropogenic climate change. The greatest threats are tipping the Arctic sea-ice and the Greenland ice sheet, and at least five other elements could surprise us by exhibiting a nearby tipping point." Lenton et al., "Tipping Elements in the Earth's Climate System", p. 1792.

¹⁴³Articles in the Canadian media often argue that our forests should be counted against our emissions when determining our obligation to cut GHG pollution, despite the non-comparability of a stock of carbon embodied in biomass and an annual flow of carbon from fossil fuel burning. Also, nobody believes that countries should be responsible for emissions induced by warming itself: another gap between emissions as we count them and as they exist in the physical world. See: Jennifer Skene and Michael Polanyi. *Missing the Forst: How Carbon Loopholes for Logging Hinder Canada's Climate Leadership.* 2021. URL: https://naturecanada.ca/wp-content/uploads/2021/10/Missing-the-Forest.pdf (visited on 06/16/2022).

144 Cloe Logan. New Report Shows Emissions from Canada's Forestry Sector are Vastly Underreported. 2021. URL: https://www.nationalobserver.com/2021/11/01/news/new-report-shows-emissions-canadas-forestry-sector-are-vastly-underreported (visited on 06/16/2022).

145 Natasha Bulowski. Canada's Climate Goals are Built on Flawed Forest Carbon Accounting, Enviro Groups Say. 2022. URL: https://www.nationalobserver.com/2022/04/22/news/canadas-climate-goals-are-built-flawed-forest-carbon-accounting (visited on 06/16/2022).

¹⁴⁶Bob Weber. Canadian Government Masking Carbon Emissions from Forestry: Report. 2022. URL: https://globalnews.ca/news/9206501/canada-forest-carbon-emissions-report/ (visited on 10/27/2022).

¹⁴⁷Jaccard argued that "we have dithered for so long that geoengineering options are now unavoidably in the climate toolbox." Jaccard, *The Citizen's Guide to Climate Success: Overcoming Myths that Hinder Progress*, p. 255-6.

¹⁴⁸See: Stephen M. Gardiner. "Is 'Arming the Future' with Geoengineering Really the Lesser Evil? Some Doubts About the Ethics of Intentionally Manipulating the Climate System". In: *Climate Ethics: Essential Readings*. Ed. by Rajendra Kumar Pachauri et al. Oxford: Oxford University Press, 2010.

¹⁴⁹Nicholas Stern. Stern Review: The Economics of Climate Change: Executive Summary. 2006. URL: https://webarchive.nationalarchives.gov.uk/ukgwa/20100407172955mp_/http://www.hm-treasury.gov.uk/d/Executive_Summary.pdf (visited on 04/17/2022), p. 1.

¹⁵⁰Nicholas Stern. The Economics of Climate Change: The Stern Review. Cambridge University Press, 2007. URL: http://webarchive.nationalarchives.gov.uk/+/http://www.hm-treasury.gov.uk/sternreview_index.htm (visited on 01/23/2017).

¹⁵¹Lemphers argued: "For nearly two decades, the dominant frame in climate policy debates was the steep cost of climate action. That started to change with the 2006 Stern Review which tallied the global cost of inaction." Nathan C. Lemphers. "Beyond the Carbon Curse: a Study of the Governance Foundations of Climate Change Politics in Australia, Canada and Norway". PhD thesis. Toronto: University of Toronto, 2019. URL: https://tspace.library.utoronto.ca/handle/1807/101303 (visited on 08/15/2020), p. 302.

¹⁵²Sam Meredith. UN's Mark Carney says 'Enormous' Stranded Assets Show the Need for a Rapid Energy Transition. 2021. URL: https://www.cnbc.com/2021/10/21/climate-stranded-assets-show-the-need-for-rapid-energy-transition-carney-says.html (visited on 04/17/2022).

153 See also: Jessica Shankleman. Mark Carney: Most Fossil Fuel Reserves can't be Burned. 2014. URL: https://www.theguardian.com/environment/2014/oct/13/mark-carney-fossil-fuel-reserves-burned-carbon-bubble (visited on 04/17/2022).

¹⁵⁴Pilita Clark. Mark Carney Warns Investors Face 'Huge' Climate Change Losses. 2015. URL: https://www.ft.com/content/622de3da-66e6-11e5-97d0-1456a776a4f5 (visited on 04/17/2022).

¹⁵⁵Rand quoted Carney calling climate change "a defining issue for financial stability" and affirming that the vast majority of fossil fuel reserves are stranded. Rand argued: "Until Carney spoke up, talk about the carbon bubble was the prerogative of

coming from authoritative figures associated with sober financial analysis rather than appeals to justice have been important validation for university administrations concerned about fiduciary duty. The salience of expressions of concern about climate change from conventional financial actors is revisited in the conclusions, where non-progressive coalitions for climate change action are discussed.

A comprehensive review of media coverage would far exceed the necessary scope for this summary, but there are nonetheless clear indications that in the period before and during the CFFD movement journalists have devoted enormous attention to climate change's causes and consequences, as well as the efforts of governments to respond and their adequacy. Xinsheng Liu, Arnold Vedlitz, and Letitia Alston described two roles played by the media in relation to climate change: influencing its salience as a public policy issue, and influencing how the public and policy makers think about the issue, including about possible solutions. Maxwell Boykoff found that worldwide coverage of climate change in 50 newspapers was five times larger in 2009 than in 2000. Andreas Schmidt, Ana Ivanova, and Mike Schäfer found that from a relatively low level in the 1990s, issue attention "expanded, sometimes dramatically, in all countries in the course of the following years."

In their examination of the *Toronto Star* and *Globe and Mail* between 1988 and 2007, Katrina Ahchong and Rachel Dodds found that the salience of climate change increased throughout the twenty year period, with swells at times of international talks and agreements, and concluded: "Climate change is an issue of growing concern, and the increasing presence of it in the news media is evidence of this fact." Mark Stoddart, Randolph Haluza-DeLay and David Tindall's analysis of the Globe and Mail and National Post between 1997 and 2010 found that coverage rose from 0.2% of articles in 1999 to more than 2% of articles in the peak year of 2007 when the IPCC released their 4th assessment report. They argued: "national news media in many parts of the world have integrated climate change into normal news routines since the adoption of the Kyoto Protocol." George Hoberg analyzed the rising salience of climate change in the context of proposed export pipelines for the bitumen sands. Between 2013 and 2016 he found that climate change went from the least to the most mentioned frame of analysis in articles about the proposed Energy East pipeline. Hoberg argued: "This shift can be credited in large part to a change in emphasis in environmental discourse resulting from the increased role played by 350.org, an international group focused on climate." 162

Google's Ngram Viewer allows for the frequency of words in a corpus of millions of books to be tracked

NGOs and the odd ethical investment fund. With Carney, the risk of stranded assets went mainstream." Tom Rand. The Case for Climate Capitalism: Economic Solutions for a Planet in Crisis. Toronto: ECW Press, 2020, p. 43–4.

¹⁵⁶ Xinsheng Liu, Arnold Vedlitz, and Letitia Alston. "Regional News Portrayals of Global Warming and Climate Change". In: Environmental Science & Policy 11.5 (2008), pp. 379-393. URL: https://www.sciencedirect.com/science/article/pii/S1462901108000038 (visited on 04/17/2022).

¹⁵⁷Maxwell T. Boykoff. Who Speaks for the Climate?: Making Sense of Media Reporting on Climate Change. Cambridge: Cambridge University Press, 2011, p. 20.

¹⁵⁸ See also: Maxwell T. Boykoff and J. Timmons Roberts. Media Coverage of Climate Change: Current Trends, Strengths, Weaknesses. 2007. URL: https://www.researchgate.net/profile/Max-Boykoff-2/publication/228637999_Media_coverage_of_climate_change_Current_trends_strengths_weaknesses/links/02e7e528bf129aba0b000000/Media-coverage-of-climate-change-Current-trends-strengths-weaknesses.pdf (visited on 07/21/2022).

¹⁵⁹ Andreas Schmidt, Ana Ivanova, and Mike S. Schäfer. "Media Attention for Climate Change Around the World: A Comparative Analysis of Newspaper Coverage in 27 Countries". In: *Global Environmental Change* 23.5 (2013), pp. 1233–1248. URL: https://www.sciencedirect.com/science/article/pii/S095937801300126X (visited on 04/17/2022).

¹⁶⁰Katrina Ahchong and Rachel Dodds. "Anthropogenic Climate Change Coverage in two Canadian Newspapers, the Toronto Star and the Globe and Mail, from 1988 To 2007". In: *Environmental Science & Policy* 15.1 (2012), pp. 48–59. URL: https://www.academia.edu/77464786/Anthropogenic_climate_change_coverage_in_two_Canadian_newspapers_the_Toronto_Star_and_the_Globe_and_Mail_from_1988_to_2007 (visited on 08/02/2022).

¹⁶¹Mark C.J. Stoddart, Randolph Haluza-DeLay, and David B. Tindall. "Canadian News Media Coverage of Climate Change: Historical Trajectories, Dominant Frames, and International Comparisons". In: Society & Natural Resources 29.2 (2016), pp. 218–232. URL: https://www.tandfonline.com/doi/pdf/10.1080/08941920.2015.1054569 (visited on 06/25/2021).

¹⁶²George Hoberg. The Resistance Dilemma: Place-Based Movements and the Climate Crisis. Cambridge: The MIT Press, 2021, p. 175–6.

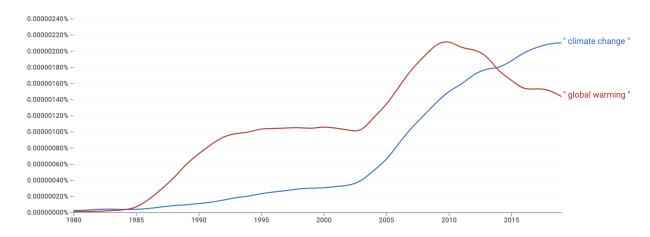


Figure 2.1: Google Ngrams for "climate change" and "global warming" 1980-2019

across time. ^{163,164} Between 1980 and 2019 (the last year available for analysis at the time of writing) it showed a drastic increase in coverage, also documenting the shift from chiefly describing the problem as "global warming" to "climate change:"

While hard to quantify, the cultural emphasis on climate change has also perceptibly increased. Al Gore's "Inconvenient Truth" documentary in 2006 earned \$24 million in the US and nearly \$50 million globally. ¹⁶⁵ In April 2022, a Canadian Newsstream search for "Greta Thunberg" yielded 3,250 articles — and she was named *Time*'s person of the year in 2019. ¹⁶⁶ There have been appeals from popes, celebrities, and United Nations secretaries general.

In addition to the content of their coverage, some news sources have made public editorial changes in response to their understanding of the climate change problem, perhaps most prominently *The Guardian* in the UK. In 2021, they announced the Covering Climate Now partnership with the *Columbia Journalism Review* and *The Nation*. ^{167,168} In 2019, the *Toronto Star* published "Undeniable: Canada's Changing Climate" — a series of stories about climate change impacts across the country. ¹⁶⁹ It included a handbook on "What we can do Now" which described a poll of 1,812 Canadian voters in 2019, which found that 36% strongly agreed that climate change was a serious problem for Canada, 28% somewhat agreed, and only 10% somewhat and 15% strongly disagreed. ¹⁷⁰ It cited Steve Easterbrook on the importance of talking about the issue; discussed national carbon footprints on a total and *per capita* basis; listed areas for personal action, including in investment; and described issues to consider when choosing among political candidates.

¹⁶³ Jean-Baptiste Michel et al. "Quantitative Analysis of Culture Using Millions of Digitized Books". In: Science 331.6014 (2011), pp. 176-182. URL: https://www.science.org/doi/10.1126/science.1199644 (visited on 04/17/2022).

¹⁶⁴Ben Zimmer. Google's Ngram Viewer Goes Wild. 2013. URL: https://www.theatlantic.com/technology/archive/2013/10/googles-ngram-viewer-goes-wild/280601/ (visited on 04/17/2022).

¹⁶⁵Lakanen identified the period of 2006–2016 as an era where "concern over climate change and large-scale environmental issues became widespread in North America," partly because of Gore's film. Lakanen, "'A Battle for the Soul of the Climate Movement': The Expansion of the Intersectional Climate Justice Frame Among Young Activists in Canada", p. 23.

¹⁶⁶Frank Jordans. Thunberg 'a bit surprised' to be Time Person of the Year. 2019. URL: https://abcnews.go.com/Business/wireStory/climate-activist-greta-thunberg-time-person-year-67655105 (visited on 04/17/2022).

¹⁶⁷The Guardian. The Climate Emergency is Here. The Media Needs to Act Like It. 2021. URL: https://www.theguardian.com/environment/2021/apr/12/covering-climate-now-guardian-climate-emergency (visited on 04/17/2022).

¹⁶⁸Covering Climate Now. Statement on the Climate Emergency. 2022. URL: https://coveringclimatenow.org/projects/covering-climate-now-statement-on-the-climate-emergency/ (visited on 04/17/2022).

¹⁶⁹Toronto Star. *Undeniable: Canada's Changing Climate*. 2019. URL: https://projects.thestar.com/climate-change-canada/ (visited on 07/12/2020).

 $^{^{170}{\}rm Megan}$ Ogilvie. What We Can Do Now. 2019. URL: https://projects.thestar.com/climate-change-canada/what-you-can-do/ (visited on 07/12/2020).

While they clearly happened after the period of study covered by my interviews, these projects represent a culmination of journalistic concern about how the problem has been reported.

When the issue of stratospheric ozone depletion by chlorofluorocarbons (CFCs) was being debated in the UK in 1988, the head of Britain's environment ministry, Crispin Tickell, appealed to prime minister Margaret Thatcher on the basis of her training as a chemist at Oxford. This was followed by a sharp turning point in her government's policy.¹⁷¹ In her 1988 speech to the Royal Society, Thatcher described the fear that "we are creating a global heat trap which could lead to climatic instability" adding that "the annual increase in atmospheric carbon dioxide alone is of the order of three billion tonnes" and "half the carbon emitted since the Industrial Revolution remains in the atmosphere."¹⁷² Thatcher also expressed early concern about climate change. The same year, Canadian Conservative prime minister Brian Mulroney hosted a world climate change conference in Toronto.^{173,174} In an address to the UN General Assembly, Mulroney said: "The world is facing an environmental crisis of unparalleled magnitude" and identified climate change along with ozone depletion and toxic waste as "cause for legitimate concern both here and around the world."^{175,176}

In the lead up to the 1993 election, the federal Liberal party platform proposed new measures for sustainable development. Climate change and energy policies were an important part of electoral platforms and competition over the next three decades. One of the central issues in the 2008 federal election was the "Green Shift" plan proposed by the Liberal party under Stéphane Dion. Heather Smith summarized Canadian federal climate change policy under the Mulroney, Chrétien, Martin, and Harper governments. Nathan Lemphers extended this into the Justin Trudeau government and the Pan-Canadian Framework on Clean Growth and Climate Change in 2018. Sp the time of the 2019 Canadian federal elec-

¹⁷¹Karen T. Litfin. Ozone Discourses: Science and Politics in Global Environmental Cooperation. New York: Columbia University Press, 1994, p. 126.

¹⁷²Margaret Thatcher. Speech to the Royal Society. 1988. URL: https://www.margaretthatcher.org/document/107346 (visited on 04/17/2022).

¹⁷³ CBC Radio. When the Environment was not a Partisan Issue. 2019. URL: https://www.cbc.ca/radio/sunday/the-sunday-edition-for-september-29-2019-1.5299577/when-the-environment-was-not-a-partisan-issue-1.5299597 (visited on 06/09/2022).

¹⁷⁴ As of 2019, Mulroney was urging Canadian leaders to take more substantial action on climate change. Brian Platt. Brian Mulroney Urges Canadian Politicians to Take Action on Climate Change, Despite Political Risk. 2019. URL: https://nationalpost.com/news/politics/brian-mulroney-urges-canadian-politicians-to-take-action-on-climate-change-despite-political-risk (visited on 06/09/2022).

¹⁷⁵ Jamie Bradburn. 'A crisis of unparalleled magnitude': How Environmental Concerns did — and Didn't — Shape the 1988 Election. 2021. URL: https://www.tvo.org/article/a-crisis-of-unparalleled-magnitude-how-environmental-concerns-did-and-didnt-shape-the-1988-election (visited on 06/09/2022).

¹⁷⁶C-SPAN. Prime Minister Brian Mulroney Announces a Centre for Sustainable Development. 1988. URL: https://www.c-span.org/video/?c4685787/user-clip-prime-minister-brian-mulroney-announces-centre-sustainable-development (visited on 06/09/2022).

¹⁷⁷ Liberal Party of Canada. Securing Our Future Together. 1993. URL: https://web.archive.org/web/19980423142109/http://liberal.ca/download/plan-e.pdf (visited on 05/06/2022), p. 52.

¹⁷⁸Glen Toner and James Meadowcroft. "Institutionalizing Sustainable Development: The Role of Governmental Institutions". In: *Innovation, Science, Environment: Special Edition: Charting Sustainable Development in Canada, 1987–2007.* Ed. by Glen Toner and James Meadowcroft. Montreal: McGill-Queen's University Press, 2009.

¹⁷⁹See: CTV News. Dion Introduces 'green shift' Carbon Tax Plan. 2008. URL: https://www.ctvnews.ca/dion-introduces-green-shift-carbon-tax-plan-1.303506 (visited on 08/02/2022).

¹⁸⁰ CBC News. Carbon Tax Plan 'good for the wallet,' Dion Pledges. 2008. URL: https://www.cbc.ca/news/canada/carbon-tax-plan-good-for-the-wallet-dion-pledges-1.704607 (visited on 08/02/2022).

¹⁸¹ Andrew Coyne. The Green Shift that Might Have Been. 2008. URL: https://www.macleans.ca/politics/ottawa/the-green-shift-that-might-have-been/ (visited on 08/02/2022)

green-shift-that-might-have-been/ (visited on 08/02/2022).

182 Aaron Wherry. Long After Stéphane Dion's Ill-fated Green Shift, a Price on Carbon Might be at Hand. 2016. URL: https://www.cbc.ca/news/politics/wherry-carbon-price-1.3687291 (visited on 08/02/2022).

¹⁸³ Heather A. Smith. "Political Parties and Canadian Climate Change Policy". In: International Journal 64.1 (2009), pp. 47–66. URL: https://journals.sagepub.com/doi/pdf/10.1177/002070200906400104 (visited on 04/17/2022).

¹⁸⁴On the Harper years, see also: Lakanen, "'A Battle for the Soul of the Climate Movement': The Expansion of the Intersectional Climate Justice Frame Among Young Activists in Canada", p. 90–106.

¹⁸⁵Lemphers, "Beyond the Carbon Curse: a Study of the Governance Foundations of Climate Change Politics in Australia, Canada and Norway", p. 104–74.

tion, 62% of people saw climate change and the environment as a very important issue, trailing government ethics and accountability (82%), jobs and the economy (84%), and health care (86%). 186

Globally, public policy attention to climate change has increased significantly. As part of the requirements for satisfying the U of T divestment policy, the Toronto350.org brief included a chapter on actions taken by the Canadian government and by peers around the world. The mitigation group report in the IPCC's sixth assessment also stated: There has been a consistent expansion of policies and laws addressing mitigation since AR5 [in 2014]." 188

To extensively document the scope of corporate messaging on climate change would again be quite beyond what is necessary here. Counter-repertoires used against divestment by the fossil fuel industry are described in my pre-print, including their promotion of green consumerism as a preferable or adequate response to climate change, as opposed to government coercion. 189 Corporate disclosure of climate change risks is a developing area of activity, both undertaken voluntarily by firms themselves and as part of new requirements by governments. ¹⁹⁰ For example, Entergy, a US electricity corporation, released a 65-page analysis of climaterelated risks and opportunities in 2019. These include physical risks including sea level rise, coastal erosion, and extreme weather events as well as energy transition risks, notably "[i]ncreased costs associated with compliance; stranded assets caused by national or state carbon mitigation policy." ¹⁹¹ In 2020, ExxonMobil wrote off \$17-20 billion in North and South American natural gas as stranded assets, on the same day its Canadian subsidiary Imperial Oil did the same for 1.2 billion in natural gas in Alberta. These examples illustrate how the concept of stranded assets has indeed expanded beyond the analysis of eNGOs into the planning and communications of energy firms. 193 Voluntary coordination mechanisms have also emerged, such as the Carbon Disclosure Project (CDP): an NGO which promotes environmental and risk reporting and which has grown from about 245 corporations taking part in 2002 to over 10,000 companies, cities, states, and regions in $2020.^{194,195}$

The insurance industry's growing role in communicating climate change risks and lobbying for mitigation and adaptation strategies is chiefly discussed in the account of alternative or flanking coalitions in the conclusion. Insurance firms including Swiss Re, Munich Re, American International Group, Aviva and AXA have been offering insurance products tied to climate change since at least 2007. Given the privileged position of business in influencing policy making, there may be reason to hope that politicians will be further encouraged to act on climate change on the basis of risks quantified and communicated by the insurance

¹⁸⁶Erick Lachapelle and Chris Borick. A Decade Of Comparative Canadian and American Public Opinion on Climate Change. 2022. URL: https://fordschool.umich.edu/sites/default/files/2022-04/NACP_Lachapelle-Borick.pdf (visited on 05/06/2022), p. 14.

¹⁸⁷Toronto350.org, The Fossil Fuel Industry and the Case for Divestment: Update, p. 97–119.

¹⁸⁸Intergovernmental Panel on Climate Change, Climate Change 2022: Mitigation of Climate Change: Summary for Policymakers, p. 15.

¹⁸⁹ Milan Ilnyckyj. "Campus Fossil Fuel Divestment (CFFD) Counter-Repertoires". In: APSA Preprints (2022). URL: https://preprints.apsanet.org/engage/apsa/article-details/61f627ee8d70c3e757128358 (visited on 01/31/2022), p. 23-41.

¹⁹⁰ Thibaut Millet, Kent Kaufield, and Meghan Harris-Ngae. Canada's Energy Companies are Gaining Ground on Climate Risk Disclosures, but There are Still Gaps to Fill. 2021. URL: https://www.ey.com/en_ca/climate-change-sustainability-services/energy-companies-on-climate-risk-disclosures (visited on 04/18/2022).

¹⁹¹Entergy. Climate Scenario Analysis and Evaluation of Risks and Opportunities. 2019. URL: https://www.entergy.com/userfiles/content/environment/docs/EntergyClimateScenarioAnalysis.pdf (visited on 04/18/2022), p. 22.

¹⁹²The Energy Mix. Exxon Writes Off \$20 Billion, Imperial \$1.2 Billion as Gas Properties Become Stranded Assets. 2020. URL: https://www.theenergymix.com/2020/12/02/exxon-writes-off-20-billion-imperial-1-2-billion-as-gas-properties-become-stranded-assets/ (visited on 04/18/2022).

¹⁹³See also: Toronto350.org, The Fossil Fuel Industry and the Case for Divestment: Update, p. 88–9.

¹⁹⁴Carbon Disclosure Project. Celebrating 20 years of CDP. 2020. URL: https://www.cdp.net/en/info/about-us/20th-anniversary (visited on 08/04/2022).

¹⁹⁵A large scholarly literature has also emerged on the private sector and climate change.

¹⁹⁶The Economist. A Flood of Claims. 2007. URL: https://www.economist.com/finance-and-economics/2007/09/13/a-flood-of-claims (visited on 04/18/2022).

industry. 197, 198, 199, 200

Several scholars identified a pattern of growing and waning cycles of attention on environmental issues including climate change. ^{201,202,203} There is a danger of conflating environmental concern generally with climate change specifically, though the general rise in environmental concern has driven climate change research, led to the establishment of institutions with mandates to protect the environment, and shifted public and elite perceptions about the sustainability of contemporary industrial society. Raili Lakanen cited a first wave between 1968 and 1975 "marked by increased media coverage and citizen polling." ^{204,205,206} By the 1970s, North American governments "felt compelled to at least appear to be taking action to protect the environment." ^{207,208} In Canada this included the creation of the Department of the Environment, 1971 Clean Air Act, and 1972 Clean Water Act. The 1987 Our Common Future report brought in an emphasis on 'sustainable development.' ²⁰⁹ Prime minister Brian Mulroney delivered a keynote address at the 1988 conference in Toronto on the changing atmosphere. ^{210,211} The 1992 Rio Earth Summit also demonstrated an increased focus on the environment in multilateral institutions and negotiations. Lakanen then describes a third era from 2006-2016 where the Harper government rolled back regulations. ²¹² This was despite polls

¹⁹⁷ Lloyd's of London. New Sustainable Products and Services Showcase Highlights Insurance Crucial in Getting to Net Zero. 2021. URL: https://www.lloyds.com/about-lloyds/media-centre/press-releases/new-sustainable-products-and-services-showcase-highlights-insurance-crucial-in-getting-to-net-zero (visited on 04/18/2022).

¹⁹⁸Kalyeena Makortoff. Top Insurers Join Prince Charles to Fight Climate Crisis. 2021. URL: https://www.theguardian.com/business/2021/jun/24/top-insurers-join-prince-charles-to-fight-climate-crisis (visited on 06/25/2021).

¹⁹⁹ The Economist. Natural Disasters Made 2017 a Year of Record Insurance Losses. 2018. URL: https://www.economist.com/finance-and-economics/2018/01/11/natural-disasters-made-2017-a-year-of-record-insurance-losses (visited on 04/18/2022).

²⁰⁰ The Economist. Changing Weather Could Put Insurance Firms out of Business. 2019. URL: https://www.economist.com/finance-and-economics/2019/09/19/changing-weather-could-put-insurance-firms-out-of-business (visited on 04/18/2022).

²⁰¹Tarrow described a cycle of contentious movements arising, influencing mainstream politics, and then losing relevance or influence: "What remains after the enthusiasm of the cycle is a residue of reform. Such cycles have risen and fallen periodically over the past two centuries. Each time they appear, the world seems to be turning upside down. But just as regularly, erosion of mobilization, polarization between sectors of the movement, splits between institutionalization and violence, and elites' selective use of incentives and repression combine to bring the cycle to and end. At its height, the power of the movement is electric and seems irresistible; but by the end, it is integrated by the political process." Tarrow, *Power in Movement: Social Movements and Contentious Politics*, 3rd ed. p. 233.

²⁰²Jaccard described a pattern in public policy responses to environmental threats which demonstrates cycles of contention, albeit ones which aren't perceptible or salient to ordinary citizens: "Scientists alert people to the problem. Environmentalists are the first to believe them. Corporations that are implicated as contributing to the problem either deny the threat or balk at the cost of addressing it, fearful of government red tape and loss of profits. Eventually, enough public concern prompts politicians to act. They respond with tougher standards, and on rare occasions with policies that change prices. The standards force technological change. The threat is diminished. Afterwards, almost no one can say what technologies and what policies were involved. But if asked, they admit they didn't change their behaviour." Jaccard, *The Citizen's Guide to Climate Success: Overcoming Myths that Hinder Progress*, p. 155.

²⁰³Regarding interactions between cycles of contention at different scales, Stokes describes "how interactions between policies across scales can fuel uncertainty." Stokes, Short Circuiting Policy: Interest Groups and the Battle over Clean Energy and Climate Policy in the American States, p. 141.

²⁰⁴Lakanen, "'A Battle for the Soul of the Climate Movement': The Expansion of the Intersectional Climate Justice Frame Among Young Activists in Canada", p. 84.

²⁰⁵Mark S. Winfield. "Polls, Politics, and Sustainability". In: *Innovation, Science, Environment: Special Edition: Charting Sustainable Development in Canada, 1987–2007.* Ed. by Glen Toner and James Meadowcroft. Montreal: McGill-Queen's University Press, 2009.

²⁰⁶Robert C. Paehlke. Hegemony and Global Citizenship: Transitional Governance for the 21st Century. New York: Palgrave Macmillan, 2014.

²⁰⁷Lakanen, "'A Battle for the Soul of the Climate Movement': The Expansion of the Intersectional Climate Justice Frame Among Young Activists in Canada", p. 85.

²⁰⁸Paehlke, Hegemony and Global Citizenship: Transitional Governance for the 21st Century, p. 2009.

²⁰⁹World Commission on Environment and Development. Our Common Future. Oxford: Oxford University Press, 1987.

²¹⁰Kathryn Harrison. "The Road not Taken: Climate Change Policy in Canada and the United States". In: *Global Environmental Politics* 7.4 (2007), pp. 92–117. URL: https://muse.jhu.edu/article/224162/pdf (visited on 05/06/2022).

²¹¹Paehlke, Hegemony and Global Citizenship: Transitional Governance for the 21st Century.

²¹²Lakanen, "A Battle for the Soul of the Climate Movement': The Expansion of the Intersectional Climate Justice Frame Among Young Activists in Canada", p. 90–106.

in 2007 which identified the "highest ever levels of public concern for the environment in Canadian opinion polling." While clearly more focused on protecting the oil industry than curbing climate change, the behaviour of the Harper government demonstrated awareness of the salience of the issue to Canadians, including by instituting strict messaging control, criticizing environmentalists as 'foreign funded,' formally withdrawing from the Kyoto Protocol in 2011, and asserting the need for a 'made in Canada' climate plan. The perceived need to fight for and protect the industry demonstrate how its allies see it at risk.

In January 2020, the Yale Program on Climate Change Communication reported as part of their "Six Americas" project that the share of Americans "alarmed" about climate change nearly tripled between 2014 and 2019 and now constituted the largest category of respondents. ²¹⁸, ²¹⁹, ²²⁰, ²²¹, ²²² Matto Mildenberger et al. examined the distribution of public opinion about climate change in Canada, and found "broad support for climate policy action across Canada."

In a 2020 American Psychiatric Association poll, 67% of Americans were somewhat or extreme anxious about the impact of climate change on the planet, while 55% were somewhat or extremely anxious about its impact on their own mental health.^{224,225} An opinion survey published by Pew Research in 2021 spoke to climate change's increased salience in the period since 2015.^{226,227} In a survey of 16,254 adults in 16 advanced economies, the share of people who were very concerned that global warming would harm them personally rose by 19% in Germany between 2015 and 2021, along with 18% in the UK and 7% in Canada.²²⁸ In the US, concern actually fell 3% between 2015 and 2021, as the share of the population reporting that

²¹³Winfield, "Polls, Politics, and Sustainability", p. 77.

²¹⁴Harrison, "The Road not Taken: Climate Change Policy in Canada and the United States".

²¹⁵Lakanen, "'A Battle for the Soul of the Climate Movement': The Expansion of the Intersectional Climate Justice Frame Among Young Activists in Canada", p. 91.

²¹⁶Lakanen, "'A Battle for the Soul of the Climate Movement': The Expansion of the Intersectional Climate Justice Frame Among Young Activists in Canada", p. 92, 93, 99, 103–5.

²¹⁷Young and Coutinho, "Government, Anti-reflexivity, and the Construction of Public Ignorance About Climate Change: Australia and Canada Compared".

²¹⁸ Matthew Goldberg et al. For the First Time, the Alarmed are Now the Largest of Global Warming's Six Americas. 2020. URL: https://climatecommunication.yale.edu/publications/for-the-first-time-the-alarmed-are-now-the-largest-of-global-warmings-six-americas/ (visited on 01/18/2020).

global-warmings-six-americas/ (visited on 01/18/2020).

²¹⁹See also: Breanne Chryst et al. "Global Warming's 'Six Americas Short Survey': Audience Segmentation of Climate Change Views Using a Four Question Instrument". In: *Environmental Communication* 12.8 (2018), pp. 1109-1122. URL: https://www.tandfonline.com/doi/abs/10.1080/17524032.2018.1508047 (visited on 12/26/2019).

²²⁰Janet K. Swim and Nathaniel Geiger. "From Alarmed to Dismissive of Climate Change: A Single Item Assessment of Individual Differences in Concern and Issue Involvement". In: *Environmental Communication* 11.4 (2017), pp. 568–586. URL: https://www.tandfonline.com/doi/abs/10.1080/17524032.2017.1308409 (visited on 12/26/2019).

²²¹Anthony Leiserowitz et al. "Global Warming's Six Americas: A Review and Recommendations for Climate Change Communication". In: *Current Opinion in Behavioral Sciences* 42 (2021), pp. 97–103. URL: https://www.sciencedirect.com/science/article/pii/S2352154621000929 (visited on 04/17/2022).

²²²Martel-Morin and Lachapelle applied this audience segmentation method to Canadians: Marjolaine Martel-Morin and Erick Lachapelle. "The Five Canadas of Climate Change: Using Audience Segmentation to Inform Communication on Climate Policy". In: Plos One 17.11 (2022), e0273977. URL: https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0273977 (visited on 11/30/2022).

²²³Matto Mildenberger et al. "The Distribution of Climate Change Public Opinion in Canada". In: *PloS one* 11.8 (2016). URL: https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0159774 (visited on 04/18/2022).

²²⁴American Psychiatric Association. New APA Poll Reveals That Americans are Increasingly Anxious About Climate Change's Impact on Planet, Mental Health. 2020. URL: https://www.psychiatry.org/newsroom/apa-public-opinion-poll-2020 (visited on 09/08/2022).

²²⁵American Psychiatric Association. *APA Public Opinion Poll* — *Annual Meeting 2020.* 2020. URL: https://www.psychiatry.org/newsroom/apa-public-opinion-poll-2020 (visited on 09/08/2022).

²²⁶James Bell et al. *In Response to Climate Change, Citizens in Advanced Economies Are Willing To Alter How They Live*

²²⁶James Bell et al. In Response to Climate Change, Citizens in Advanced Economies Are Willing To Alter How They Live and Work. 2021. URL: https://www.pewresearch.org/global/2021/09/14/in-response-to-climate-change-citizens-in-advanced-economies-are-willing-to-alter-how-they-live-and-work/ (visited on 06/07/2022).

²²⁷James Bell et al. In Response to Climate Change, Citizens in Advanced Economies Are Willing To Alter How They Live and Work. 2021. URL: https://www.pewresearch.org/global/wp-content/uploads/sites/2/2021/09/PG_2021.09.14_Climate_FINAL.pdf (visited on 06/07/2022).

²²⁸Bell et al., In Response to Climate Change, Citizens in Advanced Economies Are Willing To Alter How They Live and Work, p. 4.

they were very concerned fell from 30% to 27%.²²⁹ Among Canadian respondents, 34% reported being very concerned that climate change would affect them in their lifetimes, 34% were somewhat concerned, 19% were "not too" concerned, and 12% were not at all concerned.²³⁰ The survey also spoke to variation in level of concern by ideology, which relates to the discussion about audience prioritization and coalition building in this dissertation. 87% of those identified on the ideological left in Canada reported being somewhat or very concerned about climate change, compared with 68% of those characterized as being in the centre, and 57% of those sorted on the right. In the US it is 87% on the left, 69% in the centre, and 28% on the right. In the UK, 81% on the left, 70% in the centre, and 67% on the right.²³¹ This suggests that climate change is most polarized as an issue in America, intermediately polarized in Canada, and least polarized in the UK. In the US, UK, and Canada those categorized on the right were most likely to say the public is dealing with climate change well, with those in the centre less likely to say so, and those on the left even less likely to say so.^{232,233}

In a 2022 survey of US and Canadian public opinion on climate change between 2011 and 2021, Erick Lachapelle and Chris Borick found "increased acceptance of the human causes, and moderate increases in support for policy interventions." ²³⁴ In Canada, the share of people who think there is solid evidence of global warming rose from 80% in 2011 to 86% in 2021, while the share very confident that warming is occurring rose from 38% to 51% in the same period. ²³⁵ Meanwhile, strong support for carbon taxes rose from 20% to 29% (though the share strongly opposed also rose from 26% to 28%). ²³⁶

In 2021 polling by the Angus Reid Institute, among 2,008 total respondents in Canada, 46% described climate change as a very serious threat while 28% called it a serious threat.²³⁷ That had risen from 38% saying it was a very serious threat and 37% saying it was a serious threat in 2014. This survey also found a high degree of polarization, with 74% of voters overall saying that climate change poses at least a serious threat, compared with 95% of Liberal party supporters, 93% of NDP supporters, (somewhat surprisingly) just 90% of Green party supporters, and 41% of Conservative supporters.²³⁸

There is evidence that public opinion among youth has been especially influenced.²³⁹ This is reflected in statements from CFFD organizers. An organizer at Dalhousie said she had "really cared about this stuff since I was little", while another from the same campaign said she had been "involved in climate stuff since I was very young" and had been involved with the group Kids for Climate Action in Vancouver. Zoe Luba

²²⁹Bell et al., In Response to Climate Change, Citizens in Advanced Economies Are Willing To Alter How They Live and Work, p. 9.

²³⁰Bell et al., In Response to Climate Change, Citizens in Advanced Economies Are Willing To Alter How They Live and Work, p. 8.

²³¹Bell et al., In Response to Climate Change, Citizens in Advanced Economies Are Willing To Alter How They Live and Work, p. 10.

²³²Bell et al., In Response to Climate Change, Citizens in Advanced Economies Are Willing To Alter How They Live and Work, p. 16.

²³³People also polarized in the US, Canada, and UK following the same pattern on whether actions to address climate change will be good for the economy. Bell et al., In Response to Climate Change, Citizens in Advanced Economies Are Willing To Alter How They Live and Work, p. 20.

²³⁴Lachapelle and Borick, A Decade Of Comparative Canadian and American Public Opinion on Climate Change, p. 1.

 $^{{}^{235}\}text{Lachapelle and Borick}, \textit{A Decade Of Comparative Canadian and American Public Opinion on Climate Change}, \textit{p. 4}.$

²³⁶Lachapelle and Borick, A Decade Of Comparative Canadian and American Public Opinion on Climate Change, p. 10.

²³⁷Angus Reid Institute. Climate Change: O'Toole's Carbon Pricing Gamble Draws Mixed Political Reviews. 2021. URL: https://angusreid.org/cpc-liberal-carbon-pricing-plan-climate-change/ (visited on 06/08/2022).

²³⁸ Philippe J. Fournier. The Conservatives' Great big Climate Problem: 338 Canada. 2021. URL: https://www.macleans.ca/politics/ottawa/338 canada-the-conservatives-great-big-climate-problem/amp/ (visited on 06/08/2022).

²³⁹At COP-26, former president Obama advised young people: "To all the young people out there — I want you to stay angry. I want you to stay frustrated... But channel that anger. Harness that frustration. Keep pushing harder and harder for more and more. Because that's what's required to meet that challenge. Gird yourself for a marathon, not a sprint." BBC News. COP26: Obama Tells Young People to Stay Angry on Climate Fight. 2021. URL: https://www.bbc.com/news/science-environment-59210395 (visited on 08/02/2022).

from the Mount Allison campaign said that since being an early teen they had been "really angry about the way things are in the world." When running for a seat on the governing council, Amanda Harvey-Sánchez, a key organizer in the first U of T campaign, posted on Facebook that: "When I was a kid, one of my biggest fears was that I would never get to swim with coral reefs because they would all be gone because of climate change." In my interviews, an organizer from the UBC campaign described how today's young people are "the generation who will be inheriting the consequences of climate change." Numerous interview participants described being involved in environmental clubs in high school, and a common account of what was attractive about fossil fuel divestment as a strategy was how it shifts effort away from reducing individual consumption and toward influencing collective choices and outcomes. Many climate activists have also written and spoken about their anguished decisions about whether to have children of their own, fearful about what the destabilization we are creating will mean for their lives. 241,242

Research published in 2021 found that among 10,000 16-25 year olds in 10 countries including the US and UK, 83% said people had failed to care for the planet, and 75% that the future is frightening. ^{243,244,245,246} The authors emphasized the connection between climate change and mental health: "the realities of climate change alongside governmental failures to act are chronic, long term and potentially inescapable stressors." ²⁴⁷ The survey found that "59% were very or extremely worried and 84% were at least moderately worried", "[m]ore than 50% reported each of the following emotions: sad, anxious, angry, powerless, helpless, and guilty," "75% said that they think the future is frightening and 83% said that they think people have failed to take care of the planet." ^{248,249,250} 39% of respondents across all countries reported that climate change made them hesitant to have children of their own. ^{251,252} In the 2021 Pew survey, young adults were found to be more concerned than their older counterparts about climate change, with 71% of American 18 to 29 year-olds very or somewhat concerned compared to 63% of those 30-49, 55% of those 50-64, and 52% of those over 65. ²⁵³ In the UK, 76% of those 18-29 reported being somewhat or very concerned, compared to 77% of those 30-49, 70% of those 50-64, and 65% of those over 65. In Canada, 75% of those 18-29 and 30-49

²⁴⁰Amanda Harvey-Sánchez. Vote Amanda Harvey-Sánchez for Governing Council. 2017. URL: https://www.facebook.com/Amanda4GC/photos/a.597852007078647/599797706884077/ (visited on 06/08/2022).

²⁴¹See: Britt Wray. Therapy for the End of the World. 2021. URL: https://thewalrus.ca/therapy-for-the-end-of-the-world/ (visited on 02/05/2021), p. 6.

²⁴²Laura Lynch. How to Turn Climate Anxiety Into 'a tool, not a dead end'. 2022. URL: https://www.cbc.ca/news/science/what-on-earth-climate-anxiety-1.6442720 (visited on 06/08/2022).

²⁴³Caroline Hickman et al. "Young People's Voices on Climate Anxiety, Government Betrayal and Moral Injury: A Global Phenomenon". In: *The Lancet* (2021). URL: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3918955 (visited on 09/14/2021).

²⁴⁴ See also: Fiona Harvey. Four in 10 Young People Fear Having Children Due to Climate Crisis. 2021. URL: https://www.theguardian.com/environment/2021/sep/14/four-in-10-young-people-fear-having-children-due-to-climate-crisis (visited on 09/14/2021).

²⁴⁵Roger Harrabin. Climate Change: Young People Very Worried — Survey. 2021. URL: https://www.bbc.com/news/world-58549373 (visited on 09/14/2021).

²⁴⁶Sophia Smith Galer. 56 Percent of Young People Think Humanity Is Doomed. 2021. URL: https://www.vice.com/en/article/88npnp/fifty-six-percent-of-young-people-think-humanity-is-doomed (visited on 09/14/2021).

²⁴⁷Hickman et al., "Young People's Voices on Climate Anxiety, Government Betrayal and Moral Injury: A Global Phenomenon", p. 8.

²⁴⁸Caroline Hickman et al. "Climate Anxiety in Children and Young People and Their Beliefs About Government Responses to Climate Change: A Global Survey". In: *The Lancet Planetary Health* 5.12 (2021). URL: https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(21)00278-3/fulltext (visited on 04/17/2022).

²⁴⁹Galer, 56 Percent of Young People Think Humanity Is Doomed.

²⁵⁰Harrabin, Climate Change: Young People Very Worried — Survey.

²⁵¹Hickman et al., "Young People's Voices on Climate Anxiety, Government Betrayal and Moral Injury: A Global Phenomenon", p. 6.

²⁵²Harvey, Four in 10 Young People Fear Having Children Due to Climate Crisis.

²⁵³Bell et al., In Response to Climate Change, Citizens in Advanced Economies Are Willing To Alter How They Live and Work, p. 5.

reported being somewhat or very concerned, versus 65% of those 50-64 and 57% of those over 65.²⁵⁴ The importance of climate change to young people is illustrated by some of the unexpected publications which have been venues for climate and divestment advocacy, such as $Teen\ Vogue.^{255,256,257,258,259,260,261,262}$ A 2018 study of 1,287 American youths between 13 and 18 found that 2/3 were worried about climate change and 23% very worried. Half believed they would personally be harmed by climate change, while 81% said future generations would be.263,264,265

The 2021 Ontario Student Drug Use and Health Survey, which surveyed 2,225 students between grades 7 and 12 across 31 school boards found that 23.6% were very or extremely worried about climate change and that 50% of students were depressed about the future because of climate change. 266,267,268,269,270,271,272

Young people are also more willing to question the fossil fuel industry. Reporting on an EKOS poll, the CBC reported in 2016 that: "While nine in 10 Canadians younger than 35 believe the oil and gas industry is important to the country's economy now, only 60 per cent think it will remain that way in the future."²⁷³

²⁵⁴Bell et al., In Response to Climate Change, Citizens in Advanced Economies Are Willing To Alter How They Live and Work, p. 5.

²⁵⁵Jamie Margolin. For My Future College, Fossil Fuel Divestment Is a Must-Have So the Climate Crisis Doesn't Make My Education Useless. 2019. URL: https://www.teenvogue.com/story/college-fossil-fuel-divestment-climate-crisis-make-education-useless-op-ed (visited on 08/13/2020).

²⁵⁶Teen Vogue. How to Take Direct Action on the Climate Crisis at Your School This Year. 2019. URL: https://www.teenvogue.com/story/how-take-action-climate-change-at-school-this-year (visited on 08/13/2020).

²⁵⁷Anais Peterson, Greta Kvittem, and Elizabeth Love. On Fossil Fuel Divestment Day, Students Demand Universities Take Action. 2020. URL: https://www.teenvogue.com/story/fossil-fuel-divestment-day (visited on 08/13/2020).

²⁵⁸Isabella Fallahi. Polluters Out Is a New Youth Coalition Pushing for Divestment From Fossil Fuels. 2020. URL: https://www.teenvogue.com/story/polluters-out-youth-climate-activistsdivestment (visited on 08/13/2020).

²⁵⁹Kayah George and Emma Harrison. Banks That Fund the Fossil Fuel Industry Don't Deserve Your Business. 2020. URL: https://www.teenvogue.com/story/banks-fund-climate-change (visited on 08/13/2020).

²⁶⁰De Elizabeth. Protesters Interrupt Harvard-Yale Football Game to Fight Back Against Climate Change. 2019. URL: https://www.teenvogue.com/story/harvard-yale-football-game-climate-justice-protest (visited on 01/04/2020).

²⁶¹Katie Eder and Shannon Carlson. Big Banks Are Funding Fossil Fuel Projects — Let's Hold Them Accountable. 2021. URL: https://www.teenvogue.com/story/banks-fund-fossil-fuels (visited on 11/03/2021).

²⁶²Zahra Biabani. Fossil Fuel Divestment: Students Are Filing Complaints to Force Change on Campus. 2022. URL: https://www.teenvogue.com/story/fossil-free-five-coalition-complaint (visited on 04/12/2022).

²⁶³Connie Roser-Renouf, Edward Maibach, and Teresa Myers. *American Adolescents' Knowledge, Attitudes and Sources of Information on Climate Change*. 2020. URL: https://www.climatechangecommunication.org/wp-content/uploads/2020/08/teen-report-1.pdf (visited on 04/17/2022), p. 6.

²⁶⁴See also: Matthew Ballew et al. *Do Younger Generations Care More About Global Warming?* 2019. URL: https://www.climatechangecommunication.org/all/do-younger-generations-care-more-about-global-warming/ (visited on 04/18/2022).

²⁶⁵ Matthew Ballew et al. Young Adults, Across Party Lines, are More Willing to Take Climate Action. 2020. URL: https://www.climatechangecommunication.org/all/young-adults-across-party-lines-are-more-willing-to-take-climate-action/ (visited on 04/18/2022).

²⁶⁶ Angela Boak, Tara Elton-Marshall, and Hayley A. Hamilton. *The Well-Being of Ontario Students: Findings from the 2021 Ontario Student Drug Use and Health Survey.* 2021. URL: https://www.camh.ca/-/media/files/pdf---osduhs/2021-osduhs-report-pdf.pdf (visited on 08/02/2022), p. 16, v.

²⁶⁷Nadine Yousif. More than Half of Ontario's Young Students Say They Feel Depressed About the Future. 2022. URL: https://www.thestar.com/news/gta/2022/04/26/more-than-half-of-ontarios-young-students-say-they-feel-depressed-about-the-future.html (visited on 08/02/2022).

²⁶⁸On climate and ecological anxiety and depression among young people generally, see: Mala Rao and Richard A. Powell. The Climate Crisis and the Rise of Eco-anxiety. 2021. URL: https://blogs.bmj.com/bmj/2021/10/06/the-climate-crisis-and-the-rise-of-eco-anxiety/ (visited on 08/02/2022).

²⁶⁹ Jeremiah Rodrigues. Eco-anxiety: Young Canadians Report Climate Change Impact on Their Mental Health. 2021. URL: https://www.ctvnews.ca/mobile/climate-and-environment/eco-anxiety-young-canadians-report-climate-change-impact-on-their-mental-health-1.5615253 (visited on 10/13/2021).

²⁷⁰ Ellen Francis. Activists 'born into the climate crisis' Face Another Challenge: Fear of the Future. 2021. URL: https://www.washingtonpost.com/climate-environment/2021/09/16/climate-change-anxiety-youth/ (visited on 10/16/2021).

271 Harrabin, Climate Change: Young People Very Worried — Survey.

²⁷² Peter Kalmus. Climate Depression is Real. And it is Spreading Fast Among Our Youth. 2021. URL: https://www.theguardian.com/commentisfree/2021/nov/04/climate-depression-youth-crisis-world-leaders (visited on 08/02/2022).

²⁷³ Brooks DeCillia. Young Canadians More Likely to see a Future Without Oil and Gas. 2016. URL: https://www.cbc.ca/news/canada/calgary/ekos-poll-environment-youth-economy-oil-gas-1.3498263 (visited on 12/28/2019).

2.1.1 The carbon bubble

Beyond the damage it is feared that climate change will cause to people, societies, and ecosystems, the CFFD movement could appeal to a new form of salience especially relevant to financial decision-makers. In the Carbon Tracker Initiative (CTI) report that started McKibben and Klein thinking about divestment, the central point is the existence of a "carbon bubble" — an over-valuation of fossil fuel assets arising from the faulty belief that firms' ability to emit CO₂ will effectively remain unrestricted. With that assumption called into question, the asset values and investment plans of many corporations become unjustified, leaving them with "stranded assets" which cannot be used under more rigorous climate protection policies. That is the "terrifying new math" of McKibben's Rolling Stone article and "Do the Math" tour. If governments do shift course to match their climate and energy policies to their long-term targets for planetary stabilization, the people who invested in the energy sources which will need to be abolished will not earn the returns they had been expecting and may lose their capital entirely. This makes fossil fuel divestment different from other campaigns with exclusively moral motivations. It may be immoral to support tobacco companies, or arms merchants, or firms associated with Israeli government misconduct, but there is no equivalent to a carbon budget which fundamentally constrains their ability to endure and grow long term. For university administrators with legal obligations and strong norms of maintaining strong investment performance, the financial case for fossil fuel divestment added salience over and above generalized concern about what climate change will mean for humanity, while making it harder to argue that it wasn't their problem or responsibility.

The conclusion documents how the CFFD movement's popularization of the concepts of stranded assets and the carbon bubble has helped spread concern and action into organizations and communities not associated with activism, including the financial sector, financial regulators, and the insurance industry. This again demonstrates how the appeal of the CJ and CO₂-energy framings differs between activists and decision makers. CJ advocates perceive the CO₂-e view as insufficiently critical of capitalism and myriad forms of global injustice. For conventional power holders, however, the foundation of the CO₂-e view in scientific and economic argumentation made it harder to dismiss since this description situates the problem in areas where they see themselves as legitimate actors. A financial and practical appeal requires some sort of substantive response, whereas a moral one can often be dodged by portraying it as outside their competence or legitimacy—especially by actors which are formally constrained to consider chiefly economic questions. The financial argument also arguably has more cross-cutting ideological appeal since it is not based on premises about equity.

2.2 350.org's role as a divestment proliferator

Thirty years after the signature of the UNFCCC, global $\rm CO_2$ emissions have continued to rapidly grow, from about 23 gigatonnes of $\rm CO_2$ in 1992 to nearly 35 gigatonnes in 2020. Rich countries have not made good on their promises to lead the way toward lower-carbon forms of prosperity, and developing countries are following the fossil-fuel-intensive growth path of Europe, North America, and Japan. Despite the

 $^{^{274}}$ Our World in Data. Annual CO_2 Emissions from Fossil Fuels, by World Region. 2020. URL: https://ourworldindata.org/grapher/annual-co-emissions-by-region (visited on 06/08/2022).

²⁷⁵In an illustrative example, in summer 2022 the Democratic Republic of the Congo auctioned off oil exploration blocks in one million hectares of peatland and 11 m hectares of rainforest. The government estimated the reserves at 16 billion barrels, worth \$650 billion, which would produce the equivalent of three years of global emissions if burned. 60 million residents, representing 75% of the total population, live on less than \$1.90 per day. The Economist. An Oil Auction in Congo Bodes ill for the Climate: but the Government Says Criticism from Rich Countries is Hypocritical. 2022. URL: https://www.economist.com/middle-east-and-africa/2022/07/27/an-oil-auction-in-congo-bodes-ill-for-the-climate (visited on 08/03/2022).

apparently broad scientific and political consensus that temperature increase must be limited to no more than 1.5-2.0 °C above pre-industrial levels, no political parties in Canada, the US, or UK are proposing concrete plans for cutting their emissions to that extent, much less to make up their 'fair share' of the burden when affluence and historical emissions are taken into account.²⁷⁶

Two figures help to illustrate these dynamics. The first — from senior climate scientist Robbie Andrew — showes how the necessary reduction rate for CO_2 emissions (and thus fossil fuel use) rapidly increases and becomes implausible as a global peak and transition toward rapid and sustained reductions is delayed.²⁷⁷ The second — used with permission from the blog of U of T computer science Professor Steve Easterbrook — shows Canada's legacy of promising emission reduction trajectories, failing to achieve them, and then failing to set more ambitious new targets to "make up lost ground after each failed target."

This was a push factor in driving strategic evolution by climate change activists — without a plausible path forward through political lobbying, they have refocused on private organizations and the effort to shift public norms. At the same time, internet-based organizing is changing the mechanisms through which activists and NGOs can influence politics. Instead of needing staff to make personal connections to local organizations, they can mass disseminate a plan of action and, instead of needing to support campaigns with material resources, they can do so primarily by attracting and shaping media attention on the movement. This was a pull factor toward 350.org's viral approach to achieving wild growth. It is not surprising that 350.org's name is literally a web link, because their style of idea-based rather than resource-based organizing depends on the ability to spread strategies and ideas independently from directing resources and staff.

2.2.1 The long-term view: reconciling our political theories and philosophies with environmental science

Understanding 350.org and the climate change activist movement requires some longer-term consideration of the emergence of environmental issues into political life. I have described the concept of the political opportunity structure as a set of conditions external or exogenous to the actions of activists which influence what they choose to do and how, but this doesn't fully address how the evolution of activist organizations themselves changes the opportunity structure. There is reflexivity between changes in the political opportunity structure and changes in NGO strategy. In the broadest view, the evolution of the environmental movement is part of the long unrolling of consequences from humanity gaining the ability to exploit fossil fuel energy and kicking off the industrial revolution in the late 1700s. Global politics have been profoundly destabilized by the exponential increases in population, affluence, and technological ability — and are being destabilized again by the contentious politics of incorporating environmental sustainability into

²⁷⁶Two nuances are worth clarifying here. First, the claim I am making is not that governments have taken no action on climate change or not deviated from a business-as-usual course that disregards the impact of GHG emissions. Nonetheless, there has been no transition to significant and sustained cuts in GHG emissions globally or in major economies and there is little indication that governments overall are willing to forego fossil fuel revenues for the sake of climatic stability. Second, countries including the UK and Canada (which along with the US are the main subjects of interest in my research) have made notional commitments to deep emissions reductions and "net zero." My interpretation of these pledges is that they function as a mechanism to avoid immediate action and justify new investments at odds with climate stabilization. The existence of such pledges — in the absence of a year-to-year agenda where the determination to abolish fossil fuels is evident — does not mean that the problem of climate change has been meaningfully solved or that the activist movement for climate stability has become unnecessary.

²⁷⁷Robbie Andrew. While 1.5 °C has always been a tough goal, the 2 °C goal is more attainable, but still requires substantial effort from all of us. The transition is underway, but we must not slacken the pace. 2021. URL: https://twitter.com/robbie_andrew/status/1447468928628834306 (visited on 01/09/2023).

²⁷⁸Steve Easterbrook. Missing the Target: Canada's Deplorable Record on Carbon Emissions. 2016. URL: https://www.easterbrook.ca/steve/2016/10/missing-the-target-canadas-deplorable-record-on-carbon-emissions/ (visited on 02/09/2022).

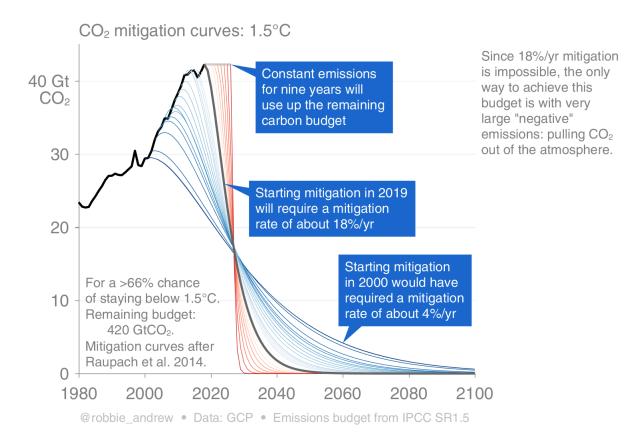


Figure 2.2: Emission cuts far more rapid than those in the past are needed to avoid warming over 1.5 °C

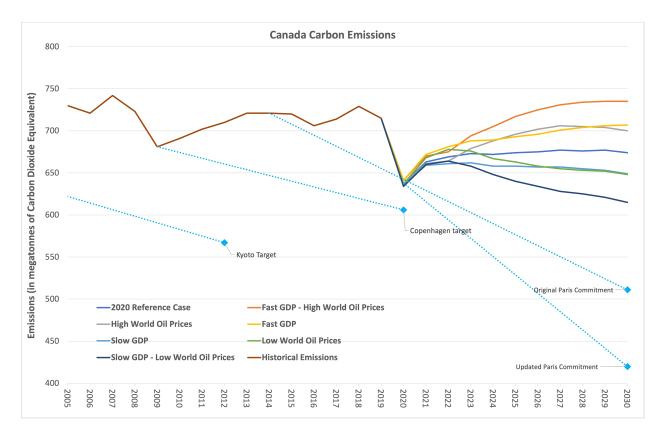


Figure 2.3: Canada's emission reduction promises versus actual trajectories

political theories and institutions which have so far seen the Earth as effectively infinite and indestructible.²⁷⁹ These consequences unrolling across the centuries reorganize the world slowly enough to let people develop a mistaken sense of stability from their own experiences, making behaviours which are fundamentally unsustainable feel like entitlements and driving the politics of backlash against environmental restrictions. Since humanity's climate predicament is unique and unprecedented, nobody knows what kind of changes could produce an attractive form of stability. Even worse, our capacity to gauge any one course of action against its alternatives is always hypothetical and counterfactual, since we can only really know the consequences of the choices actually made. The ideological position of climate justice represents an attempt to link social justice with environmental outcomes, while its form of organizing reflects the destabilization of historical patterns of influence between citizens, interest groups, and governments. The political opportunity structure thus plays a role in influencing how activist organizations develop, and the direction of that evolution influences the political opportunity structure going forward. Specifically, the blockages on the path to successful climate action through national and international political processes drove activists to focus on institutions outside of government. Activist groups' perception that climate change can be fruitfully linked to other agendas likewise influenced their approach to issue linkage and coalition building in the direction of embracing intersectionality and reflexive solidarity with other social justice causes.

Taking the long-term view, 350.org and other elements of the social movement to control climate change represent a contemporary effort to overcome the inadequacies of our political theories and philosophies under

²⁷⁹As Lakanen put it: "activists are beginning to interpret and communicate an alternative politics of climate change in the Anthropocene." Lakanen, "'A Battle for the Soul of the Climate Movement': The Expansion of the Intersectional Climate Justice Frame Among Young Activists in Canada", p. 4.

conditions where ecological disruption threatens the human future. This process is a central mechanism through which contention arises about environmental policy, as humankind's weak assumptions about being too small to threaten the biosphere and the way of life in recent decades being plausible to extend indefinitely fail. Views of politics based on pre-ecological understandings foster feelings of entitlement to continue with behaviours which are falsely believed to be sustainable, and the feeling of loss when that sense of entitlement is threatened helps explain the emergence of harshly anti-environmentalist political perspectives in recent decades.

2.2.2 350.org and the "campaign in a box"

One of the main mechanisms of coordination provided through the "campaign in a box" which 350.org furnished to campus groups is a standardized set of 'asks', messaging strategies, and organizational principles. ^{280,281,282,283} By providing standard demands, 350.org relieved small and nascent campaigns of the burden of choosing what to prioritize and ask for within their specific institutional context in response to the enormity of climate change. ²⁸⁴ That standardization also helped prevent drift in campaign objectives as they progressed, and greatly limited the degree to which individual campaigns needed to cultivate media attention, since they were subsumed in media reporting into a singular narrative where each success in driving institutional action was presented as a victory for the entire movement. 350.org and other divestment proliferators thus played two distinctive roles: as initiators of self-organized campaigns, and as storytellers creating a coordinated media narrative and sense of coherence for the movement.

Kiki Wood, former director of the Canadian Youth Climate Coalition (CYCC), described 350.org's process for proliferating divestment campaigns as a "campaign in a box" (CIAB) which included standardized demands, toolkits and training, and a "pathway to victory." This campaign in a box strategy was initiated by 350.org and subsequently spread by other CFFD proliferator organizations including the CYCC and Di-

²⁸⁰As part of the campaign in a box, 350.org provided updates on the composition of the Carbon Underground top-200 list of corporations with the largest fossil fuel reserves. 350.org. *The New Top 200*. 2017. URL: https://350.org/the-new-top-200-2/(visited on 06/25/2022).

²⁸¹As described by Curnow and Gross: "These campaigns are often coordinated in conjunction with larger nongovernmental organizations, reflecting the NGOization of activism today, and tend to use guidebooks circulated by NGOs (nongovernmental organizations) to launch affiliates or chapters of the campaigns across the country. Affiliates take up the same types of actions across time and place, following the steps of the guidebooks to achieve their wins." They described how the Do the Math tour promoted "a neatly packaged 'ask' of easily replicable pathways" and "easy-access kits and resources made available by 350.org to provide a template for the campaign format," and how their "coordinated actions are shaped by the materials and the dominant frame of the larger fossil fuel divestment campaign." Curnow and Gross, "Injustice Is Not an Investment: Student Activism, Climate Justice, and the Fossil Fuel Divestment Campaign", p. 369, 372, 374, 375.

²⁸²Aidid also noted the importance of "a unified demand of divesting from the Carbon Underground 200... and a user-friendly website with a toolkit to get student activists involved" and described how campaigns imitate one another's demands and tactics, which are "often borrowed from larger divestment networks such as 350.org." Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. 27–8.

²⁸³Lakanen noted that "principles of intersectional climate justice are disseminated through youth training networks which connect 'free agents' (activists without traditional organizational affiliations) from across the country into new linkages for mobilization." Lakanen, "'A Battle for the Soul of the Climate Movement': The Expansion of the Intersectional Climate Justice Frame Among Young Activists in Canada", p. iii.

²⁸⁴This style of organizing is able to function by distributing ideas rather than tangible resources, made possible through internet communication. Providing a template campaign decreased the level of effort and original work required for any particular campus campaign to form, relieved them of the burden of choosing an individual objective for their campaign (and of reconsidering and perhaps changing it). Intriguingly, it relieved individual campaigns of the need to do their own analysis of political opportunities at the societal level, focusing them on the task of implementing 350.org's standard demand, or 'ask', in their particular institutional context. This is why I describe 350.org as a vanguard rather than a grassroots organization; the ideas come from staff at the centre, while implementation is delegated to outsider volunteers.

vest Canada Coalition, the Divestment Student Network in the US, and People & Planet in the UK. ^{285,286} The campaign in a box included written guides, a "Do the Math" intercity promotion tour, conferences called "convergences" that brought together organizers from campaigns across Canada and the US, media attention and standardized messaging, and a limited degree of direct advice and support to individual CFFD campaigns, especially during escalated actions like camp outs.

Bill McKibben told me that 350.org's role as a divestment proliferator began when he and Naomi Klein saw the CTI's 2011 report "Unburnable Carbon: Are the World's Financial Markets Carrying a Carbon Bubble?" and connected it with their recollection of the prior divestment movement against South African apartheid. McKibben began visiting university campuses where he encouraged the formation of divestment campaigns, notably at UBC on 2011-11-16. In July 2012, McKibben published an article in *Rolling Stone*, translating the concept of stranded assets from the technical realm of the CTI report into the forum of mass politics. By September 2012, 350.org had begun soliciting interest in initiating CFFD campaigns and sending materials to those who signed up. 289

In October, 350.org released a 21 page guide: "Fossil Free: A Guide to Campus Fossil Fuel Divestment." The document explicitly stated the political opportunity identified by 350.org:

Every year, the fossil fuel industry spends hundreds of millions of dollars to lobby Congress and buy elections. They've bought the silence of our politicians and filled our airwaves with misinformation... A new strategy: Unless we break the stranglehold these institutions have over our democracy and our economy, we're never going to see the climate progress we need.²⁹¹

It provided the standard "ask" used by Canadian, US, and UK CFFD campaigns: an immediate halt to new fossil fuel investments, and full divestment from the industry over five years. It also provided concrete and specific guidance on campaign organization, with a six-step plan to:

- 1. Build a team
- 2. Plan the campaign by researching the endowment and who has authority over it, as well as potential on-campus allies
- 3. Build campus support through 'outside game' strategies like hosting events and pursuing endorsements from on-campus groups
- 4. Pressure the administration with demonstrations, media pieces, petitions, and alumni support

²⁸⁵Muncie argued that "All divestment campaigns in Scotland are centrally supported by Friends of the Earth Scotland." Ella Muncie. "Investing in Climate Solutions? An Exploration of the Discursive Power and Materiality of Fossil Fuel Divestment Campaigns in Scotland." In: *Journal of Environmental Studies and Sciences* (2020), pp. 1–11. URL: https://link.springer.com/article/10.1007/s13412-020-00653-2 (visited on 02/05/2021), p. 3.

²⁸⁶On proliferators in Canada, see also: Maina, Murray, and McKenzie, "Climate Change and the Fossil Fuel Divestment Movement in Canadian Higher Education: the Mobilities of Actions, Actors, and Tactics", p. 6.

²⁸⁷Carbon Tracker Initiative. *Unburnable Carbon* — *Are the World's Financial Markets Carrying a Carbon Bubble?* 2011. URL: https://carbontracker.org/wp-content/uploads/2014/09/Unburnable-Carbon-Full-rev2-1.pdf (visited on 09/05/2021).

²⁸⁸Bill McKibben. *Global Warming's Terrifying New Math.* 2012. URL: http://www.rollingstone.com/politics/news/global-warmings-terrifying-new-math-20120719 (visited on 01/23/2017).

^{289350.}org. Fossil Fuel Divestment Resources. 2012. URL: https://docs.google.com/document/d/ 1bKOcqvKoOCPtCtwXmQcHhY62riGLDJNPy3zVGA1UPJE/(visited on 03/04/2022).

^{290350.}org. Fossil Free: A Campus Guide to Fossil Fuel Divestment. 2012. URL: https://web.archive.org/web/20161024174306/http://gofossilfree.org/wp-content/uploads/2014/05/350_FossilFreeBooklet_L04.pdf (visited on 03/05/2022).

²⁹¹350.org, Fossil Free: A Campus Guide to Fossil Fuel Divestment, p. 4.

- 5. Pressure the relevant board of decision-makers in person by seeking a meeting ('inside game' strategies), maintaining pressure through creative actions, and demonstrating outside their formal meetings (hybridizing inside game and outside game approaches)
- 6. If necessary, escalate to tactics like withholding donations and building occupations²⁹²

The document provided pages of instruction per topic, and almost presciently lays out the experiences of CFFD campaigns which I researched — both successful and so-far-unsuccessful — in Canada, the US, and UK. This reinforces the importance of studying the movement from a transnational perspective, since the relevant channels of influence are as likely to run from campaign to campaign across a border as within one state. It demonstrates that national politics was a factor of little importance to the CFFD movement during the period of study, except as part of the political opportunity structure which drove 350.org to target public opinion and non-governmental institutions including private foundations, universities, pension funds, and faith organizations.

This guide was the closest thing to a singular "campaign in a box" which shaped the progression of the emerging movement. In an interview, a 350.org staffer described how a core concept behind the campaign in a box approach was to define a campaign which would be easy to replicate locally:

It was a campaign where it was easier to create a decentralized component to it. It was a campaign which could very easily have a DNA that could be replicated, so campaigners had this box with the DNA in it. They had their local target. They had the narrative which was connected to the global narrative. They had an ask which was already kind of written out for them and also consistent with the ask of campaigns around the world. And so I think that element of really easily replicating it locally was a big big piece of it. With climate change as this global issue it's incredibly disempowering at times, and it's very difficult to know where your power lies locally.

This reflects a creative approach to overcoming the structural barriers of temporal and spatial distance and impersonality with environmental problems and especially climate change.²⁹³ Activists were able to find a way to re-channel community-focused organizing practices of the sort associated with Saul Alinsky, based around local personal demands like housing quality, into a campaign demanding the worldwide abatement of an invisible gas.

350.org released subsequent documents providing further guidance on campaign implementation. In November 2012, they released a communications guide, which recommended talking points and responses to frequent objections to fossil fuel divestment.²⁹⁴ In January 2013, they added a CFFD "Trainers' Guide" describing the theory of change behind the movement, history of divestment, campaign strategy, organizing principles, the basics of university endowments, working with the media, and "Negotiating with Power."^{295,296} In May 2017, they released an escalation guide which argued that escalation to more confrontational tactics can "increase pressure on targets when other tactics have failed; keep the campaign fun and exciting for supporters and team members; [and] demonstrate your power and your refusal to back down."²⁹⁷ Material similar to all of these documents has been continually available via 350.org's "gofossilfree"-branded websites

²⁹²350.org, Fossil Free: A Campus Guide to Fossil Fuel Divestment, p. 14.

²⁹³For a catalog of these barriers, see: Ilnyckyj, Structural Barriers to Avoiding Catastrophic Climate Change.

 $^{^{294}350.\}mathrm{org}.$ Fossil Fuel Divestment Communications Guide. 2012. URL: https://s3.amazonaws.com/s3.350.org/images/Fossil_Free_Communications_Guide_1.pdf (visited on 03/05/2022).

²⁹⁵Joshua Kahn Russell et al. *Trainers' Handbook: Student Divestment Workshop.* 2013. URL: https://s3.amazonaws.com/s3.350.org/images/FormattedStudentDivestmentCurriculum_1.pdf (visited on 03/04/2022), p. 2-3.

²⁹⁶They also released a campaign strategy guide: 350.org. Campaign Strategy Guide. 2013. URL: https://s3.amazonaws.com/s3.350.org/images/Campaign_Strategy_Guide1.pdf (visited on 06/19/2020).

 $^{^{297}350. {\}rm org.}\ \textit{Escalation Guide.}\ 2017.\ {\tt URL:}\ {\tt https://gofossilfree.org/europe/escalation-guide/}\ (visited on \ 03/05/2022).$

since at least 2016, as documented in Wayback Machine snapshots.²⁹⁸

350.org also organized McKibben's "Do the Math" publicity tour of 21 cities, beginning in Seattle on 2012-11-08 and ending with Naomi Klein in Washington DC on 2012-11-18.²⁹⁹ In April 2013 they released a documentary about the tour on YouTube.³⁰⁰ In the documentary, McKibben presents a framing that differs markedly from the climate justice view, instead emphasizing the fundamental problem of climate change as one of interest-group politics where a self-interested fossil fuel industry has captured the political system to advance their narrow objectives:

There is nothing, and I mean nothing, radical in what we are talking about here. All we're asking for when we talk about climate change is a planet that works the way that it did for the last 10,000 years, a planet that works the way the one we were born onto works. That's not a radical demand. That's, if you think about it, a conservative demand. Radicals work at oil companies. If you wake up in the morning to make your \$100,000 a day [like Rex Tillerson as CEO of Exxon] you're willing to alter the chemical composition of the atmosphere, then you're engaged in a more radical act than anybody who ever came before you, and our job is to figure out how to check that radicalism, how to bring it to heel, how to keep it from overwhelming everything good on this planet.³⁰¹

This statement lends credence to the argument that there has been an evolution in the central framing about the nature of the climate change problem employed by the CFFD movement, away from a CO₂-e framing with space for conservatives and capitalists and toward a dominant CJ framing which demands acceptance of progressive analysis of the problem.

In addition to documents and media produced at the centre and distributed outward, divestment proliferators also organized "convergences" — training conferences where proliferators provided staffers, trainers, and keynote speakers — with organizers from CFFD campaigns in Canada and the US as participants.³⁰² 150 students attended the first — "Power Up! Divest Fossil Fuels" — at Swarthmore College (where the Mountain Justice group had first applied the divestment strategy to the fossil fuel industry) from February 22–24, 2013.^{303,304} In a press release, convergence organizer Zein Nakhoda said:

The Power Up! Student Convergence has the potential to springboard the growing fossil fuel divestment fight into a broad social movement for climate justice... Students will work to build synergy between those taking direct action on the frontlines, those working to transform their local institutions, and those campaigning for bold climate legislation.³⁰⁵

This event led to the formation of the Divestment Student Network (DSN) in the US, which acted similarly to 350.org to provide support and guidance to as many CFFD campaigns as possible.³⁰⁶ The DSN helped

 $^{^{298}350.\}mathrm{org}.$ How to Run a Campus Divestment Campaign. 2016. URL: https://web.archive.org/web/20160422220722/https://gofossilfree.org/usa/divestment-guide/ (visited on 03/03/2022).

²⁹⁹Grady-Benson and Sarathy, "Fossil Fuel Divestment in US Higher Education: Student-led Organising for Climate Justice", p. 5.

p. 5. 300 350.org. Do the Math — The Movie. 2013. URL: https://www.youtube.com/watch?v=IsIfokifwSo (visited on 03/03/2022). 301 350.org, Do the Math — The Movie, (32:39).

³⁰²Future 350 Canada staffer Katie Perfitt described how the 2012 Power Shift convergence was where "ideas about climate justice started to make sense to me." Belliveau, "Climate Justice in the Fossil Fuel Divestment Movement: Critical Reflections on Youth Environmental Organizing in Canada", p. 81.

³⁰³ students divest.org. Power Up! Divest Fossil Fuels Student Convergence: Programming. 2013. URL: https://web.archive.org/web/20130226004629/http://students divest.org/programming/ (visited on 03/05/2022).

³⁰⁴ Caitlin Kidder. Divestment Convergence at Swarthmore Kicks Off. 2013. URL: https://www.thenation.com/article/archive/divestment-convergence-swarthmore-kicks/ (visited on 03/04/2022).

³⁰⁵ Sachie Hopkins-Hawkawa and Zein Nakhoda. Students Fighting for Fossil Fuel Divestment Converge for National Gathering. 2013. URL: https://web.archive.org/web/20130226161049/http://studentsdivest.org/wp-content/uploads/2013/02/Convergence-Press-Release.pdf (visited on 03/05/2022).

³⁰⁶ Divestment Student National Network. Announcing the Divest Fossil Fuels Student National Network. 2013. URL: https://web.archive.org/web/20131229164334/http://divestnationalnetwork.files.wordpress.com/2013/10/orange-square_issue-1_10-16-13.pdf (visited on 03/05/2022).

organize the 200-student divestment convergence in San Francisco from April 4–6, 2014 — to which delegates from Canadian campaigns including U of T were invited.³⁰⁷ 350.org and the CYCC organized a convergence in Montreal in November 2014.³⁰⁸ Convergences on the theme of building the movement took place in London on 2015-07-11 and Paris on 2015-12-02.^{309,310,311} 350.org also organized a "Global Divestment Mobilisation" from May 5–13, 2017.³¹²

For Canadian CFFD organizers, the proliferation work and campaign in a box from 350.org were a crucial element of the political opportunity structure. They provided a numerical and financial framing, emphasizing the carbon bubble and stranded assets, which was perceived as legitimate by target administrations and which genuinely influenced their deliberations. At the same time, the move toward climate justice initiated by the DSN and CYCC and subsequently internalized by 350.org and most divestment organizers contributed to the emergence and persistence of the CJ-CO₂-e tension. While the climate justice view became dominant among activists, it had much less ability to translate into the discourse of broader university communities and media coverage of the movement. As we will see in the chapter about mobilizing structures, the means through which CFFD campaigns organized themselves and made decisions was influenced by the moral and strategic guidance from the campaign in a box — and the emphasis on informal organizing from divestment proliferators and the broader activist culture created conditions where the contention between CJ and CO₂-e was hidden, especially for observers outside the movement.

2.3 Universities as persuadable targets, means of shifting norms, and activist recruitment

While numerous factors made universities promising targets for the persuasion strategies of CFFD activists, there are also countervailing forces that have kept their willingness to act at a level below their rhetoric. Factors that contributed to their receptiveness to activist pressure included universities' self-representation as environmentally responsible and green. Universities were comparatively open to climate change campaigning as opposed to other social justice campaigning, and especially the Boycott, Divestment, and Sanctions (BDS) movement against Israeli policy in the occupied Palestinian territories. Factors inhibiting their willingness to act included a depoliticized and profit-maximizing set of investment norms, the presence of constituencies with an interest in continued fossil fuel development, and their unwillingness to link climate action with their efforts at Indigenous reconciliation, which can be criticized like their

³⁰⁷Stephen O'Hanlon. Reflections on the 2014 Fossil Fuel Divestment Convergence. 2014. URL: https://swarthmorephoenix.com/2014/04/24/reflections-on-the-2014-fossil-fuel-divestment-convergence/ (visited on 03/04/2022).

³⁰⁸William Mazurek. McGill and Concordia Host the First Fossil Free Canada Climate Convergence. 2014. URL: https://www.mcgilldaily.com/2014/11/concordia-hosts-first-fossil-free-canada-climate-convergence/(visited on 05/31/2019). 309350.org. Fossil Fuel Divestment: Building the Movement. 2015. URL: https://gofossilfree.org/fossil-fuel-divestment-building-the-movement/(visited on 03/05/2022).

³¹⁰Fossil Free UK. Fossil Fuel Divestment: Building the Movement. 2015. URL: https://gofossilfree.org/uk/divestment-event-london/ (visited on 03/05/2022).

 $[\]frac{311}{350}. \text{org. } \textit{Momentum for Divestment in Paris. } 2015. \text{ URL: } \text{https://350.org/paris-divest/ (visited on } 03/05/2022).$

³¹²Fossil Free UK. Global Divestment Mobilisation — What's Happening in the UK?. 2017. URL: https://gofossilfree.org/gdm-uk/ (visited on 03/05/2022).

³¹³Toffel and Gulick clarified that divestment consists of selling funds invested in problematic corporations, sanctions are government actions which seek to punish an entity economically, and boycotts are campaigns to stop making purchases from problematic corporations. Michael W. Toffel and Sarah Gulick. *Harvard Business School Case: Fossil Fuel Divestment.* 2019. URL: https://www.hbs.edu/faculty/Pages/item.aspx?num=56528 (visited on 10/25/2019), p. 8.

environmental commitments as superficial and public relations driven rather than sincere. ^{314,315,316,317,318} Independently from the actions taken by universities on their own investments, post-secondary education was a fruitful place to advance the CFFD movement's parallel goals of delegitimizing the fossil fuel industry and recruiting, developing, and training activists. ³¹⁹

2.3.1 Universities as persuasion targets

Universities' public role and the makeup of their student bodies both provided opportunities to fossil fuel divestment proliferators. For universities, divestment was within the plausible range of action: more than they would do on their own unprompted, but maybe something community pressure and a strong argument could drive them to. In terms of their public activities and role, universities have been key venues where climate change science has developed; their ongoing research and teaching illustrate climate change's potential severity (and help make the issue salient to students); and their preferential tax status and direct taxpayer support are partly justified by the idea that they serve the public interest, including by providing informed commentators on public policy. Belliveau called them "pillars of intellectual hegemony and thought leadership."320 Academic independence is meant to encourage truth-telling over interest-based messaging and public relations. Universities classically have a liberal ideological leaning that makes them open to some degree to progressive activism. Like pension funds, universities also aim to exist forever, which means they have long enough time horizons for severe climate impacts beyond 2050 to be relevant to them.³²¹ They also purport to have an interest in the long-term welfare of their students. Canadian universities have self-adopted an environmentalist role and branding which, though often superficial in implementation, have nonetheless helped divestment organizers counter the argument that acting to control climate change is outside their responsibility.

The marketing and self-presentation of Canadian universities, and their concern about public relations, created opportunities for activists to demand divestment on the basis of values and commitments which

³¹⁴Toffel and Gulick note Australian prime minister Tony Abbott's condemnation of the decision by the Australian National University to divest, as well as "mounting political pressure from the political right" on US universities. Toffel and Gulick, Harvard Business School Case: Fossil Fuel Divestment, p. 14.

³¹⁵Aidid's research on the Lakehead campaign identified that the university's board was even more concerned about public relations and recruitment than about financial risk. Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. 99.

³¹⁶Mikkelson argued that the McGill campaign "unmasked a deep complicity between the people who control the institution and vested anti-environmental interests" and that "the central administration dominates the Senate, and they were (and are) bitterly opposed to divestment." Gregory M. Mikkelson. "Divestment and Democracy at a Canadian University". In: *Journal of the Council for Research on Religion* 2.1 (2020), pp. 1–16. URL: https://creor-ejournal.library.mcgill.ca/article/view/35/22 (visited on 02/11/2021), p. 4, 6.

³¹⁷ This focus on public relations in response to ethical issues is not limited to climate change. See for instance: Paula Duhatschek. Academic Says Universities Too Worried About Bad PR to Deal with Systemic Racism. 2020. URL: https://www.cbc.ca/news/canada/kitchener-waterloo/bad-pr-systemic-racism-universities-1.5629591 (visited on 07/01/2020).

³¹⁸Governments have displayed similar prioritization. Lemphers quotes a Canadian civil servant on how "ministers were more preoccupied with the public dimension of the issue" as a succession of plans failed to check rising emissions. Lemphers, "Beyond the Carbon Curse: a Study of the Governance Foundations of Climate Change Politics in Australia, Canada and Norway", p. 142.

 $^{^{319}}$ On the multiple strategic goals of the movement, see: The CFFD movement's three strategic objectives p. 5

³²⁰Belliveau, "Climate Justice in the Fossil Fuel Divestment Movement: Critical Reflections on Youth Environmental Organizing in Canada", p. 101.

³²¹Rand said of pension funds: "Like all investors, pension funds have a fiduciary obligation to generate returns, but over a very long time horizon. They need to generate those returns at known points in time (and in known amounts), often many decades out. Hence they have a unique relationship to a healthy economy over many decades... Unchecked climate risk entails ecological collapse over the coming century; absent a stable ecosystem, there's little possibility of a healthy economy decades out; without a healthy economy decades out, pension funds cannot meet obligations to which they're already committed; hence, they have a fiduciary obligation to make investment decisions in such a way as to reduce climate risk (not just to avoid it)." Rand, *The Case for Climate Capitalism: Economic Solutions for a Planet in Crisis*, p. 134.

their university had already stated. In one way or another, virtually every Canadian university did and does portray itself as environmentally aware and active. UBC told prospective students that it "ranks number one in the world for taking urgent action to combat climate change and its impacts." The University of Alberta said it "is committed to sustainability in every aspect." The Queen's "Green Campus" page listed climate action, food sustainability, and student initiatives. In August 2020, l'Université de Montréal listed eleven pages of news stories about how it is implementing sustainable development or "développement durable." Dalhousie said that "sustainability is woven into all that we do—from teaching and learning, to researching and building community for a better future." Laval issued a press release in 2017 when it was rated the second most sustainable in the world under the Sustainability Tracking, Assessment and Rating System (STARS) system. Statements of this sort were used by CFFD campaigns to assert divesting would be appropriate and necessary, while resistant universities portrayed their non-divestment efforts as sufficient or superior.

Canadian universities' self-representation as environmentally conscious created an opportunity that informed the messaging of most CFFD campaigns, which often pointed to universities' own statements about environmental protection and sustainability to argue that this logically obligated them to divest, or that failure to do so would damage their 'green' reputations.³³¹ The opportunity is limited in practical effect, however, by the superficial and publicity-driven nature of these green commitments. When the risk is reputational and when most observers won't undertake a detailed substantive examination of the actions being taken, it is easy for universities to present alternative choices like teaching about climate change or adopting minimal ESG screening as equivalent to or superior to divestment.

Even universities which rejected the substantive claims of CFFD activists have often praised the efforts of climate activists in the abstract.³³² This is perhaps unsurprising, as universities which have themselves expressed concern about climate change projections would not be consistent in criticizing the efforts of students to protect their own futures.³³³ For example, Alex Cool-Fergus, an organizer at Sherbrooke, said that the campaign tried "to show the university how being green or ecologically minded is a kind of trade mark and part of the advertising scheme of the university." Tolerating such activist campaigns while rejecting their core demands lets universities portray themselves as wise and benevolent, sharing the substantive concerns of student activists but rejecting as naïve, undesirable, or ineffective the specific measures they

³²²University of British Columbia. Our Place Among the World's Best. 2020. URL: https://www.ubc.ca/about/our-place.html (visited on 08/15/2020).

³²³Arielle Garsson from the UBC campaign said the university's self-promotion as a sustainable campus was a major talking point in the CFFD campaign.

³²⁴ University of Alberta. About Us. 2020. URL: https://www.ualberta.ca/about/index.html (visited on 08/15/2020).

³²⁵ Queen's University. Green Campus. 2020. URL: https://www.queensu.ca/about/greencampus (visited on 08/15/2020).

 $^{^{326}}$ Université de Montréal. Nos Gestes. 2020. URL: https://durable.umontreal.ca/engagements/nos-gestes/ (visited on 08/15/2020).

³²⁷ Dalhousie University. Sustainability at DAL. 2020. URL: https://www.dal.ca/about-dal/sustainability.html (visited on 08/15/2020).

³²⁸A Dalhousie organizer said that she went to Dalhousie specifically because of its self-representation as green, but now does not recommend the school to potential applicants.

³²⁹ Andrée-Anne Stewart. STARS Accreditation: Université Laval Ranked Second in the World for Sustainable Development. 2017. URL: https://www.ulaval.ca/en/about-us/media-centre/press-releases/press-releases-2017/stars-accreditation-universite-laval-ranked-second-world-sustainable-development (visited on 12/31/2019).

³³⁰For a more detailed discussion, see: Ilnyckyj, "Campus Fossil Fuel Divestment (CFFD) Counter-Repertoires", p. 21–3.

³³¹This approach is also evident in the broader movement beyond Canada. See: Nora Heaphy and Leehi Yona. *Yale's Climate Hypocrisy.* 2017. URL: https://yaledailynews.com/blog/2017/10/09/heaphy-yona-yales-climate-hypocrisy/ (visited on 01/02/2012).

³³²For a similar case see: BBC News. *Oil and Gas Industry 'Listening' to Climate Activist Greta Thunberg.* 2019. URL: https://www.bbc.com/news/uk-scotland-scotland-business-48505692 (visited on 06/04/2019).

³³³Arielle Garsson described how UBC promotes itself as a sustainable campus and how the campaign emphasized the disjoint between that and investing in fossil fuels.

proposed. This pattern reflects Eve Bratman et al.'s observation that the "embrace of sustainability" within higher education has "been of the system maintaining or reforming variety."³³⁴ During a meeting between representatives of an Ontario CFFD campaign and representatives of the target university's administration, the activists were praised for the quality of their research and an official half-jokingly suggested that they ought to confer degrees for it. Months later, the central demands of the campaign were all rejected. That outcome reflects McKibben's conviction that winning the argument of logic and evidence isn't enough to produce climate action on a sufficient scale. ^{335,336} At the same time, this meeting with the joke about conferring degrees demonstrated the relatively tolerant attitude university administrations had maintained toward CFFD campaigns.

Divestment proliferators and the 'campaign in a box' strategy were able to take advantage of Canadian universities' comparatively tolerant attitude toward demands for climate change action. The high degree of sympathy and concern about climate change from university institutions is part of what created the political opportunities which shaped the CFFD movement. Some administrators argued with campaign organizers that they wanted to take more substantive action on climate change, but could only do so if 'forced' by visible student demands. This contrasts with other social movements — and particularly the BDS movement against Israeli conduct in the occupied Palestinian territories — where university administrations have been far less sympathetic to the analysis and aims of organizers, and far less willing to interpret activism as appropriate student conduct. This is relevant to the CJ-CO₂-e debate because the linkages which progressives accept as so vital can become an impediment to institutional buy-in because campaign targets do not accept them as similarly justified or within their own sphere of responsibility.

The divestment movement has been granted a degree of latitude by university administrations which isn't comparably granted to efforts like BDS, racial justice movements like Black Lives Matter, or Indigenous movements like Idle No More.³³⁷ Whereas social movements which universities deem to be an even greater threat to public relations get more energetic and high-risk counter-repertoires used against them, divestment campaigns were described on reasonably favourable terms to me by virtually everyone who I spoke to in my research, including members of these university communities who are publicly on record opposing them.³³⁸ At Dalhousie, for example, the first contact between CFFD activists who had initiated a campout on November 21st, 2017 and university security was the latter visiting to bring garbage and recycling cans. The encampment was visited by the university president and the chair of the board, with the former complimenting their six foot dinosaur and the latter offering ten minutes of speaking time at the next board of governors meeting. When the chair of the board of governors provided the rationale for rejecting divestment in 2014, he also stated: "[w]e understand and agree with the goals of Divest Dal."³³⁹ Naomi Goldberg emphasized how the "safe space" at Mount Allison, specifically in terms of police officers not being allowed on campus, reduced

³³⁴Bratman et al., "Justice is the Goal: Divestment as Climate Change Resistance", p. 679.

³³⁵In *The End of Nature*, McKibben described a naïve view he held before his insight that a social movement is necessary to change political outcomes on climate change. He described his prior theory of change as: "people would read my book — and then they would change." Bill McKibben. *The End of Nature*. New York: Anchor, 1989.

³³⁶The line is quoted at (0:40) in: 350.org, Do the Math — The Movie.

³³⁷See Khan on Black Lives Matter in Toronto, and particularly their comparatively harsh treatment by the police: Janaya Khan. What Black Lives Matter Taught Me About Protesting. 2020. URL: https://thewalrus.ca/social-media-is-revolutionizing-the-way-we-protest/ (visited on 03/01/2020).

³³⁸ An article in a trade publication for university administrators noted: "Divestment is so palatable that groups in oil-dependent Newfoundland and Alberta are finding that students — even those with family members working in the oil and gas industry — are receptive." Diane Peters. The Hot Mess of Student Activism. 2015. URL: https://www.universityaffairs.ca/features/feature-article/the-hot-mess-of-student-activism/ (visited on 07/12/2019).

³³⁹ Lawrence Stordy. Fossil Fuel Divestment Statement: Consideration of Fossil Fuel Divestment: Statement from Mr. Lawrence Stordy — Chair, Dalhousie's Board of Governors. 2014. URL: https://web.archive.org/web/20141127191507/http://www.dal.ca/dept/university_secretariat/board_of_governors/meetings/fossil-fuel-divestment-statement.html (visited on 07/12/2019).

the risk associated with their occupation of the president's office and contributed to a setting where it was possible to learn a lot about civil disobedience. The U of T administration's 45 page justification for their non-divestment approach in 2016 argued: "Clearly, the time for concrete, effective action has arrived" and "the threat of climate change will require not just governments, but all members of civil society, to adopt ambitious, substantive measures that far exceed past practices in scope and impact." Harvard University president Lawrence Bacow said of the CFFD campaign: "We may differ on means. But I believe we seek the same ends – a decarbonized future in which life on Earth can flourish for ages to come." Grady-Benson and Sarathy described how even administrations which reject divestment "still acknowledge the urgency of anthropogenic climate change and highlight other steps their institutions are taking to address the issue."

This sympathy doesn't always mean target universities have actually taken substantive action. The counter-repertoires employed by universities, the fossil fuel industry, and governments against the FFD movement are discussed in detail in my 2022 APSA pre-print.³⁴³ A distinction can naturally be drawn between treating members of a campaign civilly (and even praising aspects of their messaging and actions) and being genuinely open to taking the action the campaign is proposing. An organizer at UVic explained: "we always felt the university would be very nice to us but not do what we wanted." Suspicion that target universities are unshakeably indisposed to divestment was widespread in the analysis of organizers of ongoing campaigns, as well as those analyzing formal rejections after the fact. One administrator who spoke with me explained the university's perspective this way:

At the risk of sounding paternalistic — that's not my rationale for saying the following — we, the board, the administration, gave this organization, their group, those kids enormous resources in terms of time, attention, place on the agenda, even financing, support of activities. We bent over backwards for them. I know that sounds kind of like liberal tolerance but the ultimate reason for doing this was that we really believe as educators in the importance of young people getting engaged and doing stuff and so this, compared to people playing fucking video games, I'll put my money on this group, no matter how much they might disrupt my life.

Interpreting this comment requires some nuance and empathy. There are grounds for accepting the common view among CFFD activists that target administrations deliberately used delay and procedural hurdles to impede campaigns. The comment illuminates how for each actor involved in contentious politics there is a mindset and justification in which their own actions are appropriate or even laudable, in contrast with those of actors pursuing different objectives. Actors involved in contentious politics also interpret each other in terms of roles: CFFD activists often saw themselves as politically motivated citizens trying to solve a problem, in part, by influencing a university where they have sway, while university administrators more likely saw them as embryonic political beings with an excess of idealism and a deficit of practicality. Nonetheless, as the quote also demonstrates, universities are not opposed to climate change mitigation demands in the abstract and are willing to tolerate and even encourage them as manifestations of rising political consciousness among students and desirable political pluralism and advocacy within university communities — one of the ways in which the conventionally liberal political culture of universities favoured CFFD activism. The common of the state of the conventionally liberal political culture of universities favoured CFFD activism.

³⁴⁰Meric Gertler. Beyond Divestment: Taking Decisive Action on Climate Change. 2016. URL: http://www.president.utoronto.ca/secure-content/uploads/2016/03/Beyond-Divestment-Taking-Decisive-Action-on-Climate-Change.pdf (visited on 01/23/2017), p. 4.

³⁴¹Toffel and Gulick, Harvard Business School Case: Fossil Fuel Divestment, p. 1.

 $^{^{342}}$ Grady-Benson and Sarathy, "Fossil Fuel Divestment in US Higher Education: Student-led Organising for Climate Justice", p. 15.

³⁴³Ilnyckyj, "Campus Fossil Fuel Divestment (CFFD) Counter-Repertoires".

³⁴⁴Ilnyckyj, "Campus Fossil Fuel Divestment (CFFD) Counter-Repertoires", p. 5–22.

³⁴⁵Barry Rabe argued that: "In many respects, there can be no political venue in American that is likely more receptive to bold steps to address climate change than its colleges and universities." Barry G. Rabe. Can We Price Carbon? Cambridge:

The starkest contrast with the relative palatability of fossil fuel divestment was the hostility perceived from and sometimes expressed by target administrations toward BDS. 346,347,348,349,350,351 Lenetsky called it "the really big fear" of the McGill board of governors, and the administration at U of T specifically asked what distinguished CFFD from BDS, as they were wary of the former as a precedent for the latter. At Concordia, "organizers strategically chose not to include BDS because the Concordia administration would not support it... DC [Divest Concordia] organizers worried that if the campaigns merged, it was likely to harm the FFD campaign's potential to succeed." The relationship between CFFD and BDS is of interest historically as overlapping movements, but more importantly it provides the clearest illustration of the contrast between CJ and CO_2 -e worldviews on issue linkage. For CJ advocates, the measure of true solidarity is willingness to express support even at a cost to yourself, whereas for CO_2 -e organizers the relevance of Israeli conduct to climate change was disputed while the risks of making the connection were salient. This again relates to each group's most important audience, which for CJ advocates was other activists themselves while for CO_2 -e organizers it was the target administration.

The concern Lenetsky described about fossil fuel divestment "open[ing] the door for other forms of divestment" is reflected in the frequent 'slippery slope' arguments made by divestment opponents and target administrations, stressing how they need to have a wide variety of investment options for their endowments and pension funds and how morally-motivated campaigns against many different asset types are conceivable and would collectively reduce the scope of their investment opportunities. ^{353,354,355} A UBC organizer said:

The BDS campaign did coincide a little bit. I believe it came to a vote in the AMS student society in one of the lull periods between pushes in our campaign, so it never felt like a direct conflict — conflict in the sense of competing for attention or things like that. We were very aware though that people would link the two divestment campaigns a lot so we actually would have to

MIT Press, 2018, p. xiiv.

³⁴⁶ In 2004, the Palestinian Campaign for the Academic and Cultural Boycott of Israel issued a call for a boycott. Palestinian Campaign for the Academic and Cultural Boycott of Israel. *History*. 2008. URL: https://web.archive.org/web/20141203175607/http://pacbi.org/etemplate.php?id=868 (visited on 01/28/2020).

³⁴⁷Haidar Eid. BDS Needs a Political Vision for Palestinian Statehood. 2020. URL: https://www.aljazeera.com/indepth/opinion/bds-political-vision-palestinian-statehood-200124143707259.html (visited on 01/28/2020).

³⁴⁸Another demonstration of the ferocious resistance to social movements seen as anti-Israel or anti-Zionist is the reaction to Jennifer Peto's 2010 MA dissertation on Holocaust education at the Ontario Institute for Studies in Education (OISE) at U of T. Peto was protested by the Jewish Defence League and called a "disgrace to U of T" in the *National Post*. Jennifer Peto. "The Victimhood of the Powerful: White Jews, Zionism and the Racism of Hegemonic Holocaust Education". MA thesis. University of Toronto, 2010. URL: https://tspace.library.utoronto.ca/bitstream/1807/24619/1/Peto_Jennifer_201006_MA_thesis.pdf (visited on 02/06/2020).

³⁴⁹ Sheri Shefa. JDL Protests Against Peto Outside Anti-israel Lecture. 2011. URL: https://www.cjnews.com/featured/jewish-learning/jdl-protests-peto-outside-anti-israel-lecture (visited on 02/06/2020).

 $^{^{350} \}rm National~Post.~\it National~Post~\it Editorial~\it Voard:~\it Jenny~\it Peto~is~a~\it Disgrace~to~\it U~of~\it T.~2011.~\it URL:~\it https://nationalpost.com/full-comment/national-post-editorial-board-jenny-peto-is-a-disgrace-to-u-of-t~\it (visited~on~02/06/2020).$

³⁵¹ Daniel Dale. *U of T Slammed Over 'Jewish Racism' Thesis*. 2010. URL: https://www.thestar.com/news/gta/2010/12/07/u_of_t_slammed_over_jewish_racism_thesis.html (visited on 02/06/2020).

³⁵² Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. 94–5.

³⁵³Derek Bok, president of Harvard from 1971 to 1991, warned that "if Harvard were consistent in pursuing social justice through divestment... the number of black-listed firms could easily be long enough to push our losses to high levels indeed." Toffel and Gulick, *Harvard Business School Case: Fossil Fuel Divestment*, p. 6.

³⁵⁴McGray argued "administrators resist divestment because of its hidden subversive potential as a slippery slope to an increased democratisation of capital. Even when not among the primary aims of divestment campaigns, their very existence serves to cast a certain amount of public scrutiny on institutions and call into question their level of austerity-privacy. Although yielding to calls to divest might dissipate such scrutiny in the short term, it could represent an institutional acknowledgement that this scrutiny is sometimes legitimate, opening the door to more challenges to their austerity-privacy." Robert McGray and Jonathan Turcotte-Summers. "Austerity-Privacy & Fossil Fuel Divestment Activism at Canadian Universities". In: Australian Universities' Review 59.2 (2017), pp. 36–49. URL: https://files.eric.ed.gov/fulltext/EJ1157055.pdf (visited on 01/01/2020), p. 45–6.

³⁵⁵Aidid quoted a research participant who said that the Concordia campaign had decided against seeking divestment from weapon manufacturers and mining firms because they felt they "had to focus on one thing at a time, because we knew if we brought too much, it would convolute our argument and become very difficult." Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. 71.

be like 'we're a fossil fuel divestment here, we're not associated with the BDS campaign.' The board's policy, though, on fossil fuel divestment — and not only their policy but every step they took with us along the way — was carefully considered because they were concerned that what they do on fossil fuel divestment is setting a precedent for other divestment campaigns.

In the Dalhousie campaign, Simon Greenland-Smith explained that there was internal contention about supporting BDS and they "had to wrestle cognitively if it was strategic for our campaign", ultimately deciding to support BDS even though it was not strategic. An organizer at UBC said that their BDS referendum saw "very, very public opposition movement" and that there were counter-events for all of the BDS campaigns events. A McGill professor who spoke with me said that the contemporaneous BDS campaign "caused so much backlash" and plausibly contributed to the administration's resistance to fossil fuel divestment. In an interview, one university administrator said: "It's one of those issues where... I held my breath for twelve years because it can be quite divisive on campus and can drive the university into the ground."

BDS campaigns have attracted broader societal criticism and been condemned as anti-Semitic by groups including the Anti-Defamation League, which argued: "the predominant drive of the BDS campaign and its leadership is not criticism of policies, but the demonization and delegitimization of Israel" and "many of the strategies employed in BDS campaigns are anti-Semitic" while those organizing them are often "driven by opposition to Israel's very existence as a Jewish state." while those organizing them are often "driven laws "effectively banning companies from boycotting Israel," though an effort at the national level failed in the senate in 2019. 360, 361 In 2017, Israel passed a law to deny entry into the country to BDS support-

 $^{^{356}}$ Anti-Defamation League. BDS: The Global Campaign to Delegitimize Israel. 2018. URL: https://www.adl.org/resources/backgrounders/bds-the-global-campaign-to-delegitimize-israel (visited on 02/21/2020).

³⁵⁷ Bakan and Abu-Laban argued: "The BDS campaign, and in particular the call for an academic boycott, has been controversial. It has generated a counter-response emphasising, variously, the goals of the movement as ineffective, counter-productive to peace and/or security, contrary to norms of academic freedom and even tied to anti-Judaism and anti-Semitism." Abigail B. Bakan and Yasmeen Abu-Laban. "Palestinian Resistance and International Solidarity: The BDS Campaign." In: Race & Class 51.1 (2009), pp. 29–54. URL: https://journals.sagepub.com/doi/10.1177/0306396809106162 (visited on 01/11/2020), p. 29. 358 Others highlighted how tolerance for even moderate criticism of Israeli policy has decreased. Shree Paradkar wrote that "legal experts and advocacy groups are raising concerns that these recent incidents suggest an escalation of silencing even moderate critiques of Israel, and not just in the halls of academia, but in the media, the political sphere and social interactions." Shree Paradkar. Controversies at U of T Law, York University Highlight Escalating Suppression of Moderate Voices Criticizing Israel. 2020. URL: https://www.thestar.com/opinion/star-columnists/2020/10/25/controversies-at-u-of-t-law-york-university-highlight-escalating-suppression-of-moderate-voices-criticizing-israel.html (visited on 10/26/2020).

³⁵⁹ A University of Maryland critical issues poll published in January 2020 found that only 49% of Americans polled reported knowing what BDS was. Among those who said they knew, 47% were opposed while 26% were in favour. Shibley Telhami. What Do Americans Think of the BDS Movement, Aimed at Israel? 2020. URL: https://www.brookings.edu/blog/order-from-chaos/2020/01/08/what-do-americans-think-of-the-bds-movement-aimed-at-israel/ (visited on 01/09/2020).

³⁶⁰Toffel and Gulick, Harvard Business School Case: Fossil Fuel Divestment, p. 8.

³⁶¹Zack Beauchamp. The Controversy Over Laws Punishing Israel Boycotts, Explained. 2019. URL: https://www.vox.com/policy-and-politics/2019/1/9/18172826/bds-law-israel-boycott-states-explained (visited on 02/21/2020).

ers. ^{362,363,364,365,366,367,368,369} In 2019, the Bundestag, the lower house of the German parliament, passed a resolution which condemned BDS as anti-Semitic. ³⁷⁰ When the UN High Commissioner on Human Rights published a list of companies operating in Israeli-controlled territories, it was denounced by US secretary of state Mike Pompeo as confirmation of the "unrelenting anti-Israel bias so prevalent at the United Nations." ³⁷¹ An Israel Anti-Boycott Act was also introduced in Congress in 2020, intended to "prohibit boycotts or requests for boycotts imposed by international governmental organizations against Israel." ³⁷²

Resistance to BDS has taken place in Canada during the CFFD movement. A 2015 op-ed in The Ubyssey argued "BDS spreads hatred and intolerance" and urged students to "Vote NO to anti-Semitism." In 2016, Canadian Jewish groups that considered BDS anti-Semitic successfully campaigned for the de-funding of the Waterloo Public Interest Research Group (WPIRG), which had been a locus of CFFD organizing. 374,375,376 A 2017 Ubyssey article argued that "at its heart, the movement calls for the destruction of the state of Israel." In May 2019, driven by concerns that a Green Party candidate may be a BDS supporter, party leader Elizabeth May said: "We have nothing to do with BDS... We repealed it. We are not a party that condones BDS. We would never tolerate anybody in our party who violates our core values, who are anti-Semitic." Nonetheless, CFFD campaigns were sometimes open to endorsing BDS campaigns. At UVic the CFFD campaign was "definitely open to endorsing them" after a preliminary meeting, but the BDS

 $^{^{362} \}mbox{The Economist.}$ Donald Trump Presses Israel Into Barring Entry to American Congresswomen. 2019. URL: https://www.economist.com/democracy-in-america/2019/08/16/donald-trump-presses-israel-into-barring-entry-to-american-congresswomen (visited on 08/18/2019).

³⁶³See also: The Economist. A Campaign That is Gathering Weight: Israel's Politicians Sound Rattled by the Campaign to Isolate Their Country. 2014. URL: https://www.economist.com/middle-east-and-africa/2014/02/07/a-campaign-that-isgathering-weight (visited on 08/18/2019).

³⁶⁴The Economist. Are Calls to Boycott Israel Anti-Semitic? 2015. URL: https://www.economist.com/democracy-in-america/2015/05/12/are-calls-to-boycott-israel-anti-semitic (visited on 08/18/2019).

³⁶⁵Similar efforts are now underway to legally sanction institutions that have opted for fossil fuel divestment: Chris McGreal. Rightwing Lobby Group Alec Driving Laws to Blacklist Companies That Boycott the Oil Industry. 2022. URL: https://www.theguardian.com/environment/2022/feb/08/rightwing-lobby-alec-blacklist-companies-boycott-oil-industry (visited on 04/18/2022).

³⁶⁶ Mose Buchele. Texas and Other States Want to Punish Fossil Fuel Divestment. 2022. URL: https://www.npr.org/2022/03/16/1086764072/texas-and-other-states-want-to-boycott-fossil-fuel-divestment-blackrock-climate (visited on 03/17/2022).

³⁶⁷Bill Holland. Oil-producing States Push Back Against ESG Screening by Pension Fund Managers. 2022. URL: https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/oil-producing-states-push-back-against-esg-screening-by-pension-fund-managers-69421719 (visited on 04/12/2022).

³⁶⁸Kate Aronoff. *The Deranged Demands of the 'Anti-ESG' Movement*. 2022. URL: https://newrepublic.com/article/167550/desantis-anti-esg-movement (visited on 09/07/2022).

³⁶⁹Brad Johnson. BlackRock Among 10 Financial Companies on Official Texas List of Fossil Fuel 'Divestors'. 2022. URL: https://thetexan.news/blackrock-among-10-financial-companies-on-official-texas-list-of-fossil-fuel-divestors/(visited on 09/07/2022).

³⁷⁰ The Economist. How the Jewish Museum Berlin Fell Out with Jews. 2019. URL: https://www.economist.com/europe/2019/07/27/how-the-jewish-museum-berlin-fell-out-with-jews (visited on 08/26/2019).

³⁷¹ Raphael Ahren. Pompeo says Settlement Blacklist Shows UN's 'Unrelenting Anti-Israel Bias'. 2020. URL: https://www.timesofisrael.com/us-says-settlement-blacklist-shows-uns-unrelenting-anti-israel-bias/ (visited on 03/10/2020).

³⁷²Ron Kampeas and Omri Nahmias. Rep. Zeldin Brings Anti-boycott Act to Congress. 2020. URL: https://www.jpost.com/American-Politics/House-bill-would-penalize-compliance-with-European-and-UN-boycotts-614198 (visited on 03/10/2020).

³⁷³ Koby Michaels. Op-ed: Vote No on Israel Divestment. 2015. URL: https://www.ubyssey.ca/opinion/israel-divestment-bds-ams-ubc-411/ (visited on 07/21/2019).

³⁷⁴A Waterloo CFFD organizer said the PIRG was accused of being "a radical anarchist organization" and "anti-Semitic."

³⁷⁵Aidid stated that: "At Waterloo, WPIRG was defunded when they ran a campaign to support Palestine which severely impacted FFUW — Fossil Free University of Waterloo —'s access to meeting space and funding for their events." Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. 95.

 $^{^{376}}$ See also: Greg Mercer. UW Advocacy Group Loses Funding. 2016. URL: https://www.therecord.com/news-story/6899492-uw-advocacy-group-loses-funding/ (visited on 08/03/2019).

³⁷⁷ Koby Michaels. Op-ed: BDS Will Bring Bigotry, Hatred and Even Violence to UBC. 2017. URL: https://www.ubyssey.ca/opinion/op-ed-bds-will-bring-bigotry-hatred-and-even-violence-to-ubc/ (visited on 08/14/2019).

³⁷⁸Paul Lungen. Concerns Raised over New Green MP's Views on BDS. 2019. URL: https://www.cjnews.com/news/canada/concerns-raised-over-new-green-mps-views-on-bds (visited on 11/14/2019).

campaign ceased to be active on campus.

As temporally overlapping movements, the question of whether to support BDS drove CFFD campaigners to question what their values, strategic plans, and priorities really were. In criticizing the BDS movement, Alexander Joffe emphasized the intersectional analysis that activists have used to link the issue of Israeli policy and conduct in the occupied Palestinian territories to climate change:

As links between fossil fuel divestment, the 'green' agenda, and other 'social justice' causes increase on campus, the BDS movement's impact on practical politics will continue to rise... Fossil fuel divestment protests were held at many campuses in February [2020], and faculty and staff groups have begun to lend support. A number of institutions including Georgetown and the University of California system announced plans to divest from fossil fuel companies... Predictably, BDS activists have expanded efforts to hijack the fossil fuel issue by emphasizing the 'connectedness of climate justice' at campus rallies, and by expressing similar support for protestors blockading transportation networks in western Canada.³⁷⁹

This sort of bandwagoning to the perceived influence of CFFD is common — used by non-fossil fuel social justice campaigns metaphorically applying the term "divestment" to other university and public policy changes which do not involve investment in publicly-traded securities, such as calls to "divest" from the police. ^{380,381,382,383,384} The hope within these campaigns that using the divestment label to advocate for other causes will be effective speaks to the activist perception that the CFFD movement has a chance of succeeding in influencing university policy, or at least the perception that CFFD has attracted interest on and off campus.

2.3.2 Barriers within universities

Not all features of universities were propitious for CFFD campaigning — including the makeup of their decision-making bodies, loss aversion and financial strain, their view of fiduciary duty, the presence of resistant constituencies, and their unwillingness to see climate change action as related to Indigenous reconciliation.

The university body with the power to implement CFFD demands was most commonly a board of governors or regents, or sometimes a university president empowered to decide through an existing divestment policy. The makeup and inclinations of these university deliberative bodies are relevant for understanding their responses to CFFD campaigns, and for understanding how the CFFD movement influenced its organizers. Those who prioritized consensual relations with the administration learned to emulate their norms in

³⁷⁹ Alexander H. Joffe. UN Publishes Anti-Israel Blacklist, BDS Pressures Democratic Candidates and Universities. 2020. URL: https://www.meforum.org/60523/un-publishes-anti-israel-blacklist (visited on 03/10/2020).

³⁸⁰Infrastructure resistance strategies described as "divestment" have not been limited to fossil fuel projects, as demonstrated by efforts in 2019 to get Canadian universities to stop supporting the Thirty Meter Telescope on Mauna Kea in Hawaii, because of lack of Indigenous consent. Trent University Native Association et al. Statement of Opposition Regarding Trent University's Involvement in the Construction of the Thirty Meter Telescope on Hawaiian Sacred Site Mauna Kea. 2019. URL: https://docs.google.com/forms/d/e/1FAIpQLSesOmby87cJOtGZXa28HmJHnupB2nefUnOEBOfDYj_-MROFzg/viewform (visited on 08/26/2019).

³⁸¹ Jessica Deer. Indigenous Students Ask Canadian Universities to Divest from the Thirty Meter Telescope. 2019. URL: https://www.cbc.ca/news/indigenous/indigenous-students-ask-canadian-universities-to-divest-from-the-thirty-meter-telescope-1.5225229 (visited on 01/18/2020).

³⁸²Chantelle Bellrichard. Canadian Astronomers Contend With Issue of Indigenous Consent over Hawaiian Telescope Project. 2020. URL: https://www.cbc.ca/news/indigenous/canada-indigenous-consent-hawaii-telescope-1.5738068 (visited on 10/13/2020).

³⁸³ A poster made in 2019 by the U of T divestment campaign said: "Indigenous peoples demand immediate divestment from the TMT project" — stretching and perhaps misusing the term "divestment" for a non-commercial scientific project.

³⁸⁴A January 2020 divestment discussion hosted by the Leap Manifesto group and the U of T School of the Environment included a speaker who framed resistance to the Thirty Metre Telescope proposed on Mauna Kea in Hawaii as "divestment."

³⁸⁵For a detailed discussion of the history of governance at the University of Toronto, see: Renu Kanga Fonseca. "Motivations

vocabulary, modes of dress, and public messaging. With businesspeople generally well-represented on these bodies and a general instinct toward conservatism commented on by many research participants (including faculty members and administrators) it is probably fair to say that an inclination toward the *status quo* was the starting point from which each Canadian university began to consider the question of fossil fuel divestment. CFFD campaigns tried to shift inaction from the default to something universities had to justify, increasingly in the face of claims that their investment choices are undermining the life prospects of their students.

The financial context in which universities responded to divestment campaigns is relevant for understanding their reasoning and choices. Numerous interview participants made reference to the 2008 financial crisis and resulting investment losses, often explaining that this feeling of having lost and needing to catch back up added to the skepticism of universities about acting on fossil fuel divestment. There is a substantial literature in psychology and behavioural economics on loss aversion and the human tendency to feel losses more acutely than gains. Warren Mabee, a Queen's faculty member who served on the committee established by the principal to consider divestment, said that the financial crisis pushed the university to be more conservative after a "big portion of the endowment disappeared." Another faculty member interview participant noted that public funding for universities has been shrinking, driving anxiety within administrations and the search for revenue from real estate development and profitable international student recruitment. Cuts made to federal funding for universities in 1990 may also have contributed to financial cautiousness. ³⁸⁶ Universities have also prioritized good relations with potential donors, both individual and corporate, and used the threat of lost donation income as a justification for rejecting divestment. ^{387,388,389,390} Emilia Belliveau, an organizer in the Dalhousie and uVic campaigns, said that the responses of universities have "revealed the corporate capture of democratic public institutions."

Many of the arguments against divestment advanced by target universities, including in their formal justifications for rejecting campaigns, described competing priorities which can sometimes be given precedence over environmental protection. Doubtless driven in part by professional values among money managers and corporate executives, universities have generally been loathe to reject the idea of a fiduciary duty to maximize investment returns regardless of any other considerations.³⁹¹ A Concordia organizer called refusal to divest based on fiduciary duty an "omnipotent force almost." A Waterloo activist said their board of governors returned to fiduciary duty again and again, asserting that looking at anything other than returns was illegal.

and Experiences of Elected Governing Council Members". MA thesis. University of Toronto, 2011. URL: https://tspace.library.utoronto.ca/handle/1807/30094 (visited on 04/17/2020), p. 13-8.

³⁸⁶ Abram Lutes. Divesting UNB From Fossil Fuels: A Brief History. 2019. URL: http://nbmediacoop.org/2019/08/13/divesting-unb-from-fossil-fuels-a-brief-history/ (visited on 09/24/2019).

³⁸⁷Divest McGill claimed that \$2 million worth of donations were withdrawn because the university refused to divest. At a rally in 2016 after McGill rejected divestment, alumna Naghmeh Sabet-Rasekh, a portfolio manager at Scotia Wealth Management, said that a client had withheld this amount in protest. Vince Morello. Divest McGill Ends Demonstrations with a Surprise Announcement. 2016. URL: https://thelinknewspaper.ca/article/divest-mcgill-ends-with-a-surprise-announcement (visited on 12/31/2019).

³⁸⁸Maina-Okori, Murray, and McKenzie, "Climate Change and the Fossil Fuel Divestment in Canadian Higher Education: The Mobilities of Actions, Actors, and Tactics (journal pre-proof)", p. 18.

³⁸⁹Other campaigns considered calling for donors to withhold contributions until their target universities divested. Kathryn S. Kuhar. *Class of 2021: Withhold Donations Until Harvard Divests.* 2021. URL: https://www.thecrimson.com/article/2021/6/8/coleman-whitten-winters-withhold-donnations-harvard-divest/ (visited on 06/18/2021).

³⁹⁰At U of T, one of the most plausible explanations for the reversal of their 2016 divestment rejection is that they were about to launch a major fundraising campaign and wanted to avoid criticism on the issue. Milan Ilnyckyj et al. *Universities Must Dump Their Fossil Fuel Investments Before Fundraising*. 2021. URL: https://www.nationalobserver.com/2021/12/03/opinion/universities-must-dump-fossil-fuel-investments-fundraising (visited on 12/03/2021).

³⁹¹This hasn't universally been true. Prescott College sustainability coordinator James Pittman argued that fossil fuel divestment is compatible with fiduciary duty because of the need to think long-term and the lack of evidence for a financial penalty in divested portfolios. This is compatible with Rand's point about the long investment horizons of pension funds. Grady-Benson and Sarathy, "Fossil Fuel Divestment in US Higher Education: Student-led Organising for Climate Justice", p. 10.

The political prospects for divestment at any particular school are shaped by the influence and perceived interests of important constituencies. Within Canadian universities, the most overt and remarked-upon student opposition to CFFD campaigns arose from engineering students.³⁹² One interview participant described how engineering students at the Memorial University of Newfoundland (MUN) obtained access to the formal proposal which the campaign was preparing for the university, which led to "uproar" and a meeting in opposition on the St. John's campus (which was not one of the two campuses where the MUN campaign was active). 393,394 In May 2020, MUN president and chancellor Vianne Timmons stated that "we are very supportive" of the fossil fuel industry because "so many of our engineers and faculty and students" are involved or aspire to work in the sector. 395 An organizer in the UBC campaign said that ex-fossil fuel corporation staff members and "geological engineering" students were hostile to the campaign. An organizer in the Dalhousie campaign said that the most acute public opposition and tension came from the engineering department, where many students were being directly trained for jobs in the oil and gas industry.³⁹⁶ Joanna Brenchley noted that the greatest public tensions at Dalhousie were with the engineering department because many students were being directly trained for oil and gas jobs and wanted to avoid villainizing people in the industry. Some Earth sciences and geography students expressed their support when Dalhousie rejected divestment in 2014. Student Colin MacAdam said: "If divestment did happen companies would likely divest from Dalhousie. We would lose a lot of funding." Earth sciences chair Rebecca Jamieson argued that divestment could have driven fossil fuel corporations to redirect support elsewhere in the province. Oceanography chair Marlon Lewis said that the fossil fuel industry is "part of the research agenda and we treat them like partners." ³⁹⁷ In 2018, University of Alberta engineering professor Fraser Forbes argued the school giving an honourary degree to David Suzuki created "the worst crisis, a crisis of trust, that we've faced in more than three decades" and described "outrage being expressed across the entire breadth of our engineering community" before saying that the faculty of engineering should: "Intensify our advocacy for Alberta's industrial sectors, within the University of Alberta, and beyond."398 A Waterloo organizer also said the campaign experienced public opposition from engineering students. An interview participant from the second Queen's campaign noted that the engineering program is the largest in the school and said that engineering students expressed concern that if fossil fuel divestment happened the industry would boycott them for jobs. Nicholas Lorraway described rumours that a Shell representative had threatened to withhold donations if the school divested, which would have been a blow particularly to the engineering department.

³⁹²Vaughan commented on the culture of engineers: "In the modern workplace, technologists generally have little responsibility beyond the development, testing, calculations, and paperwork related to the applied work they do. Their creative work is bracketed by program decisions made outside (and above) the lab. Strinchcombe writes, 'The product of the engineer is a proposed decision by the client.' To a great extent, the job is reactive and consists of providing clients, both in-house and external, with designs that fit prescribed plans and information for making technical decisions. ... These institutional arrangements have led many scholars to conclude that engineers are 'servants of power': carriers of a belief system that caters to dominant industrial and government interests." Diane Vaughan. The Challenger Launch Decision: Risky Technology, Culture, and Deviance at NASA: Enlarged Edition. Chicago: University of Chicago Press, 2016.

³⁹³Memorial faculty member Robin Whitaker commented on how the oil industry was highly visible and present at MUN, especially in the engineering school.

³⁹⁴A MUN organizer commented that the anti-divestment effort at the St. John's campus was run by engineering students who feared the pro-divestment campaign at the Cornerbrook campus would undermine their future internships and jobs.

³⁹⁵Terry Roberts. 'Time is now,' Trudeau Told as N.L. Leaders Rally Around Clobbered Oil Industry. 2020. URL: https://www.cbc.ca/news/canada/newfoundland-labrador/oil-ottawa-offshore-1.5585156 (visited on 06/19/2020).

³⁹⁶Emilia Belliveau said that a Shell executive told the Dean of Science at Dalhousie university that it would look unfavourably on a divested university in future investment decisions. The same statement was publicly quoted. Charles Mandel. *How Big Oil Seeps Into Canadian Academia*. 2016. URL: https://www.nationalobserver.com/2016/04/27/news/how-big-oil-seeps-canadian-academia (visited on 05/13/2021).

³⁹⁷Paul Withers. Divest Dalhousie Failure Welcomed by Some on Campus. 2014. URL: https://www.cbc.ca/news/canada/nova-scotia/divest-dalhousie-failure-welcomed-by-some-on-campus-1.2852051 (visited on 01/01/2020).

³⁹⁸Fraser Forbes. Message from Fraser Forbes. 2018. URL: https://www.ualberta.ca/engineering/news/2018/april/message-from-fraser-forbes (visited on 01/28/2020).

Another organizer described how the fear that the Shell laboratory would be defunded was a source of public opposition to the campaign. Diana Yoon said that at Queen's the geography and engineering departments were resistant to divestment — and that engineering students came to meetings to share concerns about scholarships and internships.

A faculty interview participant made several comments about opposition from engineering students. One student in that faculty was the most visible source of opposition to that campaign, and engineers were frequently opposed. They are also personally connected in some cases with the fossil fuel industry, including through research that takes place in partnership with and with funding from the fossil fuel industry. The participant also described engineering as a "deeply conservative and male field."

In fairness, some in the engineering field have supported CFFD campaigns. Bryan Karney, a professor in U of T's department of civil engineering, chaired the *ad hoc* committee that recommended divestment based on a more demanding set of criteria than in the 'campaign in a box.'³⁹⁹ Engineering students were also organizers at U of T, Waterloo, Queen's, Dalhousie and other universities.^{400,401}

Divestment activists sought to link the ethical requirement to act on climate change with the position that universities should be actively engaged in advancing Indigenous reconciliation, while university administrations consistently rejected that linkage. The Indigenous politics context at Canadian universities has faced the same central criticism as their supposed commitment to environmental protection: namely, that it is more a marketing and promotion device and a defence against criticism than a genuine determination to assess past behaviour, atone for any misconduct, and profoundly change the functioning of the institution in the future. Particular attention has been devoted to the issue because of the Truth and Reconciliation Commission (TRC) of Canada's 2015 report, which found that Canada's residential school system was cultural genocide and issued 94 calls to action, including that the corporate sector should adopt the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) and obtain "the free, prior, and informed consent of Indigenous peoples before proceeding with economic development projects." The University of Toronto, for example, released a 125-page report on implementing the calls to action.

Regardless of the sincerity or meaningfulness of universities' actions, several interview participants noted the increased interest in Indigenous issues from universities during the period when CFFD campaigns have been active in Canada. Diana Yoon said Indigenous issues were "not on the agenda" when she began

³⁹⁹ This included "firms that derive more than 10% of their revenue from non-conventional or aggressive fossil fuel extraction"; firms that knowingly disseminate disinformation concerning climate change science or firms that deliberately distort science or public policy more generally in an effort to thwart or delay changes in behaviour or regulation; and "firms that derive more than 10% of their revenue from coal extraction for power generation or Canadian and American power generation firms that derive more than 10% of their revenue from coal-fired plants." Bryan Karney et al. Report of the President's Advisory Committee on Divestment from Fossil Fuels. 2015. URL: https://web.archive.org/web/20160314150821/http://www.president.utoronto.ca/secure-content/uploads/2015/12/Report-of-the-Advisory-Committee-on-Divestment-from-Fossil-Fuels-December-2015.pdf (visited on 12/31/2019), p. 3-4.

 $^{^{400}}$ Though a Queen's organizer noted that a pro-nuclear engineer within the group was "the least well aligned member we had."

⁴⁰¹Regarding Dalhousie: Belliveau, "Climate Justice in the Fossil Fuel Divestment Movement: Critical Reflections on Youth Environmental Organizing in Canada", p. 73.

⁴⁰² Truth and Reconciliation Commission of Canada. Truth and Reconciliation Commission of Canada: Calls to Action. 2015. URL: https://web.archive.org/web/20150701230223/http://www.trc.ca/websites/trcinstitution/File/2015/Findings/Calls_to_Action_English2.pdf (visited on 08/15/2020).

⁴⁰³Hoberg described how, in the Coldwater v. Canada decision which dismissed a challenge to the Trans Mountain pipeline, the court found that the Crown's consultation obligation was not equivalent to a right to consent, holding: "Canada was under no obligation to obtain consent prior to approving the Project. That would, again, amount to giving Indigenous groups a veto." Hoberg, *The Resistance Dilemma: Place-Based Movements and the Climate Crisis*, p. 154.

⁴⁰⁴Steering Committee for the University of Toronto Response to the Truth and Reconciliation Commission of Canada. Answering the Call Wecheehetowin: Final Report of the Steering Committee for the University of Toronto Response to the Truth and Reconciliation Commission of Canada. 2018. URL: https://www.provost.utoronto.ca/wp-content/uploads/sites/155/2018/05/Final-Report-TRC.pdf (visited on 08/15/2020).

university, but that "Indigenous consent and reconciliation" were starting to get a lot of attention on campus later in her involvement. An organizer from the University of Winnipeg campaign noted that the school is "known for being an Indigenously based university."⁴⁰⁵ Another Winnipeg organizer said the school is "really pushing an Indigenization and sustainability narrative" and that the campaign tried to make use of this, though they ultimately found the commitment to be superficial. ^{406,407} Within this dissertation, Indigenous politics and allyship are chiefly discussed in the repertoires chapter. However, these developments are relevant in terms of political opportunities as well, since they established part of the structural context in which investment decisions were made, though universities were highly resistant to linking investment policy with their efforts to promote Indigenous reconciliation.

Universities' individualities shaped the political opportunity structure for each CFFD campaign. Canadian universities vary in their present-day thinking and historical relationship to activism. One research participant said: "Concordia is a hub where people go for activism." Others at York and SFU emphasized the radical early years of their schools, generally before commenting on how it later diminished. At other universities, CFFD organizers and faculty members described how they were deeply culturally conservative and rarely the site for political demands or activist campaigns, for instance at Queen's and Waterloo.

2.3.3 Resistance and campaign outcomes

To some extent, CFFD campaigns tailored their approaches to the available political and institutional opportunities at their universities. For example, one participant in the Winnipeg campaign described a "rush against time" while regents appointed by the New Democratic Party (NDP) remained on the board. An organizer from the Concordia campaign described the impact of the 2011–12 student strikes in Montreal, a pre-existing pattern of organizing which other activists cited to explain why some in-person mobilizations in Quebec ended up being so much larger than those elsewhere. Generally speaking, Canadian CFFD campaigns during this time period stuck closely to the proposed campaign "ask" and approach in 350.org's "campaign in a box." This reduced the amount of independent effort required in the opening phases of each campaign, and helped create a unitary narrative, with efforts around the world presented as part of one coordinated movement. A Canadian CFFD movement where each campaign had 'asks' tailored to the specific context at the target institution could potentially have yielded more successes, from the perspective of the target university committing to divestment, by setting a level of ambition compatible with the willingness of the administration and pursuing incremental wins. The strong peer effects between target administrations must also be considered, however. 408 It is far less courageous, and therefore far more probable, to follow the

⁴⁰⁵Belliveau stated: "at the University of Winnipeg the divestment campaign has been led by Indigenous youth. Their campaign explicitly connects fossil fuel divestment with Indigenization on campus, reconciliation for First Nations communities, and justice for Indigenous people's the world over where fossil fuel (and other) resources have been extracted at their expense." Belliveau, "Climate Justice in the Fossil Fuel Divestment Movement: Critical Reflections on Youth Environmental Organizing in Canada", p. 50–1.

⁴⁰⁶Belliveau wrote that "the University of Winnipeg's divestment campaign has been organized by a number of Indigenous student leaders, and has promoted its cause with banners such as 'No Indigenization without Divestment!'. Moreover, my interviews indicate that climate justice can be an introduction or accessible avenue for Settler-Canadians to engage with decolonization and support First Nations resurgence." Belliveau, "Climate Justice in the Fossil Fuel Divestment Movement: Critical Reflections on Youth Environmental Organizing in Canada", p. 35.

⁴⁰⁷At the University of Saskatchewan, at least nine First Nations and Métis professors left between 2015 and 2020, with a letter from the faculty association alleging racism against Indigenous professors and a lack of seriousness about Indigenization. Jason Warick. *Indigenous Professors Cite Racism, Lack of Reform in University of Saskatchewan Exodus.* 2020. URL: https://www.cbc.ca/news/canada/saskatoon/indigenous-professors-cite-racism-lack-of-reform-in-university-of-saskatchewan-exodus-1.5703554 (visited on 08/30/2020).

⁴⁰⁸The Fossil Free Macalester handbook noted: "One 'universal' lesson that we learned is that the Board is very interested in what our peer institutions are doing and how they have acted or not acted in similar situations and on similar issues." Ana Gvozdic et al. *Handbook: Lessons from a Divestment Campaign*. 2020. URL: https://web.archive.org/web/20210821013814/

example of a richer peer school with a better reputation. If a few key universities in Canada had chosen to accept divestment earlier during the period of this study, the inter-university context may have helped replicate that precedent. Referring to divestment from Darfur, for instance, Samantha Power argued that Harvard's decision to divest made it easier for other universities, in part by negating the claim that such an action would be taken only by "wacky lefties." As things actually went between 2012 and the acceleration of new fossil fuel divestment commitments by Canadian universities after 2019, however, each additional rejection from an influential Canadian school added to the strength of those advocating the status quo or non-divestment responses to the petitions of activists. Since 2019 there has been a string of new commitments: UQAM, Concordia, UBC, Guelph, Lakehead, UVic, Waterloo, U of T, SFU, the University of Ottawa, Carleton, and l'Université de Montréal have joined Laval in committing to divestment while this research has been ongoing. A growing trend of campaign success based on continued use of similar tactics demonstrates how campaign longevity — and thus volunteer recruitment, retention, and training — allows more decision points and changes in political context where an appeal to divest may be successful. It shows how campaign endurance is a key factor for success, elevating the strategic importance of recruitment and retention.

2.3.4 Universities as forums to influence public discourse

The choice to emphasize language and arguments which would appeal to university administrators and money managers discomforted anticapitalist CFFD organizers, but likely advanced the aim of spreading public discourse about the inappropriateness of persisting with fossil fuel investments. Fossil fuel divestment campaigns at universities did a great deal to proliferate the concepts of the carbon bubble and stranded assets and — by presenting them in terms of financial responsibility and fiduciary duty — prompted other institutions which would never have deliberated on the oppressive nature of capitalism to seriously re-examine their investment choices.

Factors exogenous to the climate movement made post-secondary institutions a plausible mechanism for influencing public and elite opinion and norms about what constitutes an appropriate and adequate response to climate change.

Many critics of divestment have emphasized the small size of university endowments compared to the global pool of invested assets and to the total investment in the fossil fuel industry. The importance of universities is not that they have sufficiently great wealth to shift global energy investment decisions themselves. Rather, it is the combination of how they are potentially open to persuasion via activist arguments, and that their decisions and reasoning receive publicity and public importance which could lead to others follow-

⁴⁰⁹ Toffel and Gulick, Harvard Business School Case: Fossil Fuel Divestment, p. 7.

 $^{^{410}}$ In 2018, Alexander Hemmingway, from the UBC campaign, described how each rejection added momentum on the side of resistant universities and made subsequent rejections more likely.

⁴¹¹For a list of commitments to act by Canadian universities up to the time of writing, see: Campaign outcomes at Canadian universities p. 221

ing their example. 412,413,414 If universities accept the logic of the carbon bubble and respond by changing their investment strategies, it creates pressure for all large institutional investors to at least undertake the same analysis. Furthermore, if universities choose to support activists' efforts to stigmatize the fossil fuel industry it may have the potential to help disrupt the political dynamics where governments explicitly and implicitly subsidize and support the fossil fuel industry and where voters consistently use elections to reveal their preference for governments that express concern about climate change but do not take serious action to abolish fossil fuels, alleviating core structural barriers to sufficient climate action.

Divestment campaigns and decisions at universities have received extensive media attention. As of April 2022, a Canadian Newsstream search for "university fossil divestment" yields 400 newspaper articles since 2010. Restricted to the University of Toronto, it finds 90 articles; compared with 60 for McGill, 71 for UBC, 25 for UVic, and 17 for Laval.

2.3.5 Universities as activist recruiting grounds

From a recruitment perspective, universities offered fossil fuel divestment proliferators a pool of comparatively privileged (and thus potentially politically empowered), increasingly-well-educated, and normally politically inexperienced recruits. That inexperience increased the prospects for having a strong influence over their world view, and particularly their vision of how political change can be achieved. At the same time, it meant that divestment activists at universities would have a long period of time, and likely future positions of influence, from which to help drive a fossil fuel abolition agenda.⁴¹⁵

Canadian CFFD campaigns between 2012 and 2020 were chiefly undertaken by undergraduate volunteers, and their comparative youth and position as students are important for understanding the movement's strategy in response to the political opportunities available. Their age and social context provided an opportunity for socialization – people previously concerned about climate change but pursuing individualized responses got the chance to work in coordination to advance more structural change. This political involvement was undertaken at a formative time for long-term beliefs, relationships, and behaviours. The impact of participation on CFFD organizers was likely to persist into their subsequent forms of political involvement, thus making a movement comprised of university students an appealing political opportunity for proliferator organizations working to build a climate activist movement with large membership and imbued with

⁴¹²One of Belliveau's interview participants explained: "what I think is exciting... isn't thinking that UofT's portfolio is going to change the course of climate justice, but that the conversations that go on in Canada's biggest university and the norms that people learn might shift the attitudes they have towards the fossil fuel industry and capitalism and colonialism." Belliveau, "Climate Justice in the Fossil Fuel Divestment Movement: Critical Reflections on Youth Environmental Organizing in Canada", p. 87.

⁴¹³³⁵⁰ Canada staffer Katie Perfitt argued: "divestment is really important for bringing the discussion about climate justice to campuses... I call it a gateway drug. Divestment organizing is the first of many things that people will get involved with once they take that pill and their minds are open to the reality of what climate justice means." Belliveau, "Climate Justice in the Fossil Fuel Divestment Movement: Critical Reflections on Youth Environmental Organizing in Canada", p. 93.

⁴¹⁴Reinforcing the point that universities have influence on the media, University of Toronto Mississauga held several annual media camps for researchers, faculty members, librarians, staff members, post-doctoral fellows, and sessional instructors. On the invitation page they noted: "Canadian journalists are looking for U of T experts to share their insight." University of Toronto Mississauga Equity, Diversity & Inclusion Office. *Media Camp 2022*. 2022. URL: https://www.utm.utoronto.ca/edio/faculty-staff-resources/media-camp-2022 (visited on 04/22/2022).

⁴¹⁵On potential multilateral approaches to drive fossil fuel abolition, see: Harro van Asselt and Peter Newell. "Pathways to an International Agreement to Leave Fossil Fuels in the Ground". In: *Global Environmental Politics* (July 2022), pp. 1–20. URL: https://direct.mit.edu/glep/article/doi/10.1162/glep_a_00674/112377/Pathways-to-an-International-Agreement-to-Leave (visited on 08/02/2022).

⁴¹⁶In her analysis of the broader climate change activist movement, Lakanen found that among group organizers "many were doing this work concurrently with their studies; all but a small handful would receive no financial compensation for their labour, output, or expertise." Lakanen, "A Battle for the Soul of the Climate Movement': The Expansion of the Intersectional Climate Justice Frame Among Young Activists in Canada", p. 18.

characteristics of intersectional analysis and non-hierarchical organization. Because of their prior exposure to the frightening projections of climate change science, and because they had already been confronted with the inadequacy of individualized solutions like recycling, university students were primed for exposure to a politicized theory of change rooted in collective action. The template created by 350.org, and shifted by the DSN and CYCC, had been created by their peers and was based around communication technologies which they had already embraced.

The role of young people in the climate change activist movement had already drawn considerable attention before Greta Thunberg and the climate strike movement gave it further political and media salience. A17,418,419,420,421,422,423 In 2020, The Economist called "widespread and co-ordinated youthful passion... one of the most striking developments in recent climate politics." In 2020, UN secretary general António Guterres created an advisory group of seven activists aged between 18 and 28 to provide quarterly updates on ways to address climate disruption and related social ills. The structural conflict between older generations who may hope to benefit from fossil fuel use without experiencing the worst climatic consequences and younger generations who will need to live out their lives with the consequences of today's choices is one explanation for the enthusiasm of youth in this area, who are evidently not able to rely on the protection of their elders given the conduct of governments to date. The youth of activists is relevant to activist development. Early experiences are believed to have important lifelong effects — as McAdam described in Freedom Summer. Kiki Wood, a staffer with the CYCC, described an aim of divestment as "bringing young people into the climate justice movement, for politicizing them" and argued that the process works better when people are young. Young activists have many years left to give to the movement

⁴¹⁷Mangat et al. argued that the social movement literature "analyses the movement in relation specifically to 'youth-led collective political action." Rupinder Mangat, Simon Dalby, and Matthew Paterson. "Divestment Discourse: War, Justice, Morality and Money". In: *Environmental Politics* 27.2 (2018), pp. 187–208. URL: https://www.tandfonline.com/doi/abs/10.1080/09644016.2017.1413725?journalCode=fenp20 (visited on 01/04/2019), p. 189.

⁴¹⁸Grady-Benson and Sarathy, "Fossil Fuel Divestment in US Higher Education: Student-led Organising for Climate Justice", p. 661.

⁴¹⁹On student leadership for social justice at the high school level in Canada, including the preference of school administrators that they focus on international rather than local issues, see: Amanda-Mae Cooper. "Student Leadership for Social Justice in Secondary Schools: A Canadian Perspective". MA thesis. University of Toronto, 2009. URL: https://tspace.library.utoronto.ca/handle/1807/17158 (visited on 04/17/2020).

⁴²⁰ Regassa Olijirra described the rise of student activism as partly a search for alternative means of political engagement: "The fact that college activism has been becoming an alternative platform of political engagement to the traditional party politics for undergraduate college students and students' intellectual development in social justice leadership coupled with the changing dynamics of organizing on campus as a result of the cyber media platform demands more research for so that higher education professionals could have adequate awareness and a positive grip on the matters pertaining to student civic engagement." Regassa Olijirra. "Undergraduate Student Activism and Contemporary Social Issues: Understanding College Students' Civic Engagement". PhD thesis. Minneapolis, Minnesota: University of St. Thomas, 2021. URL: https://ir.stthomas.edu/cgi/viewcontent.cgi?article=1163&context=caps_ed_lead_docdiss (visited on 06/17/2021), p. v.

⁴²¹ See also: May Chazan and Melissa Baldwin. "Granny Solidarity: Understanding Age and Generational Dynamics in Climate Justice Movements". In: Studies in Social Justice 13.2 (2019), pp. 244-261. URL: https://journals.library.brocku.ca/index.php/SSJ/article/view/2235/1792 (visited on 02/29/2020).

 $^{^{422} \}rm Joe \ Curnow \ and \ Anjali \ Helferty.$ A Year Of Resistance: How Youth Protests Shaped The Discussion On Climate Change. 2019. URL: https://www.desmogblog.com/2019/12/28/year-resistance-how-youth-protests-shaped-discussion-climate-change (visited on 03/10/2020).

⁴²³ Hana Shafi. The Kids Are Mad as Hell: Climate Change is Stealing Their Future. But Their Activism Gives Me Hope. 2020. URL: https://thewalrus.ca/the-kids-are-mad-as-hell/ (visited on 10/21/2020).

 $^{^{424} \}mbox{The Economist.} \ Covid-19 \ and \ the \ Climate. 2020. \ \mbox{URL: https://www.economist.com/leaders/2020/04/25/covid-19-and-the-climate (visited on 04/29/2020).}$

⁴²⁵ Fiona Harvey. UN Calls on Youth Activists to Advise on Climate Crisis and Covid-19 Recovery. 2020. URL: https://www.theguardian.com/science/2020/jul/28/un-calls-on-youth-activists-to-advise-on-climate-crisis-and-covid-19-recovery (visited on 07/30/2020).

⁴²⁶McAdam observed: "The interplay between history and biography takes on a disjunctive quality, as the orderly progression toward adulthood is interrupted by historical events and processes. The result is often a period of throughgoing resocialization, as biographies and identities are modified in accordance with the newly perceived historical imperatives." Doug McAdam. Freedom Summer. Oxford: Oxford University Press, 1988, p. 11.

 $^{^{427}}$ Climate activists tattooing themselves with the CO_2 concentration in their birth year is an embodied case in point.

and are at a stage in their lives when they are making educational and career choices which will determine their subsequent political influence. 428,429 At the same time, the nature of their activism is influenced by their inexperience, notably undeveloped self-care and delegation skills, which are relevant to campaign implementation as discussed in the mobilizing structures chapter. The financial contextual factors described earlier (particularly reduced job opportunities since the 2008 financial crisis and the educational arms race encouraging young people to seek ever-higher qualifications) have increased the share of young people in post-secondary education. Niall Ferguson emphasized the role of an "excess of educated young people" in the social movements of the 1960s, as well as today's social justice movements, including climate change activism. 430 Natasha Adams and Jim Coe argue that the greatest strengths of youth-organized movements are their willingness to use fast consensus-based decision making, the moral authority of the young, and their willingness to challenge conventional ideas. 431,432,433 Young people who see their futures threatened by climate change have grown aware of how neither international negotiations through the UNFCCC nor conventional domestic political processes are leading to the emissions reductions necessary for climatic stabilization at a tolerable level. 434 This has left them open to radical critiques of the status quo, including the idea that climate change cannot be solved under capitalism, and added to the appeal of strategies which seek to disrupt political deliberations as they have proceeded in the past, embracing contentious politics.

Emilia Belliveau — involved in the Dalhousie and UVic campaigns and a divestment scholar — explained how political opportunities for activist development existed at universities. Students there learn about climate change and structural power dynamics. At the same time, they often believe in principles of justice and lack channels through which to direct their energy. This aligns with how many interview participants described some exposure to environmentalism or involvement in apolitical efforts like recycling, but wanted to be part of an effort with a more systemic and political approach to addressing climate change. 435,436,437

⁴²⁸Lakanen noted that "participants identified how central to their lives their activism and organizing on climate change issues and climate justice had become" and quoted an interview participant who said: "I believe I will probably be doing this work my whole life." Lakanen said: "the quotes from these activists identify climate justice work as vocation — almost as a calling or inner voice guiding them into a life of service." Lakanen, "A Battle for the Soul of the Climate Movement': The Expansion of the Intersectional Climate Justice Frame Among Young Activists in Canada", p. 158, 159, 160.

⁴²⁹Interestingly, Katherine Stewart describes a similar understanding about the importance of influencing youth within the Christian nationalist movement in the US, describing "training millions of supporters" and quoting Luis Bush on the importance of influencing "children between the ages of four and fourteen, the stage of life at which most people form their religious identities." This is relevant to the discussion of climate change in part because of how right-wing religious institutions have sought to seed climate change denial among the young by creating scientifically inaccurate curricula and educational materials. Katherine Stewart. *The Power Worshippers: Inside the Dangerous Rise of Religious Nationalism.* New York: Bloomsbury Publishing, 2020, p. 8, 255.

⁴³⁰ Niall Ferguson. Baby Sharks Take to the Streets. 2019. URL: https://www.bostonglobe.com/opinion/2019/10/29/baby-sharks-take-streets/2kBGRVqtKcINwNhmq5QFqK/story.html (visited on 12/28/2019).

⁴³¹ Natasha Adams and Jim Coe. Learning from the Tide of Youth Activism. 2020. URL: https://thinkingdoingchanging.com/2020/01/13/learning-from-the-tide-of-youth-activism/ (visited on 03/30/2020).

⁴³² Natasha Adams and Jim Coe. Youth Led Campaigns & Movements — Research Report. 2019. URL: https://drive.google.com/file/d/19G10XX87Dcxcmi_op23erud78AMonJwC/view (visited on 03/30/2020), p. 10-3.

⁴³³ Natasha Adams and Jim Coe. Youth Led Change in the UK — Understanding the Landscape and the Opportunities. 2019. URL: https://www.blagravetrust.org/wp-content/uploads/2019/12/youth-led-change-landscape-and-possibilities.pdf (visited on 03/30/2020).

⁴³⁴See: The Economist. Economics, Demography and Social Media Only Partly Explain the Protests Roiling So Many Countries Today. 2019. URL: https://www.economist.com/international/2019/11/14/economics-demography-and-social-media-only-partly-explain-the-protests-roiling-so-many-countries-today (visited on 12/28/2019).

⁴³⁵One anonymous interview participant described working on composting during high school. Another described seeking out groups working at a more systematic level after the Copenhagen COP called the usefulness of civil disobedience into question. ⁴³⁶An organizer from the Dalhousie campaign joined in part because she was "looking for a way to get involved that went beyond recycling to systemic action."

 $^{^{437}}$ Michelle Marcus was another interview participant who described divestment as appealing because it was a systemic approach which contrasted with their efforts focused on individual behaviour in high school.

 438,439 Grady-Benson and Sarathy argue that the CFFD movement "signals a sea change, from individualised sustainability efforts to youth-led collective political action."440 An organizer from the Dalhousie campaign commented that "I never thought activism was something I could do" but found that the CFFD group "felt like it was actually doing something appropriate to the scale of what we're dealing with with climate change." The length of time for which the CFFD movement has been ongoing led to multiple generations of students being exposed and sometimes taking part. Jed Lenetsky noted being exposed to Klein's This Changes Everything and an active Black Lives Matter group in high school, which contributed to a desire to take part in climate change activism as an undergraduate. Sam Harrison, who in 2013 was involved with Kids for Climate Action in Vancouver and was later an organizer in the first U of T campaign, argued: "I think it's really important for youth to be involved in this movement. It's our future we're talking about... We are the ones who are going to have to deal with the consequences of current decisions."441 An organizer from the UBC campaign said that the student organizers of the campaign are "the generation who will be inheriting the consequences of climate change." All this likely qualifies as the kind of interruption of the orderly progression toward adulthood by historical events and processes which McAdam discusses in Freedom Summer. 442 The arising "period of thoroughgoing resocialization" is evident in the descriptions interview participants gave of how CFFD participation affected them, though they have not been resocialized into a single worldview or set of strategic or tactical preferences.⁴⁴³ Indeed, much of the resocialization experienced by CFFD activists related to the persistent and substantive disagreements which they experienced with their fellow organizers, about how climate change ought to be understood and acted on, and about how it connects to broader questions of normative political philosophy and right action in the sphere of politics.

The comparative tolerance of university administrations for climate change and CFFD activism made it a low-risk pursuit for individual students in the great majority of cases. 444 That low risk level benefitted the ongoing CFFD movement in many ways. As a low-risk strategy, fossil fuel divestment campaigns readily shared mutual campaign endorsements, and made efforts to coordinate their efforts into larger-scale campaigns corresponding to political jurisdictions like the United States and Canada as well as border-crossing fossil fuel infrastructure projects. Even student groups which trained volunteers specifically in how to be peacefully arrested in acts of non-violent civil disobedience often found that the police declined to use arrest powers and eventually agreed on terms for them to leave of their own accord. 445 These civil disobedience ac-

⁴³⁸This appeal is not universal. An interview participant at York described Regenesis — a contemporaneously active campus environmental organization — as "lifestyle environmental activism" focused on clothing donation and recycling. They noted that the group had a much larger membership than the CFFD campaign.

⁴³⁹Speaking alongside David Suzuki and Melina Laboucan-Massimo at the 2013 Wake Up Canada event, Sam Harrison argued: "I think, especially with regards to the environmental movement, we need to become more political. As great as community gardens and compost programs in schools are, the time has come to change our laws, not just our light bulbs." Cameron Fenton. Canada's New Climate Abolitionists. 2013. URL: https://canadiandimension.com/articles/view/canadas-new-climate-abolitionists (visited on 08/06/2019).

⁴⁴⁰ Grady-Benson and Sarathy, "Fossil Fuel Divestment in US Higher Education: Student-led Organising for Climate Justice", p. 2.

⁴⁴¹Fenton, Canada's New Climate Abolitionists.

⁴⁴²McAdam, Freedom Summer, p. 11.

⁴⁴³Bergman argued: "the radical flank effect highlights another path, whereby actors who might disagree with the radical message of Divestment promote more moderate modes of engagement and action; these are in turn legitimized through their contrast with the 'radical flank."' Bergman, "Impacts of the Fossil Fuel Divestment Movement: Effects on Finance, Policy and Public Discourse", p. 14.

⁴⁴⁴This doesn't mean activists had no concerns which inhibited participation or support for confrontational tactics. An organizer quoted in Bratman et al. described needing "a lot of reassurance" that controversial actions were necessary and would produce "minimal retribution" from the administration. The organizer noted: "Although I knew logically that it was highly unlikely we would get into any real trouble with the campaign, even just scolding conversations or disapproving looks from administrators made me uncomfortable." Bratman et al., "Justice is the Goal: Divestment as Climate Change Resistance", p. 687.

 $^{^{445}}$ Climate activists including CFFD organizers who trained to occupy the offices of Canadian MPs were told it would be an

tions did not take place within divestment campaigns per se but divestment campaigns have often involved activists who were simultaneously organizers in actions outside the university. One interview participant described how the CFFD campaign's emphasis on lawful non-violent direct action at their university (as opposed to civil disobedience, in which activists openly break the law and openly accept the consequences) was shaped by the campaign's perception of political opportunity. They felt this approach could be effective at influencing the president's office while also letting the campaign put new members at ease in terms of their preferred tactics. A frequent concern among new campaign members was the risk of being expelled by the university or arrested by the police, which helps explain why campaigns highlighted the broad range of their often non-confrontational activities when recruiting. 446

Divestment is arguably also low-risk in terms of likely personal career impact. For the most part, young climate change and environmental activists are accepted as people optimistically striving for a better world, though perhaps not sufficiently persuasive to justify an action as dramatic as selling off fossil stocks. To be publicly associated with such a campaign likely carries little stigma, as reflected in the public statements and counter-arguments I have observed from critics. The possibility of adverse career impacts did occur to some campaign organizers who endeavoured to keep their involvement from being publicized online. One UBC organizer kept their involvement in the campaign off the internet to avoid being ruled out of desirable jobs after graduation. A university staff member at a school east of the Rockies assisted a CFFD campaign using a name and email address different from those used in their professional self-expression.

The relatively tolerant attitude of university administrations toward CFFD campaigns did have some exceptions in Canada. An anonymous interview participant described how the University of Winnipeg treated the campaign and organizers badly, making them feel like "troublemakers" and "criminals." This perception drove the campaign toward more emphasis on building campus support (outside game) and less on following the university's own processes (inside game). Another participant described how the Winnipeg administration was angered by a sit-in at a board of regents meeting, from which many CFFD activists "had to be forcibly removed." At subsequent meetings, the administration had security at the door to exclude students. At Waterloo, the police were called when activists handed out divestment fliers and a copy of the speaker's recent op-ed at a high-profile Jeffrey Sachs talk in the university's newest building in May 2018. An interview participant said that the university's "public relations people over-reacted" in calling the police to have the activists escorted out, and that the incident embarrassed the administration. When UVic organizers tried to deliver letters from students to president Jamie Cassels, they found the administration building locked and guarded by campus security, after their prior conduct at a board of governors meeting was deemed "disruptive." 448

Tina Oh's experiences as a CFFD organizer active in student politics at Mount Allison were the most adverse personal consequences yet experienced by anybody in the Canadian movement. After choosing to take part in an arrestable action outside the campaign during the 2016 Climate 101 action in Ottawa, Oh

arrestable action, as with several outdoor protests in Ottawa.

⁴⁴⁶An organizer at Concordia described how there were different roles available within the campaign, including for "militant divestors." These included research and committee membership, and lobbying the university, university foundation, and student union. The organizer explained that they personally acted as a negotiator as opposed to an agitator.

⁴⁴⁷Intriguingly, the Alberta Narratives Project found that conservatives in the oil and gas industry feel they are being "treated like criminals" by activists. Alberta Narratives Project. Communicating Climate Change and Energy with Different Audiences in Alberta. 2019. URL: http://albertanarrativesproject.ca/wp-content/uploads/2019/02/ANP-Report-II-final-online.pdf (visited on 01/18/2020), p. 15.

⁴⁴⁸ Emily Fagan. Students Barred from Entering Michael Williams Building, Labelled a 'Security Threat' After Board of Governors Meeting and Protest. 2019. URL: https://www.martlet.ca/students-barred-from-entering-michael-williams-building-labeled-a-security-threat-after-board-of-governors-meeting-and-protest/ (visited on 01/04/2020).

was removed from her role as vice-chair of the New Brunswick Student Association. 449,450 When Oh resigned as vice-president external of the Mount Allison Student Association (MASU), she alleged systemic racism within the organization and told the Students' Administrative Council that:

I cannot work for an organization that neither supports nor understands the necessity of my environmental justice and anti-racism work... I cannot work for an organization that feels embarrassed that one of their vice-presidents is doing that work vocally and without shame. 451

Oh also described being followed home and videotaped by a townsperson, and how her report to the police about it was not taken seriously. Oh's experience demonstrates the limits of tolerance for climate change activism, and arguably how those limits are tied to racial privilege. Diana Yoon's experience at Queen's provides a notable contrast, however. She explained that after her arrest at Climate 101 there was a front-page article in the student newspaper and she was invited to address classes. Oh's example illustrates how the tolerance of universities for climate change organizing diminished as activists linked climate change to broader areas of their intersectional agenda.

Beyond the small number of cases of hostile administrative responses, there were other impediments to effective CFFD organizing at universities, including their revolving student populations. Jesse Smith described some of the challenges in student mobilization in an email to me:

My sense is that the reality is that organizing at Langara is very challenging because most students only stay a year or two, so campaigns fizzle out when students move on. Faculty may have an interest, but it is frowned upon (by faculty) for faculty to take the lead on student-lead initiatives, so the upshot is that this kind of thing rarely has legs. It is a sad conundrum, but just our reality.

This speaks to two kinds of challenges, one logistical and one about legitimacy. Regular turnover of students is an inescapable feature of university life and numerous interview participants emphasized the way in which their campaigns were challenged by the graduation of key organizers and founding members. Peter Gibbs, an organizer at UVic, noted the link between graduations and loss of institutional memory which had been "living in people's heads", and went on to say that "if you lose the wrong 2-3 people it can be extremely disruptive." A participant from the University of Winnipeg argued that the university was relieved when many of the most active organizers graduated, leading to a "silent time" in the campaign. Spencer McGregor, from the Guelph campaign, argued:

I think it's likely that there has been some sharing of information between campuses about how to defuse momentum. We theorize that having a working group, then special action policy, then this and that — that sort of dragged-on process — could actually be a good way to deflect momentum enough. If you delay for four years, then you have a new group of students coming in and lose all the experienced people.

⁴⁴⁹ Naomi Goldberg. Oh 'Removed' as Vice-Chair of New Brunswick Student Association. 2016. URL: http://www.since1872.ca/news/oh-removed-as-vice-chair-of-new-brunswick-student-association/ (visited on 08/04/2019).

⁴⁵⁰Erin Elaine Casey. 'Nothing will get done if we don't do it.' Student Activist Tina Oh Wins Prestigious Brower Youth Award. 2019. URL: https://www.dal.ca/faculty/management/news-events/news/2019/01/07/__nothing_will_get_done_if_we_don__t_do_it____student_activist_tina_oh_wins_prestigious_brower_youth_award.html (visited on 08/15/2020). ⁴⁵¹Catherine Turnbull. Oh Resigns from MASU, Cites Systemic Racism. 2017. URL: https://www.since1872.ca/active-sections/1-news/oh-resigns-from-masu-cites-systemic-racism/ (visited on 08/31/2022).

⁴⁵²Maureen O'Reilly. Queen's Students Protest Pipeline Expansion at Parliament Hill. 2016. URL: https://www.queensjournal.ca/story/2016-10-28/news/queens-students-protest-pipeline-expansion-at-parliament-hill/ (visited on 08/23/2020).

⁴⁵³One participant described how the graduation of earlier participants "forced a restart" of the campaign.

⁴⁵⁴For transparency, the literal interview transcription included language which could be hurtful unnecessarily to a vulnerable group. At the interview participant's request, I have substituted text that has the same meaning without the harmful connotation.

Malkolm Boothroyd commented on how summers were disruptive for the UVic campaign, along with examination periods. Peter Gibbs said that the UVic administration succeeded in drawing out the campaign to the point where core organizers graduated, an approach they called "strategically smart, morally quite disappointing." One interview participant also drew attention to how the co-op system at Waterloo added to student turnover because students would be away from campus for one third of the year. Another noted how student recruitment at York was challenging because it is largely a commuter campus and students tend to leave right after class. On the question of faculty involvement, Smith's email is also telling; among the norms governing the behaviour of academic staff at Canadian universities is a measure of self-restraint regarding involvement in student political movements. These norms about limited involvement in student political activity somewhat constrain 'outside game' campus support building, while also revealing the norm that 'experts' should not be strenuous in their protestations about what ought to be done, and that those making calls for strong action in some degree shift in status from 'experts' to 'advocates.'

While student turnover was cited by many as a structural challenge for the CFFD movement, with organizing capacity and instructional memory lost with each crop of graduations, that dynamic also served to help develop activists. Lenetsky noted how at the end of his first year some of those who has been involved longest and most intensely graduated and he "ended up in a leadership position." Connor Curtis similarly described how he stepped up to help continue the MUN campaign after others graduated, having not originally been a campaign leader or in a core role. An organizer explained how in the UBC campaign they held visioning sessions annually where people asked to take on roles, and that "the model is we're always trying to train ourselves out of our jobs." This approach demonstrates literal learning-by-doing as a means of activist development. Dealing with student turnover drove learning-by-doing for activist development, which evolved as a third strategic objective of the CFFD movement, deepening the concept from 350.org's general pursuit of a grassroots movement into a set of specific practices for establishing and sustaining student campaigns.

The value of recruiting students into the climate change activist movement presumes that they will go on to work in other forums. As will be documented later with their involvement in off-campus arrestable actions and support to frontline communities, there is already evidence that people brought into climate change activism via divestment have gone on to activism in a broader societal context. For the MUN campaign, Connor Curtis explained that their expectation of low odds of success encouraged the campaign to pursue other objectives simultaneously, including advocacy for a fracking moratorium and other provincial policy changes. For the strategic objective of using fossil fuel divestment as a mechanism to create and train a cadre of organizers, it is relevant that the labour for university campaigns chiefly came from young people. Seeing their own futures at stake motivated volunteers and helped legitimate the movement to target administrations. Furthermore, since sustained activist involvement re-shapes identity and university students have good prospects for moving on to positions of influence, the formative capacity of CFFD as a youth movement has had desirable secondary effects. CFFD organizers who have graduated have gone on to lead movements which are instead situated within society at large, and to be champions of fossil fuel abolition within future employers in the governmental, private, and NGO sectors. McKibben credited divestment veterans for creating the Sunrise movement in the US: "Really, the leadership of the Sunrise Movement in the US, which brought forth the Green New Deal, is most of them cut their teeth on campus divestment. Varshini Prakash who runs the thing was the person who divested UMass Amherst." 455

⁴⁵⁵Sarah Kaplan described how young Americans who took part in climate strikes and other protests are growing up to be active in electoral politics: Sarah Kaplan. *The Climate Crisis Spawned a Generation of Young Activists. Now They're Voters*. 2020. URL: https://www.washingtonpost.com/climate-environment/2020/10/30/young-voters-climate-change/ (visited on

2.4 Chapter summary and wrap-up

The CFFD movement at Canadian universities emerged in response to three major elements of the political opportunity structure: the increased salience of climate change, 350.org's role in proliferating a unified movement, and the potential to persuade university administrations and multifaceted benefits of doing so. Within the movement, adherents to the CJ and CO_2 -e world views perceived and responded to the political opportunity structure differently, reflecting their contradictory perspectives on the extent of societal change needed to control climate change. For CJ advocates, climate change is just one example of the consequences of an unjust and dysfunctional global system, and its seriousness is sometimes presented as an opportunity to undertake the fundamental reform they desire. Scholarly literature on the climate justice worldview often presents it as a desirable end state which people are expected to reach once they have been exposed to the right information and experiences. By contrast, CO₂-e advocates who maintain a narrower focus on replacing fossil fuel energy with alternatives can aspire to a less complete and wide-ranging form of political agreement and favour approaches based on incremental (though ultimately substantial over time) change through existing institutions. The increased salience of climate change creates political opportunities for everyone promising solutions, and 350.org's campaign in a box was designed as a mechanism to turn that increased concern into changed political outcomes. Lack of agreement among CFFD activists about which outcomes are most desirable and important created and sustained the contention which is the central topic of this dissertation.

Chapter 3

Mobilizing structures

Having established the three central elements of the political opportunity structure behind the CFFD movement, we must turn to questions about how campaigns organized themselves and made decisions since, as instances of collective political action, it was necessary for them to prioritize, make strategic decisions, and adjudicate disputes. This was accomplished via the mobilizing structures of the CFFD movement.¹

This chapter will address two basic questions. First, what style of organizing and decision making did the divestment proliferators encourage through the campaign in a box? Second, how did campaigns at Canadian universities implement that model? What degree of variation emerged between campaigns?

In answering the first question, the chapter will argue that despite some important variations among the campaigns (which the chapter will describe), most of the campaigns adopted organizational approaches that emphasized informality, an avoidance of hierarchy, and consensus in their decision-making processes. The campaigns took this approach for several reasons, including the impact of proliferators, especially 350.org, the models for organizing provided by other social movements such as Occupy, and the values, personal connections, and social circumstances of the student activists who took part in the movement. In answering the second question, the chapter will argue that these informal, non-hierarchical, consensus oriented mobilizing structures inadvertently concealed the presence of the $CJ-CO_2$ -e disagreement within the movement and ultimately favoured the CJ approach. The chapter will explain why the mobilizing structures had this effect and why many (though not all) CO_2 -e activists remained in the movement despite this.

As we will see, each of these questions connects to the through-story of the dissertation about how CJ-CO₂-e contention has been present throughout the movement, as well as to my key normative claim that socializing student activists into a climate justice worldview is a valuable but insufficient strategy to achieve the implementation and persistence of climate change mitigation policies. To avoid being too vulnerable to the charge of calling out defects without proposing solutions, I will also suggest some ways in which the mobilizing structures used by CFFD campaigns might be plausibly improved.

¹In Comparative Perspectives on Social Movements, McAdam, John McCarthy and Mayer Zald defined mobilizing structures as including tactical repertoires, social movement organizational forms, and modular social movement repertoires. I considered it more useful here to focus on organizational forms and more broadly distinguish structures from repertoires, with the latter being what campaigns choose to do and the former principally being how campaigns decide to do it — a narrower perspective on mobilizing structures as the means through which campaigns make decisions rather than the actions they take. This corresponds with Ostrom's perspective that "constitutional and collective-choice rules affect the distribution of benefits and the likelihood of reciprocal cooperation" — helping to determine which organizations endure and succeed in their aims. Elinor Ostrom. "A Behavioral Approach to the Rational Choice Theory of Collective Action: Presidential Address, American Political Science Association, 1997". In: American Political Science Review 92.1 (1998), pp. 1–22. URL: https://www.jstor.org/stable/2585925 (visited on 04/03/2020), p. 17.

 $350.\mathrm{org}$, the DSN, the CYCC, and other divestment proliferators successfully encouraged an informal and non-hierarchical form of organization for CFFD campaigns.^{2,3} When they followed the guidance to avoid formal organizational structures, roles, and decision-making processes, CFFD campaigns were pushed in the direction of what Cohen, March, and Olsen call a garbage can model of organizational decision making. That is, decision making was characterized by "problematic preferences," "unclear technologies," and "fluid participation." Organizers disagreed about the relative priority and even absolute desirability of various goals. At the same time, the lack of structured and documented decision processes — combined with the success of 350.org in presenting the CFFD movement as unified in analysis and objectives — buried and concealed the presence of the CJ-CO₂-e disagreement within campaigns. In part this was the unintentional result of informal decision making systems where conflicts between viewpoints were not made explicit; in part, it arose from the desire in both camps for the movement to seem unified.

This chapter will begin by discussing the guidance on mobilizing structures which was provided by proliferators, both in the campaign in a box and through their ongoing influence over campaigns in progress. This helps justify the claim that informal and non-hierarchical styles were dominant in Canadian CFFD campaigns during this period. It will then examine how this guidance was implemented by campaigns, which is best illustrated by discussing areas of disagreement between participants and how they were addressed, as well as the implications of consensus as a decision-making method, and the ways in which the movement conformed with the garbage can model. Variation between campaigns will then be discussed, including the degree to which they operated as friendship groups, variations in group structure, the role played by student governments and faculty, and diffusion in organizing styles between campaigns. To address the explanatory puzzle of how the lack of formalized institutional knowledge did not generally inhibit campaign endurance, I will discuss some of the ways campaigns did employ sophisticated planning techniques, including by sustaining campaigners and working to mitigate burnout. Finally, to avoid pointing out limitations of the informal model without discussing potential improvements, I will describe some ways its limitations might be countered. The discussion can then progress in the next chapter to the repertoires of actions campaigns employed.

3.1 The model of organizing advocated in the campaign in a box

Intersectionality is written into the organizing principles which 350.org created for the CFFD movement:

We work across movements, with justice at the core. We recognise the linkages between issues of climate justice, economic justice, racial justice, gender equality, workers rights and more, and strive to build a movement that works in common cause with allies for shared impact. We stand in solidarity with communities most impacted by climate change and fossil fuels. Many of these communities are the least protected from climate change, due to historical inequalities, and the most impacted by it. We support their demands for their survival, and the rights of future generations.⁴

²In research on Canadian CFFD campaigns, Belliveau argued: "Distributed leadership models, non-hierarchical or horizontal organizing are examples of how campaigns use social justice practices to embody climate justice in their structure." Belliveau, "Climate Justice in the Fossil Fuel Divestment Movement: Critical Reflections on Youth Environmental Organizing in Canada", p. 40.

³Aidid found that her three case studies of Concordia, UBC, and Waterloo all had non-hierarchical leadership and made decisions through consensus of "modified consensus." Concordia and Waterloo had informal structures, while UBC had five working groups. Aidid also noted that the Waterloo and Concordia campaigns "aspire to have more formal structures to help them sustain longer and deeper commitments with external groups and the university." Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", P. 79, 83.

⁴350.org. Fossil Free Organising Principles. 2019. URL: https://gofossilfree.org/organising-principles/ (visited on 05/10/2022).

Principles of non-hierarchical, horizontal, and decentralized organizing which avoids formalized roles and decision-making processes are less explicitly stated and more organic to the broader activist community.^{5,6} Both my interviews and documents from within the movement show that these styles of organizing have been dominant in the CFFD movement, both because their usefulness has been taken as a lesson learned from past social movements (especially Occupy) and because they are thought to align with movement objectives and ideals. A key part of the motive for intersectionality is the view that an empowered and oppressive minority perpetuates numerous forms of global injustice and thus that by broadening participation and emphasizing the voices of marginalized and front-line communities progress toward justice can be made.

The informal mobilizing structures endorsed by proliferators arose from their interpretations of past social movements, particularly Occupy, as well as from the Ganz model of "snowflake organizing" employed by recent left-wing political campaigns in the US.⁷ Ellen Spears' history of the American environmental movement since 1945 said:

[T]he Occupy movement at its peak reached 100 U.S. cities and spurred protests in more than 1,500 locations worldwide. As occupations waned the following year, many Occupy activists joined the climate change movement, bringing their direct action experience to the Keystone pipeline protests and to successful campus fossil fuel divestment campaigns. Core Occupy activists founded the Sunrise Movement, a broad-based campaign to urge Congress to pass a carbon tax and other measures to slow global warming.⁸

The Occupy model which originated with the Occupy Wall Street encampment in New York's Zuccotti Park centred around participatory democracy, with working groups and general assemblies in which anyone could speak and consensus was used as a decision making system.^{9,10,11,12} In 2019, McKibben used the analogy of distributed energy generation to describe the kind of leaderless movement he aspired to, calling a "sprawling campaign" "the only kind of movement that will ever be able to stand up to the power of the energy giants." Calling Occupy "the ultimate in leaderlessness," McKibben traced the influence on it from the Arab Spring in the early 2010s and Otpor!, a political organization in Serbia active between 1998 and 2004.¹⁴ He argued: "the promise of this moment is a radically flattened version of hierarchy, with far

⁵In a personal communication, a Canadian CFFD organizer told me the Powershift 2012 and 2013 convergences were instrumental in encouraging non-hierarchical organizing and that a presentation there by the McGill divestment group described Occupy as the inspiration for their non-hierarchical organizing.

⁶Aidid argued: "Activists build trust and empowerment through democratic and non-hierarchical decision-making processes, and horizontal leadership structures can give multiple organizers the opportunity to lead." Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. 104.

⁷This is described in a 2016 manual from the Sierra Club in a chapter on structuring a campaign team. The Sierra Club. The Sierra Club Organizing Manual. 2016. URL: https://www.sierraclub.org/sites/www.sierraclub.org/files/program/documents/Movement-Organizing-Manual-2016.pdf (visited on 06/09/2022), p. 85, 88.

⁸Ellen Spears. Rethinking the American Environmental Movement Post-1945. New York: Routledge, 2019. (Visited on 08/05/2022).

⁹White noted that "although getting money out of politics became a core rallying point for the wider movement, the general assembly at Zuccotti disregarded our specific suggestion for one demand." Micah White. *The End of Protest: A New Playbook for Revolution.* Toronto: Knopf Canada, 2016, p. 22.

¹⁰On Occupy's principles and inability to choose one demand, see also: Andrew Anthony. 'We showed it was possible to create a movement from almost nothing': Occupy Wall Street 10 Years On. 2021. URL: https://www.theguardian.com/us-news/2021/sep/12/occupy-wall-street-10-years-on (visited on 08/15/2022).

¹¹McKibben spoke at a 2011 Occupy Wall Street rally, as well as at Occupy Vancouver: treehuggertv. *Bill McKibben at Occupy Wall Street Rally 10/8/2011*. 2011. URL: https://www.youtube.com/watch?v=13S5uqPLJUk (visited on 05/10/2022).

¹²CryingWolf57. Bill McKibben visits Occupy Vancouver Nov 15, 2011. 2011. URL: https://www.youtube.com/watch?v=Q2FeOQ8QF_w (visited on 05/10/2022).

¹³Bill McKibben. *Movements Without Leaders*. 2019. URL: https://350.org/movements-without-leaders/ (visited on 05/10/2022).

¹⁴Popovic said of Otpor!: "The other crucial decision we made was that Otpor! wouldn't be a movement based on charismatic leaders... a movement without easily identifiable people in charge would be harder for the authorities to take down in one swoop. Arrest any one of us, went the logic, and fifteen others would take his or her place." Srdja Popovic and Matthew Miller. Blueprint for Revolution: How to Use Rice Pudding, Lego Men, and Other Nonviolent Techniques to Galvanize Communities, Overthrow

more room for people to pop up and propose, encourage, support, drift for a while, then plunge back into the flow" and called for "a spread-out and yet thoroughly interconnected movement, a new kind of engaged citizenry." The Occupy movement was an important precedent and inspiration for CFFD decision making. For example, the hand signs used to indicate agreement and blocking within Occupy meetings were used as consensus decision making systems by campaigns at McGill, Dalhousie, Guelph, UBC, and UVic. Such approaches had value in making campaign participants feel included and avoided the feeling of being split apart that can arise when contentious matters are settled by voting. It also reduced the time committed to 'bureaucratic' discussions which were unappealing to many volunteers.

Several interview participants described how their campaigns employed a "snowflake model" of organization, based in part on the thinking of Marshall Ganz and the voter mobilization efforts in the 2008 and 2012 campaigns of Barack Obama. 17,18,19 This model divides labour and creates personal responsibility for outcomes to some degree, while eschewing formal organizational structures or chains of command. A rielle Garsson described the UBCc350 campaign as following this structure, with nobody elected or chosen for a position through a formal process. Rather "the people who show up and have experience" ended up in positions of responsibility. This is compatible with Michelle Marcus' description of the UBC campaign, in which the role of coordinator (akin to president) was not formally defined, elections were not held, and where people who had been active were chosen for roles by the leaders in earlier years. As with the informality of consensus, this approach seems to have benefits in practicality and popularity among student organizers, but may have more conceptual limitations in terms of equitable decision making. As Jo Freeman warned the feminist movement in 1970:

For everyone to have the opportunity to be involved in a given group and to participate in its activities the structure must be explicit, not implicit. The rules of decision-making must be open and available to everyone, and this can happen only if they are formalized. This is not to say that formalization of a structure of a group will destroy the informal structure. It usually doesn't... 'Structurelessness' is organizationally impossible. We cannot decide whether to have a structured or structureless group, only whether or not to have a formally structured one.²¹

Groups seeking to be unstructured risk being governed by friendship networks instead, undermining the idea that informality allowed them to be radically democratic and participatory.

Dictators, Or Simply Change the World. New York: Spiegel & Grau, 2015, p. 9.

 $^{^{15}}$ While the UVic campaign had a hand sign to allow anybody to veto a group decision, one interview participant said it was never used.

¹⁶There are arguments against the idea that time activists spend on bureaucratic self-management is inevitably at the cost of achieving their shared external objectives. Francesca Polletta opened her analysis of decision making in activist movements by quoting a Students for a Democratic Society (SDS) member: "Talk helps people consider the possibilities open for social change... One person said, 'freedom is an endless meeting." Francesca Polletta. Freedom is an Endless Meeting: Democracy in American Social Movements. Chicago: University of Chicago Press, 2002, p. 1.

¹⁷See also: Josh Stuart. Organizing Snowflake Model Campaigns in NationBuilder. 2014. URL: https://www.cstreet.ca/organizing_snowflake_model_campaigns_in_nationbuilder (visited on 07/21/2019).

¹⁸Marshall Ganz. Organizing: People, Power, Change. 2012. URL: https://d3n8a8pro7vhmx.cloudfront.net/themes/52e6e37401925b6f9f000002/attachments/original/1423171411/Organizers_Handbook.pdf?1423171411 (visited on 01/22/2020).

¹⁹Dogwood Initiative et al. Organizing: People, Power, Change. 2012. URL: http://cons449c.sites.olt.ubc.ca/files/2012/01/Organizing-Participant-Guide.pdf (visited on 01/22/2020).

²⁰It was also specifically encouraged by some proliferator organizations involved in divestment, including LeadNow and the Dogwood Initiative in BC. David P. Ball. 'Snowflake' Organizing, Used by Obama, Imported by Canadian Campaigners. 2015. URL: https://thetyee.ca/News/2015/11/11/Snowflake-Organizing/ (visited on 07/21/2019).

²¹Jo Freeman. The Tyranny of Structurelessness. 1970. URL: http://www.jofreeman.com/joreen/tyranny.htm (visited on 01/11/2020).

3.1.1Mid-campaign support and influence from proliferators

Beyond originating the campaign in a box, 350.org provided resources to support ongoing CFFD campaigns, as did the CYCC and various public interest research groups (PIRGs).²² Grady-Benson and Sarathy argue that these groups "were integral to the diffusion of FFD campaigns on college and university campuses," despite the movement being initiated by students and student-led.²³ CFFD campaign organizers were trained by proliferators, supported by their high level media messaging and spokespeople, and sometimes assisted on the ground during major campaign actions like occupations and sit-ins. This ongoing support had great importance at the movement level, even if individual campaigns got little personal contact with proliferators. The divestment movement attracted public and media interest by being global and fast-growing: both claims supported from the outset by materials provided by 350.org. Proliferator organizations have also played a prominent role in the public discourse about divestment, as spokespeople including McKibben, Klein, May Boeve, Atiya Jaffar, Katie Rae Perfitt, Clayton Thomas-Muller, Cam Fenton, and Jamie Henn have been frequent article-writers and media guests, often countering the objections raised to divestment by industry, investors, and governments.

Interview participants varied in their descriptions of the depth and importance of proliferator involvement in their campaigns while they were ongoing (as opposed to in proliferating the idea of divestment to begin with). Some described a real but minimal level of contact with 350.org and CYCC staff.²⁴ One argued that proliferator organizations "played almost no role in what happened at UBC." Others described a more substantial role, citing how staff members were "very close friends" to many in the campaign or how they had been leading members of the campaign before being hired by proliferator organizations. Intermediate responses included those who described the proliferator role in organizing convergences and providing training, as well as the "Escalation Core." In part, this inconsistency reflects how campaigns were comprised of partially overlapping successive sets of organizers, meaning not everyone involved was present during times when proliferator organizations prioritized their specific campaigns.

Naomi Maina-Okori, Jaylene Murray, and Marcia McKenzie argued that "significant borrowing of actions and tactics" took place among Canadian CFFD campaigns "including the use of branding and messaging from environmental organizations such as 350.org." They supported the claim with references to the Fossil Fools Day and divestment Valentine's Day card actions, with 35% of campaigns undertaking at least one of the two. ²⁶ Since these were tactics shared by proliferator organizations and implemented by campaigns, this is evidence of proliferators broadcasting tactics to campaigns, more than tactics diffusing among them. A 2013 article by CYCC director Cameron Fenton listed actions at UVic, SFU, Lakehead, Laurentian, McMaster, the University of New Brunswick, the University of Ottawa, McGill, and U of T.²⁷ In 2014, Fenton posted

 $^{^{22}}$ While not mentioning proliferators specifically, Gunningham describes how the CFFD movement "engages in information sharing and dissemination (for example, it compiles and distributes data about the carbon footprints of major fossil fuel companies and about which organizations have already divested and which still hold fossil fuel assets)." Neil Gunningham. "Review Essay: Divestment, Nonstate Governance, and Climate Change". In: Law & Policy 39.4 (2017). URL: https: //onlinelibrary.wiley.com/doi/abs/10.1111/lapo.12085 (visited on 01/04/2019), p. 316.

²³Grady-Benson and Sarathy, "Fossil Fuel Divestment in US Higher Education: Student-led Organising for Climate Justice", p. 5. $$^{24}{\rm A}$$ staffer acknowledged that 350.org plays little role in steering campaigns.

 $^{^{25}}$ Maina-Okori, Murray, and McKenzie, "Climate Change and the Fossil Fuel Divestment in Canadian Higher Education: The Mobilities of Actions, Actors, and Tactics (journal pre-proof)", p. 2.

 $^{^{26}}$ Maina-Okori, Murray, and McKenzie, "Climate Change and the Fossil Fuel Divestment in Canadian Higher Education: The Mobilities of Actions, Actors, and Tactics (journal pre-proof)", p. 18-9.

²⁷Cameron Fenton. Fossil Fools Day Comes to Canada. 2013. URL: http://www.ourclimate.quarkcreative.ca/fossilfools-day-comes-to-canada/ (visited on 12/31/2019).

photos from actions at Waterloo and Guelph, among places not readily identifiable from the images.^{28,29} 350.org's "Escalation Core" coordinated a series of actions for Fossil Fools Day 2016.³⁰ Climate activists outside of divestment campaigns also undertook Fossil Fools Day actions, as when Toronto350.org brought a large inflatable "carbon bubble" to Dundas Square in 2014.³¹

Proliferators encouraged media-friendly coordinated actions from all CFFD campaigns, including "Fossil Fools Day" for April 1st and campaigns to make and deliver large numbers of Valentine's Day cards to target administrators, calling on them to "break up" with fossil fuels. For Fossil Fools Day in 2014, the SFU campaign deployed a fake pipeline on their Convocation Mall. The UBC campaign undertook a banner drop. Actions were also undertaken by the University of Winnipeg, McGill, Guelph, U of T, and Dalhousie campaigns. The Dalhousie campaign delivered a large black plastic "carbon bubble" to the administration, while the campaign at U of T deployed a similar bubble at Dundas Square. Concordia and McGill staged a joint die-in. The campaign at Lakehead "had a make-shift fracking rig set up in the Agora." At UVic, organizers held a satirical rally calling for greater investment in the fossil fuel industry and erected a mock oil rig. Sa,39 Coordinated days of action were also organized by proliferators within the CFFD movement outside Canada. Rising Tide UK had previously promoted a Fossil Fools Day in 2010, albeit not specifically targeted at universities. In Australia in 2015, the Australian Business Review reported that 350.org had organized protests at 15 Australian university campuses.

Convergences were another major mechanism through which proliferator organizations influenced the CFFD movement while it has been ongoing. These included the Power Shift national conferences between 2009 and 2012; PowerShift BC in 2013; and PowerShift Atlantic in 2014.⁴² Training at convergences was a key mechanism through which proliferators encouraged a particular organizing style, in contrast with publicly available documents which do not emphasize it equivalently. These convergences and training events were organized self-consciously to take advantage of a feeling of social solidarity to encourage participants to climb a ladder of escalation (also referred to as a ladder of engagement) toward willingness to engage in

 $^{^{28} \}text{Cameron Fenton.}$ Fossil Fools Day 2014 — Rundown. 2014. URL: https://web.archive.org/web/20141009131135/http://www.wearepowershift.ca/fossil_fools_day_2014_rundown (visited on 08/03/2019).

²⁹See also: Lynn Desjardins. Canadian Youth Take Action Against Climate Change. 2014. URL: http://www.rcinet.ca/en/2014/04/02/canadian-youth-take-action-against-climate-change/ (visited on 08/03/2019).

 $^{^{30}} Fossil$ Free Canada. "Escalation Core 2.0 (Fall 2016 - Winter/Spring 2017)". Provided by Kiki Wood. 2016.

³¹John Bonnar. Toronto350.org Calls for End to Tar Sands Pipelines, Fossil Fuel Investments. 2014. URL: https://rabble.ca/podcasts/shows/john-bonnar-audio-blog/2014/04/toronto350org-calls-end-to-tar-sands-pipelines-fossil- (visited on 12/31/2019).

³²Desjardins, Canadian Youth Take Action Against Climate Change.

 $^{^{33}} The \ Ontarion.$ Divestment Campaign Targets U of G Endowment Fund. 2014. URL: https://theontarion.com/2014/04/03/divestment-campaign-targets-u-of-g-endowment-fund/ (visited on 08/03/2019).

³⁴PowerShift Canada. Divest Dalhousie Delivered a Carbon Bubble to Their Administration. 2014. URL: https://www.flickr.com/photos/powershiftcanada/13564593755/in/album-72157643270362584/ (visited on 08/03/2019).

³⁵Noelle Didierjean. Concordia, McGill Students Hold 'Die-In' to Protest Fossil Fuel Investment. 2014. URL: https://thelinknewspaper.ca/article/concordia-mcgill-students-hold-die-in-to-protest-fossil-fuel-investmen (visited on 08/03/2019).

 $^{^{36}}$ This corroborates statements from interview participants that the two campaigns collaborated on planning and actions.

 $^{^{37} \}mathrm{Jamie~Smith}.~Out~of~Oil.~2014.~URL:~https://web.archive.org/web/20140407064906/http://www.tbnewswatch.com/artsandlife/331394/Out-of-oil (visited on 08/03/2019).$

 $^{^{38}} Taryn$ Brownell. Divest UVic's Reverse Psychology. 2014. URL: https://www.martlet.ca/divest-uvics-reverse-psychology/ (visited on 08/03/2019).

³⁹PowerShift Canada. Drilling for Oil on the University of Victoria Campus. 2014. URL: https://www.flickr.com/photos/powershiftcanada/13570748144/in/album-72157643270362584/ (visited on 08/03/2019).

⁴⁰Rising Tide UK. Fossil Fools Day 2010. 2010. URL: https://www.risingtide.org.uk/node/158 (visited on 12/31/2019).

⁴¹The Australian Business Review. Protesters to March on 15 Campuses Calling for Divestment. 2015. URL: https://www.theaustralian.com.au/business/business-spectator/news-story/protesters-to-march-on-15-campuses-calling-for-divestment/3ff10ad6a9da2d16dd092b2beb30bb78 (visited on 08/03/2019).

⁴²Canadian Youth Climate Coalition. *About.* 2014. URL: https://web.archive.org/web/20140802180739/http://www.wearepowershift.ca/about (visited on 08/25/2022).

more challenging and contentious tactics. This was often capped off by incorporating a direct action into the last part of the convergence, allowing participants to experience the kind of training that organizations like 350.org provide before non-violent direct actions and then the action itself. This approach predates the CFFD movement. After the CYCC's first Power Shift conference in Ottawa in 2009, participants took part in a "Fill the Hill" protest on Parliament Hill, calling for greater ambition from the Canadian government before the Copenhagen COP.⁴³

One interesting effort at campaign coordination was the "Escalation Core" (sometimes written "Corps") established by Kiki Wood, Katie Perfitt, and Fossil Free Canada, which was branding by 350.org rather than a distinct organization. 44,45 As Wood explained to me, the initiative was based on a non-standard definition of "escalation" which was meant to be about increased sophistication, not confrontation, and wary of tactics that increase administration resistance. Divestment campaigns were invited to nominate a member to the escalation core, which then sought to provide training materials, coaching, and amplification. 46 Tina Oh, from the Mount Allison campaign, described the school as one of the first five members of the CYCC's "Core" along with Dalhousie, McGill, UVic, and the University of Winnipeg. This initiative included Canadian CFFD representatives taking part in divestment convergences in San Francisco in 2013 and Montreal in 2014. Generally speaking, it is important to note, when "escalation" is discussed by CFFD activists and in the related literature it does refer to the use of more confrontational tactics and the hope that such a development will overcome institutional resistance, thus "forcing divestment." This could be taken as another case — along with harsh condemnation rather than incremental win messaging — where CFFD activists as a body were more militant (and arguably less strategic) than some proliferators recommended. 47,48,49 Grady-Benson and Sarathy described the Escalation Core created by the DSN in 2014 and stated that it:

dedicates itself to increasing strategic and coordinated escalation among campaigns nationally. Rather than encouraging aimless direct action, the Core is emphasizing the need for escalation through a sequence of actions that intensify tone, increase frequency, and increase pressure on student administrators and trustees. 50

This seems more akin to the standard usage of "escalation" meaning more confrontational tactics, albeit with some of the same concern for strategic planning and target administration responses that Wood highlighted.

The ideas of "escalation" and "forcing divestment" have a complex status in the CFFD movement. From the perspective of getting target universities to act, it is arguably a misreading of the political opportunities available, since investment decisions are an important area of authority and self-preservation within universities, controlled by bodies with little inclination or susceptibility to having their decisions forced through

⁴³CBC News. Fill the Hill: A University Student Takes Aim at Climate Change. 2009. URL: https://www.cbc.ca/news2/citizenbytes/2009/10/fill-the-hill-a-university-student-takes-aim-at-climate-change.html (visited on 05/12/2022).

⁴⁴In the course of research, numerous people and publications seemed to misunderstand Fossil Free as an independent organization. Nicholas Lorraway described something similar being done deliberately at Queen's, where Queen's Backing Action on Climate Change (QBACC) and Divest Queen's were "one and the same" organization, but where they were separated in terms of social media strategy.

 $^{^{45}}$ Jed Lenetsky was in the escalation core starting in fall 2016.

⁴⁶Fossil Free Canada, "Escalation Core 2.0 (Fall 2016 - Winter/Spring 2017)".

⁴⁷A divestment proliferator staff member argued that in the end you can only actually persuade a university to divest, and that the justice language used by CFFD campaigns was sometimes counterproductive because it alienates allies and "puts universities in an impossible position."

⁴⁸Though Alex Cool-Fergus at Sherbrooke suggested that harsh condemnation at other schools encouraged the administration to keep negotiations amicable because they had seen how bad relations with some other CFFD campaigns had become.

⁴⁹Laura Cutmore, an organizer in the Dalhousie campaign, argued that proliferators would have preferred less critical responses to disappointing decisions from the administration, but that campaigns were emotionally invested.

⁵⁰Grady-Benson and Sarathy, "Fossil Fuel Divestment in US Higher Education: Student-led Organising for Climate Justice", p. 17.

student pressure.⁵¹ An administrator at a target university said:

I don't see boards doing something that they're not voluntarily wanting to do unless there's a real pistol to their heads, like say for example a university faculty strike or some kind of event that will do the university damage in terms of reputation. ^{52,53}

They also objected to the plausibility of a strategy of taking over a board meeting with three demands, laughing and saying there wasn't "a snowball's chance in hell" of changing university policy. This isn't a total dismissal of the possibility of coercive pressure from the university community on investment authorities, but it emphasizes the need for a much higher degree of influence than was held by CFFD campaigns, which generally comprised a few dozen organizers and which may not even have been widely known within the student body, much less perceived as so important as to drive influential constituencies to disrupt university functioning as part of a pressure campaign. Despite being associated with rhetoric about "forcing" divestment, proliferator organization staffers may have had a more plausible understanding of these dynamics than many individual campaign organizers, who may have fallen prey to the cognitive illusion that just because something is sufficiently important and urgent to you it will be interpreted in the same way by those who hold power and who do not come to the question of what ought to be done about climate change with the same framing and motivations.

350.org and the CYCC are not the only proliferator organizations or eNGOs which played a role in the CFFD movement. As discussed elsewhere in this text, the UK NGO People & Planet has played a similar coordinating role in that country.⁵⁴ In the US, Divest Ed was created by the Better Future Project in 2018.^{55,56} The group has established a one-year intensive organizing fellowship with a cohort of about 40 campus activists per year, spread across about 20 universities. More recently, the Divest Canada Coalition was created by volunteers to help coordinate ongoing CFFD campaigns and share institutional knowledge between organizers.

Public interest research groups (PIRGs) also played an organizing role in Canadian CFFD campaigns between 2012 and 2020. For instance, Divest Dalhousie was a working group of the Nova Scotia PIRG. Founded by Ralph Nader in 1971, PIRGs are a federation of US and Canadian non-profits supportive of grassroots organizing and progressive political change. These include the Ontario PIRG, which in turn has an OPIRG Toronto chapter at U of T as well as others at McMaster, Brock, Waterloo, Guelph, Kingston, Carleton, Windsor, Peterborough, York, Ottawa, and Laurier. There are also British Columbian PIRGs representing Vancouver Island, Simon Fraser University, and Prince George; an Alberta PIRG with a chapter in Lethbridge; a Regina PIRG in Saskatchewan; Quebecois PIRGs at McGill, Concordia, and UQAM; and a Nova Scotia PIRG.⁵⁷ CFFD campaigns organized as PIRGs include McMaster, Guelph, York, Dalhousie,

 $^{^{51}}$ An organizer from Queen's commented that the university had "no financial, political, or ideological incentive to align with this campaign."

⁵²CFFD activists have made similar claims. Swarthmore organizer Kate Aronoff argued: "Direct action, no matter how well planned and executed, is a nuisance to Boards of Trustees rather than a threat." Grady-Benson and Sarathy, "Fossil Fuel Divestment in US Higher Education: Student-led Organising for Climate Justice", p. 17.

⁵³An organizer at UBC explained: "there are conceivable strategies, if the whole student body had boycotted the university — blockade of campus — there's hypothetical things that I think are outside the realm of current social acceptance and norms."
⁵⁴See: Chloe Hatton. In Conversation With: People and Planet. 2018. URL: https://mancunion.com/2018/11/01/inconversation-with-people-and-planet/ (visited on 10/07/2019).

⁵⁵Sarah Shemkus. Divest Ed Looks to Help Fill Gap in Fossil Fuel Divestment Movement. 2019. URL: https://energynews.us/2019/02/19/northeast/divest-ed-looks-to-help-fill-gap-in-fossil-fuel-divestment-movement/ (visited on 09/30/2019).

⁵⁶Susannah Sudborough. Better Future Project Launches Online Resource Center for Campus Divestment Movement. 2018. URL: https://dailyfreepress.com/blog/2018/10/13/better-future-project-launches-online-resource-center-for-campus-divestment-movements/ (visited on 10/01/2019).

⁵⁷Ontario Public Interest Research Group. PIRG Network. 2019. URL: https://opirg-gripo.ca/about-opirg/pirg-network/ (visited on 07/01/2019).

Waterloo, and Laurier. 58,59

Other Canadian eNGOs have also been involved in supporting and generating materials for CFFD campaigns — as well as in encouraging campaigns to make use of informal and non-hierarchical mobilizing structures. For instance, in 2012 the Dogwood Initiative, Stonehouse Institute, DeSmog Canada, and the Leading Change Network published an adapted version of Marshall Ganz' "Organizing: People, Power, Change." Major headings included team building and "Public Narrative & Story of Self." The document included a great deal of practical guidance on team building, "distributed leadership" via the snowflake model, and framing and public narrative building. It also spoke to theory of change, including the value of incremental wins on the way to "mountaintop goals," and emphasized the role of emotions in generating either action or inertia. This helps illustrate how the idea of informal and non-hierarchical decision making is well established in progressive activist culture.

Compared with intersectionality, informal organizing is harder to demonstrate in black and white in early written materials from divestment proliferators. At the same time, through the lessons taken by activists from movements like Occupy it had become an organic perspective on how organizing ought to be done. It was also actively stimulated through training at convergences. The choice of organizing style was not driven solely by the hope it would be effective for establishing and sustaining campaigns, but also because of normative beliefs about how top-down hierarchical governance processes sustain the global oppression from which climate change arises in the CJ view.

3.2 Implementation of the campaign in a box model by campaigns

Mobilizing structures are most relevant to campaign conduct insofar as they embody the mechanisms organizers have chosen to decide how to act. Examining them provides an opportunity to see which precedents and whose thinking have influenced the organization of CFFD campaigns — chiefly revealing a consistent emphasis on informality and non-hierarchical decision-making structures, as promoted by divestment proliferators. This model, drawn most obviously from the Occupy movement, satisfies activists' desires to avoid bureaucratic processes which they object to, but it also impacts the degree to which campaigns are truly participatory and democratic since informality often relocates decision making from a transparent public forum to private discussions among a sub-group of organizers. Informality also somewhat impedes the development and retention of institutional memory since decision making happens in private channels not open to outside examination, and even campaign participants may not be well informed about what they decide.

The manner and degree to which CFFD campaigns achieved CFFD's third strategic aim of activist development has depended to a notable degree on how campaigns have organized themselves and made decisions, affecting who and how many people they could recruit and the responses of influential campus constituencies to their demands. It has also substantially impacted the individual experiences and subsequent trajectories of CFFD activists, influencing future organizing priorities and styles: it drove some toward the pursuit of a broader set of objectives which place climate change mitigation within a broader social justice based framework (CJ), others to groups with less intersectional organizing styles like the Citizens Climate Lobby (CO₂-e), and sometimes frustrated or angered activists to the point that they left CFFD organizations

 $^{^{58}\}mathrm{OPIRG}$ McMaster. One With OPIRG: Fossil Free McMaster. 2015. URL: https://www.opirgmcmaster.org/2015/03/08/one-with-opirg-fossil-free-mcmaster/ (visited on 08/03/2019).

⁵⁹OPIRG Guelph member Spencer McGregor noted that there was also an anti-pipeline OPIRG action group at the same time, and the two groups coordinated.

⁶⁰Dogwood Initiative et al., Organizing: People, Power, Change.

⁶¹Ganz, Organizing: People, Power, Change.

or abandoned activism altogether.⁶²

A major challenge in understanding the mobilizing structures of CFFD campaigns is disentangling the roles and leadership of multiple involved organizations.⁶³ As Hadden noted, "social movements exist in a complex protest space. Their boundaries are not always distinct and their mobilization is often influenced by previous or contemporaneous movements."^{64,65} Nella Van Dyke and Holly McCammon argued "most scholarly studies of social movements fail to recognize that many, if not most, movements are amalgamations of movement organizations" and that "conceptualizing social movements as organizational clusters or coalitional networks allows us to grasp more fully the varied constituencies, ideological preferences, identities, and tactical preferences different groups bring to movement activism."^{66,67,68,69} Institutionally, most Canadian CFFD campaigns have been student clubs which were specifically established to run a divestment campaign.⁷⁰ In other cases, divestment has been taken up as a cause by pre-existing organizations which also had other projects, especially student governments and PIRGs.⁷¹ Understanding organizational boundaries is particularly complex with student governments, since candidates are often elected on slates with shared platforms and student government representatives have some obligation to reflect the views of their constituents as opposed to following their own preferences or best judgment.^{72,73,74}

Misunderstandings about organizational structure, or perhaps oversimplifications, are common in CFFD journalism and scholarship. For instance, numerous commenters describe Fossil Free as though it is a distinct

⁶²A 'leave behind' document prepared by CCL Canada for meetings with policy makers illustrated the important features of their approach: the use of a tax-and-dividend approach where 80% of revenues are redistributed to the population, a narrow focus on climate change as opposed to other environmental or justice problems, and a theory of change based on becoming trusted non-partisan sources of guidance for elected officials. Citizens' Climate Lobby Canada. Leave Behind: Our Request for Fair, Effective and Predictable Carbon Pricing. 2020. URL: https://canada.citizensclimatelobby.org/8972-2/ (visited on 11/16/2020).

⁶³The CFFD movement demonstrates features of "decentralized, polycephalous, and reticulated structure" of the sort discussed in: Wiktorowicz, *Islamic Activism: A Social Movement Theory Approach*, p. 12.

⁶⁴Jennifer Hadden. "Explaining Variation in Transnational Climate Change Activism: the Role of Inter-movement Spillover". In: *Global Environmental Politics* 14.2 (2014), pp. 7–25. URL: https://www.mitpressjournals.org/doi/10.1162/GLEP_a_00225 (visited on 01/11/2020), p. 8–9.

⁶⁵Maina-Okori, Murray, and McKenzie, "Climate Change and the Fossil Fuel Divestment in Canadian Higher Education: The Mobilities of Actions, Actors, and Tactics (journal pre-proof)", p. 11.

⁶⁶Nella Van Dyke and Holly J. McCammon. Strategic Alliances: Coalition Building and Social Movements. Minneapolis: University of Minnesota Press, 2010, p. xii.

⁶⁷This demonstrates the progression in both activism and scholarship about activism since Soule wrote in 1997 that "the imitation and diffusion of innovative protest tactics has received less scholarly attention due to the tendency of scholars to treat social movement organizations as discrete entities, ignoring the connections or linkages between them." Sarah A Soule. "The Student Divestment Movement in the United States and Tactical Diffusion: The Shantytown Protest". In: *Social Forces* 75.3 (1997), pp. 855–882. URL: https://www.jstor.org/stable/2580522?seq=1#metadata_info_tab_contents (visited on 01/04/2019), p. 856.

⁶⁸ Doug McAdam and Dieter Rucht. "The Cross-national Diffusion of Movement Ideas". In: *The Annals of the American Academy of Political and Social Science* 528.1 (1993), pp. 56-74. URL: https://journals.sagepub.com/doi/pdf/10.1177/0002716293528001005 (visited on 03/12/2020).

⁶⁹David S. Meyer and Nancy Whittier. "Social Movement Spillover". In: Social Problems 41.2 (1994), pp. 277–298. URL: https://academic.oup.com/socpro/article-pdf/41/2/277/9592004/socpro41-0277.pdf (visited on 03/12/2020).

⁷⁰For example, the Spartan constitution of Divest Manitoba established it as a student club "under the umbrella of the University of Manitoba Students Union" with boilerplate text on membership, amendments, meetings, participation rights, and elections

⁷¹The Concordian student newspaper describes the CFFD effort as "largely undertaken by student-run groups like Divest Concordia, Sustainable Concordia, and the Concordia Student Union (CSU) in 2016." Alex Hutchins. *Divest Concordia Spreads its Wings*. 2019. URL: http://theconcordian.com/2019/02/divest-concordia-spreads-its-wings/ (visited on 10/07/2019).

⁷²See: Aiden Jefferson. Fossil Fuel Divestment Re-emerges as Hot Topic in AMS Elections. 2019. URL: https://www.ubvssev.ca/news/ams-elections-candidates-push-for-fossil-fuel-divestment/(visited on 07/21/2019)

ubyssey.ca/news/ams-elections-candidates-push-for-fossil-fuel-divestment/ (visited on 07/21/2019).

73 Electing pro-divestment candidates to representative bodies nonetheless represents a potentially productive strategy. In 2020, "three members from the Harvard Forward petition slate elected on a platform of divestment, responsible investment, climate leadership, and inclusive governance." Divest Harvard. Pro-Climate Candidates Elected to Harvard Board. 2020. URL: https://medium.com/@DivestHarvard/pro-climate-candidates-elected-to-harvard-board-b098202b5d56 (visited on 08/21/2020).

⁷⁴This earned national media attention: John Schwartz. Climate Activists Gain Seats on Harvard Oversight Board. 2020. URL: https://www.nytimes.com/2020/08/21/climate/havard-board-climate-change.html (visited on 08/22/2020).

organization, as opposed to a website and branding operated by 350.org.⁷⁵ When Curnow, Amil Davis, and Lila Asher said that Fossil Free U of T was established in spring 2014 to pursue divestment they did not mention that the city-wide Toronto chapter of 350.org actually initiated the campaign in the fall of 2012 and that a progression took place from divestment at U of T being a campaign of Toronto350.org to a set of student activists breaking away from the group to form Fossil Free UofT partway through the process around August 2015.^{76,77,78} Organizations which appear neatly separated on a structural diagram may in fact be controlled by the same people. One interview participant, for instance, described how an environment club which the divestment campaign sought to partner with was "us sitting in a different room at a different time." ⁷⁹ Taken in combination with the limitations in assessing the nature of an organization through interviews with a subset or organizers, organizational complexity and ambiguity should make us cautious about describing and comparing CFFD campaigns in simple sweeping terms, especially since the evidence supports the persistent presence of profound disagreements about objectives and strategies.

3.2.1 Consensus as a decision making system

Other disputes and frustrations concerned efforts by CFFD campaigns to compile internal codes of values, meant to be applied when making such decisions: for instance, on the fraught question of whether to avoid association with frontline groups or communities that affirm the legitimacy of illegal or violent actions in extremis.

Interview participants described multiple grounds for skepticism about written policies. For one thing, many CFFD volunteers and climate activists generally dislike 'bureaucratic' portions of their group's work and get disengaged by time spent on such tasks. Horizontal and non-hierarchical organizing can make it difficult to establish and maintain a single stable campaign position on any matter. For another, draft policies would often be written by the group members most passionate about an issue and drafted to reflect their understanding of it. These policies may thus not reflect the overall view or practices within the group. ⁸⁰ In part because of that, and partly because of limited institutional memory, such policies often risked becoming a dead letter, filed away somewhere on a group Google Drive but not practically implemented during the

⁷⁵A November 2019 Facebook post stated that the page "FossilFree" would be discontinued and people should look at the 350.org page for updates. Fossil Free. We've Decided to Shut Down This Facebook Page Before the End of the Year. 2019. URL: https://www.facebook.com/FossilFree/posts/1514371548713860 (visited on 12/01/2019).

⁷⁶The text never referred to the earlier Toronto350.org campaign and seemed to refer to an unstated period as the "first year" of the campaign. Joe Curnow, Amil Davis, and Lila Asher. "Politicization in Process: Developing Political Concepts, Practices, Epistemologies, and Identities Through Activist Engagement". In: *American Educational Research Journal* 56.3 (2019), pp. 716–752. DOI: 10.3102/0002831218804496. URL: https://doi.org/10.3102/0002831218804496, p. 716, 730.

⁷⁷The earliest Wayback Machine capture of the Toronto350.org website on 2013-01-08 includes a description of the U of T divestment campaign and a link to sign the 350.org-hosted petition. The 2013-08-08 version includes a link for eligible members of the U of T community to sign the brief later formally presented to the administration on 2014-03-06 after it was substantially updated for the 2015-04-10 release. Toronto350.org. *Toronto350.org.* 2013. URL: https://web.archive.org/web/20130108060844/http://toronto350.org/ (visited on 05/11/2022).

⁷⁸On the history of the first U of T campaign, see: Lila Asher et al. *U of T Community Response to the Report of the Fossil Fuel Divestment Committee.* 2016. URL: http://www.uoftfacultydivest.com/files/Community-Response.pdf (visited on 01/30/2017), p. 1-2.

⁷⁹From the perspective of individual CFFD campaigns, some organizations are purely brands, rather than functional entities with independent agendas and members. Most relevant to this thesis is 350 Canada, which is a brand used by 350.org staff members in Canada rather than an independent organization involving any significant transparency in decision making or role for individual campaigns, demonstrating the pyramidal position of proliferator organizations. 350 Canada's closed and non-participatory structure when developing its own campaigns and priorities hints at the limits of informal mobilizing structures in developing long-term strategic campaigns, as demonstrated in their organizing calls where ordinary climate activists are urged to commit to specific actions which have already been decided through a process which does not involve them.

⁸⁰Eisenberg argued that ambiguity can be used strategically, such as to achieve "unified diversity," whereby a diversity of interpretations of such things as mission statements or organizational goals are permitted to exist and dysfunctional conflicts are avoided." Michael J. Smithson. "Social Theories of Ignorance". In: *Agnotology: The Making and Unmaking of Ignorance*. Ed. by Robert N. Proctor and Londa Schiebinger. Stanford: Stanford University Press, 2008, p. 223.

group's work. For example, Nicholas Lorraway noted that the Queen's campaign had a constitution as a student club, but it was not followed in group decision making. An organizer at SFU said that the only governing document in the SFU campaign was a mission statement, but that it wasn't used or functional. At another campaign, founding members created formal governing documents which later sat on a shared drive and were not read or applied by later participants.

Another challenge associated with efforts to structure campaigns less formally was simply lack of awareness about and compliance with formal structures. A campaign may have delegated a sub-committee to laboriously draft a mission statement or a policy on intersectionality, but such documents often (a) did not represent a compilation of the views of all campaign members on the topic and (b) rarely or never directed or constrained campaign behaviour. One interview participant described discovering a constitution for their organization which was previously unknown to them, and which was subsequently not applied in their deliberative processes. An organizer at Concordia said that the campaign did have governing documents but "they're somewhere in the cloud" and had no role in practice. In the Western Washington University campaign there were notionally elected positions, but the organizer who I spoke to said "we didn't ever really follow it." An organizer at Queen's explained that as a student club the divestment campaign had to have a constitution, but that it was not actually followed in terms of group structure or decision making.

The most common approach among Canadian CFFD campaigns was to make decisions by consensus, eschew formal job titles and responsibilities, and operate without formal policies and constitutions. In some cases, this arrangement arose as much from the tiny membership of campaigns as from broader activist guidance that informal approaches are practically and morally superior. In other cases, decisions about these mobilizing structures were highly ideological and closely tied to preferences between the climate justice and $\rm CO_2$ -energy framings. Joanna Brenchley, an organizer at Dalhousie, explained how the CFFD group consciously sought to break from organizational models which they were familiar with: "we really wanted to live values of consensus, even though we had never seen it before in our lives."

Perhaps the most interesting dimension of the CFFD movement in terms of political process within activist groups has been the inconsistent definition of "consensus", which has often arisen less through a process of refining the proposed course of action until all those in the organization are satisfied and operated more through informal interpersonal mechanisms where people with objections were willing to raise them only to a degree, and many withdrew them when they perceived the conviction of others, yielding social consensus rather than substantive agreement.^{83,84,85} Spencer McGregor described how the Guelph campaign

⁸¹On the one hand, this may justify criticism that activist groups miss moments of opportunity because they are too focused on developing institutional structures. Piven and Cloward, *Poor People's Movements: Why They Succeed, How They Fail*, p. xxi-xxii.

⁸²On the other, this increases the risk of a "tyranny of structurelessness" where without formal means of decision-making which are actually used groups instead become controlled by an inner cohort functioning on interpersonal relationships and private communication. Freeman, *The Tyranny of Structurelessness*.

⁸³Commenting on causes of inaction on climate change, Markowitz and Shariff identified in-group dynamics which may preclude honest participation in consensus decision making: "individuals derive self-esteem and a sense of belongingness from exhibiting the values of their in-group, providing acute motivation to toe the party line." Ezra M. Markowitz and Azim F. Shariff. "Climate Change and Moral Judgement". In: *Nature Climate Change* 2.4 (2012), p. 243. URL: https://www.nature.com/articles/nclimate1378 (visited on 12/29/2019), p. 244.

⁸⁴Baumeister and Leary described the "need ... for frequent, nonaversive interactions within an ongoing relational bond" and argued that existing evidence supports the view that "the need to belong is a powerful, fundamental, and extremely pervasive motivation." Roy F. Baumeister and Mark R. Leary. "The Need to Belong: Desire for Interpersonal Attachments as a Fundamental Human Motivation". In: *Psychological Bulletin* 117.3 (1995), p. 497. URL: https://psycnet.apa.org/record/1995-29052-001 (visited on 12/29/2019), p. 497.

⁸⁵Aidid discussed the idea of "modified consensus" — which prioritizes the perspectives of students who would be most impacted by a decision when there is no consensus — but does not explain how to decide if consensus exists or who is most impacted. Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. 84, 105.

sought to implement consensus-based decision making:

Depending on how important it is, we say: 'This is the idea. What do people think? What would you improve?' And so then we'll go around and every person will have a chance to say, and then usually by the time we reach the end of the circle we find some improvement that everyone agrees on, just because it sounds good and nobody had thought of it before. Once we're done that planning phase, once we reach something we think we'd like to pursue we either just say: 'Is anyone opposed?' or 'Can everyone who agrees raise their hands?' We try to reach consensus but we don't have a formal process.

An organizer at Mount Allison described how efforts at "collective consensus-based decision making" were hard to implement because people didn't share their opinions because they didn't want to disrupt an apparent consensus. Aidid argued that for her case studies at UBC, Concordia, and Waterloo "where disagreements occurred, all campaigns often handled them through deliberation until all opinions were voiced and there was group consensus."86 Silence was then taken as consensus. 87 Joanna Brenchley from the Dalhousie campaign noted that the consensus approach can suppress statements of disagreement since there is strong social pressure not to dissent from an apparent consensus, especially for newer members of a campaign. "You never want to be the dissenting voice," Brenchley explained. Peter Gibbs said that the UVic campaign made decisions based on consensus in person or on their Facebook group, with no system for testing consensus and with it left up to any potential objectors to speak up. An organizer at UBC described their decision making style as "quasi-consensus", based on "talking through issues" until most or all participants felt comfortable. As critiqued by Curnow and Chan, the lack of consistency in how decisions were made by CFFD campaigns somewhat challenges the notion that they were as democratic and participatory as the intended to be and generally perceived themselves. 88,89,90 Not being able to know who decided what when, with the support of who and the opposition of who, limits the degree to which campaigns can be understood by their own participants, as well as by researchers, and makes it hard conceptually and philosophically to determine the degree to which anti-oppressive principles emphasized by proliferator organizations operated in practice to affect decision making.

One interview participant raised some intriguing points about a consensus-based decision making style. A single student had a perspective very much at odds with the CFFD movement as a whole — not just social greens encouraging an intersectional approach, but also with more issue-focused market liberals and institutionalists. The student was determined not to criticize the administration and to present whatever decision they made in a positive light. The interview participant explained that with consensus decision making one person can be especially empowered, particularly in a small campaign. That may accord with the idea of avoiding having anyone forced to endorse statements or positions which they disagree with, but it

⁸⁶Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. 83.

⁸⁷Aidid noted that, though "seemingly equitable," consensus based decision making "can remove the opportunity for members to voice their dissent." Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. 105.

⁸⁸This contrasts with Hadden's account of consensus procedures as "a vehicle for harmonization of tactics and frames among participating organizations" at the Copenhagen COP. Hadden, *Networks in Contention: The Divisive Politics of Climate Change*, p. 124.

⁸⁹This could have a great deal to do with implementation. There is a world of difference between all participants in a decision making process iteratively developing a proposed course of action ending with a clear decision reached through an orderly process and the mere assumption that the lack of immediate vocal opposition represents agreement among people who have not established a clear or agreed process for determining what they have decided on.

⁹⁰Hoping for clear, consistent, and documented decision making within groups run by student volunteers may be asking too much since it may be absent even in highly formalized decision making systems. A major part of Stokes' argument about US electricity policy is that interest groups and legislatures often don't fully understand the content or consequences of what they are agreeing upon. Stokes also emphasizes "the difference between the rules on paper and the rules in use." Stokes, Short Circuiting Policy: Interest Groups and the Battle over Clean Energy and Climate Policy in the American States, p. 57.

also reveals how consensus need not be implemented as a process where majority voices have corresponding influence. The participant described a similar dynamic in drafting a faculty letter of support for the campaign, which became a process of keeping key people and "prestigious faculty members" who saw social justice language as a "non-starter" as signatories. This involved removing strongly worded text from earlier versions. The broad issue of who had effective authority within campaigns was raised by several interview participants, with one explaining:

Just as with any group of people there were issues with our decision making process. Some people had more power than others, and it was theoretically consensus based but in practice I think there were a few people who were able to make more decisions than others... First of all, there's a sort of meritocracy thing going on in a lot of consensus-based decision making processes where there's an assumption that if you haven't been part of divest for a while you can't really make a decision, or your opinion doesn't matter that much. To some extent that's valuable. If you're still learning it's great to just listen at first, but I think there were people who had been involved for a while who still didn't gain the status of 'person who has been involved in divestment long enough to have decision making power.' So I think that was an issue, and is an issue in general in consensus-based organizations. Also, I think there were some people who it was just really hard to say 'no' to, and when people are heavily involved in the organizing and have been for a while it's very difficult to go against what that person wants, even if the majority doesn't believe that it's the right decision. That was a big issue for us.

Ambiguous and opaque patterns of authority also affect messaging control, since campaign social media channels were often controlled in practice by one person, giving them scope to shape outside perceptions of the campaign's positions. This isn't necessarily objectionable within a system of distributing work to volunteers — and likely reflects the unpopularity of 'bureaucratic' processes like formal vetting of the contents of communications — but it does again demonstrate how consensus evaluated through the lack of active opposition can narrow the range of viewpoints which are perceptible within campaigns, and how informality doesn't necessarily correspond with democratic decision making.

Freeform decision making sometimes left it ambiguous what had been proposed and actually decided. It was also at odds with ideals of being inclusive and participatory, since decisions to be made were rarely formally circulated in advance to allow any interested campaign member to be informed and take part. It also fed the development of parallel decision making mechanisms through personal relationships or private communications within a small subgroup of organizers. ⁹¹ Even though nearly all Canadian CFFD campaigns in this period emphasized non-hierarchical and consensus decision-making, when I asked subjects about whether decisions were really made by everyone during planning meetings or whether they were sometimes made privately by a smaller group in a different forum, many acknowledged that the latter was sometimes or often the case. One participant remarked:

Most big decisions happened because there were like four people who got together on their own and talked strategy but then before anything was implemented it was brought to the group. So I would say it was a combination of both, just because when you work in a big group of 20 people it's really hard to come up with a concrete proposal.

This aligns with one of the biggest frustrations and criticisms about Occupy: by seeking to undertake participatory consensus decision making in such large gatherings it became impossible to reach genuine consensus, defined as reaching a decision that all participants privately support, as opposed to one where

⁹¹As Freeman argued: "For everyone to have the opportunity to be involved in a given group and to participate in its activities the structure must be explicit, not implicit. The rules of decision-making must be open and available to everyone, and this can happen only if they are formalized." Freeman, *The Tyranny of Structurelessness*.

nobody is willing to challenge the apparent agreement among those who have stated a position. At times this was exacerbated by efforts of CFFD campaigns to be radically inclusive, since that led to people whose behaviour would not be tolerated in other kinds of organizations continuing to take part in CFFD meetings, causing frustration and sometimes the departures of other volunteers. Interview participants described how a commitment to inclusiveness led to the continuing presence of activists with views well outside the mainstream of the campaign, both in the direction of wanting to be much less confrontational and critical of the university and in the direction of proposing much more radical action.

Describing the first CFFD campaign at the University of Toronto, Curnow and Jody Chan stated that: "Decision-making was ostensibly done by what they termed 'working consensus', but in practice, decisions were not made in a consistent way." This assessment is supported by my experience in the Toronto350.org campaign at U of T and has relevance to the broader CFFD movement, in which proliferator organizations effectively encouraged campaigns to be informal, non-hierarchical, and non-bureaucratic. The rationale for that approach was both philosophical and pragmatic. On the idealistic side it was another example of the desire of progressive activists to represent their values in their actions and organizations, with a preference for participatory processes and distributed authority. Pragmatically, the approach recognized the limited capacity of CFFD campaigns run by student volunteers, as well as the temperamental aversion of many activists to spending time on governance. While the non-hierarchical approach was almost universally common in Canadian CFFD campaigns between 2012 and 2019, the experiences of interview participants reveal that it had disadvantages as well as advantages.

There were also linkages between equity and decision-making methods. When I asked interview participants if their group had been directed by a smaller subgroup of the most committed people within it, several agreed with that categorization. Dislike of bureaucratic discussions among many activists influenced the extent to which highly inclusive decision making was used in CFFD campaigns, as was a notion that an organizer's level of influence should depend on their level of commitment. Several interview participants described some notion that a person's level of time commitment to the effort did or should translate into a higher level of influence in decision making, though such priority was informal and undocumented.⁹⁴ Spencer McGregor, a Guelph organizer, cited both length of involvement and number of hours being committed as factors which made some participants more influential than others: "There would be a more dedicated core group that had more time to give it" and "If you have some who's been involved since the start of the group... then that person will naturally be seen as more of an authority on the subject." Describing the Mount Allison campaign, a campaign organizer mentioned a core group that "invisibly held more decision making power" due to their knowledge and the amount of work they had done. Zoe Luba corroborated the point: "Naturally, when people are taking on more of the work, they end up making more of the decisions because they're more active." The idea that an organizer's level of effort should relate to their level of influence in the campaign was also present in CFFD efforts outside Canada. Miriam Wilson described how the campaign in Glasgow included about ten core members distinguished by the reliability of their involvement beyond just meetings and events. Those "putting in a lot of hours" gained greater influence in decision making.

Interpreting consensus in a way that allowed minority views to be buried was the most important way

⁹²Curnow and Chan, "Becoming an 'Expert': Gendered Positioning, Praise, and Participation in an Activist Community", p. 148.

⁹³Benford described a peace movement group in the 1980s which failed to offer potential members opportunities aside from boring meetings, with the group "organizing itself to death" through a long process of attempted reorganization which drove out members. Robert D. Enford and Scott A. Hunt. "Dramaturgy and Social Movements: the Social Construction and Communication of Power". In: *Social Movements*. Springer, 1995, pp. 84–109, p. 43.

 $^{^{94}\}mathrm{It}$ was also likely subject to the biases studied by Curnow.

the Canadian CFFD movement obscured the enduring presence of both CJ and CO₂-e worldviews. Since decisions were rarely transparently communicated, decisive, and binding, people could continue to pursue divergent theories of change within the same organizations.

3.2.2 Choosing tactics

Just as disagreements about broad-level questions of linking climate change mitigation to other forms of social justice contributed to contention within CFFD campaigns, at times differing tactical preferences prompted impassioned debates as well. Bratman et al. described a core question dividing student CFFD organizers: "to what extent are confrontational, direct action tactics necessary to achieve that change" (the "revolutionary reimagining" of the economy and society which the authors describe in the first part of this core dividing question). Within the campaign they studied, "opinions were diverse concerning the utility of different tactics of engagement and the merits of different strategies for tacking the issue through contentious politics." Tactical preferences are tied to each activist's core beliefs about how change takes place. Insiders who have bought into existing institutions and processes often favour pursuing incremental change as opportunities arise within slow-changing bureaucratic structures; outsiders see this as wasting time within broken systems which need to be replaced, not left to hopefully improve by incremental measures. Insiders (and divestment proliferator organization staffers) see university officials as open to arguments and possible to persuade, while outsiders believe that divestment can be "forced" through sufficiently escalated tactics. See

The two questions of how confrontational tactics should be and how systemic successful change needs to be can be logically separated. Someone favouring incremental change may nonetheless think confrontational strategies are the best path for achieving it, while someone else may aspire to revolutionary change but judge that it can be best achieved through incremental steps. In practice, however, disagreements about tactics tended to align with views on whether a good relationship with a target administration should be used to comfort and persuade them toward incremental policy change or whether activists should concentrate on popularizing a grand narrative to cultivate the desire to reform institutions radically. By advocating for both types of messaging in the context of "inside game" and "outside game" strategies, 350.org created a movement where activists of both persuasions could hybridize their efforts to some degree.

3.3 Variation between campaigns

The deliberately non-hierarchical and informal structure encouraged by proliferator organizations was adopted by the great majority of Canadian CFFD campaigns between 2012 and 2020, though with a few distinctive exceptions that permit some degree of comparative analysis. Both my interview-based methodology and the complex and dynamic nature of Canadian CFFD campaigns make it challenging to summarize and

⁹⁵Van Ness and Summers-Effler noted that "debates over tactics can also generate strong negative emotions which threaten solidarity and affective ties." Justin Van Ness and Erika Summers-Effler. "Emotions in Social Movements". In: *The Blackwell Companion to Social Movements*. Ed. by David A. Snow, Sarah A. Soule, and Hanspeter Kriesi. Wiley Online Library, 2004, p. 416.

⁹⁶Bratman et al., "Justice is the Goal: Divestment as Climate Change Resistance", p. 683-4.

⁹⁷Bratman et al., "Justice is the Goal: Divestment as Climate Change Resistance", p. 684.

⁹⁸As former FBI hostage negotiator Chris Voss put it: "good negotiators know that their job isn't to put on a great performance but to gently guide their counterpart to discover their goal as his own." This is what makes it possible to get beyond "temporary in-the-moment compliance" to "gut level change." Negotiation, as Voss puts it, is "coaxing, not overcoming; co-opting, not defeating." Chris Voss. Never Split the Difference: Negotiating As If Your Life Depended On It. New York: Penguin Random House, 2016, p. 81, 97, 141.

compare the character of campaigns at different universities, which are often not extensively documented, always prompt different interpretations from each participant, and which have changed frequently as new organizers and organizations like student governments have become involved.

Important areas of variation between campaigns included the degree to which they functioned as friend-ship groups; the different structures they selected; and the role played by faculty, administrators, and student government. Campaigns simultaneously took direction from proliferators and monitored and influenced one another. Therefore, it is also worth considering what forms of diffusion took place between CFFD campaigns in Canada.

3.3.1 Decision making and areas of disagreement within campaigns

The best way to see how mobilizing structures for decision making worked in CFFD campaigns is to consider areas of contention and disagreement, since those are the areas where decision processes were really put to the test. The central purpose and requirement of any political decision-making system is to provide a path forward when unanimity does not exist about what ought to be done collectively. This was particularly challenging in the context of CFFD campaigns for several reasons. First, climate change is a problem without precedent. There is no neat historical model for how to solve it, meaning that people will invariably draw different lessons from historical cases like tobacco and South African apartheid. Second, while the ultimate goal of a safe and stable climate was common among all CFFD activists, there were deep disagreements about which different categories various intermediate actions and political programs fell into:

- 1. Things that must be achieved in order for climate change to be brought under control. For everyone this included a vast reduction in anthropogenic GHG pollution but some also believed that it included major political and economic changes like the end of capitalism ^{99,100,101,102,103,104}
- 2. Activities which climate activists must undertake in order to form effective alliances, thus raising the odds of achieving their aims, even though the activities did not necessarily have anything to do directly with climate change mitigation 105
- 3. Actions which were morally praiseworthy or necessary within the value systems of activists but which did not directly assist with either climate stabilization or alliance building, and which may provoke

 $^{^{99}}$ For instance, one interview participant argued "we can't solve the climate crisis without also dealing with inequality writ large."

¹⁰⁰ Of course it is logically possible that a world as unequal as ours or more so could nonetheless get all its energy from sources that don't alter the climate. Analyses of the systemic CJ type incorporate a theory of change in which status quo actors are an insurmountable barrier to climate action in the present political context, making changing that context a necessary condition for success. The same participant explained that other faculty members at their school also leading the CFFD campaign totally reject the linkage with social inequality.

¹⁰¹Kathleen Olds, from the Dalhousie campaign, argued that environmentalism cannot succeed within a society that remains racist and patriarchal. Emilia Belliveau argued similarly that existing power structures cannot build solutions to climate change because of neoliberal capitalism, patriarchy, and colonization.

¹⁰²In contrast, Mark Jaccard provided a technocratic rather than political analysis of essential actions, which he took to include decarbonizing electricity and transport as well as regulations that phase out coal plants and gasoline vehicles, as well as carbon tariffs to help overcome the international coordination problem. Jaccard, *The Citizen's Guide to Climate Success: Overcoming Myths that Hinder Progress*.

¹⁰³ John Geddes. Solving the Climate Crisis Isn't on Consumers. It's on the People in Power. 2020. URL: https://www.macleans.ca/society/solving-the-climate-crisis-isnt-on-consumers-its-on-the-people-in-power/ (visited on 02/04/2020).

¹⁰⁴ A similar tone is evident in Stokes and Lemphers, as well as reports from bodies like the Carbon Tracker Initiative and Pembina Institute. This illustrates the two solitudes between energy experts and justice advocates.

¹⁰⁵ An organizer at Dalhousie described a "third stream" of campaign work in solidarity, including with environment and labour groups.

resistance from some target audiences 106

The emphasis in the CFFD movement on intersectionality and solidarity tended to de-prioritize actions closely linked to climate change mitigation in favour of those where activist demands were more immediate. As Jaccard put it in criticizing this tendency: "We must improve at distinguishing efforts that are strategically effective from the many distractions that reduce our chance of success." 107,108

Three major areas of disagreement ought to be considered to clarify how Canadian CFFD decision making worked: issue linkage, the root causes of climate change, and tactics. The strategic ramifications of putting political objectives into one category or another have been a major source of ongoing internal contention within climate change politics. ^{109,110} To take a single example, for CJ advocates who viewed climate change as one of many damaging consequences arising inevitably from consumerism, capitalism, and the endless pursuit of economic growth, there was no solution to climate change which did not also involve replacing that economic system. ^{111,112,113,114,115,116,117} For CO₂-e advocates, the implementation of such a broad and ambitious project seemed like a dubious proposition, given the urgency of the climate crisis, the limited political success of recent anti-capitalist movements like Occupy Wall Street, and the poor environmental records of some non-capitalist states, which called into question whether a non-capitalist society would

¹⁰⁶For example, Aidid described how the Waterloo and Concordia campaigns were "predominantly White" and "grappled with this by supporting groups that engage in racial advocacy to make up for the lack of representation in their campaigns." Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. 80.

¹⁰⁷Jaccard, The Citizen's Guide to Climate Success: Overcoming Myths that Hinder Progress, p. 22.

¹⁰⁸By contrast, Klein argues that the environmental crisis "supercharges" our most pressing political and economic causes, and that calls for climate change mitigation can be integrated into all progressive political movements. Naomi Klein. *This Changes Everything: Capitalism vs. The Climate.* Toronto: Alfred A. Knopf Canada, 2014, p. 153.

¹⁰⁹Joanna Brenchley, an organizer at Dalhousie, described disagreements about how to do solidarity work based on a tension between being strategic and living up to activists' values.

¹¹⁰As described in Curnow: "The divide, epistemologically, was between conceptualizations of thought and action. Politicized students argued for a view of solidarity where praxis had to be united, where their opponents argued that we could, and should separate our support, prioritizing what was strategic in the moment. The earlier debates about process and relationships were wrapped up in these contestations. While the mainstream environmentalists argued for a discrete approach to a narrowly framed issue, politicized members wanted to frame climate change in its relational ecosystem, using the anticipated win to build momentum for anti-racist and decolonial struggles." Curnow, "Politicization in Practice: Learning the Politics of Racialization, Patriarchy, and Settler Colonialism in the Youth Climate Movement", p. 106.

¹¹¹As Blair Palese, former CEO of 350 Australia put it: "There's no doubt that the notion of endless growth—profiting from the use of every resource you can get your hands on regardless of consequences—has led to the current climate change crisis. Run-away capitalism and the burning of fossil fuels for energy is unsustainable and we need to change how we interact with our planet if we are to survive." Blair Palese and Benedetta Brevini. "An Interview with Blair Palese: Green Campaigns—Challenges, Opportunities and 350.org". In: Carbon Capitalism and Communication. Springer, 2017, pp. 201–206. URL: https://link.springer.com/chapter/10.1007/978-3-319-57876-7_17 (visited on 04/04/2022).

¹¹² Deirdre Fulton quotes an appealing version of the intersectional perspective: "Our side sees a future built on not only surviving, but thriving. Our side fights for a future where amenities such as food, water, shelter, education, clean air and healthcare are considered basic rights, not luxury commodities. It is a future where work is valued regardless of its ability to generate profit for the 1 percent, and that recognizes the abundance of the earth and the people living on it. It is a future where Black lives matter, where First Nations' treaty rights are honored, and where a person's citizenship status does not determine their character. It is a future where workers have family-sustaining jobs building the vital infrastructure that will carry us through a just transition away from fossil fuel dependency." Deirdre Fulton. With Sit-Ins Around Country, Students Escalate 'Divestment Spring'. 2015. URL: https://www.commondreams.org/news/2015/04/09/sit-ins-around-country-students-escalate-divestment-spring (visited on 02/23/2020).

¹¹³Mangat, Dalby, and Paterson, "Divestment Discourse: War, Justice, Morality and Money", p. 200.

¹¹⁴The Green Party of Canada website called for Canadians to "abandon unending economic growth as a goal and replace it with a goal of maximizing human and environmental health and well-being." Green Party of Canada. Reimagine a Safer, Fairer World. 2020. URL: https://www.greenparty.ca/en/reimagining-our-future/reimagine-a-safer-fairer-world (visited on 09/03/2021).

¹¹⁵ See also: Adrian Parr. The Wrath of Capital: Neoliberalism and Climate Change Politics. New York: Columbia University Press, 2014.

¹¹⁶Peter Newell and Matthew Paterson. Climate Capitalism: Global Warming and the Transformation of the Global Economy. Cambridge: Cambridge University Press, 2010.

¹¹⁷Hunter Lovins and Kevin Cannon. Climate Capitalism: Capitalism in the Age of Climate Change. New York: Hill and Wang, 2011.

really be better at addressing climate change. Bratman et al. identify "the core question that divided student organizers" as "to what extent does meaningfully addressing climate change require a revolutionary reimagining of our economy and society?" This accords with Curnow's description of how the U of T campaign was split between "radicals" and "reasonables." 120,121

The appropriate scope of issue linkage was controversial, with those on one side objecting to broadening the issue beyond matters clearly related to climate change and energy, and those on the other side objecting to not linking the fight against climate change to their other political objectives. ^{122,123} Issue linkage was controversial, as was the relationship between being inclusive and tolerant within the organization and decisions about public positions to take (if any) on movements against racism, homophobia, etc. ¹²⁴ Jaccard warns: "humanity's failure thus far with the climate-energy threat has provided an opportunity for people to attach their agendas to the solution, and in the process render it more complicated and difficult than necessary." That risk — emphasized by more moderate participants in the CFFD movement — is offset by the danger that by failing to grapple with root causes of climate change we will produce only ineffective solutions. In response to the argument from environmentalists that ending racism is too ambitious a project to undertake alongside decarbonization, Hop Hopkins argued: "You can't have climate change without sacrifice zones, and you can't have sacrifice zones without disposable people, and you can't have disposable people without racism." This debate is unresolved and continues to echo through the climate change activist movement, influencing activist development, and driving ongoing sorting into more policy-minded and more justice-minded organizations.

A central contention of the CJ worldview is that only an intersectional approach can address the root causes of climate change. While the climate justice assertion that climate change must be addressed in terms of root causes has merit, the questions of what qualifies and what implications follow remain disputed. Even if anti-capitalist environmentalists are right about the root causes of climate change and other forms of ecological destruction, it does not follow that addressing the root cause is the only viable course of action. For someone dying of thirst in the desert, the scorching heat may be the root cause, and yet it is easier to give the person water than to change the weather. A tumour caused by alcohol consumption or sun-tanning can be treated with surgery, radiation, or drugs. Arguably, critics of capitalism have always under-estimated

¹¹⁸Tina Oh from the Mount Allison campaign told me that all the core organizers were anti-capitalists, which she contrasted with Waterloo which she perceived to be skeptical about that perspective.

¹¹⁹Bratman et al., "Justice is the Goal: Divestment as Climate Change Resistance", p. 683.

¹²⁰Curnow, "Politicization in Practice: Learning the Politics of Racialization, Patriarchy, and Settler Colonialism in the Youth Climate Movement", p. 103–4, 117.

¹²¹The internal contention between climate activists willing to accept incremental change and those who think a total societal reorganization is necessary for humanity to be sustainable is present outside Canada as well. For instance, *The Economist* described "Realo" and "Fundi" wings of the German Green party. The Economist. *Green on Green.* 2020. URL: https://www.economist.com/europe/2020/11/21/some-activists-are-running-out-of-patience-with-germanys-green-party (visited on 12/14/2020).

¹²² Aidid explained that at UBC, on whether to support BDS and private prison abolition, it "was difficult to come to consensus and some members were surprised that there was internal conflict on this decision because they identified the Palestinian struggle as an issue of settler colonialism and climate injustice." Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. 87.

¹²³Aidid suggested that CFFD campaigns should "expand their networks outside of the environmental sector... and towards movements that aim for the same goals of just transitions and liberation such as the BDS movement." Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. 104.

¹²⁴The question of how fully to embrace causes supported by most CFFD organizers but not tangibly related to fossil fuel abolition was often emotional and not easily resolved. With political positions as important elements of activists' identity, there was distaste about any collaboration involving others who are not in full ideological agreement. This tribalism limits the scope for cross-cutting collaboration on elements of a decarbonization agenda between activists with strong views and mainstream parties and organizations.

 $^{^{125}} Hop\ Hopkins.\ Racism\ is\ Killing\ the\ Planet.\ 2020.\ URL:\ https://www.sierraclub.org/sierra/racism-killing-planet (visited on 06/29/2020).$

its ability to adapt to new governmental institutions and operating conditions. ¹²⁶ Firms have learned to live with and expect labour and competition regulation, a government-provided welfare state, active monetary and fiscal policies to try to manage the business cycle, and many other such innovations. Pressed sufficiently to replace their fossil fuel energy use with something else (up to the point where they no longer worsen climate change), it is possible that firms will be able to do so, even with general capitalist parameters like private ownership and the drive for profit still in place.

Statements about root causes are narratives rather than descriptions of objective phenomena. In the context of accident investigations, Dekker argued that:

Cause is not something you find. Cause is something you construct. How you construct it, and from what evidence, depends on where you look, what you look for, who you talk to, what you have seen before and likely on who you work for. ... A lot needs to go wrong for an incident or accident to occur. So you can really construct 'causes' from everywhere. The causal web quickly multiples and fans out, like cracks in a window. What you call 'root cause' is simply the place you stop looking any further.¹²⁷

In this view, root causes are selective (because listing everything that contributed would produce a meaninglessly broad explanation), exclusive, and oversimplified, ¹²⁸ A more meaningful explanation needs to examine the origins of the problem from the perspectives of those who were involved, while solutions must be crafted to help people make better future choices, not just condemn those involved in bad past outcomes. Obviously there are major differences between a disaster as the acute failure of one technological system at a moment in time (like a plane crash) and the disaster of climate change which involves many more factors and few discrete and specific outcomes agreed by all to be important. Nonetheless, Dekker's argument applies to the question of whether climate change could be confronted by focusing on the chemical cause in rising CO₂ concentrations, or whether it is necessary to identify structural 'root' causes and control the problem by countering those. Dekker argues that seeking the cause of an accident is as "bizarre as asking what the cause is of not having an accident." ¹²⁹ We can imagine scenarios where climate change never emerged as a problem for humanity, for instance because the Earth simply did not possess the large fossil fuel reserves which we have been exploiting, or perhaps because deeply rooted norms of non-exploitative relationships led to people discontinuing fossil fuel use as soon as the damaging impacts on others became known. We can challenge the claim that climate change arises fundamentally from capitalism or racism or patriarchy by imagining a global social order which never developed those features but which did experience the same possibilities in resources and technologies as humanity developed through the industrial revolution. 130 While it is always speculative to consider counterfactual histories, it is not clear why a world without some forms of oppression would not feature people happy to capitalize on the improved quality of life and technological possibilities offered through fossil fuel exploitation, which has undergirded a vast rise in living standards over the past

¹²⁶Likewise, the use of markets and auctions to allocate resources to their highest-value purpose can be seen even outside of capitalist commercial transactions. For example, the US food bank network Feeding America established an auction system with equitably-distributed imaginary money to encourage donations to end up with the people who had the most use for them. Stacey Vanek Smith and Jacob Goldstein. *The Free Food Market*. 2017. URL: https://www.npr.org/sections/money/2019/09/11/565736836/episode-665-the-free-food-market (visited on 08/02/2022).

 ¹²⁷ Sidney Dekker. The Field Guide to Understanding 'Human Error': Third Edition. Boca Raton: CRC Press, 2014, p. 76.
 128 Dekker, The Field Guide to Understanding 'Human Error': Third Edition, p. 75–6.

¹²⁹Dekker, The Field Guide to Understanding 'Human Error': Third Edition, p. 75–6 (italics in original).

¹³⁰Astrophysicist Adam Frank undertook a version of this by imagining how extraterrestrial civilizations might be affected by and respond to climate change, concluding that: "Unless the universe is deeply biased against it, there have been other civilizations across space and time that faced these challenges. Anthropocenes may be common." While Frank's use of ecological modeling is clearly outside the scope of his expertise, the thought experiment nonetheless raises the possibility that non-human technological civilizations which do not share out biases and particular forms of oppression might nonetheless be destabilized by climatic changes arising from energy use. Frank, How Do Aliens Solve Climate Change?

250 years.¹³¹ There is certainly logic and evidence supporting the idea that capitalism exacerbates climate change by normalizing and encouraging ever-increasing levels of consumption and narrowing the considerations behind business choices principally to profit alone. At the same time, it isn't evident that there is a non-capitalist system which could emerge quickly enough to avoid the worst impacts of climate change, or which would indeed remain focused on solving that problem despite the structural barriers which make acting to mitigate climate change especially difficult.

While often treated as beyond debate, the way CJ advocates situate the root causes of climate change in persistent forms of oppression can be questioned analytically. If the root causes emphasized are the energy density, availability, and convenience of fossil fuels then the project of developing corrective actions focuses more naturally on developing and deploying fossil fuel alternatives. The lack of specific focus on such tasks within the CJ movement is an important ground for criticizing whether it really has the potential to solve the problem at hand, especially given the lack of clear and fully explained logic for how eliminating something like capitalism or colonialism would replace the world's energy base quickly enough to avoid catastrophic warming.

The example of choosing whether to endorse or support BDS campaigns illustrates how disagreements among activists often centre around which of the above categories actions fell into: inherently necessary, necessary for coalition-building, or just demanded by progressive values. The question of whether to endorse the BDS movement is an especially clear illustration of how activists' analysis differed. Did it make sense for CFFD campaigns to endorse BDS because fossil fuel abolition would require a change in Israeli government policy? Was the simple fact that both movements were using divestment as a strategy cause enough to justify linking the issues? Did political conditions on campus create an opportunity to gain supporters for a CFFD campaign by endorsing BDS? Or was supporting BDS a moral obligation regardless of the consequences for the CFFD campaign — even if doing so would lead to opposition which the campaign may not have otherwise experienced, reduced recruitment prospects among students who question or reject the linkage, more reluctance from university administrations frightened about bad publicity, and a more complicated communication strategy which must now explain the rationale for the CFFD campaign's BDS support?

These disagreements are centrally about which issues *must* be linked to successful decarbonization, which are perceived to be strategically beneficial but not strictly necessary, and which are not widely perceived as linked by CFFD activists' target audiences. The degree to which issue linkage was embraced shaped the mobilizing structures through which CFFD campaigns operated because it defined the coalition of support which they aspired to and influenced the group dynamics between each CFFD campaign and its broader campus environment and between campus campaigns and proliferators. What to prioritize and which tradeoffs to accept are central questions of decision making.

Interview participants described some of these disagreements, though often indirectly and at times other than when they were asked directly about whether any took place. CFFD campaigns varied in the ideological composition of their membership. This variation is present and similar throughout the CFFD movement, and not only within Canadian campaigns. Deirdre Shelly, an organizer in the American University campaign, said: "From free-market greens to anti-capitalist radicals, the campaign has been able to attract a wide range of students and has never collectively tried to situate the campaign within one ideology." One of Lee Ann Fujii's insights into interviewing was how silences can be telling and subjects will often answer

 $^{^{131}}$ As a simple comparison, Jaffe and Taylor note that eight hours of hard manual labour expends 3 x 106 joules of energy while the average American uses 1 x 109 J of energy per day — about three hundred times what they could produce with their muscles.

 $^{^{132}}$ Bratman et al., "Justice is the Goal: Divestment as Climate Change Resistance", p. 8.

sensitive questions indirectly and during times in the interview other than when they are directly asked. Based on the people who I spoke to, some of the most contentious decisions within CFFD campaigns were about allyship. CFFD campaigns can be imagined as circles which partly overlap with each other and partly overlap with other organizations and movements active at the same time, containing some of the same people, and sometimes advocating on issues which organizers have come to understand as linked. Some allyship decisions were so essentially uncontroversial as to be almost automatic, like expressing support for other CFFD campaigns via social media. Some required campaign effort but did not generate controversy, like participating in multi-group events like discussion panels on tenant rights or the social safety net. Support for other social justice campaigns was largely reflective of how most CFFD organizers have essentially been "social greens" as defined in Dauvergne and Clapp's typology. They often see capitalist exploitation as the root cause of climate change, and are thus sympathetic to movements for workers' rights, against corporate intellectual property, and against free trade. 134,135,136 Within this worldview, globalization is largely a force which worsens inequality and breaks down valuable local social and political structures. That sometimes leads to near-reflexive support for any movement or approach which aims to re-localize, whether that's community urban agriculture, or distributed power grids and energy storage. With imagination and a broad-minded perspective, nearly any two phenomena in a globalized world can be seen as related, particularly when the person making the argument has recourse to high-level ideological narratives based on concepts like oppression. Continual social immersion in such arguments can alienate their advocates from the politics of the mass population, as well as from specific target audiences like university administrations whose own norms and prior views must be taken into consideration when choosing means of persuasion. While logical arguments about structure and power can be used to link climate change with the Israeli-Palestinian conflict, those arguments speak more persuasively to progressive activists primed to accept that perspective than to others, and especially to others who have a contrary predisposition to question progressive framings and narratives. 137 Activists thus find themselves working to manage the tension between messaging readily embraced by their peers and narratives which are effective at persuading their external targets. As elaborated upon in the repertoires chapter, the audiences activists favour influence their preferred messaging and tactics.

CFFD activists may personally have been convinced of the merits of BDS, but multiple interview participants described a high level of awareness that a perceived alliance between CFFD and BDS campaigns would draw criticism for divestment that it would not otherwise receive, complicate the task of effective communication on the climate issue, and complicate relations with other campus groups and their oversight bodies, like student governments which administer the approval of student clubs. The relationship between BDS and CFFD activism also demonstrates how the multi-audience approach of social movement communicators makes the political structures and leadership at multiple levels relevant to the outcomes they experience. A strong pro-BDS position taken by a university group in Canada during the period of this study would

¹³³Clapp and Dauvergne, Paths to a Green World: The Political Economy of the Global Environment, p. 241-4.

¹³⁴For example, Belliveau argued that the climate justice perspective mirrors arguments from Magdoff and Foster "who say that environmental problems caused and perpetuated by capitalism cannot be solved by the same system." Belliveau, "Climate Justice in the Fossil Fuel Divestment Movement: Critical Reflections on Youth Environmental Organizing in Canada", p. 72. ¹³⁵Fred Magdoff and John Bellamy Foster. What Every Environmentalist Needs to Know About Capitalism. New York: Monthly Review Press, 2011.

¹³⁶This was a frequent source of friction in campaigns which included some "market liberals" who find it more productive or tractable to see climate change as a technical CO₂-energy problem rather than a justice problem, and who hope that the innovation and vast productive capacity of capitalist systems can be turned to reducing the future severity of climate change, both by mitigating emissions and by building resilience throughout society.

¹³⁷Aidid quoted a CJUBC organizer about how "some people wanted to really talk about solidarity for Palestinian people and some people really wanted to talk about the prison abolition system and some people really wanted to focus on divestment. And then we had conflicts where it was like everyone wanted their thing and it was like, how do we prioritize all of these things?" Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. . 83.

be safely expected to prompt repudiation from newspaper columnists and politicians at the provincial and federal levels, as substantiated by the list of organizations condemning the movement in the discussion in the political opportunity chapter about fossil fuel divestment's relative palatability as an activist cause.

An additional justification for an intersectional agenda is the reality that climate change is not the only reason why present-day forms of societal organization are unsustainable. Humanity's stable future and the prospects for non-human nature are also influenced by a wide range of environmental harms, from habitat destruction to freshwater nutrient loading to soil conservation and the state of the ozone layer. In parallel with the argument that problems can be managed by treating their proximate causes even when root causes are persistent or not plausibly subject to activist action must be the realization that there is no prima facie reason to think that actions which will solve climate change will automatically solve any other problems, including environmental problems. 138,139 When Kate Neville raised the danger that divestment will encourage growth of industries which cause environmental damage, social exploitation, and heightened corporate control, it perhaps reflected an inappropriate assumption or aspiration that there is indeed a clear course of action which will simultaneously alleviate all these issues, furnishing the energy which fossil fuels provide without the downsides of, for instance, hydroelectricity, 140,141 Neville identified "a larger imbalance in our politics and economies" as the root problem giving rise to climate change. 142 That is plausible, and it would be misleading to argue that if humanity could somehow be rid of the problem of climate change we would therefore have a sustainable global civilization. At the same time, given the magnitude of the threat posed by climate change and the urgency involved in addressing it, there is a strong case for prioritizing decarbonization over attempts to address other injustices and a case for addressing fossil fuel use as the direct cause even if it arises from more fundamental historical causes and even though fossil fuel alternatives have non-ideal characteristics. 143 Likewise, the urgent and one-off opportunity to act on climate change provides an argument for tolerating imperfect non-fossil energy solutions.

3.3.2 The garbage can model and the CFFD movement

As mentioned in the introduction, features of decision making within Canadian CFFD campaigns can be usefully analyzed using the garbage can model, in which group preferences are ill-defined, informality creates unclear technology for making group decisions, and participation is fluid. In their description of the model, Cohen et al. provided a definition of "organized anarchies" and laid out conditions in which

¹³⁸Indeed, because the most plausible paths to drastic reductions in global fossil fuel use require replacing the fuels with energy derived from other sources, the massive non-fossil build-out which would be necessary to sustain lifestyles akin to those which presently exist in the rich world would exacerbate some other environmental problems, as new hydroelectric projects disrupt freshwater ecosystems, wind farms kill birds and bats, and so on.

¹³⁹On biodiversity loss as a threat to humanity, see: Jennifer Rankin and Fiona Harvey. Destruction of Nature as Threatening as Climate Crisis, EU Deputy Warns. 2022. URL: https://www.theguardian.com/environment/2022/jul/21/destruction-nature-as-threatening-climate-crisis-eu-deputy-warns-frans-timmerman (visited on 07/21/2022).

¹⁴⁰Kate J. Neville. "Shadows of Divestment: The Complications of Diverting Fossil Fuel Finance". In: *Global Environmental Politics* 20.2 (2020), pp. 3-11. URL: https://www.mitpressjournals.org/doi/abs/10.1162/glep_a_00555 (visited on 05/27/2020), p. 5-7.

¹⁴¹ For example, on environmentalist opposition to mining for electric vehicle production see: Maxine Joselow and Vanessa Montalbano. Push for Mining Metals for Electric Vehicles Splits Democrats, Environmentalists. 2022. URL: https://www.washingtonpost.com/politics/2022/03/16/push-mining-metals-electric-vehicles-splits-democrats-environmentalists/(visited on 08/02/2022).

 $^{^{142}}$ Neville, "Shadows of Divestment: The Complications of Diverting Fossil Fuel Finance", p. 4.

¹⁴³On prioritizing climate change, see: Benjamin Cashore and Steven Bernstein. "Bringing the Environment Back In: Overcoming the Tragedy of the Diffusion of the Commons Metaphor". In: Perspectives on Politics (2022), pp. 1-24. URL: https://www.cambridge.org/core/journals/perspectives-on-politics/article/bringing-the-environment-back-in-overcoming-the-tragedy-of-the-diffusion-of-the-commons-metaphor/911192B7F4AD934C8FD771B00F9D529C (visited on 08/03/2022).

organizations were most likely to function according to such mechanisms, specifically inconsistent and illdefined preferences, unclear technology, and fluid participation. "Ill-defined preferences" was the least welldefined element of the paper, but it can be linked in the CFFD case to the internal contentiousness between the CJ and CO₂-e views. ¹⁴⁴ CFFD organizers differ in their analysis on the root causes of climate change, their theories of change about how to promote fossil fuel abolition, and their tactical preferences. At times, they split into identifiable factions, as with the "reasonables" and "radicals" identified by Curnow. "Unclear technology" likewise seems applicable to the choice to avoid formal structure and decision making processes like voting, instead making use of an un- or ill-defined notion of consensus which frequently shifts the location of decision making away from the forum in which it is ostensibly conducted and into the interpersonal relationships between organizers. "Fluid participation" applies in two senses. First, the actual membership in any CFFD organization was dynamic on multiple timescales, as each cohort of organizers varied their level of commitment in response to institutional actions and other pressures in their own lives. The need to be present at all formal and informal meetings to express a view on decisions not advertised in advance limits participation to those whose other obligations allowed this at any given time. Second, the boundaries of organizations promoting CFFD were often unclear: blurring into student government and clubs which also promoted other aims. The desire to create a broad support coalition can obscure where decision making takes place and who is responsible for outcomes. Also, organizers sought to maintain the external appearance of continuity within campaigns that have experienced large changes in membership, organization, or objectives — or even which have ended completely and been re-initiated. 145 Cohen et al. concluded that:

It is clear that the garbage can process does not resolve problems well. But it does enable choices to be made and problems resolved, even when the organization is plagued with goal ambiguity and conflict, with poorly understood problems that wander in and out of the system, with a variable environment, and with decision makers who may have other things on their minds. 146

I don't intend to imply that these concerns necessarily overpower the reasons why CFFD campaigns have chosen informal organizational and decision making structures, but simply to raise the point that such informality creates identifiable problems in CFFD campaigns which cannot be satisfactorily resolved within those informal structures. Considering the garbage can model may also be useful in light of the three parallel and sometimes competing objectives of the CFFD movement described in the introduction: it is hard enough for organizations with ill-defined preferences, unclear technology, and fluid participation to choose a coherent and effective approach when seeking to advance just one end. The complexities increase when there is disagreement about whether to prioritize success in convincing the target institution, delegitimizing the fossil fuel industry, or building the movement with new organizers — especially since the values and forms of messaging most likely to successfully persuade vary substantially between these audiences. As in many places throughout this dissertation, thinking of the three strategic goals for the CFFD movement (institutional action, delegitimization, and activist development) as potentially in tension with one another, and thus a motivation for disagreement, helps explain activist behaviour and campaign experiences. ¹⁴⁷

In a summary of scholarly work on the concept, Werner Jann described how within the garbage can model "the primary purpose of a certain decision process was no longer necessarily to produce a specific

¹⁴⁴The paper does refer to "heterogeneity of values" and "the degree of conflict within the organization" — both of which are elements of the internal contentiousness as discussed here. Cohen, March, and Olsen, "A Garbage Can Model of Organizational Choice", p. 4, 8.

¹⁴⁵This is added to by how target organizations pay limited attention to campaigns, and may maintain a view of their activity that has become years out of date. Years after the Toronto350.org / UofT350.org campaign at U of T ended, I was still routinely asked about how it was doing by university insiders including faculty, administrators, and students.

¹⁴⁶Cohen, March, and Olsen, "A Garbage Can Model of Organizational Choice", p. 16.

 $^{^{147}}$ On the multiple strategic goals of the movement, see: The CFFD movement's three strategic objectives p. 5

outcome, but rather, through the airing or 'exercising' of problems, participants, and solutions, to maintain, legitimize, or change the organization of the organization as a social unit" thus emphasizing persuasion among and between activist organizers rather than of target administrations by activists. ¹⁴⁸ This helps explain how Curnow and others who celebrated a supposed victory of climate justice proponents over incrementalist "reasonables" within a climate justice-inspired campaign were able to see the justice advocates as rebels within their own movement. ¹⁴⁹ Seeing CFFD campaigns as social units in which activists try to balance its perpetuation as a community with their varied strategic preferences also helps explain why CO₂-e and CJ activists continued to work together despite their disagreements. Activists build important relationships with one another and, all things being equal, generally want to collaborate productively, but their work is driven by sincere political analysis and motivations, so fundamental conflicts over issue linkage and prioritization fracture campaigns which are still sincerely supported by both sides.

Informality within CFFD campaigns meant decision making was often personal, intermittently participatory, and chaotic — characterized by decisions being made through interpersonal relationships rather than group deliberative processes, based on the ideas and arguments readily at hand rather than more comprehensive preparation, and without strong record keeping on what was decided, by whom, and why. Where they did exist, formal policies were often the product of work by a small subset of the campaign organizers most engaged on an issue, and did not in effect play the role of determining group conduct. All this makes the garbage can model analytically useful for assessing the movement, and particularly for evaluating whether the aspirations for democratic and participatory decision making which horizontal and informal structures supported were actually achieved.

3.3.3 CFFD campaigns as friendship groups

CFFD campaign organizers deliberated in ways that reflected the relationships between them. Decision-making practices were not divorced from tactical choices. In discussing important consequences of participation in the CFFD movement, Belliveau described how the networks established and deepened by the movement supported decision-making by consensus. This aligns with comments in other interviews about how the development of a deep culture of trust makes highly confrontational tactics possible, since participants felt a sense of solidarity which motivated and emboldened them while diminishing the salience of their concerns or reservations.

I asked interview participants whether their experience in CFFD campaigns was akin to an effort undertaken by a group of friends and whether organizing should ideally be done among friends to seek their views on their experiences in divestment campaigns and their ideals about activist organizing. Generally, interview participants reported a strong personal and social dimension in the sociology of their campaigns, though some divestment proliferators described risks and downsides to the approach. Joanna Brenchley described the Dalhousie campaign as "very much a group of friends." A proliferator organization staffer described the benefits and drawbacks of organizing within a campaign which functions sociologically as a group of friends, calling it "really effective for some things but complicated and can be the ruin of groups." On the positive

¹⁴⁸Werner Jann. "Micheal D. Cohen, James G. March, and Johan P. Olsen, 'A Garbage Can Model of Organizational Choice".
In: The Oxford Handbook of Classics in Public Policy and Administration. Ed. by Steven J. Balla, Martin Lodge, and Edward C. Page. Oxford: Oxford University Press, 2015, p. 305.

¹⁴⁹Lakanen described 350.org as one of the organizations facilitating "the circulation of climate justice narratives globally" and argued: "Rather than promoting narrowly-focused environmentalisms, 350.org attempts to connect climate justice social movements around the world." She quoted an interview participant saying 350.org had "cast a wide tent" in preparing the 2014 People's Climate March. Lakanen, "'A Battle for the Soul of the Climate Movement': The Expansion of the Intersectional Climate Justice Frame Among Young Activists in Canada".

side, organizing as a group of friends can help furnish adequate emotional support within a challenging field of work.¹⁵⁰ Wilson described how "friendship is what keeps people coming back to the group." It can also foster patterns of cooperation which are broader and more enduring than a specific campaign. On the problematic side, this approach can encourage complicated interpersonal conflicts which impede organizing as differences of opinion on tactics and politics create divides and the psychological investment in personal relationships makes disagreement more emotional. Other problems described by interview participants include how friendship-based organizing can become exclusionary and threaten diversity, and that it can shift metrics of effectiveness toward "a sense of self-congratulation" which is divorced from the degree to which the campaign is changing minds and outcomes more broadly. Different levels of commitment between volunteers can also strain friendships and relationships.

A subset of campaigns had a dominant amount of decision making overwhelmingly empowered in a single person, at least during the specific periods of time I was able to learn about through these interviews. 151 For example, during one year of a campaign it was run by a dedicated group of six executives. One of them, however, had a degree of influence sufficient to create an 'as she goes, go we all' dynamic within an executive that notionally functioned on a notion of consensus which was neither precisely defined nor implemented in formal processes, beyond potentially with hand signs at meetings. At Laval, Alice-Anne Simard considered herself to be the only organizer sufficiently involved to be worth interviewing. At the Western Washington University campaign in the US the president "would sometimes call the shots", while Laura Cutmore at Dalhousie described a similar concentration of decision making during their 2017 campout. An interview participant at Queen's described a similar dynamic where two campaign coordinators were able to determine group decisions to a large degree: "The two people who were making decisions were very confident and used to being in power, so they were the ones who would just decide on the direction. ... It was less consensual for sure... Definitely less of a consensus." An activist with the Memorial campaign called one organizer "the main force" of the campaign, "very overbearing," and "over-dominating at times." In an April 2022 webinar hosted by the Climate Justice Organizing HUB, several long-time CFFD organizers noted that diminished recruitment during the COVID-19 pandemic led to situations where they had to make choices for the group unilaterally. 152,153,154,155 Under such constraints, personal relations with the most influential organizers may become the key determinant of a campaign member's influence, at odds with the ideal of democratic participation in activist planning.

In addition to concerns about campaigns dominated by a small self-organized group, there is some evidence of a contrasting risk. One interview participant described "pretty strong groupthink" among campaign organizers. The presence or perceived presence of a dominant majority view can have a strong chilling effect

 $^{^{150}}$ This is especially relevant given the information provided elsewhere in this dissertation about the mental health impacts of climate change and activist burnout.

¹⁵¹This contrasts with the "movement diversity" which McKibben called "absolutely crucial to success", noting that "lowering the volume" on existing voices is necessary for new ones to participate appropriately. Bill McKibben. A Letter to My Colleagues at 350.org (and Friends in the Broader Movement). 2020. URL: https://350.org/bill-mckibbens-letter/(visited on 07/15/2020).

 $^{^{152}}$ In a demonstration that CFFD organizers applied a critical lens to the guidance they received about organizational structure, the invitation to the HUB's 2022-05-17 workshop on group structure described how it would "cover the inherent tensions between the rejection of hierarchy in most grassroots groups and the need for a functional and visible decision-making flow that will keep things moving and also help avoid group burnout."

¹⁵³ For other materials developed by the HUB at around the same time, see: Climate Justice Organizing HUB. Develop Recruitment and Retention Strategies. 2022. URL: https://en.wiki.lehub.ca/index.php/Develop_recruitment_and_retention_strategies (visited on 05/16/2022).

¹⁵⁴Climate Justice Organizing HUB. Navigating Turnover in Student Groups. 2022. URL: https://en.wiki.lehub.ca/index.php/Navigating_Turnover_in_Student_Groups (visited on 05/16/2022).

¹⁵⁵Climate Justice Organizing HUB. Student Organizing Best Practices. 2022. URL: https://en.wiki.lehub.ca/index.php/Student_organizing_best_practices (visited on 05/16/2022).

on those who feel otherwise, notwithstanding the alternative cases where those with minority viewpoints remained determined to express them and may have gained disproportionate influence due to consensus decision making. An interview participant from UBC described groupthink in the context of allyship decisions, saying they could be more about ideological signalling than campaign strategy. This privately-felt pressure toward conformity may have been exacerbated by other elements of informality, such as using Occupy-style hand signs, since their near-immediate display by those present who have already formed a view on a topic may lead everyone else to take the subject as decided or too popular to question; not providing notice of matters to be decided at a meeting, which limits the preparation of participants and their ability to seek independent information about decisions and trade-offs; and policies written by a self-selected subset of organizers most concerned about equity and oppression issues.

Another interview participant described how their campaign was largely directed by a smaller subset of "core" members because that "makes for faster decision making." The core members, who constituted a group of friends, would meet before planning meetings open to the entire group and form a consensus beforehand. A Mount Allison organizer noted that "a lot" of decisions were made via Facebook, that three of the main organizers lived together, and that others were good friends who hung out with them. An interview participant at UBC explained that the campaign held large inclusive strategy sessions, but that it was hard to make decisions and plans in a large group; the non-elected campaign coordinator and a few PhD students often made final decisions. Some people within the campaign were much more focused on strategy than others, those people "would lead the conversation in a direction and we all trusted them a lot." Another UBC campaign organizer said: in "a lot of groups like this, effectively, side discussions that happen between individuals outside the context of meetings really shape the issues that are raised in meetings and also the decisions that are made." When I asked an organizer in UVic if decisions within their campaign had often been made by a smaller group than the one that attended planning meetings, they said:

Definitely. It was led by under five people at any given moment. The people that did most of the emotional labour, physical labour, planning labour — those were mostly women and there weren't many of them that showed up week after week after week that would have these conversations outside of meeting times that would plan the meetings, that were always the spokespeople. It was always me and a few others.

There is a distinction to be drawn between groups being open to broad participation in which volunteers choose their own level of involvement and campaigns being directed by an exclusive sub-group based around interpersonal relationships. A UBC organizer explained:

In particular, often those who were doing the most work and the most coordination, who were spending the most time on it and having the most discussions about it, as a result had the most influence on the direction of things. It did feel there was genuine openness to as many people being involved as possible. There was some conscious thought about trying to make sure that space remained open for broader involvement.

The role of private side conversations in CFFD campaigns may relate to Blee's observation that "mechanisms also emerge in activist groups that allow them to eliminate [tactical] options without deliberation or even acknowledgment that a decision is being made." First, if decisions are shaped to a large extent by conversations outside a CFFD campaign's formal structure then it naturally limits the scope of which actions may

 $^{^{156}}$ A Mount Allison organizer said that within the MTA campaign there were many side discussions before formal meetings and that the campaign was directed by a subgroup "to a very large extent."

¹⁵⁷Kathleen Blee. "How Options Disappear: Causality and Emergence in Grassroots Activist Groups". In: *American Journal of Sociology* 119.3 (2013), pp. 655–681. URL: https://www.jstor.org/stable/10.1086/675347 (visited on 12/26/2019), p. 676.

be considered to those that would occur to and appeal to the people in those side conversations. Secondly, when consensus is implemented as a discussion which continues until no more dissent is heard, that will discourage participants from raising possibilities which they expect would be met with disapprobation by the group's most influential and personally inter-connected members.

3.3.4 Variations in structure

Campaigns were variously structured, with some as unincorporated independent entities, some established as student societies like SFU350 (generally requiring a constitution and elected roles, sometimes with financial and membership rules), and some as public interest research group (PIRG) working groups. In other cases, campaigns were run by pre-existing bodies, most often student governments. The frequent requirement that official student clubs have governing documents and elected positions was at odds with the non-hierarchical structure favoured by CFFD campaigns. Arielle Garsson described how the UBC campaign was specifically not established as a student group under the Alma Mater Society (AMS) because that would have required these governance structures. An organizer in the UVic campaign explained that they avoided club status "to have freedom and avoid the administrative requirements of being a student club." In contrast, SFU350 at Simon Fraser University was a student club with the requirements of keeping minutes, being open to all students, and having elected positions. At Concordia the existing Sustainable Concordia student club provided funding and meeting space for the divestment campaign, reducing the need for the group to have a more formally established character.

UBCc350 was an interesting outlier in that it was established as "a chapter of 350.org" with the intention of pursuing multiple simultaneous campaigns. ^{159,160} Marcus explained how after November 2011's campus visit by Bill McKibben the group initially prioritized a get-out-the-vote effort for the 2013 BC provincial election. ¹⁶¹ Hemmingway argued that UBCc350's involvement in non-partisan election organizing affected their perspective on issue linkage and intersectionality and produced a theory of change "quite explicitly focused on electoral politics" — calling "those origins... an anchoring point that affected the political composition of the group." ¹⁶² Marcus explained how the group normally focused on one campaign per year, generally working on divestment but with pauses for election organizing and a shift in 2018 to emphasizing resistance to Kinder Morgan's Trans Mountain pipeline. Stephanie Glanzmann described a range of non-divestment activities undertaken by UBCc350, including routine meetings with MP Joyce Murray; involvement in federal and provincial elections, and candidate debates; voter registration efforts akin to those of the progressive NGO LeadNow; pipeline and coal train resistance; and "funneling students to protests." Mobilizing within a multi-purpose group had advantages in that volunteers could pick campaigns that interested them and because different issues followed different tempos, creating immediate areas for action at most times rather than getting stuck waiting for a response from the target of a demand.

 $^{^{158}\}mathrm{Michelle}$ Marcus explained that official UBC clubs must hold elections at least for president and treasurer and they "wanted to be more informal" and disliked the title "president."

¹⁵⁹Aidid called the UBC campaign unique compared to those at Concordia and Waterloo because the group was not "strictly about divestment." Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. 85.

¹⁶⁰Aidid noted that UBCc350 changed their name to Climate Justice UBC shortly after UBC announced divestment. Campaign members felt this would "embed and commit to their values more deeply." Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. 66.

¹⁶¹Another UBC campaigner told me that influencing elections was the original purpose of UBCc350 and that they took on divestment as a temporary campaign between election cycles.

¹⁶²Corroborated by another interview participant, who said that divestment was intended as a temporary campaign between election cycles.

Toronto350.org was also multi-purpose: established in July 2012 before the main 350.org efforts to proliferate divestment and initially focused on resisting the Enbridge Line 9 pipeline reversal. After September 2012 the group established the first University of Toronto divestment campaign which, years later, spun out into an independent UofT350.org organization, which collapsed in acrimony after the target administration rejected their central demands in March 2016. The splitting away of the divestment campaign was justified largely in terms of avoiding the bureaucracy of the city-wide group, but also reflected interpersonal conflict, a desire for agency among the leaders of the student campaign, and the ongoing radical/reasonable CJ/CO₂-energy debate about issue linkage. The whole situation is something of a parable about legitimacy, structure, and efficiency, since Toronto350.org as a whole was originally established as a U of T club to avoid the bureaucracy and expense of becoming an incorporated non-profit, but then objections within the group that the organization was too U of T focused and didn't institutionally recognize non-students led to the decision to incorporate, creating the bureaucracy which then helped prompt the student campaign to split away.

While almost all the labour expended on CFFD campaigns came from student volunteers, there were a handful of people in the movement who were paid for some of their work. At McGill, the student society employed two people for three hours per week each to support the campaign, while the organization was also working to divest its own holdings from fossil fuels. At Concordia the campaign hired one researcher for a small contract researching socially responsible investment, the report from which is public online. In September 2019, a group of Harvard alumni hired two people to promote fossil fuel divestment. With the rarity of paid positions for divestment campaigners, perhaps volunteer labour itself can be considered a mobilizing structure. Tarrow's argument that contentious politics is triggered when actors lack resources of their own — and operates through "well-structured social networks" — could bolster the validity of this interpretation, since none of the pro-divestment actors have sufficient resources to organize campaigns based on paid labour. The specific characteristics of volunteer-run campaigns have indeed been highly significant to the CFFD movement, including in terms of the burdens borne by individual organizers and the challenges in sharing out work between activists while also making sure it was done.

3.3.5 The role of faculty and administrators

To correspond with the conceptual categories used in this dissertation, the discussion of the role played by faculty is split in two. Insofar as faculty members played a substantive role in organizing and implementing campaigns, they are part of a mobilizing structure which was relevant to how campaigns made decisions and set their tactical preferences. Pursuing faculty support as part of a strategy of building and demonstrating that multiple campus constituencies favour divestment is better understood as part of activist repertoires, and discussed in the next chapter.

Where faculty endorsements were simply legitimation for a campaign which they did not direct, they are best understood in the context of repertoires, whereas when faculty have influenced campaign organization and decision making it is best analyzed in terms of mobilizing structures. For example, Joanna Brenchley told me that the Dalhousie faculty association endorsed the campaign, but faculty members never attended planning meetings — putting the faculty role in that campaign in the repertoires (outside game / campus

¹⁶³Aidid interviewed an organizer at Concordia who was paid. Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. 76–7.

¹⁶⁴Alexandra Chaidaz and Aiden Ryan. Harvard Alumni Recruit Professional Divestment Activists. 2019. URL: https://www.thecrimson.com/article/2019/9/27/divest-hires-activists/ (visited on 10/07/2019).

 $^{^{165}\}mathrm{Tarrow},\,Power\;in\;Movement:\;Social\;Movements\;and\;Contentious\;Politics,\;3rd\;ed.$ p. 6.

support) rather than the mobilizing structures (decision making) category. Similarly, Tina Oh said that the Mount Allison faculty passed a motion of support, did some fundraising, and some showed up for actions including the camp out and die-ins, but that they were not involved as organizers. Lead organizer of Divest UVic Emily Lowan described to Camilla Bains for the *National Observer* that: "A real key to Divest UVic's success is that we have a great working relationship with our faculty association... We've done joint letters to the administration in the past, and we also pushed them to run a referendum amongst faculty, which had 77 per cent in favour (of divestment). Faculty support is key." 166

In some campaigns, faculty did take part in decision making. When asked about the role faculty played in their campaigns, CFFD organizers sometimes reported participation of a small number of faculty members in their planning meetings, and multiple interview participants and public documents described UBC as an unusually faculty-led campaign in the early years. More commonly, faculty members were lobbied to endorse divestment campaigns individually through public petitions or collectively through their faculty associations. At Dalhousie, UBC, and U of T faculty associations formally endorsed the call for fossil fuel divestment. At the University of Victoria, a faculty association vote in 2014 earned 66% support for divestment. Based on my interviews and campaign documents, three Canadian campaigns — at UBC, Lakehead, and Mount Allison — had faculty members play an enhanced midwife role in the establishment and early strategy of the campaign. At Mount Allison, the campaign began in professor Brad Walters' environmental activism and geography class, taken by founders including Emma Jackson and Lauren Latour. UBCc350 began with a focus on election organizing before divestment was proliferated as a strategy and involved a significant role for professors George Hoberg and Kathryn Harrison at the outset. 170,171

The UBC campaign has unique features from the perspective of faculty involvement, though many of the resulting dynamics also had variants at other schools. As described by Stephanie Glanzmann, the UBC campaign was largely kicked off by graduate students and two professors, George Hoberg and Kathryn Harrison, after Bill McKibben visited campus and "lit the fire" in 2012. Glanzmann described the first four years of the campaign as "very academic" and understood through a "policy lens instead of trying to build grassroots momentum" with effort focused on "inside baseball" with the board of governors. She also explained that she "really led the governance swap up" that took place as undergraduate students were deliberately empowered as faculty members "stepped back." Michelle Marcus also said that Hoberg and Harrison "stepped back" in spring 2016 and were not involved after the university rejected the campaign's

¹⁶⁶ Camilla Bains. Take Us More Seriously, Fossil Fuel Divestment Groups Tell School Administrators. 2021. URL: https://www.nationalobserver.com/2021/03/23/analysis/take-us-more-seriously-fossil-fuel-divestment-groups-canadian-universities (visited on 03/23/2021).

¹⁶⁷Between January 26th and February 8th 2015 955 UBC faculty members voted in a referendum on fossil fuel divestment, with 61.88% voting in favour. Veronika Bondarenko. *UBC Faculty Vote to Support Divestment from Fossil Fuel Companies*. 2015. URL: https://www.ubyssey.ca/news/ubc-faculty-vote-to-support-divestment-from-fossil-fuel-companies-907/(visited on 07/21/2019).

¹⁶⁸Diane Peters. Activists want Universities to Stop Investing in Fossil Fuels. 2014. URL: https://www.universityaffairs.ca/news/news-article/activists-want-universities-to-stop-investing-in-fossil-fuels/ (visited on 07/12/2019).

¹⁶⁹ James Rowe and Jessica Dempsey have also written about their perspective on faculty involvement in the UVic campaign: Emilia Belliveau, James K. Rowe, and Jessica Dempsey. Fossil Fuel Divestment, Non-reformist Reforms, and Anti-capitalist Strategy. 2021. URL: https://read.aupress.ca/read/regime-of-obstruction/section/356ae30b-935e-4882-bbe4-ba41d7ba3bc0 (visited on 05/13/2021).

 $^{^{170}}$ Stephanie Glanzmann identified Hoberg and Harrison as early organizers and said the campaign was "really based around those two."

¹⁷¹Corroborated by an anonymous interview participant who said faculty has played "a foundational role" in the early part of the campaign and played a big role in strategic decision making, though Hoberg avoided imposing his viewpoint.

core demands.^{172,173,174} These experiences illustrate the trade-offs between the three top-level objectives of institutional action, delegitimization, and activist development.¹⁷⁵ An interview participant explained that deciding how to respond to the administration's actions was a "splintering point" between faculty and students, as incremental efforts to improve on a promised Sustainable Futures Fund which would initially have included oil and pipeline companies was "not a good strategy for harnessing that anger" after students felt the university's actions to date were insubstantial or inadequate. This appears to demonstrate tension between faculty with permanent relationships with the university and willingness to take part in long processes of "inside baseball" lobbying and students with a stronger desire for immediate action and more desire for visible and highly participatory tactics.¹⁷⁶ Of course this is a generalization and there are counter-examples, such as when members of the *ad hoc* committee at U of T publicly criticized the president's decision to reject divestment in 2016.¹⁷⁷

Faculty members had both pragmatic and normative concerns about being too involved in campaigns or too strident in their support.¹⁷⁸ When McKibben visited UBC before the initiation of the divestment campaign there, a faculty member stressed to him the need to maintain credibility by not seeming too much like an advocate on any issue. McKibben responded that it is for fights like this that academics have been developing and protecting their credibility.¹⁷⁹ In 2018, U of T political science professor Jessica Green argued:

The time for being an honest broker has passed. The existential threat of climate change requires that we use our expertise, and our position of privilege in the academy, to advocate for solutions rather than merely lay out options. ¹⁸⁰

Some faculty members avoided taking part in CFFD campaign decision making because they felt they had less legitimacy in leadership roles than students; at least one other avoided such a role specifically because he saw the main point of divestment as the development of confidence and leadership skills among students. Simon Nicholson, a faculty member involved in the American University campaign, described "encouraging students to take the helm of the campaign at this first meeting" and being "cognizant of the professional risks, constraints, and relatively weak political leverage he faced as a faculty member." Even in research on divestment, some faculty members have expressed concerns about their positionality relative to student co-authors. In US CFFD campaigns, Bratman et al. identified how faculty "felt constrained from expressing outright support of student actions, especially as some student-led tactics violated codes of conduct.

 $^{^{172}\}mathrm{This}$ was corroborated by Alexander Hemmingway.

¹⁷³ See Canadian Press. UBC Board of Governors Votes Against Divestment from Fossil Fuel Industry. 2016. URL: https://www.cbc.ca/news/canada/british-columbia/ubc-board-of-governors-votes-against-divestment-from-fossil-fuel-industry-1.3317816 (visited on 10/01/2020).

¹⁷⁴This presaged a similar decision from Bill McKibben in July 2020 to "transition from active to emeritus status" in his work at 350.org. McKibben, A Letter to My Colleagues at 350.org (and Friends in the Broader Movement).

 $^{^{175}}$ On the multiple strategic goals of the movement, see: The CFFD movement's three strategic objectives p. 5

 $^{^{176}}$ On the multiple strategic goals of the movement, see: The CFFD movement's three strategic objectives p. 5

¹⁷⁷ Matthew Hoffmann et al. A Committee Replies. 2016. URL: https://www.theglobeandmail.com/opinion/letters/april-5-cash-access-politics-plus-other-letters-to-the-editor/article29517019/ (visited on 07/21/2019).

¹⁷⁸On activism in the workplace, see also: Ana L. Costa, Henrique Vaz, and Isabel Menezes. "The Activist Craft: Learning Processes and Outcomes of Professional Activism". In: *Adult Education Quarterly* (2021), p. 0741713620988255. URL: https://journals.sagepub.com/doi/full/10.1177/0741713620988255 (visited on 02/17/2021).

¹⁷⁹ In 2015 The Globe and Mail reported Hoberg's account of this back and forth: "Someone was asking McKibben, 'Doesn't becoming an activist undermine your credibility as a researcher and academic?' ... McKibben's response was: 'This is the most significant problem humanity has ever confronted, what are you saving your credibility for?' ... For a number of people in the room that was like a punch to the gut." Mike Hager. UBC Professors to Vote on Fossil-fuel Divestment. 2015. URL: https://www.theglobeandmail.com/news/british-columbia/ubc-professors-to-vote-on-fossil-fuel-divestment/article22547779/ (visited on 08/26/2019).

¹⁸⁰Jessica F. Green. Why We Need a More Activist Academy. 2018. URL: https://www.chronicle.com/article/Why-We-Need-a-More-Activist/243924 (visited on 02/17/2020).

¹⁸¹Bratman et al., "Justice is the Goal: Divestment as Climate Change Resistance", p. 686.

¹⁸²Bratman et al., "Justice is the Goal: Divestment as Climate Change Resistance", p. 678.

These constraints informed their relationships to transgressive direct action and expressions of political viewpoints."¹⁸³ Canadian faculty members interviewed for this project and consulted informally about the CFFD movement described similar norms of limited participation in student-led activism. The concerns of faculty about hewing to norms, and the likelihood that faculty will prioritize permanent relationships with their university administration over links to ever-changing student activist groups, substantiate the idea that within CFFD campaigns where faculty played a role in strategic planning they were likely to encourage a narrowly focused approach designed to be palatable to decision makers. Likewise, in cases where faculty who were involved in the initiation of campaigns later chose to step back, the choice was often justified by the view that students have greater legitimacy in making such demands. ¹⁸⁴

Even within organs of the university which institutionally opposed CFFD demands, interview participants reported occasional assistance in the form of 'inside information' from sympathetic individuals, particularly in the form of passing on information about the deliberations of committees which have not yet reported. One anonymous participant reported such sympathy and support from an employee of their university's asset management corporation, which had acted as an organization to avoid divestment. Bratman et al. also describe how student representatives and student trustees who attended board meetings "communicated the tenor and outcome of the discussion", assisting the campaign in deciding on next steps. The existence of such hidden allies is indicative of two things: the degree to which universities are far from monolithic in the preferences of staff members, and the degree of appeal the arguments and examples of CFFD activists can hold, creating the scope for persuasion.

3.3.6 The role of student governments

As formal representatives of the student body, student governments have been the targets of lobbying efforts by CFFD campaigns while themselves holding influence over which objectives, strategies, and tactics have been favoured by divestment campaigners. Relationships with student governments have also had some effect on campaign strategies. Sean Price, an organizer at Queen's, described how the Queen's Backing Action on Climate Change (QBACC) campaign was officially a club of their alma mater society, which provided funding. One interviewee reported that concern about being defunded encouraged that campaign to pursue non-confrontational tactics between 2016 and 2018, which included tabling, canvassing on campus, a petition, student education events, film screenings, and a "large art exposition" with wall-sized canvasses in the student centre. An organizer at Carleton said "they didn't really have a separate campaign from the graduate students' association," but that it was a lower priority campaign for them. A Winnipeg organizer said that the student association had played a large role, including reaching out to environmentalists to contact the administration in support of the campaign and working to collect data on the endowment, with their interest partly motivated by the fossil fuel industry's conduct toward Indigenous peoples. The role of student governments in the CFFD movement is chiefly discussed in the repertoires chapter since, with some exceptions aside, they were more important as a group of potential supporters to court through outside game strategies than as active participants in CFFD planning.

¹⁸³Bratman et al., "Justice is the Goal: Divestment as Climate Change Resistance", p. 686.

¹⁸⁴This in turn demonstrates a tension between pragmatism and idealism in how the climate justice movement sought to select spokespeople, insisting that marginalized groups and frontline communities were the most important to give a platform to. This is at odds with the perspective that decision makers are influenced by groups in proportion to their power, which suggests an alternative strategy of seeking spokespeople who are already influential and represent constituencies with real power within the target institution.

¹⁸⁵Bratman et al., "Justice is the Goal: Divestment as Climate Change Resistance", p. 687.

3.3.7 Diffusion between campaigns

The distinctiveness of the CFFD movement largely arises from how proliferators have sought to organize and coordinate the spread of ideas and strategies between campaigns. Through the campaign in a box, coordinated 'asks' and branding, and efforts through the media to present divestment as a unified and coordinated movement, proliferators acted as a mobilizing structure for the dissemination of forms of organizing. When he laid out criteria for evaluating whether a repertoire exists in the actions of a social movement, Tilly included:

Participants in contention give evidence that they are aware of those performances by giving names to them, referring to previous actions of the same kind, giving each other instructions, adopting divisions of labour that require prior consultation of experience, anticipating each other's actions, and/or terminating actions more or less simultaneously. 186,187,188,189

In the CFFD case, this took place both through organic contact between individual campaigns and via the mediation of proliferators. Soule notes that social movement organizations are not isolated entities, but monitor one another directly through interpersonal ties and indirectly through the media. ¹⁹⁰ While features of this analysis will be considered at greater length in the next chapter, the relationship to mobilizing structures here is clear. Repertoires within social movements emerge, are defined, and elaborated through interaction between activists, and those interactions help to define what is happening as a social movement. While many elements of the CFFD movement were adopted by individual campaigns from guidance provided by proliferator organizations, within ongoing campaigns the organizers were acutely aware of one another's tactical choices and the responses they provoked from universities, with information from limited media reporting, personal relationships, and a great deal of social media promotion. It is possible to identify specific cases where the media and personal communication networks between Canadian CFFD campaigns served as mobilizing structures though which a shared repertoire was defined. This includes substantial collaboration and scrutiny of proposals and media releases via platforms like Google Docs, as well as inperson sharing at convergences and on video calls. The dichotomy between direct diffusion via relational ties and indirect diffusion via cultural linkages needs updating now that communication technologies have blended the categories, and the coordinating role that proliferator organizations provide in the present context requires examination. 191,192

While proliferator organizations played a crucial role in initiating the fossil fuel divestment movement and establishing many of its practices around objectives and communication framing, documents and information from interview participants confirm that Canadian CFFD campaigns did interact with one another and influence each other's approaches in an ongoing way. Some interview participants described a measure of collaboration between campaigns. Bronwen Tucker said the McGill campaign worked closely with Concordia, while Mac Fitzgerald said that Queen's had cooperated somewhat with McGill. An organizer at the

 $^{^{186}\}mathrm{Tilly},\ Contentious\ Performances,\ p.\ 144.$

¹⁸⁷Soule cites Strang and Meyer's definition of diffusion as the "flow of social practices among actors within some larger system." Soule, "The Student Divestment Movement in the United States and Tactical Diffusion: The Shantytown Protest", p. 860.

¹⁸⁸David Strang and John W. Meyer. "Institutional Conditions for Diffusion". In: *Theory and Society* (1993), pp. 487–511. URL: https://www.jstor.org/stable/pdf/658008.pdf (visited on 04/16/2020).

¹⁸⁹McAdam and Rucht, "The Cross-national Diffusion of Movement Ideas".

¹⁹⁰Soule, "The Student Divestment Movement in the United States and Tactical Diffusion: The Shantytown Protest", p. 873.

¹⁹¹Soule, "The Student Divestment Movement in the United States and Tactical Diffusion: The Shantytown Protest", p. 860. ¹⁹²This kind of role for coordinating institutions isn't entirely new, of course. Soule notes how groups such as the American Committee on Africa (ACOA) and Africa fund had a geographic focus in the US northeast which was reflected in the level of mobilization in different regions. Soule also notes that the ACOA hired a student coordinator to facilitate communication between campus groups. Soule, "The Student Divestment Movement in the United States and Tactical Diffusion: The Shantytown Protest", p. 869, 876.

University of Winnipeg said they collaborated with other campaigns, especially Dalhousie. An organizer at SFU said they collaborated with UBC and Capilano University. Peter Gibbs said that the UVic campaign met with UBC and SFU but that no partnership arose. Tina Oh at Mount Allison said that campaigns could have strategized together and coordinated more, while Conor Curtis at Memorial said there was a lack of coordination with other groups and 350.org. Sean Price at Queen's said that beyond "Escalation Core" calls, there was little evidence of coordination between campaigns at different schools. Aidid noted that when CJUBC (formerly UBCc350) set out to design a reinvestment campaign, they collaborated with the groups at SFU and UVic. 193 In some cases, the influence between campaigns was direct but not based on interpersonal contact. A good example is how some formal briefs presented to university decision makers explicitly responded to arguments against divestment raised at other universities which rejected petitions. 194,195,196 CFFD organizers also observed one another's actions via social media, which may have involved a high degree of interaction or have been purely information flow in one direction. In addition to influencing efforts to persuade target administrations directly, tactical diffusion among campaigns influenced their approach to building a coalition of support in the community. Jed Lenetsky described how Divest McGill's first Fossil Free Week in 2014, which included a campout outside the administration building, was modeled on such a week previously held at Harvard. In other cases, diffusion took place informally and largely invisibly through developing interpersonal networks between student activists, accelerated and interlinked by convergences like Power Shift conferences.

3.4 Sophisticated planning despite informality

While I have identified some limitations of informal approaches in terms of being fully participatory and generating institutional memory, I do not want to over-state the case that informality impeded the success of Canadian CFFD campaigns. Indeed, since the main expected consequence of limited institutional memory would be an inability for campaigns to persist across time and despite setbacks, the experience of how Canadian campaigns endured despite avoiding conventional forms of institutional embodiment requires explanation.

Almost all CFFD campaigns in Canada were deliberately informal and non-hierarchical, eschewing formalized roles for organizers, governing documents like constitutions and written policies, and formal decision making procedures. ^{197,198} Using this approach, organizers in Canada were nonetheless often able to implement sophisticated multi-year campaigns which were progressively handed off from one cohort of student organizers to the next. They employed sophisticated strategic planning and scenario analysis while deploying

¹⁹³Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. 91.

¹⁹⁴The U of T divestment brief included responses to the rejections at McGill, UBC, and Harvard. Toronto350.org, *The Fossil Fuel Industry and the Case for Divestment: Update*, p. 137–41.

 $^{^{195}}$ UofTFacultyDivest.com was also copied from harvardfacultydivest.com using volunteer labour and free and open source software.

¹⁹⁶The Fossil Free York brief contained responses to the rejections at U of T and the University of Ottawa. Fossil Free York. *Make YorkU a Climate Leader: The Case for Fossil Fuel Divestment.* 2016. URL: https://web.archive.org/web/20181013173414/http://yuacri.info.yorku.ca/files/2016/11/Fossil-Free-York.pdf (visited on 10/13/2018), p. 23-5.

¹⁹⁷Belliveau argued: "Distributed leadership models, non-hierarchical or horizontal organizing are examples of how campaigns use social justice practices to embody climate justice in their structure." Belliveau, "Climate Justice in the Fossil Fuel Divestment Movement: Critical Reflections on Youth Environmental Organizing in Canada", p. 40.

¹⁹⁸ Schlosberg argued: "Democratic and participatory decision-making procedures are then both an element of, and a condition for, social justice; they simultaneously challenge institutionalised exclusion, a social culture of misrecognition, and current distributional patterns." David Schlosberg. "Reconceiving Environmental Justice: Global Movements and Political Theories". In: Environmental politics 13.3 (2004), pp. 517–540. URL: https://www.tandfonline.com/doi/pdf/10.1080/0964401042000229025 (visited on 05/06/2022), p. 519.

a broad range of mostly coordinated tactics, which were directed at audiences including target administrations, government decision makers, the media and general public, and other climate change activists.

Informality need not exclude all structured decision making processes. CFFD campaigns made use of scenario planning (where they considered the range of all plausible university responses and developing plans for each) and undertook detailed and participatory strategy discussions before major actions. Laura Cutmore described how before the Dalhousie campout organizers undertook a structured discussion on goals, messaging, and timing. The campaign made use of a "tactic star" tool to consider tactical choices in terms of their relationship to strategic goals; the target the action was seeking to influence and its likely effect; whether the resources required were available and did not have better uses; what the ideal timing would be; the effect of using the tactic on participants; the message the tactic would send; how the tactic related to the broader landscape of political opportunities; and what effect using the tactic would have on the group's relationships. ¹⁹⁹ At U of T, organizers collaborated in a Google Docs spreadsheet while discussing possible decisions by the university and what the campaign's agreed responses would be in each case. This supported the campaign's rapid response to the administration's 2016 rejection, which was learned about a night early because it had been posted in a searchable but not yet published way on the WordPress website of the office of the president. At MUN, Connor Curtis similarly described how the campaign tried to game out likely administrative responses and plan reactions to them.

Campaigns developed sophisticated strategies for responding to setbacks including the rejection of their demands from target universities and the loss of key organizers. These were largely based around an awareness of the psychology of activism: particularly the understanding that climate activists are rarely driven by personal tangible incentives but rather have their experiences and behaviours shaped by the network of interpersonal relationships between campaign members.²⁰⁰ Unlike corporate or government structures with accountability based on reporting relationships with superiors and the threat of being fired, volunteer-run campaigns must share out work and track completion via voluntary social mechanisms like providing an example to emulate, reminders, and peer pressure. Four special challenges ought to be considered when examining CFFD campaigns. They had to function using the volunteer labour of students with other simultaneous commitments. They had to manage the distribution of workload under conditions which often caused the burnout of the most committed and involved organizers.²⁰¹ Climate change induces novel and serious forms of stress in those organizing against it. Finally, informality can impede the clarity of decision making, render it less participatory, and inhibit the formation of institutional memory.

3.4.1 Burnout and sustaining campaigners

Particularly insofar as it shapes and is shaped by mobilizing structures, the sociology of student-run volunteer campaigns is important for understanding their internal functioning. Within campaigns run by small numbers of volunteers who often think of one another as friends, conflict invariably has a personal dimension. When a state of enmity exists, everyone involved thinks they have a good justification for their position and choices; self-regard demands that you take your own side. Disagreements within CFFD

¹⁹⁹ This method is included in a 350.org campaign in a box document: 350.org. Fossil Free: A Campus Guide to Fossil Fuel Divestment. 2014. URL: http://gofossilfree.org/wp-content/uploads/2014/05/350_FossilFreeBooklet_L04.pdf (visited on 03/18/2017), p. 28.

²⁰⁰This is one of the factors that most distinguishes the CFFD movement from community organizing of the sort championed by Saul Alinsky, which was driven by the desire for tangible gains for those involved in the movement.

²⁰¹Lakanen similarly described burnout — defined as "a deeper and persistent feeling of disconnection, hopelessness, depression, or withdrawal" — among activists in the broader climate justice movement. 16 of her 35 interview participants mentioned it as something they or someone close to them experienced. Lakanen, "'A Battle for the Soul of the Climate Movement': The Expansion of the Intersectional Climate Justice Frame Among Young Activists in Canada", p. 167, 157-8, 163, 168-80.

campaigns had major importance for volunteer motivation and retention, as did the structural efforts which were made to manage those conflicts. With the radicalism and internal contentiousness of the climate activist movement, some measure of being able to tolerate disagreements among your co-organizers is a necessary precondition for participation in CFFD campaigns. There are of course individual limits to that toleration, and infighting and the resulting stress and strained interpersonal relationships were identified in my interviews as important causes of burnout, individual departures, and even the fragmentation of campaigns.

Awareness of the dangers posed by climate change and humanity's inadequate response to it has been a source of enormous stress for many CFFD organizers. One CFFD proliferator whom I interviewed described how a 350.org staff member had given them Laura van Dernoot Lipsky and Connie Burk's Trauma Stewardship — a discussion of secondary trauma among those in caring professions, with many references to the psychological burdens borne by environmental activists. 202,203,204,205,206 These pressures were exacerbated by the perception within CFFD campaigns that climate change is an enormously urgent and consequential issue, feeding a sense that the "world is burning" whether they were working their hardest or not, and contributed to some of the characteristic burnout problems described by Lipsky and Burk, such as feelings of hopelessness and never being able to do enough, fear, and guilt. 207,208 The sense that so much was on the line contributed to the emotional intensity of the movement, with profound fears about the future of human civilization adding to the salience of disagreements about what ought to be done and how. The fact that these motivations will not go away likely contributes to the formative power of the movement for organizers, who have been exhorted to participate as a way to save their own futures.

The voluntary and extracurricular nature of CFFD campaigns made it challenging to get tasks completed capably while also maintaining the health and motivation of key organizers.^{209,210,211} The problem of burnout was worsened by the dynamics of youth-run volunteer organizations. Some young organizers had not learned delegation skills, or found that delegation could not be successfully used with activists who won't follow instructions in a volunteer context in the way they might in an employment context. Since activists did

²⁰²In the introduction the authors noted: "We cannot ignore emerging information about the profound levels of trauma exposure among people in the front lines of the environmental movement – those fighting to stop the juggernaut of global warming and those who strive desperately, in the face of mounting losses, to ward off the extinction of countless species of plants and animals." Laura van Dernoot Lipsky and Connie Burk. *Trauma Stewardship: An Everyday Guide to Caring for Self While Caring for Others.* San Francisco, CA: Berrett-Koehler Publishers, 2009, p. 5–6.

²⁰³Fraser et al. argued that "consciously or subconsciously, conservationists live with a high degree of negative emotional experience as part of their daily awareness of the problems that ensue from human degradation of the natural environment." John Fraser et al. "Sustaining the Conservationist". In: *Ecopsychology* 5.2 (2013), pp. 70–79. URL: https://www.liebertpub.com/doi/10.1089/eco.2012.0076 (visited on 12/26/2019).

²⁰⁴On the psychology of environmental activism, see also: Alex Kirby. Antecedents of Turnover for Field Staff in Wilderness Therapy Programs. Antioch New England Graduate School, 2006.

²⁰⁵Daniel Gilford et al. The Emotional Toll of Climate Change on Science Professionals. 2019. URL: https://eos.org/features/the-emotional-toll-of-climate-change-on-science-professionals (visited on 12/26/2019). ²⁰⁶Wray, Therapy for the End of the World.

²⁰⁷Lipsky and Burk, Trauma Stewardship: An Everyday Guide to Caring for Self While Caring for Others.

²⁰⁸Susanne Moser described the psychological barriers to climate action as: "invisibility of causes, distant impacts, lack of immediacy and direct experience of the impacts, lack of gratification for taking mitigative actions, disbelief in human's global influence, complexity and uncertainty, inadequate signals indicating the need for change, perceptual limits and self-interest." Susanne C. Moser. "Communicating Climate Change: History, Challenges, Process and Future Directions". In: Wiley Interdisciplinary Reviews: Climate Change 1.1 (2010), pp. 31–53. URL: https://onlinelibrary.wiley.com/doi/abs/10.1002/wcc.11 (visited on 12/29/2019), p. 31.

²⁰⁹ On activist retention see: Leslie A. Bunnage. "Social Movement Engagement over the Long Haul: Understanding Activist Retention". In: Sociology Compass 8.4 (2014), pp. 433-445. URL: https://onlinelibrary.wiley.com/doi/abs/10.1111/soc4. 12141 (visited on 12/26/2019).

²¹⁰James Downton and Paul Wehr. *The Persistent Activist: How Peace Commitment Develops and Survives*. Boulder, Co: Westview Press, 1997.

²¹¹James Downton Jr and Paul Wehr. "Persistent Pacifism: How Activist Commitment is Developed and Sustained". In: *Journal of Peace Research* 35.5 (1998), pp. 531-550. URL: https://www.jstor.org/stable/425698?seq=1#metadata_info_tab_contents (visited on 12/26/2019).

not have an employment or other formalized or enduring relationship with the campaign, many campaigns had difficulty with accountability: with people not always following through on tasks for which they had volunteered. Since there were always many means through which a CFFD campaign could be advanced, there was always an endless catalog of potential actions for each organizer. That often led to the most motivated organizers taking on more and more, diminishing the sustainability of their own contribution, limited the spread of skills within the organization, challenging notions of equitable participation, and causing large problems when key organizers graduated or left the campaign. For the most active organizers, participation could be akin to "taking another class or even a part time job on top of school." Especially with the mental stress associated with climate change, such burdens could not always be sustainably borne and made campaigns disproportionally reliant on their most active members.

Campaigns which persisted through rejections and cycles of new students after graduations had successfully convinced a number of Canadian universities to divest by the time of publication. That demonstrates the relevance of activist development to the functioning of this style of transnational activist campaign which targets non-governmental actors. The proliferator organizations, chiefly 350.org, were able to distribute labour-intensive work to self-organizing self-governing campaigns, which in turn almost invariably functioned using the volunteer labour of members of the university community, especially undergraduate students. The general university administration counter-repertoire of out-waiting student-initiated social justice campaigns was outlasted in some cases by CFFD campaigns which persisted until new political opportunities arose which proceeded, in the context of sustained and visible activist pressure, to lead to divestment announcements and reversals of prior rejections. This need for endurance makes volunteer recruitment and retention crucial to having a chance at success.

When analyzed through the contentious politics framework, techniques which CFFD campaigns used to recruit and motivate volunteers, promote self-care, and manage burnout are better understood as mobilizing structures for activism than as repertoires of performance.²¹³ They were meant to sustain capability internally, not influence outsiders. Justin Van Ness and Erika Summers-Effler described how social movement organizations and protest situations "afford opportunities to generate and experience pleasurable emotions", including "thrill and risk" in contrast to "day-to-day mundanity" and "the pleasures of protest, such as fun, opportunities for creativity, flirting, and prospects for sex."^{214,215} They further argued that "emotional bonds which tie together activists can also generate emotional rewards for continued participation, as well as potential emotional costs for exiting."²¹⁶ The emotional motivations can contribute to activist burnout, as organizers themselves are driven to take on more tasks and as social sanction against stepping back impairs delegation and the maintenance of a sustainable pace of involvement for campaign leaders. At the same time, the satisfaction that arises from the feeling of having personally taken action in response to an important problem helps explain why campaigns were able to persist through setbacks and difficulties. This suggests a variation on the psychological strain model for the emergence of activism, in which participation is rewarded and sustained by feelings of success and making a contribution.

 $^{^{212}}$ For a list of commitments to act by Canadian universities up to the time of writing, see: Campaign outcomes at Canadian universities p. 221

²¹³On activist burnout, see: Paul C. Gorski and Cher Chen. "'Frayed all over:' The Causes and Consequences of Activist Burnout Among Social Justice Education Activists". In: *Educational Studies* 51.5 (2015), pp. 385–405. URL: https://www.tandfonline.com/doi/pdf/10.1080/00131946.2015.1075989 (visited on 05/06/2022).

²¹⁴Van Ness and Summers-Effler, "Emotions in Social Movements", p. 414.

²¹⁵Summers-Effler provided a book-length ethnographic examination of "how high-risk, altruistic social movement groups maintain commitment" in: Erika Summers-Effler. *Laughing Saints and Righteous Heroes: Emotional Rhythms in Social Movement Groups*. Chicago: University of Chicago Press, 2010.

²¹⁶Van Ness and Summers-Effler, "Emotions in Social Movements", p. 415.

Counter-burnout strategies are one area where the transnational character of the CFFD movement is evident. There is a high degree of overlap between the experiences and strategies used to sustain organizers in Canada and those in the US and UK. The handbook released by the Fossil Free Macalester campaign in Minnesota codifies many recruitment and retention practices employed in Canadian CFFD campaigns and described to me by interview participants from Canadian schools. ^{217,218} It describes how the campaign emphasized recruitment during the start of semester, sought to parcel out work to new members in a way that would engage and not overwhelm them, and used one-on-one meetings between new and experienced members to "build stronger relationships among our members and with other organizing groups on campus." In most semesters they also held a retreat for long-term planning and visioning exercises, consistent with some Canadian groups.

Mechanisms of emotional nourishment and care within CFFD campaigns were most relevant during the two principal kinds of setbacks reported by interview participants: formal rejection of their demands by target administrations and the graduation or departure of core organizers, especially a campaign's founding group. Somewhat counter-intuitively, in debriefs between long-term Canadian CFFD organizers facilitated by the Climate Justice Organizing Hub in mid-2022, campaigns that had their central demand of institutional divestment implemented also found it to be a challenge for group cohesion and recruitment, in part because the template provided by the campaign in a box did not include clear follow-on activities. This is at odds with the common activist belief that success produces 'momentum' that leads to further success. Since Canadian campaigns generally required many efforts to persuade target administrations to divest, campaign endurance was an indispensable factor in successes. That endurance reflects the degree of commitment from activists determined to make a difference on climate change, and demonstrated that capable multi-year campaigns could be operated without formal roles and decision making processes.

3.5 Improving mobilizing structures

This dissertation is not meant to be only a critique of some of the downsides of informality, but also to include some suggestions derived from the information collected in my interviews.²¹⁹ First, it is important to challenge the assumption that a lack of hierarchy and formality fosters broad participation. Second, formal roles can be mechanisms for accountability and knowledge transmission, which are important because volunteer-based campaigns lack accountability mechanisms and informality impedes the accumulation of institutional knowledge.

²¹⁷The handbook produced by Fossil Free Macalester detailed their use of "core" members as an alternative to formal hierarchy: "In structuring our meetings, relationships, and organization structure, we thought a lot about longevity and how to keep members engaged and involved over a long period of time. Instead of having a leadership structure with co-presidents at the top and other defined org positions below (e.g. secretary, op-ed writer, liaison to board, event planner), we formed a 'core' group of the most committed members to plan meetings and lead the org. Core members met once on the weekends in addition to the 'general' weekly Tuesday meetings. Members of the 'general' group could join core at any time, and the meetings were always open to anyone who wished to stop by. During core meetings, the whole group discussed long term strategies, planned upcoming events, and worked together to set the agenda of our next general meeting." Gvozdic et al., *Handbook: Lessons from a Divestment Campaign*, p. 6.

²¹⁸The handbook also explained lessons learned about institutional memory: "We believe that there is value in documenting the ways in which FFM involved the entire Macalester community — students, staff, faculty, alumni, the Macalester College Student Government (MCSG), the President, and the Board of Trustees — on an issue that we care about. We also want to write down what worked well for us and what did not, especially in terms of sustaining a movement over a long period of time. We hope that this will be helpful to other movements on campus." Gvozdic et al., *Handbook: Lessons from a Divestment Campaign*, p. 2.

²¹⁹In order to strengthen the principle of participation, Aidid recommended that CFFD organizers "create formalized processes for decision-making and conflict resolution and recruitment to gain and retain members." Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. 111.

After discussing some of the challenges with implementing an informal consensus-based model of decision making, Naomi Goldberg said: "If I could do it again, I think I would instate in some cases formal decisionmaking processes but I don't think we knew how to do that or what our options were." As examples, Goldberg listed requiring everyone to speak on important decisions; alternating who acted as meeting facilitator while requiring them to limit their role in decision making; and holding more formal votes on major actions. Some CFFD campaigns and organizations organizing CFFD campaigns did at times employ more formalized methods, such as when Toronto350.org required that proposals of a certain level of cost or importance be circulated in advance. More often, based on my interviews, when they did exist formal documents and processes were not applied in practice, illustrating the disjoint between having rules and applying them. In addition to affecting day-to-day decision making, the choice of mobilizing structures by CFFD campaigns relates to debates within activism about whether formalized institutions are desirable and worth the effort to create. Piven and Cloward famously argued that activists at decisive moments have too-often been caught up in the task of institution building, using "moments of madness" when drastic change may be possible "to draft constitutions" in the conviction that doing so will yield increased future influence. ²²⁰ This perspective may in part have informed the thinking behind the Occupy movement and the advocacy by proliferator organizations for non-hierarchical and informal campaign organization. Frequent complaints about how discussions of structure and decision making processes were boring and bureaucratic demonstrates how connections were not always drawn between the desire to be participatory and inclusive and the implementation of mechanisms to support that.

To be informed and participatory, decision making must happen in a context where all members of an organization are aware of what is being decided and the considerations in favour of and against each potential course of action. This is made possible by 'bureaucratic' mechanisms like circulating meeting agendas in advance, along with detailed proposals when major decisions are being made. When only a small subset of campaign members reach consensus on their own, and then seek ratification of their choices by the broader membership in the absence of notice and supporting materials, it is easy to represent the decisions of that subgroup as the will of the entire organization. It also contributes to chaotic "garbage can" style decision making where the arguments and options which are most readily at hand end up favoured because of their accessibility. As additional benefits, producing and circulating proposals, agendas, and minutes creates a stock of organizational knowledge which anybody can refer back to. This potentially reduces the extra influence that long-term campaign members possess, and avoids circular discussions which persist because of a lack of clear and documented resolution.

A disinclination toward hierarchy can be taken too far when it results in a lack of clear accountability regarding who has agreed to do what. As implemented in the CFFD campaigns I studied, formal elected roles were rarely the subject of electoral competition between different people presenting different agendas, and served more as a voluntary way for people to step forward and take responsibility for specific tasks and dimensions of group work. This made it easier for the group as a whole to track of whether agreed decisions are being implemented, and for less involved group members to know who to contact about an issue or question. As the comment about "train[ing] ourselves out of our jobs" illustrates, having and then passing on formal roles can be a mechanism for developing new organizers and passing off tasks from the over-worked in danger of burnout to others.²²¹ Keeping sets of records and communications tied to a position also allows

 $^{^{220}}$ Piven and Cloward, $Poor\ People$'s Movements: $Why\ They\ Succeed,\ How\ They\ Fail$, p. xxii.

²²¹Lakanen also commented on how turnover can be positive, with "benefits gleaned from the constant renewal of energy from new people getting involved in the form of infusions of energy and hope." Lakanen, "'A Battle for the Soul of the Climate Movement': The Expansion of the Intersectional Climate Justice Frame Among Young Activists in Canada", p. 166.

whoever occupies it next not to start from zero, but to have a searchable record of prior communication and decisions.

In sum, organizers should consider two take-aways from how informality worked in the Canadian CFFD movement. First, it should not be taken for granted that informality will lead to broadly participatory and democratic decision making, and thus the preference for such organizing styles on the basis of that aspiration should be tempered by experience of how consensus based decision making worked in practice. Second, divestment campaigns should recognize that success will likely only result from many years of effort and several generations of organizers. As such, they should devote effort to educating new participants with the benefit of the experiences of their predecessors and to documenting how and why choices were made. Mechanisms like decision matrices which note the objections of critics as well as the decision made by the group overall could help limit the degree to which the dominant view ends up concealing alternative analyses. Formal roles can also help to coordinate and manage labour in volunteer campaigns.

3.6 Wrap-up: Hidden $CJ-CO_2$ -e contention throughout the movement

With "consensus" interpreted as talking until dissenters stopped expressing their views, informal decision making enhanced the apparent dominance of the CJ perspective for those viewing the CFFD movement from the outside. Likewise, the shared aspiration for a concrete victory helped maintain a sometimes awkward coexistence between the two camps. CO_2 -e advocates remained involved in CJ-dominated campaigns out of the hope for victory, because the early 350.org framing emphasized the need for a diversity of viewpoints within the movement, and because the CJ-dominated CFFD movement had advantages in public visibility and recruitment which they could not have independently replicated. A further nuance also helps explain why they stayed in the coalition. While CO_2 -e advocates questioned the reasoning and political soundness of the CJ approach, they broadly shared the views of CJ advocates about what sort of policies are desirable in areas like economic redistribution and minority rights. They simply held them not to be integral to a successful climate change mitigation effort, and recognized how radical demands for systemic transformation alienated some potential supporters.

There are three major ways in which the organization of CFFD campaigns has concealed and obscured the enduring presence of both CJ and $\rm CO_2$ -e views.

First, the common messaging and 'ask' from the campaign in a box created a powerful public sense that the CFFD movement was unified in its objectives and analysis, as demonstrated by their willingness to accept Fos-

sil Free's figures on the number of institutions that have acted on a single cause. ^{222,223,224,225,226,227,228,229} The desire to maintain that perception, and the idea that 'momentum' was transferable between successful and ongoing campaigns, gave organizers the incentive to downplay contention insofar as it could be perceived by target administrations and the mass public. ²³⁰ This likely partly explains McKibben's non-contentious account of the turn toward climate justice, described in the introduction. CFFD organizers also tailored their messages to the presuppositions of target administrations, "temper[ing] its transformational perspectives for public consumption as a strategic choice." ²³¹ The ambiguity between inside game / outside game strategies and incrementalist versus radical theories of change helped make the movement hard to understand, making divisions of opinion within it less evident.

Second, the approach to decision making and particularly to evaluating consensus within campaigns allowed those with the increasingly dominant climate justice perspective to keep asserting their positions until critics who perceived themselves to be in the minority chose to be silent. Instead of being democratic and empowering, the informal and non-hierarchical form of organization encouraged in the campaign in a box facilitated the dominance of one world view over the other. Ironically, structures designed to avoid the perceived undemocratic character of formal and hierarchical structures ended up concealing disagreement and supporting the dominance of organizers with one world view over the others: dominance asserted through the practices of non-domination.

Third, climate justice proponents conflated the question of whether support for issues like racial, sexual, and Indigenous justice should be linked with climate change mitigation demands in the context of a CFFD campaign with the question of whether such forms of justice should be substantively supported on their own merits. Within an activist culture that heavily emphasizes social justice, strong pressure existed to accept the issue linkage to avoid the perception of being opposed to these non-climatic forms of justice them-

²²²An index of divestment commitments formerly at gofossilfree.org and maintained by 350.org has been cited by the organization and journalists as the sum of all the assets of institutions that have committed to divestment: Bill McKibben. *This Movement is Taking Money Away From Fossil Fuels, and it's Working.* 2021. URL: https://www.nytimes.com/2021/10/26/opinion/climate-change-divestment-fossil-fuels.html (visited on 10/26/2021).

²²³Jamie Henn. Throwback: On Dec 4, 2012 we got the first major national news story on fossil fuel divestment. We'd only gotten 2 colleges to commit to divest. Today, over 1,300 institutions representing \$14.48 TRILLION have made a commitment. 2020. URL: https://twitter.com/jamieclimate/status/1336365242457079808 (visited on 08/31/2021).

²²⁴Damian Carrington. Fossil Fuel Divestment Funds Double to \$5tn in a Year. 2016. URL: https://www.theguardian.com/environment/2016/dec/12/fossil-fuel-divestment-funds-double-5tn-in-a-year (visited on 01/23/2017).

²²⁵ Matt Egan. Investors Holding \$41 Trillion Demand Action on Climate — Now. 2021. URL: https://www.cnn.com/2021/06/10/investing/climate-change-g7-investors/index.html (visited on 06/10/2021).

²²⁶Reuters. Philanthropies and Investors Pledge \$50 Billion Divestment from Fossil Fuels. 2014. URL: https://www.japantimes.co.jp/news/2014/09/24/business/philanthropies-and-investors-pledge-50-billion-divestment-from-fossil-fuels/ (visited on 10/15/2020).

²²⁷Presenting these results as the consequences of the CFFD movement reinforced the idea that the movement was coherent and bore responsibility for these outcomes. As such, it has served as part of the campaign in a box for campus fossil fuel divestment proliferated first by 350.org, and subsequently by the CYCC, DSN, People & Planet, and others.

²²⁸The same source is cited in scholarly work: Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. 2.

 $^{^{229}\}mathrm{Mikkelson},$ "Divestment and Democracy at a Canadian University", p. 1.

²³⁰Belliveau argued: "Demonstrating the growth of divestment can be understood as a strategic choice by organizers to maintain narratives of movement momentum." Belliveau, "Climate Justice in the Fossil Fuel Divestment Movement: Critical Reflections on Youth Environmental Organizing in Canada", p. 98.

²³¹Belliveau, "Climate Justice in the Fossil Fuel Divestment Movement: Critical Reflections on Youth Environmental Organizing in Canada", p. 55.

selves.^{232,233,234} The highly emotional character of CFFD campaigns is also an important consideration.²³⁵ Lakanen described how "young activists report that their identity is wrapped up in their activism, that they 'can't imagine doing anything else.' "²³⁶ This connection between identity and activism plausibly meant that CFFD organizers wanted to bring their whole lives into their organizing work, particularly the varied justice campaigns which the CJ framing argues to be inseparably linked from success in climate change mitigation. One of her interview participants described climate change as linked to not only unequal economic, financial, social, and political systems but "all the other issues that people are concerned about." ²³⁷

For the most part, Canadian CFFD campaigns internalized a perspective on organizing in which hierarchy — even when designed and staffed through voting and election by those involved — is seen as a waste of activist effort or even as the reproduction of forms of oppression. They didn't want to be sitting around writing constitutions while the climate crisis deepened. The CFFD movement has a structure characterized by informality and a lack of hierarchy. Rather than providing resources or directives to individual campus campaigns, 350.org and other divestment proliferators principally provided materials which could be adapted to any campaign and a measure of personal guidance and support, most notably in terms of coordinating efforts between campaigns like days of action and particular messaging strategies. Both out of their own inclination and out of encouragement from proliferators, campaigns adopted informal styles, with few making use of constitutional documents, written rules, and formal decision-making procedures. These choices affected the ability of campaigns to develop institutional memory, though weakness in that area was partially countered through mechanisms like having organizers who play defined roles be shadowed by others who can help share the burden or eventually take over.²³⁸ They also affected the dynamics of who had influence within divestment campaigns, as informal structures and decision-making styles shifted the locus of decisionmaking into self-selected groups functioning through interpersonal relationships and not necessarily with the awareness or participation of all campaign members, though campaigns often did allow anyone who so desired to become a 'core member' or participate in additional strategy and planning meetings.

Returning to the questions which opened this chapter, we now have substantive information to illustrate the style of organizing which proliferators encouraged, how campaigns sought to implement it, and the variation that arose. As broadly noted in the scholarly literature on the CFFD divestment movement, it

²³²Lakanen described how some Canadian climate activists were sustained by relationships and a sense of community in the movement, while others "suggest that actors within the movement can be too critical of one another, and that this leads to feelings of alienation." Lakanen, "'A Battle for the Soul of the Climate Movement': The Expansion of the Intersectional Climate Justice Frame Among Young Activists in Canada", p. 172–4.

²³³Describing a context with similar social pressures, long-time lawyers at the American Civil Liberties Union (ACLU) told the New York Times in 2021 that their younger colleagues "placed less value on free speech, making it uncomfortable for them to express views internally that diverged from progressive orthodoxy" and that "a dogmatism descends sometimes" where you "hesitate before you question a belief that is ascendant among your peer group." Michael Powell. Once a Bastion of Free Speech, the A.C.L.U. Faces an Identity Crisis: An Organization that has Defended the First Amendment Rights of Nazis and the Ku Klux Klan is Split by an Internal Debate Over Whether Supporting Progressive Causes is More Important. 2021. URL: https://www.nytimes.com/2021/06/06/us/aclu-free-speech.html (visited on 06/24/2022).

²³⁴Ryan Grim. Elephant in the Zoom: Meltdowns Have Brought Progressive Advocacy Groups to a Standstill at a Critical Moment in World History. 2022. URL: https://theintercept.com/2022/06/13/progressive-organizing-infighting-callout-culture/ (visited on 06/24/2022).

²³⁵In a meme, Adam Kurtz altered the bromide "Do what you love and you'll never work a day in your life" by crossing out "never work a day in your life" and adding "work super fucking hard all the time with no separation or any boundaries and also take everything extremely personally." Adam J. Kurtz. Do what you love and you'll work super fucking hard all the time with no separation or any boundaries and also take everything extremely personally. 2019. URL: https://twitter.com/adamjk/status/1103367035650797569 (visited on 04/25/2022).

²³⁶Lakanen, "'A Battle for the Soul of the Climate Movement': The Expansion of the Intersectional Climate Justice Frame Among Young Activists in Canada", p. 165.

²³⁷Lakanen, "'A Battle for the Soul of the Climate Movement': The Expansion of the Intersectional Climate Justice Frame Among Young Activists in Canada", p. 2.

²³⁸Though it should be noted that such in-person transmission of institutional memory does not generate documents for the evaluation of scholars, or for the benefit of campaign members after such a train of transmission has been broken.

has mostly influenced participants in the direction of intersectional analysis; this leaves CO_2 -energy focused organizers, as well as climate mitigation advocates outside the progressive movement, with a limited institutional and interpersonal network through which to promote fossil fuel abolition, and the climate change mitigation movement itself dependent on the political success of progressive parties in gaining power. The experiences of campaigns in implementing and making use of their organizing structures illustrate the three ways in which the presence and severity of $CJ-CO_2$ -e contention was downplayed. People with both perspectives perceived the value of being seen as a unified movement, and so downplayed disagreements in contexts visible to outsiders. ^{239,240} The lack of formalized and documented decision making procedures reduced the visibility of disagreement while exaggerating the strength of the consensus around the dominant view. The broadly similar political attitudes, progressive social views, friendship context of CFFD organizing, and strong emotional component of divestment organizing also softened persistent debates about issue linkage, in part because nobody wanted to be seen as an advocate of injustice in contexts other than climate change.

²³⁹This is relevant in research as well. Bergen and Labonté defined social desirability bias as: "the tendency to present oneself and one's social context in a way that is perceived to be socially acceptable, but not wholly reflective of one's reality. In research, the bias denotes a mismatch between participants' genuine construction of reality and the presentation of that reality to researchers." Nicole Bergen and Ronald Labonté. "'Everything is perfect, and we have no problems': Detecting and Limiting Social Desirability Bias in Qualitative Research". In: *Qualitative Health Research* 30.5 (2020), pp. 783–792. URL: https://journals.sagepub.com/doi/pdf/10.1177/1049732319889354 (visited on 06/25/2022), p. 783.

²⁴⁰Aidid discusses this in the context of CFFD research: Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. 115-6.

Chapter 4

Repertoires

Throughout this dissertation I have relied on the central theatrical metaphors from the contentious politics theoretical framework, with activists seen as performers who work to persuade an audience. The political opportunity structure was conducive to this sort of movement because the salience of climate change had risen, 350.org acted as a proliferator and shared a model for campaigns, and universities were persuadable targets with societal influence that made them worth convincing. The movement's inward-facing mobilizing structures allowed for decisions to be made, priorities chosen, and campaigns implemented — though the particularities of the CFFD case meant that the dominant climate justice framing was presented as a desirable end perspective for everyone, obscuring the presence of persistent contention within the CFFD movement. The characteristics of those inward-facing structures also helped determine how the movement performed in public, since the range of options available was influenced by the capabilities of a volunteer-run student campaign. To further develop the analysis of the CFFD movement as a set of performances undertaken by actors to persuade multiple audiences, we must now turn to the outward public-facing actions that campaigns undertook. The repertoires of CFFD campaigns included lobbying target administrations with briefs, petitions, and meetings (including by making the financial case for divestment); pursuing campus support through referendums, endorsements from faculty associations and student governments, and outreach to alumni; making use of in-person opportunities through tabling, delivering class talks, and holding marches and rallies; and escalating to protests, camp outs, and building occupations when administrations refused to act. Since the aim of this dissertation is to assess how CFFD participation influenced the political behaviour of organizers, it also makes sense to examine some of the actions CFFD organizers undertook off campus while the movement was ongoing, since they illustrate what they were hoping to achieve in society at large and the lessons they had internalized about driving political change. While it is hard to integrate into the broader discussion, this chapter also considers efforts at Indigenous allyship by CFFD campaigns.

Like the previous two chapters, this one will address a set of key questions. First, why is studying the repertoires of Canadian CFFD campaigns between 2012 and 2020 relevant? What could campaigns do, given the resources available to them and their limitations? What did they do? And why did they do it? These final two questions relate closely to the question of politicization of campaign organizers across time, frequently into the CO₂-e and CJ world views. The chief distinction between the two, in terms of repertoires, is the

¹Curnow observed: "In many ways, Fossil Free UofT mirrors the cleavages in the environmental movement, with members becoming differently politicized, some toward technocratic and instrumentalist approaches that align with liberal ideologies, and others rejecting the liberal frame in favour of a more expansive critique of social relations of power." Curnow, "Politicization in Practice: Learning the Politics of Racialization, Patriarchy, and Settler Colonialism in the Youth Climate Movement", p. 18.

relative priority they accord to different audiences. CO₂-e organizers most focused on convincing the target administration to act modeled their use of evidence and arguments on what they expected board members to find convincing and were skeptical about including forms of argumentation which might alienate them. CJ organizers were more focused on convincing potential activists to join the movement, and on persuading them to adopt the CJ perspective. With those priorities, messaging that might alienate the administration may be tolerable if it has a productive effect on mobilizing new supporters. In addition to their shared appreciation of the value of the story of self and enemy naming communication techniques, the desire on both sides for an institutional victory that would add to the momentum and influence of the movement helped keep the two groups cooperating despite their differing analyses and priorities. CFFD organizers generally did not have a great deal of prior political or activist experience, so it makes sense that CJ and CO₂-e advocates did not arrive in nascent campaigns with fully formed views on intersectionality and who to persuade. Rather, it was through the process of selecting and employing repertoires, and then evaluating their impact after the fact, that organizers were generally socialized in one of those two directions.²

While it would be desirable to be able to make definitive statements about the character of each campaign across time and in comparison with those at other universities, the limitations on the data from my interviews must always be borne in mind. Larger campaigns involved dozens or even hundreds of activists over many years, but my interview information is usually limited to one discussion each with a subset of participants who it was possible to arrange an interview with. In addition to being a small part of the total group involved, the set of interview participants can be expected to differ systematically from the full collection of people involved, meaning information from them is subject to selection bias. As such, I am in a position to repeat, organize, and assess what people told me about their campaigns, but not in a position to independently verify those perspectives. At the same time, I am not entirely reliant on what interview participants told me and have been able to check it against other published work on CFFD, including interviews with activists done by others, written documents from CFFD campaigns, and media coverage of the movement.

Studying movement repertoires is indispensable since it is when it reaches out to persuade audience members that a social movement truly makes contact with the general population. If the movement is a train, repertoires are where the wheels touch the tracks, potentially allowing it to move forward. While they are directed outward at people who are not part of the movement, the repertoires performed by activists also have a crucial effect on their own socialization. The experience of acting for a common cause is the root of learning-by-doing and the basis for developing feelings of solidarity and a willingness to move up a 'ladder of escalation' towards actions which involve more personal risk. At the broadest level, the movement successfully allowed organizers to undertake collective action, in contrast with the individualized consumer choice behaviours which many had come to see as inadequate. The repertoires used by CFFD campaigns also illustrate the perennial tension between the three central movement goals of driving institutional action, delegitimizing the fossil fuel industry, and recruiting and developing activists. In this context, we again see the tension between trying to persuade skeptical decision makers to implement incremental changes and choosing to advocate for radical systemic reform.³ Materials from the campaign in a box explicitly call for both tracks to be pursued in parallel, with 'inside game' strategies for the target administration and 'outside

 $^{^2}$ In particular, since campaigns were mostly organized by people with limited political experience, it was the process of taking part in campaign deliberations and disagreements that drove them into developing an ideological and strategic stance. While CO_2 -e / CJ contention was present throughout the CFFD movement, it arose as a practical matter for most when their campaign had to make choices that favoured one view over the other.

³On the multiple strategic goals of the movement, see: The CFFD movement's three strategic objectives p. 5

game' strategies for the broader campus community.^{4,5,6}

The repertoires of the CFFD movement can be comprehensively and efficiently covered with a three part structure. First I will examine two communication techniques — the "story of self" and "enemy naming" — which drew on emotion as well as reason, which were promoted and modeled by 350.org and divestment proliferators, and which appealed to and united the ${\rm CJ}$ and ${\rm CO}_2$ -e camps. This was an important reason why they were able to remain part of the same movement, since internalizing the argument that the fossil fuel industry will continue to make planet-wrecking choices for as long as governments don't prohibit it led to CFFD organizers rejecting the idea popular with governments and university administrations that working with the industry to solve the problem would be productive. Second, after covering those two techniques, the repertoires implemented by Canadian CFFD campaigns can be mapped across a spectrum of contentiousness from most cooperative to most confrontational. Here again we can see that what most distinguishes the CJ and CO₂-e camps is which audiences they care most about, more than the tactics they preferred or saw as effective. CO_2 -e advocates were willing to speak the language of their boards of governors to try to tip them over into acting, whereas CJ organizers saw recruiting anti-capitalist anti-corporate radicals as more important to the movement. Third, we can examine the inside / outside game distinction, how Canadian campaigns made use of both approaches, and how differing levels of prioritization for various audiences distinguish the CJ and CO_2 -e worldviews.

Two communication techniques were strongly advocated by divestment proliferators and extensively implemented by campaigners: using the "story of self" to legitimize policy demands with an activist's own biography and using "enemy naming" against the fossil fuel industry to portray it as a morally culpable, self-interested, dishonest, and disruptive influence on climate change and energy policy making. These techniques are of a higher order than an approach like demonstrating the support of the campus community by winning endorsements and referendums — instead, they are tightly rooted to the climate activist movement's overall theory of change and employed by both CO_2 -e and CJ advocates. As such, their influence is perceptible in all areas of activist activity, from how they frame their policy preferences in meetings with decision makers to the vocabulary they use to try to exhort action from the population as a whole. Because of their crosscutting influence and importance, these two strategies deserve a separate treatment outside of the spectrum of contentiousness which can then be used to map out what CFFD campaigns did in tangible terms.

The story of self method is motivated by the psychological perspective that potential supporters are most likely to be influenced by a personal narrative, though it likely further narrows the sharp focus on identity which intersectional social justice movements embrace (and again raises the tension about how the perspectives seen as most legitimate, from marginalized and frontline voices, may be less convincing to decision makers than advocacy from influential communities and individuals might be). The power

⁴350.org's 2012 campus guide described a six-part strategy which combined 'inside game' and 'outside game' elements. Step 3 called for building campus support through creative actions and outreach to campus groups. Step 4 called for pressuring the administration with actions like petitions, op-eds, demonstrations, and seeking alumni support. Step 5 called for pressuring the board of trustees with a big demonstration during their meeting. Step 6 called for escalation after a campaign has been rejected, including withholding donations and occupying buildings. 350.org, Fossil Free: A Campus Guide to Fossil Fuel Divestment, p. 15.

⁵Tilly defined the strength of different repertoires based on the degree of similarity and repetition from event to event. Tilly, *Contentious Performances*, p. 15.

⁶Drawing on experience in the civil rights movement, Harvard Kennedy School lecturer Richard Parker advised divestment campaigners that they should focus on the student body rather than administrators empowered to divest the endowment. James S. Bikales. *Harvard Kennedy School Lecturer Offers Activism Advice at Divestment Talk.* 2019. URL: https://www.thecrimson.com/article/2019/4/17/parker-divestment-talk/ (visited on 02/04/2020).

⁷There is also evidence here for the complementarity between different streams of action recommended in the campaign in a box. Just as demonstrations of broad campus support can strengthen those negotiating with the administration, the story of self communication technique compliments the financial argument for divestment, adding legitimacy and an emotional dimension

of story of self underscores the entire fossil fuel divestment movement, since it is their ties to particular universities invested in the fossil fuel industry that makes activist concerns legitimate when raised with their faith community, pension fund, municipality, or university. It answers a perennial question from decision makers: 'Why do we need to listen to *these* people?'

The enemy naming technique, used in parallel, seeks to displace the assumption that it is morally neutral to choose a course of action that imposes unwanted side effects on third parties. The enemy naming narrative is justified when looking backwards by the fossil fuel industry's misconduct in misleading the public and lawmakers, and justified when looking forward by the idea that they will always continue to defend their right to sell their fossil fuel reserves, even if it leads to planetary catastrophe. The narrative is central to the movement's delegitimization strategy, operating as a direct counter to the idea that the fossil fuel industry has the means and motivation to solve the climate problem themselves. It is also central to disarming counterarguments from target administrations that divestment would be political while continued investment is not, and that good relations between the university and the industry are legitimate and desirable.

Now that we have discussed these two high level techniques, we can go on to examine CFFD campaign activities across a spectrum of contentiousness, from the most cooperative actions like furnishing requested information through established university channels to the most confrontational actions seen so far in the movement, including camp outs and building occupations. This provides indispensable information about what campaigns did, how the choice of tactics varied between campaigns, and how the tactical preferences of campaigns changed with time. Tactics directed at the university community (outside game) and those directed at the target administration (inside game) both varied in contentiousness. For example, most outreach took cooperative forms like class talks and tabling, but there were also occupations and sit-ins meant partly to rally the student population; likewise, administrations sometimes experienced playful actions like Valentine's day cards asking them to "break up with fossil fuels" and were sometimes confronted with condemnatory protests and speeches. 9,10 While the expectation from a cycles of contention perspective might be that campaigns would begin with the most cooperative tactics and only start shifting across the spectrum toward confrontational approaches in response to setbacks from universities, the CFFD movement does not particularly conform to that hypothesis. Instead, there were only fairly weak linkages between the tactical preferences of each campaign at any given point and their target administration's history of responses so far. Particularly from the perspective of target administrations, there was not evidence of a lot of close monitoring of exactly what campaigns were doing or calling for at any particular time. A stronger explanation for tactical choice among activists is the norms they have internalized, with all campaigns making use of the story of self and enemy naming techniques and with individual campaigns choosing their level of contentiousness based largely on the preferences and theories of change which were dominant among their membership at a given point in time.

A tactic is a specific and reproducible action which initiators believe can play some role in changing a political outcome. A strategy is a framework for linking together the use of multiple tactics to progress toward

to it.

⁸This is what makes the idea of working with the industry — an approach frequently welcomed by governments and university administrations — intolerable to climate change activists. Trying to encourage fossil fuel abolition from within as a shareholder is not plausible when it is the corporation's main line of business, and the efforts of the fossil fuel industry to preserve their business model with speculative forms of carbon removal from tree planting to direct air capture can be plausibly interpreted as a political strategy to avoid regulation while continuing to profit from selling coal, oil, and gas.

⁹For example, consider the protest at U of T after the university's 2016 rejection and the statement made by organizer Graham Henry to the Governing Council: Milan Ilnyckyj. 2016-04-01 Simcoe Hall protest. 2016. URL: https://secure.flickr.com/photos/sindark/sets/72157666117772020/ (visited on 05/20/2022).

¹⁰Graham Henry. Address to the Governing Council of the University of Toronto on the Subject of Fossil Fuel Divestment. 2016. URL: https://www.sindark.com/350/2016-04-07-Graham-Henry.mp3 (visited on 05/20/2022).

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a movement's objective. One easy way to distinguish between the two is that tactics in and of themselves are not related to a particular political agenda; one group might use a march, sit-in, or occupation to try and resist an energy project while an opposing group might use the same tactics to get it built. By itself, describing a tactic cannot tell you what its initiators hoped to achieve and, without the framework of a strategy to tie tactics to objectives, movements cannot undertake a coordinated effort to change the *status quo*. Repertoires are thus a selection or series of campaign actions, each making use of one or more tactics, used in tandem to persuade a target audience and advance movement objectives. If organizers are actors, repertoires are the scripts or scenes which they are able and willing to perform. Within the internally contentious CFFD movement, activists accorded varying priority to different audiences and objectives. At the same time, since the movement was crafted all along to include differentiated performances for several distinct audiences, there was scope for simultaneous or overlapping actions directed at each: at activists themselves seeking a comprehensive diagnosis and remedy for climate change as a failure of global justice, at university communities where potential recruits and supporters could be found, and at the administrations with the power to act on the CFFD movement's central demand.

The answers to this chapter's questions relate to the through story of the dissertation about CJ/CO_2 -e contention because advocates of each view prioritized potential audiences differently. ¹¹ That was manifested in enduring contention about which issues to link to climate change, largely on the basis of how different audiences would respond to the linkage. Since they concentrated on fossil fuels as the cause of CO₂ accumulation, CO₂-e advocates were willing to pursue incremental improvements in university investment policy, chiefly adopting a policy of divesting from direct holdings in firms with large fossil fuel reserves and interpreting fiduciary duty in a way that empowered university asset managers to get themselves out of the carbon bubble and contribute to the societal process of helping to deflate it. Since they aspired to political and economic changes far beyond the reorganization of university finances, CJ advocates were more willing to embrace messaging that called for transformational change, even when they believed such messaging would be unwelcome to university administrators and not influential with them. Overall, the repertoires of the CFFD movement show how CJ and CO_2 -e advocates have been able to coexist in the same movement even to the extent that the movement's contentiousness is not fully visible to outsiders. This coexistence was facilitated by the guidance from proliferators, who advocated all along for two tracks of outreach, each tailored to influence its chief intended audience. Within a self-organized structure of volunteer labour, CFFD organizers were able to choose the actions and audiences they considered most important and focused their efforts on them.

This chapter will therefore defend two arguments. First, the internalized norms and balance of perspectives within CFFD campaigns explains more about the repertoires of action they undertook than the 'cycles of contention' concept of an iterated back-and-forth interaction between those making claims and those responding. Second, the model for a two track inside/outside campaign set out by 350.org combined with the voluntary and self-organized nature of the movement allowed CJ advocates to focus on outreach to the community at large in favour of radical change while $\rm CO_2$ -e advocates made the narrower case that university administrations should divest out of the carbon bubble. This is another way 350.org fed both sides of the CJ / $\rm CO_2$ -e divide, which helps explain why CFFD campaigns were able to persist with multi-year multi-generational campaigns despite the lack of consensus on which aims and audiences were most impor-

¹¹Aidid noted that participants from all three of her case studies (Concordia, UBC, and Waterloo) used "campaign arguments that would change depending on their audience" and that "it is common for organizers to strategically adjust their arguments depending on their audience." Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. 78, 98.

tant. Each side could generally focus on the tactics and audiences they prioritized, and it was only when the two approaches would have been contradictory that campaigns had to choose between incompatible options. At the individual level, it was engagement in those debates that drove socialization into the contrasting CJ and CO_2 -e perspectives.

4.1 Norms as the driver of tactical choice

Activists seldom or never consider or discuss the complete range of actions they could theoretically perform, from violence and property damage to consciousness raising through art or efforts at provoking religious enlightenment. The character of each campaign shaped the choice of actions undertaken by activists in a way that became routine over time, just as a theatre troupe that has been performing nothing but *Macbeth* and *Titus Andronicus* would be unlikely to spontaneously shift into comedies. In her discussion of norms in the context of institutional decision making, sociologist Diane Vaughan defines them by explaining:

Norms — cultural beliefs and conventions originating in the environment — create unreflective, routine, taken-for-granted scripts that become part of individual worldview. Invisible and unacknowledged rules for behaviour, they penetrate the organization as categories of structure, thought, and action that shape choice in some directions rather than others. DiMaggio and Powell note that 'institutional arrangements constrain individual behaviour by rendering some choices unviable, precluding particular courses of action... [but] institutions do not just constrain options: they establish the very criteria by which people discover their preferences.' ^{12,13,14}

Verta Taylor and Nella Van Dyke argued that:

Collective actors choose among tactical repertoires, then, not simply on the basis of strategic decision-making. Rather, activists choose options that conform to their ideological visions, are congruent with their collective identities, and embody the cultural schemas that provide meanings, motives, and templates for action.¹⁵

More simply, Ostrom defines norms as a positive or negative valuation that an individual attaches to taking particular types of action, with each person's preferences incorporating moral lessons from life and training from elders and peers. ¹⁶ When discussing political process theory, McAdam et al. note that:

repertoires represent the culturally encoded ways in which people interact in contentious politics. They are invariably narrower than all the hypothetical forms they might use or those that others in different circumstances or periods of history employ.¹⁷

Tactics can come as much from the culture of activism as from the aims of any particular campaign. Discussing the diffusion of shantytowns in the South African apartheid divestment campaign as an "unsuccessful innovation," Soule argues that it spread nonetheless because it was described in the media as successful and because it "fit with an existing student tactical repertoire and resonated with students' perceptions of South Africa." Soule also describes a "well-established repertoire of student protest" based on "sit-ins, petitions,

¹²Vaughan, The Challenger Launch Decision: Risky Technology, Culture, and Deviance at NASA: Enlarged Edition, p. 37.
¹³Walter Powell and Paul DiMaggio. The New Institutionalism in Organizational Analysis. Chicago: University of Chicago Press, 2012.

¹⁴When I asked if the UVic campaign had any governing documents, an interview participant said instead that they had "group norms" which emerged over the years.

¹⁵Verta Taylor and Nella Van Dyke. "'Get Up, Stand Up': Tactical Repertoires of Social Movements". In: *The Blackwell Companion to Social Movements*. Ed. by David A. Snow, Sarah A. Soule, and Hanspeter Kriesi. Hoboken, New Jersey: Wiley-Blackwell, 2004. URL: https://onlinelibrary.wiley.com/doi/10.1002/9780470999103.ch12 (visited on 12/26/2019), p. 277.

¹⁶Ostrom, "A Behavioral Approach to the Rational Choice Theory of Collective Action: Presidential Address, American Political Science Association, 1997", p. 9.

¹⁷McAdam, Tarrow, and Tilly, *Dynamics of Contention*, p. 16.

 $^{^{18}\}mathrm{Soule},$ "The Diffusion of an Unsuccessful Innovation", p. 120, 127–8.

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demonstrations, rallies, [and] blockades" — each of which was present in anti-apartheid divestment campaigns and has since resurfaced in CFFD campaigns and climate activism more broadly.¹⁹ Kathleen Blee's study of four "fledgling" activist groups concluded that:

In each group, implicit discursive rules, often set off by minor comments and events, authorize some options and silence others. Although such rules emerge without deliberation or explicit decision making, they shape the group's sense of possibility into the future.²⁰

Blee noted that there is strong path dependency in the tactical choices of activist groups, with choices made at the very beginning likely to curtail which set of tactics is subsequently seen as plausible. 21,22,23 Leadership selection reinforces this, since confrontational and conciliatory groups are each likely to promote leaders who support that tone. 24

Such norms exist within activism generally, including the proliferator organizations which encouraged and helped guide the CFFD movement, and are also reflected in individual campaigns. For example, Joanna Brenchley described how upon joining the Divest Dal campaign which had existed for two years, it already had an "explicit campaign culture." Miriam Wilson described several explanations for the preferences CFFD organizers held in terms of employing confrontational or contentious tactics, including their personality and experience, coaching from proliferator organizations, and consideration of which audience(s) are being targeted by a specific performance. Activists take their cues on what is appropriate and effective from the repertoires selected by activists elsewhere and the perceived reaction they get. This may contribute to the pattern of getting ossified into repeated behaviours performed for the audience of the activists themselves and without a guiding external metric of success: taking actions because they are comfortable and familiar, and feel appropriate, and not because they are strategically calculated to improve outcomes in a specified way. Indeed, one interview participant said "for sure" that the most appealing actions for student organizers are not the ones which are most likely to convince the university. Another noted that in campaigns which function on the basis of friendship groups "a sense of self-congratulation" can interfere with critical self-reflection.

4.2 The story of self and enemy naming

Two of the most important emotional and communication techniques employed by the CFFD campaigns are using "story of self" to legitimize policy demands by building sympathy and a feeling of emotional understanding between divestment proponents and decision makers, and "enemy naming" to characterize

 $^{^{19}\}mathrm{Soule},$ "The Diffusion of an Unsuccessful Innovation", p. 856.

²⁰Blee, "How Options Disappear: Causality and Emergence in Grassroots Activist Groups", p. 655.

²¹Blee argued that: "Contingent events, whether from unpredictable human actions or mere chance occurrence ... affect activist groups into the future when they are taken up as discursive rules that reset the range of possibilities that the group can consider." Blee, "How Options Disappear: Causality and Emergence in Grassroots Activist Groups", p. 676.

 $^{^{22}}$ This may help explain why the campaign in a box was so consistently incorporated into CFFD campaigns during this period.

²³See also: Mike Smith. "Changing Sociological Perspectives on Chance". In: Sociology 27.3 (1993), pp. 513-531. URL: https://journals.sagepub.com/doi/abs/10.1177/0038038593027003010?journalCode=soca (visited on 12/26/2019).

²⁴Blee, "How Options Disappear: Causality and Emergence in Grassroots Activist Groups", p. 675.

²⁵A faculty member interview participant said that in the divestment movement generally there has been tension between strategies and tactics best calibrated to convince a target administration and those which most engage and motivate student activists.

the fossil fuel industry as a unitary culpable actor.^{26,27} In brief, activists employ the "story of self" when they use their own biography as a rhetorical and emotional mechanism to legitimize their demands.^{28,29} "Enemy naming" serves both the morality and war narratives described within the FFD movement by Mangat et al., emphasizing that fossil fuel producers make moral choices and do not simply passively supply fossil fuel demand. Both techniques demonstrate a theory of change which emphasizes the psychological salience of narratives over depersonalized facts. James Hoggan quotes Dan Kahan saying: "We know from cognitive psychology that people process information in narratives" and adds:

When there is a good guy and a bad guy; some kind of recognizable drama; a beginning, middle and end; as well as a moral and a conclusion, people resonate with the story and make sense of what you are saying.³⁰

The divestment movement can be seen as a "moral entrepreneur" or "norm entrepreneur" engaged in labeling carbon pollution as morally reprehensible and so creating increased support for decarbonization.^{31,32,33} This is compatible with the role Paul Wapner identifies for NGOs in driving cultural evolution.³⁴

Story of self and enemy naming help overcome the structural barriers to climate action. Ezra Markowitz and Azim Shariff identify "spatial and temporal distance" as a psychological explanation for why most voters are unwilling to support adequate action to stabilize the climate, "the more dissimilar and socially distant the victims of climate change seem to be — be they members of faraway communities or, perhaps, future

²⁶ Ayling and Gunningham summarized that the movement has used "shaming, persuasion, and empowerment" to try to catalyze an energy revolution to stabilize the climate. Julie Ayling and Neil Gunningham. "Non-state Governance and Climate Policy: The Fossil Fuel Divestment Movement". In: Climate Policy (2015), pp. 1-15. URL: https://www.researchgate.net/profile/Neil_Gunningham/publication/283699441_Non-state_Governance_and_Climate_Policy_The_Fossil_Fuel_Divestment_Movement/links/56c3a34008ae8a6fab5a1acb.pdf (visited on 02/26/2017), p. 1.

²⁷Greta Thunberg's address to UN Climate Action Summit in 2019 is an incredibly raw and poignant moral rebuke: "You have stolen my childhood and my dreams with your empty words... You're failing us, but young people are starting to understand your betrayal. The eyes of all future generations are upon you. And if you choose to fail us, I say we will never forgive you." She went on to emphasize the immense potential risk of self-reinforcing feedbacks and the existential stakes involved for young people: "The popular idea of cutting our emissions in half in 10 years only gives us a 50% chance of staying below 1.5 °C, and the risk of setting off irreversible chain reactions beyond human control. Maybe 50% is acceptable to you. But those numbers don't include tipping points, most feedback loops, additional warming hidden by toxic air pollution or the aspects of justice and equity. They also rely on my and my children's generation sucking hundreds of billions of tonnes of your CO₂ out of the air with technologies that barely exist. So a 50% risk is simply not acceptable to us — we who have to live with the consequences." Greta Thunberg's Full Speech to World Leaders at UN Climate Action Summit. 2019. URL: https://www.youtube.com/watch?v=KAJsdgTPJpU (visited on 08/05/2022).

²⁸Katie Rae Perfitt described how the story of self strategy was included in the Dalhousie campaign's training curriculum as a way of grounding their demands, presenting climate change as a generational crisis, tapping into universal fear and anxiety about climate change, and galvanizing people while avoiding apathy.

²⁹Kubin et al. found that "sharing personal experiences about a political issue—especially experiences involving harm—help to foster respect via increased perceptions of rationality." Emily Kubin et al. "Personal Experiences Bridge Moral and Political Divides Better Than Facts". In: *Proceedings of the National Academy of Sciences* 118.6 (2021). URL: https://www.pnas.org/content/118/6/e2008389118 (visited on 03/22/2021).

³⁰ James Hoggan. I'm Right and You're an Idiot: The Toxic State of Public Discourse and How to Clean It Up. Gabriola Island: New Society Publishers, 2016, p. 46.

³¹Ayling and Gunningham, "Non-state Governance and Climate Policy: The Fossil Fuel Divestment Movement", p. 8.

³²The moral entrepreneur terminology is taken from: Howard S. Becker. *Outsiders; Studies in the Sociology of Deviance*. New York: The Free Press, 1963.

³³Norm entrepreneur from: Cass R. Sunstein. "Social Norms and Social Roles". In: Columbia Law Review 96.4 (1996), pp. 903-968. URL: https://chicagounbound.uchicago.edu/cgi/viewcontent.cgi?article=12456&context=journal_articles (visited on 01/09/2020).

³⁴Wapner argued: "Economic activity courses through all aspects of human life and operates across state boundaries, and this makes it difficult to engage economic forces in an efficient and effective manner. NGOs meet this challenge by 'unpacking' the world economy and identifying certain nodes of power within it. They then target and try to change the character of those nodes that most effectively relate to environmental issues. NGOs adopt a number of strategies to do this. One of the most successful involves pressuring specific corporations to modify conduct." Paul Wapner. "Horizontal Politics: Transnational Environmental Activism and Global Cultural Change". In: *Global Environmental Politics* 2.2 (2002), pp. 37–62. URL: https://www.mitpressjournals.org/doi/abs/10.1162/15263800260047826 (visited on 05/22/2020), p. 44.

generations — the less morally obligated people will feel to act on their behalf."^{35,36,37,38,39,40} Activists hoping to diminish that sense of distance have deployed a series of "story of self" strategies to demonstrate to their audiences that climate change victims are right in front of them and have moral claims which must be considered.⁴¹ In their 2019 guide for setting up divestment campaigns, 350.org argued:

Stories have the capacity to build relationships and empathy between groups of people. Stories have the ability to compel people to act and stay involved. They touch people in their hearts. A story goes far beyond a headline or a fact — it is something that stays with you and has the power to change you. Especially in the face of the climate crisis, we need storytellers around the world to share their own realities, their victories, and their hopes. If we can compel our communities to look, see, hear — then we can engage people to continue to fight for the change we need. 42,43

350.org's guide to having climate change conversations argued that people are influenced by descriptions of climate change impacts close at hand and experienced by the speaker and suggests that people should "connect their personal lives to the issue of climate change." 44,45,46,47 A training guide by Marshall Ganz

³⁵Markowitz and Shariff, "Climate Change and Moral Judgement", p. 245.

³⁶Markowitz and Shariff counselled against referring to future generations abstractly, saying: "techniques that increase individuals' affinity and identification with future generations (for example, focusing specifically on identifiable future others such as one's children" can "diminish interpersonal distance, decrease social discounting, limit egocentric biases and enhance intergenerational beneficence." Markowitz and Shariff, "Climate Change and Moral Judgement", p. 246.

³⁷Kimberly A. Wade-Benzoni and Leigh Plunkett Tost. "The Egoism and Altruism of Intergenerational Behavior". In: *Personality and Social Psychology Review* 13.3 (2009), pp. 165–193. URL: https://journals.sagepub.com/doi/10.1177/1088868309339317 (visited on 12/29/2019).

³⁸Henry Shue emphasized the moral dimension of intergenerational climate change politics: "The ones who need to worry about severe climate change are the most vulnerable, including children yet to be born, who may reap the whirlwind if we sow the wind. Those who will suffer most, if anyone does, will be people with absolutely no past role in causing the problem and with no other kind of responsibility for it (and other species, most with no capacity for morally responsible action but full capacity for suffering and frustration). This would put the wrong done by the avoidable precipitation of severe climate change, it seems to me, in the general moral category of the infliction of damage or the risk of damage on the innocent and the defenseless. This is far worse than simply neglecting to protect rights, as wrong as that is, and it more like recklessly dropping bombs without knowing or caring whom they might hit. Can someone seriously argue that we are not morally responsibility for avoiding the wreaking of such havoc?" Henry Shue. "Deadly Delays, Saving Opportunities". In: Climate Ethics: Essential Readings. Ed. by Rajendra Kumar Pachauri et al. Oxford: Oxford University Press, 2010.

³⁹Efforts in Canadian newspapers to make climate impacts in 2100 salient to people today included: Rose Murphy. Why Climate Change in 2100 Matters to Me. 2018. URL: https://www.theglobeandmail.com/opinion/why-climate-change-in-2100-matters-to-me/article536111/ (visited on 01/04/2020).

⁴⁰Ivan Semeniuk. Facing the Risk: Climate Impacts That Young Canadians Will Have to Contend With. 2019. URL: https://www.theglobeandmail.com/canada/article-facing-the-risk-climate-impacts-that-young-canadians-will-have-to/(visited on 01/04/2020).

⁴¹Stokes described one incident where "a young advocate with asthma gave emotional testimony on what pollution reductions would mean for him, holding up several inhalers and calling for solutions" — an appeal which apparently had a personal influence on an elected official who was present. Stokes, Short Circuiting Policy: Interest Groups and the Battle over Clean Energy and Climate Policy in the American States, p. 115.

 $^{^{42}350.}$ org. How to Run a Fossil Free Campaign. 2019. URL: https://gofossilfree.org/campaign-guide/ (visited on 12/29/2019).

⁴³Maria Konnikova also highlighted the persuasive power of storytelling. Citing Sonya Dal Cin and Michael Slater, Konnikova argued that storytelling can overcome "significant resistance in our beliefs or attitudes" and is "one of the few successful ways of getting someone to change her mind about important issues" — including in cases where direct appeals would be met with resistance. In keeping with the 'story of self' concept, Konnikova argued that personal narratives are the most convincing. Maria Konnikova. *The Confidence Game. Why We Fall for It.*.. Every Time. New York: Penguin Books, 2016, p. 103, 108.

^{44350.}org. Having Climate Change Conversations Skill-up. 2017. URL: https://learning.elucidat.com/course/58f66f2632335-58fe796d0f9c0 (visited on 06/25/2021).

⁴⁵Describing a visit to Greenland with Kathy Jetnil-Kijiner and others, McKibben explained: "I wanted them there because I wanted Kathy standing on the ice that when it melted would drown her home. And I wanted to try and drive home that, and she did a beautiful job." Bill McKibben. What We've Learned About Climate Change in the Last 30 Years. 2019. URL: https://bioneers.org/what-learned-climate-change-bill-mckibben-zstf1911/ (visited on 01/28/2020).

⁴⁶Bill McKibben. What We've Learned About Climate Change in the Last 30 Years. 2019. URL: https://www.youtube.com/watch?v=Dfm6mfU5uko (visited on 01/28/2020).

⁴⁷Kathy Jetnil-Kijiner and Aka Niviana. *Rise: From One Island to Another*. 2018. URL: https://www.youtube.com/watch?v=_48kvsDio3k (visited on 01/28/2020).

explained how the story of self is an emotional strategy meant to affect the motivation of those who it is directed at:

Emotions inform us of what we value in ourselves, in others, and in the world, and enable us to express the motivational content of our values to others. Stories draw on our emotions and show our values in action, helping us feel what matters, rather than just thinking about or telling others what matters. Because stories allow us to express our values not as abstract principles, but as lived experience, they have the power to move others.⁴⁸

These concepts have become part of the norms of activism generally, exerting an indirect and cultural influence over CFFD campaigns in addition to the specific advice from proliferators to make use of them.

Story of self techniques have been implemented in Canadian CFFD campaigns. For instance, at a divestment dialog at UVic, Crystal Lameman, a climate and energy campaigner for the Sierra Club in Canada and a member of the Beaver Lake Cree Nation "recount[ed] her first-person experiences with the negative effects of climate change on her community and indigenous ways of knowing and being."^{49,50} Rebecca Solnit noted that: "This [activism] work is always, first and last, storytelling work, or what some of my friends call 'the battle of the story'. Building, remembering, retelling, celebrating our own stories is part of our work."⁵¹ Kiki Wood commented on how using the story of self strategy has effects on the activist as well as their target, raising the emotional stakes and adding to a sense that their life has been building to this campaign. The process through which an activist can "emotionally excavate their identity... can be clarifying and helpful" as well as empowering, in part because people are often not explicitly aware of what drives or explains their actions and beliefs.

The empathetic identification of why the person telling the story is calling for the action that they are encourages the listener to reflect on their own thoughts and behaviours in a way that is sympathetic to the values and emotions expressed by the speaker. While we may expect that only factual information will affect the decisions taken by a body like a university, CFFD campaigners emphasized how building an emotional bond had more of an effect, and that personal stories were harder to reject or rebut. Nicholas Lorraway at Queen's summarized: "Facts don't do the job — you have to reach people in a more emotional way to do the job." As Teddy Roosevelt is unattributably reputed to have said: "Nobody cares how much you know, until they know how much you care."

The "story of self" technique has been employed across the transnational CFFD movement. In her description of the American University campaign, faculty member Eve Bratman described how at a rally before a board of trustees meeting one student from New Orleans described how her family was displaced by Hurricane Katrina while another from Long Island described how her family was still recovering from Hurricane Sandy. Bratman described the "poignancy and visceral descriptions of suffering" and how the speakers "made it clear that climate change is not just about abstract weather models, but about their lives, their families, and their futures." Sophie Harrison, an organizer with the CFFD campaign at Stanford, said: "We know this is something that's going to really matter in our lifetimes ... The world that we're going to be raising our kids in is going to be very different from the one we were born into."

⁴⁸ Marshall Ganz. Public Narrative Participant Guide. 2012. URL: https://www.ndi.org/sites/default/files/Public% 20Narrative%20Participant%20Guide.pdf (visited on 07/09/2019), (italics in original).

⁴⁹Senica Maltese. *Divestment Opens Dialogue at UVic.* 2015. URL: https://www.martlet.ca/divestment-opens-dialogue-at-uvic/ (visited on 07/30/2019).

⁵⁰Jessica Dempsey and James Rowe. *Is Petro-Divestment Too Divisive?* 2015. URL: https://thetyee.ca/Opinion/2015/02/02/Divisive-Petro-Divestment/ (visited on 07/30/2019).

⁵¹Rebecca Solnit. Protest and Persist: Why Giving up Hope is not an Option. 2019. URL: https://www.theguardian.com/world/2017/mar/13/protest-persist-hope-trump-activism-anti-nuclear-movement (visited on 12/17/2019).

⁵²Bratman et al., "Justice is the Goal: Divestment as Climate Change Resistance", p. 683.

⁵³Kevin Begos and Joann Loviglio. College Fossil-fuel Divestment Movement Builds. 2013. URL: https://news.yahoo.com/

Enemy naming is another technique promoted by CFFD proliferators and 350.org's campaign in a box. Climate change fails to engage our emotions because it arises unintentionally from behaviours which people value and which are broadly considered legitimate, from home heating and electricity use to fossil-powered transport. Markowitz and Shariff describe how "unintentionally caused harms are judged less harshly than equally severe but intentionally caused ones" and "[r]ecognizing a harmful event as the product of an intentional agent... is a highly motivating cue for corrective action."⁵⁴ This perception is reflected in the efforts of climate activist organizations to portray greenhouse gas pollution as known to be harmful by those producing it, and especially by the effort to condemn the fossil fuel industry itself as morally culpable. 55,56 Naming an enemy can be a mechanism to avoid the emotional limitations that stop us from perceiving climate change as requiring corrective action.^{57,58,59} Wood described how enemy naming can shift government policy because a public perception that fossil fuel firms are otherwise driving political prosperity makes it impossible to act. Miriam Wilson described it as a way to overcome the "political stranglehold" of the fossil fuel industry over governments and "create the political space in which government subsidies, investments, and backing in the fossil fuel industry can be lessened." McKibben argued that "movements require enemies," that fossil fuels are "a rogue industry, reckless like no other force on Earth," and that they represent "Public Enemy Number One to the survival of our planetary civilization."60,61 Enemy naming also engages the attention of the media by replacing the elements of the climate story which do not automatically create drama (uncertainty, accidental cause, long time horizons) with elements which easily feed conventional reporting: accusations of wrongdoing and conflict between identifiable groups.⁶²

Importantly, proliferator organizations encouraged campaigns to present the fossil fuel industry as their

college-fossil-fuel-divestment-movement-builds-173849305.html (visited on 12/31/2019).

⁵⁴Markowitz and Shariff, "Climate Change and Moral Judgement", p. 244.

⁵⁵Shue said something similar as a moral judgment rather than specifically as a communication strategy: "Either the carbon under the planet's surface is injected into the air through burning or not. It can be kept our of the atmosphere either by being left where it is now under the ground or the sea or by being burned only after effective carbon-sequestration techniques are developed. The opposition of interests is sharp: what is good for those who want all of the carbon extracted and burned with or without effective sequestration is bad for the climate and for the other 99.999 per cent of humanity. And waiting for the price to rise until fossil fuels become non-competitive greatly risks—as far as I see, guarantees—that too much carbon will already have been injected into the planet's layer of GHGs before the price rises enough to cut demand. The friends of fossil fuel—the carbon peddlers—have joined the enemies of humanity." Shue, *Climate Justice: Vulnerability and Protection*, p. 277.

⁵⁶See also: Johannes Urpelainen. Targeting Big Polluters: Understanding Activism against the Fossil Fuel Industry. 2016. URL: https://vimeo.com/188205388 (visited on 01/28/2020).

⁵⁷Merelman explained that: "Personification is a process by which social processes are associated with visible groups of individuals, thereby providing greater impact for the ideology. The first step is to single out some kind of personified villains for ideological treatment, often by employing stereotypes to enhance dramatic power as well as for conceptual simplicity." Merelman, "The Dramaturgy of Politics", p. 3.

⁵⁸He also warned that forces of opposition can be personified with "dangerous simplicity" — a point which could arguably be applied both to target administrations condemned by activists and the fossil fuel industry itself. Merelman, "The Dramaturgy of Politics", p. 233.

⁵⁹The Divest Dal campaign personalized the idea of corporate influence over the university administration with enhanced criticism of their relationship with Shell specifically. CBC News. *Shell Canada's \$600K Donation to Dalhousie University Spurs Protest.* 2015. URL: https://www.cbc.ca/news/canada/nova-scotia/shell-canada-s-600k-donation-to-dalhousie-university-spurs-protest-1.3023846 (visited on 10/01/2020).

⁶⁰McKibben, Global Warming's Terrifying New Math.

⁶¹Mangat, Dalby, and Paterson, "Divestment Discourse: War, Justice, Morality and Money", p. 195.

⁶²As Ayling and Gunningham noted: "Even when the fossil fuel industry fights back, or the movement is condemned by News Corporation's organs, this is all grist to the mill." Ayling and Gunningham, "Non-state Governance and Climate Policy: The Fossil Fuel Divestment Movement", p. 8.

enemy, not the target administration.^{63,64,65} Ayling describes this as "private politics" in which 350.org and its affiliates are "attempting to influence attitudes to fossil fuels by framing producer companies as pariahs."⁶⁶ Jaffar explained:

The fossil fuel divestment movement is all about naming the fossil fuel industry as the villain in the story, and naming the institution that's being targeted as the target and the hero of the story because essentially we're calling on them to become the hero of the story by agreeing to divest. 67,68

Gunningham explained the intended casting of universities as heroes who can choose to side with or against the villains in the fossil fuel industry because the campaign included:

a demand (divest), a promised reward if the target meets the demand (maintaining reputation, avoiding stranded assets as fossil fuel stocks rapidly devalue), and a threat of harm if the target rejects the demand (shaming and stigmatization).^{69,70}

As Richardson described it:

Fossil fuels divestment both impeaches and challenges financial markets. It indicts those who profit from the biggest climate polluters while also presenting them with an alternative to respect values essential to long-term ecological and human well-being.⁷¹

A 350.org divestment "skill-up" listed "social license" as one of the "pillars of support" of the movement: "Challenging the acceptability of the fossil fuel industry at every turn — changing the story."⁷² This serves the strategic objective of delegitimizing the industry while also seeking to avoid excessive antagonism between campaigners and administrators which might impede the latter from taking useful actions. This strategy was taken up to a large extent by CFFD campaigns, with Lenetsky remarking that at McGill "we did a great job at separating the people from the issue." This also aligns with the interpretation of divestment as ultimately a persuasion-based enterprise, in contrast to the language of "forcing" divestment which has sometimes been

⁶³This provides a route to the resolution of the problem. As Merelman argued: "It is doubtful that any political appeal or ideology would be completely successful if it did not promise such ultimate relief from conflict or define some series of conditions under which conflict would no longer be necessary." Merelman, "The Dramaturgy of Politics", p. 223.

⁶⁴This idea is also the basis for claims that just presenting the potential adverse consequences of climate change is insufficient to motivate action, unless those predictions are accompanied by concrete actions which the audience perceives as appealing or reasonable.

⁶⁵Strategic advice from proliferators was not entirely uniform. Kiki Wood described how the CYCC was aware that universities would use delaying tactics to push off the question until core organizers graduated and therefore coached campaigns not to follow university-established deliberation processes, even if doing so meant sacrificing some odds of divestment in favour of more delegitimization and activist development.

⁶⁶ Julie Ayling. "A Contest for Legitimacy: The Divestment Movement and the Fossil Fuel Industry". In: Law & Policy 39.4 (2017), pp. 349-371. URL: https://www.researchgate.net/publication/319052010_A_Contest_for_Legitimacy_The_Divestment_Movement_and_the_Fossil_Fuel_Industry (visited on 01/04/2019), pp. ;. 349-50.

⁶⁷A similar perspective is described in: Amy Westervelt. *Telling People to 'follow the science' won't Save the Planet. But they will Fight for Justice.* 2021. URL: https://www.theguardian.com/commentisfree/2021/dec/28/follow-the-science-public-climate-crisis (visited on 08/02/2022).

⁶⁸By contrast, a Suncor slide deck quoted their 2014 report on sustainability: "Instead of trying to prove who is right and who is wrong, we need to work together on practical solutions. Simply put, there is no room for villains or heroes when we are looking at our collective energy future." Peter MacConnachie. Canada's Oil Sands: Connecting Energy Infrastructure with Core Values. 2015. URL: http://www.pnwer.org/uploads/2/3/2/9/23295822/macconnachie_pnwer_conference_july_13.pdf (visited on 08/05/2022), p. 17.

⁶⁹Gunningham, "Review Essay: Divestment, Nonstate Governance, and Climate Change", p. 310.

 $^{^{70}}$ A 350.org staff member sought to use this potential hero framing in a campaign to get the Museum of History in Ottawa to drop CAPP sponsorship in 2017.

⁷¹Benjamin J. Richardson. "Divesting From Climate Change: The Road to Influence". In: Law & Policy 39.4 (2017), pp. 325–348. URL: https://onlinelibrary.wiley.com/doi/abs/10.1111/lapo.12081 (visited on 01/10/2020), p. 341.

⁷²350.org. Divestment Skill-up. 2019. URL: https://learning.elucidat.com/course/58f66ad442bc6-58fe796f85a69#! (visited on 12/31/2019).

used.^{73,74,75} Administrations are to some degree open to policy recommendations from students, but the power dynamics at Canadian universities within this time period did not evidently allow any plausible amount of student mobilization to effectively translate into "forcing" action. Furthermore, while messaging focused on compelling action may inspire and motivate activists, it is plausible that it would deepen resistance in target organizations. An administrator told me that tactics of 'forcing divestment' were implausible in the context of a university board, where taking over a meeting and listing three immediate demands had "a snowball's chance in hell" of success:

That was just not the way these things were ever going to work, because they simply did not have the wherewithal, the political support, or the political weapons to really close down the university, or close down its functioning. They didn't have any leverage. The only leverage they had was kind of a moral or PR one.

This accords with the analysis of CFFD counter-repertoires in my APSA pre-print.⁷⁶ Universities may have felt public relations pressure to respond to CFFD campaigns in a way that showed concern about climate change, but they couldn't be compelled by student activists whose own sense of moral clarity did not translate into influence which could disrupt business as usual among influential university constituencies.

Enemy naming — and the idea of positioning universities to decide between supporting ethically questionable activities or resisting them — predates the CFFD movement. Tarrow argued that:

Contentious politics is produced when threats are experienced and opportunities are perceived, when the existence of available allies is demonstrated, and when the vulnerability of opponents is exposed. 77

Piven and Cloward discussed how some objected to on-campus anti-Vietnam war protests on the basis that universities were not conducting or responsible for the conflict. They argued in response:

The exigencies of mass action are such that [student peace activists] were constrained to act out their defiance within universities where they were physically located and could thus act collectively, so that their defiance mattered. 78

"Opportunities for defiance," they argued, "are structured by features of institutional life ... people cannot defy institutions to which they have no access, and to which they make no contribution." Thus, enemy naming and the story of self can be complimentary techniques. Benford described how, in a variety of movements, "[t]ypifications of opponents as immoral, evil or villains serve to 'galvanize and focus sentiment." *80

 $^{^{73}\}mathrm{The}$ carbon bubble and stranded assets argument "appeals to the enlightened self-interest of investors." Mangat, Dalby, and Paterson, "Divestment Discourse: War, Justice, Morality and Money", p. 198.

⁷⁴As *The Economist* noted in reference to climate activists: "There remains no way for them to force action on people and countries who do not share their passion and commitment." The Economist. *Why Tackling Global Warming is a Challenge Without Precedent.* 2020. URL: https://www.economist.com/schools-brief/2020/04/23/why-tackling-global-warming-is-a-challenge-without-precedent (visited on 04/29/2020).

⁷⁵Wapner raised the idea from Weber that "power is the ability to get someone to do something against their will" but goes on to describe a cultural approach to political influence "through persuasion and socialization rather than coercion," noting: "The assumption behind this idea of power is that actors are not stable entities with given identities and interests but rather are constantly being constructed in the midst of social interaction." Wapner, "Horizontal Politics: Transnational Environmental Activism and Global Cultural Change", p. 53.

⁷⁶To shorten this dissertation, the counter-repertoires deployed against CFFD by universities, the fossil fuel industry, and governments are described instead in my APSA pre-print. For universities, the chief strategic response has been delay coupled with the presentation of non-divestment actions as a sufficient or superior response to climate change. Understanding the broader context of industry and government resistance to climate change activism is important for organizers seeking to understand the mechanisms being used to counter them, and for scholars designing ethics protocols intended to take known corporate and state risks into consideration when developing methods to protect research participants. Ilnyckyj, "Campus Fossil Fuel Divestment (CFFD) Counter-Repertoires".

⁷⁷Tarrow, Power in Movement: Social Movements and Contentious Politics, 3rd ed. p. 33.

⁷⁸Piven and Cloward, Poor People's Movements: Why They Succeed, How They Fail, p. 22.

⁷⁹Piven and Cloward, Poor People's Movements: Why They Succeed, How They Fail, p. 23.

⁸⁰Enford and Hunt, "Dramaturgy and Social Movements: the Social Construction and Communication of Power", p. 39.

The potential leverage arising from university-focused campaigns comes from the expectations that universities operate according to some moral purpose and not only to maximize their wealth, the influential role universities play in shaping public life, and the interests universities maintain in the life prospects of their graduates. Enemy naming in the CFFD context challenges universities to protect the futures of their students and publicly take action to control the severity of climate change, offering them the opportunity to present themselves as heroes in a redemption story.

Enemy naming enhances the moral salience of arguments about climate change dangers and risks.^{81,82} One interview participant emphasized this in terms of the "carbon bubble" concept which originated with the Carbon Tracker Initiative. Emphasizing the industry's moral culpability changes the perception from a notional financial risk with no automatic moral consequences to a set of consciously imposed harms and damages arising from an industry that is fully aware of the effect of its product on the world and which remains highly effective at lobbying against regulation, and even for further government support despite climate change.^{83,84,85} This characterization legitimizes regulatory action against the industry, as Klein explained: "when we make the argument that this is a rogue sector, that their business plan is at odds with life on earth, we are creating an intellectual and political space where it becomes much easier to tax those profits, to increase royalties, and even to nationalize these companies."⁸⁶

Enemy naming and engagement are essentially opposite approaches. In *This Changes Everything* Klein is particularly critical of "the disastrous merger of big business and big green."⁸⁷ She criticized the Nature Conservancy's involvement in natural gas extraction within the reserve designated for the Attwater's prairie chicken, the WWF's relationship with Shell, and Conservation International's partnerships with a range of large corporations including BHP Billiton, Shell, Chevron, ExxonMobil, and BP.⁸⁸ Klein linked this to an argument about hierarchy and leadership within eNGOs: "these choices, made unilaterally by the top tier of leadership at the big green groups, do not represent the values of the millions of members who support them."⁸⁹ In the CFFD context, proposed engagement takes the form of "shareholder activism," through which fossil fuel industry investors could supposedly use their influence as part-owners to encourage the industry to adapt its plans and business model to be compliant with the Paris Agreement and the goal of global decarbonization.⁹⁰ The idea that shareholder activism can be effective has largely been espoused by divestment opponents and target administrations when they provided a rationale for rejecting divestment

⁸¹ This may be particularly true in comparison to other framings where responsibility for climate change is attributed primarily to individuals or countries. Leehi Yona and Alex Lenferna. Fossil Fuel Divestment Movement within Universities (Chapter in the Forthcoming: G. Sosa-Nunez & E. Atkins (2016). Climate Change & International Relations.) 2016. URL: https://www.academia.edu/22720888/Fossil_Fuel_Divestment_Movement_within_Universities (visited on 03/13/2017), p. 5.

⁸²Wouter Peeters et al. Climate Change and Individual Responsibility: Agency, Moral Disengagement and the Motivational Gap. London: Palgave MacMillan, 2015.

⁸³ See also: Nicolas Graham, William K. Carroll, and David Chen. Big Oil's Political Reach: Mapping Fossil Fuel Lobbying from Harper to Trudeau. 2019. URL: https://www.policyalternatives.ca/publications/reports/big-oil%E2%80%99s-political-reach (visited on 01/19/2020).

⁸⁴Matt Robinson. Public Officials Faced 'Organized and Sustained' Oil and Gas Lobbying on Pipelines in Recent Years: Study. 2019. URL: https://vancouversun.com/news/local-news/public-officials-faced-organized-and-sustained-oil-and-gas-lobbying-on-pipelines-in-recent-years-study (visited on 01/19/2020).

⁸⁵Consider the Trudeau government in Canada linking carbon pricing to the approval of new export pipelines.

 $^{^{86} \}rm Grist.$ Naomi Klein on the Power of Fossil Fuel Divestment. 2015. URL: https://grist.org/climate-energy/naomi-klein-on-the-power-of-fossil-fuel-divestment/ (visited on 05/14/2022).

⁸⁷Klein, This Changes Everything: Capitalism vs. The Climate, p. 191–229.

⁸⁸Klein, This Changes Everything: Capitalism vs. The Climate, p. 191–6.

⁸⁹Klein, This Changes Everything: Capitalism vs. The Climate, p. 197.

⁹⁰Connor Chund and Caleb Scwartz used the South Africa apartheid precedent to argue for divestment in preference to shareholder activism, arguing that Harvard's initial decision under president Derek Bok to use a 'seat at the table' to promote change was ineffective in curbing the social injury in question. Connor Chung and Caleb Schwartz. From Apartheid to the Climate Crisis: The Limits of Shareholder Engagement. 2020. URL: https://impakter.com/harvard-from-apartheid-to-the-climate-crisis-the-limits-of-shareholder-engagement/ (visited on 10/21/2020).

demands. ⁹¹ Lawrence Stordy, chair of Dalhousie's Board of Governors, argued in 2014: "the Board believes it will have more influence with regard to climate change as an engaged investor than it would through a one-time decision to divest holdings in carbon companies." ⁹² In response, CFFD campaigners have questioned whether any shareholder can plausibly influence firms whose central business is fossil fuel extraction to curtail those actions to the degree called for by the IPCC and others. ^{93,94} Corporate documents show awareness of the enemy naming technique. A 2015 slide deck by a Suncor employee included a slide called "A Generic view on (anti) Brand Campaign" which quotes a Greenpeace member on how "[Targeting brands] was like discovering gunpowder for environmentalists" and with bullet points saying "Original & Provocative / Plausible / Emotional response / Clear Call to Action." ⁹⁵ The deck also includes a slide on "Fossil Fuel Divestment and Stranded Assets" which illustrates industry counter-repertoires of critiquing divestment for not being the single most effective way to address climate change while pivoting to a justification of why status quo behaviours are sufficient: "focus on create and share knowledge."

A central form of wrongdoing emphasized by CFFD campaigns was efforts by the fossil fuel industry to distort climate science and mislead policy makers and the public about it. 97,98,99,100,101 Indeed, this was one of the criteria recommended as the basis for divestment by the *ad hoc* committee at U of T in 2016. 102 Describing the CFFD movement as a whole, Stephens et al. argued that greater awareness of how "fossil fuel companies strategically sought to cast doubt on what is known about the connection between burning fossil fuels and climate change" feeds a sense that divestment is on the right side of history and raises questions about who should be financially and legally responsible for the harm arising from fossil-

⁹¹Kate Murtagh, chief compliance officer and managing director, sustainable investment at the Harvard Management Company identified the question of engaging with companies causing social injury versus divesting from them as going back to President Derek Bok in the late 1970s, who argued against the university taking a stance on political issues. Alexander Robertson. *The Fossil Fuel 'Engagement vs Divestment' Debate at Harvard's Endowment Fund.* 2018. URL: http://www.climateaction.org/climate-leader-interviews/the-engagement-vs-divestment-debate-at-harvards-endowment-fund (visited on 02/04/2020).

⁹²Stordy, Fossil Fuel Divestment Statement: Consideration of Fossil Fuel Divestment: Statement from Mr. Lawrence Stordy
— Chair, Dalhousie's Board of Governors.

⁹³See: "Isn't shareholder activism a better option?" in: Toronto350.org, The Fossil Fuel Industry and the Case for Divestment: Update, p. 133–4.

⁹⁴As Chevron's finance chief Pierre Breber put it: "We have been pretty clear that we are not going to diversify away or divest from our core business." The Economist. *Big Oil's Diverging Bets on the Future of Energy.* 2020. URL: https://www.economist.com/business/2020/12/16/big-oils-diverging-bets-on-the-future-of-energy (visited on 01/09/2021).

⁹⁵MacConnachie, Canada's Oil Sands: Connecting Energy Infrastructure with Core Values, p. 16.

⁹⁶MacConnachie, Canada's Oil Sands: Connecting Energy Infrastructure with Core Values, p. 20.

⁹⁷The Barnard College board of trustees decided to divest from energy companies that deny climate change in 2017. Michael McDonald. Barnard College Endowment to Divest From Climate Change Deniers. 2017. URL: https://www.bloomberg.com/news/articles/2017-03-04/barnard-college-endowment-to-divest-from-climate-change-deniers (visited on 03/06/2017).

⁹⁸ Earlier, the body charged by the university with making a recommendation on fossil fuel divestment recommended an option where the school would "divest from coal and tar sands and would also divest from all companies that actively deny climate science." Presidential Task Force to Examine Divestment. Final Report to the Barnard College Board of Trustees Committee on Investments. 2017. URL: https://web.archive.org/web/20170310005716/https://barnard.edu/sites/default/files/bc-divestmentreport2-2016dec.pdf (visited on 01/11/2020), p. 7.

⁹⁹Shue argued that humanity "must intently face reality, which means that we must listen to those who honestly and assiduously study the problems, not to those who are paid to preserve the carbon energy regime that so greatly contributes to them." Shue, *Climate Justice: Vulnerability and Protection*, p. 294.

¹⁰⁰ Oreskes noted that even when individual firms no longer promote disinformation "nearly all of them are members of trade organizations that do." Naomi Oreskes. *Universities Must Divest From the Fossil Fuel Industry*. 2015. URL: https://www.nytimes.com/roomfordebate/2015/08/10/is-college-divestment-from-the-fossil-fuel-industry-worthwhile/universities-must-divest-from-the-fossil-fuel-industry-3 (visited on 02/15/2020).

¹⁰¹Somewhat gallingly, the industry which has done the most to cause climate change and which remains active in misleading the public and decision makers, is also seeking government support to cope with climate change effects. CBS News. Big Oil Asks Government to Protect its Texas Facilities from Climate Change. 2020. URL: https://www.cbsnews.com/amp/news/texas-protect-oil-facilities-from-climate-change-coastal-spine/ (visited on 01/12/2020).

¹⁰²The committee recommended divestment from: "Firms that knowingly disseminate disinformation concerning climate change science or firms that deliberately distort science or public policy more generally in an effort to thwart or delay changes in behaviour or regulation." Karney et al., Report of the President's Advisory Committee on Divestment from Fossil Fuels, p. 4

driven climate change. ^{103,104,105,106,107,108,109} Lemphers described how Shell has been undertaking research on climate change since 1981 and calculated in 1984 that its products produced 4% of global GHG emissions; Exxon began internal research on climate change in 1976 and a campaign to resist climate change regulation in 1989. ^{110,111,112} Mangat et al. describe how:

[t]he fossil fuel industry's duplicity is thus frequently invoked: how it has dragged its feet, opposed climate change regulation, undermined climate scientists and scientific consensus while safeguarding itself based on the same science and bought politicians. 113,114,115

This rationale was also emphasized by CFFD organizers at UVic in *The Tyee* in 2017. 116,117 In 2019, Brendan DeMelle reported that documents obtained from Imperial Oil show that their scientists had confirmed the link between fossil fuels and climate change in the 1970s, but argued in their 1996 annual report that "reducing greenhouse gas emissions after 2000 by limiting or restricting fossil-fuel consumption" is "inappropriate given the continuing widespread uncertainty regarding the impact of human activity on potential global climate change." Their discussion paper from 1990 stated: "The scientific basis for the so-called greenhouse effect was well established decades ago." 120,121 The same document presaged later IPCC content which showed the relative warming impacts of different GHGs and identified $\rm CO_2$ and methane as the largest contributors. 122 A 1993 Imperial Oil study marked "proprietary" found that a carbon tax rising to \$200

¹⁰³Jennie C. Stephens et al. "The Role of College and University Faculty in the Fossil Fuel Divestment Movement". In: *Elementa: Science of the Anthropocene* 6 (2018). URL: https://online.ucpress.edu/elementa/article/doi/10.1525/elementa.297/112810/The-role-of-college-and-university-faculty-in-the (visited on 07/20/2021), p. 2.

¹⁰⁴See also: Ross Gelbspan. The Heat is On: The Climate Crisis, The Cover-Up, The Prescription. New York: Perseus Books, 1998.

¹⁰⁵Naomi Oreskes and Erik M. Conway. Merchants Of Doubt: How A Handful Of Scientists Obscured The Truth On Issues From Tobacco Smoke to Global Warming. New York: Bloomsbury Press, 2010.

¹⁰⁶ Naomi Oreskes. Exxon's Climate Concealment. 2015. URL: https://www.nytimes.com/2015/10/10/opinion/exxons-climate-concealment.html (visited on 02/15/2020).

¹⁰⁷Geoffrey Supran and Naomi Oreskes. "Assessing ExxonMobil's Climate Change Communications (1977–2014)". In: *Environmental Research Letters* 12.8 (2017), p. 084019. URL: https://iopscience.iop.org/article/10.1088/1748-9326/aa815f (visited on 02/15/2020).

¹⁰⁸ Peter C. Frumhoff, Richard Heede, and Naomi Oreskes. "The Climate Responsibilities of Industrial Carbon Producers". In: Climatic Change 132.2 (2015), pp. 157-171. URL: https://link.springer.com/article/10.1007/s10584-015-1472-5 (visited on 02/15/2020).

¹⁰⁹Brenda Ekwurzel et al. "The Rise in Global Atmospheric CO₂, Surface Temperature, and Sea Level from Emissions Traced to Major Carbon Producers". In: *Climatic Change* 144.4 (2017), pp. 579–590. URL: https://link.springer.com/article/10.1007/s10584-017-1978-0 (visited on 02/15/2020).

¹¹⁰Lemphers, "Beyond the Carbon Curse: a Study of the Governance Foundations of Climate Change Politics in Australia, Canada and Norway", p. 108.

¹¹¹ ClimateFiles. 1988 Shell Confidential Report 'The Greenhouse Effect'. 2018. URL: http://www.climatefiles.com/shell/1988-shell-report-greenhouse/ (visited on 08/02/2020).

¹¹²Supran and Oreskes, "Assessing ExxonMobil's Climate Change Communications (1977–2014)".

¹¹³Mangat, Dalby, and Paterson, "Divestment Discourse: War, Justice, Morality and Money", p. 196–7.

¹¹⁴Jeremy Leggett. The Carbon War: Dispatches from the End of the Oil Century. London: Allen Lane, 1999.

¹¹⁵Oreskes and Conway, Merchants Of Doubt: How A Handful Of Scientists Obscured The Truth On Issues From Tobacco Smoke to Global Warming.

¹¹⁶ James Rowe et al. UVic Seeks to Profit from Corporate Climate Change Deniers. 2017. URL: https://thetyee.ca/Opinion/2017/11/03/UVic-Seeks-to-Profit-from-Corporate-Climate-Change-Deniers/ (visited on 10/04/2019).

¹¹⁷Murtaza Hussain. Imperial Oil, Canada's Exxon Subsidiary, Ignored its Own Climate Change Research for Decades, Archive Shows. 2020. URL: https://theintercept.com/2020/01/08/imperial-oil-climate-change-exxon/ (visited on 01/09/2020).

¹¹⁸Geoff Dembicki. Canadian Oilsands Firm Denied Its Own Science On Climate Change. 2019. URL: https://thetyee.ca/News/2019/12/11/Canadian-Oilsands-Firm-Denied-Own-Science/ (visited on 01/19/2020).

¹¹⁹Imperial Oil. 1996 Annual Report to Shareholders. 1996. URL: https://assets.documentcloud.org/documents/5015211/ar1996.pdf (visited on 01/19/2020), p. 32.

¹²⁰ Imperial Oil. A Discussion Paper on Potential Global Warming. 1990. URL: https://www.documentcloud.org/documents/5015317-1990-Discussion-Paper-on-Global-Warming-Combined.html (visited on 01/19/2020), p. 11.

¹²¹A lawsuit against Suncor and Exxon alleged that they have been aware of the deleterious effects of adding CO₂ to the atmosphere since the 1960s. Geoff Dembicki. Has Suncor Seen the Climate Crisis Coming for 61 Years? 2020. URL: https://thetyee.ca/News/2020/07/21/Did-Suncor-See-Climate-Crisis-Coming/ (visited on 07/30/2020).

¹²²Imperial Oil, A Discussion Paper on Potential Global Warming, p. 15.

per tonne by 2005 could stabilize GHG emissions and illustrates their financial interest in avoiding such regulation by noting that it could reduce their downstream revenue by 12%.¹²³ The evidence that fossil fuel corporations became aware that using their products would cause potentially dangerous climate change deepens the analogy between fossil fuel and tobacco corporations, each of which perceived a threat to their profitability because of evidence their product is harmful, investigated whether the harm was real and found that it was, and then proceeded to mislead the public and decision makers.^{124,125} The tobacco analogy has also been deployed against stakeholder activism as an alternative to divestment, since it cannot plausibly drive firms out of their main line of business.

Of divestment's top-level objectives of institutional action, delegitimization, and activist development, the enemy naming strategy is most clearly tied to withdrawing the social license of the fossil fuel industry. 126 Noel Healy and Jessica Debski argued that "FFD aims to remove the social licence by which fossil fuel companies operate through reputational damage and stigmatisation." 127 CFFD campaigns implemented the approach by numerous means, including calling out partnerships between target universities and fossil fuel firms and cataloguing the industry's destructive impacts in their petitions to target administrations. In some ways, the enemy naming strategy was not implemented as intended by proliferators, with campaigns condemning the administrations who had been asked to make a heroic choice. Based on my interviews, Canadian CFFD campaigns nearly always left participants with a more adverse view of the university itself, and many campaigns undertook strongly condemnatory actions with messaging at odds with what some proliferator organization staff recommended.¹²⁸ For example, when Concordia established a \$5 million green fund in 2014 as an alternative to divestment of their \$95 million endowment, it was condemned by Divest Concordia rather than being treated as incremental progress. 129,130,131 When Guelph voted to cut the carbon footprint of its endowment by 10% over two years in 2019, it was called a "starting point" by a university staff member interviewed by the press, but Fossil Free Guelph member Spencer McGregor said: "By giving us this 10 per cent carbon reduction, they're trying to spin it as a win... What they're doing

¹²³ Imperial Oil. Detailed Issue Summary: Global Warming / Climate Change. 1993. URL: https://www.documentcloud.org/documents/6563158-1993-Imperial-Oil-Ltd-Detailed-Issue-Summary.html#document/p2/a537982 (visited on 01/19/2020).
124 Oreskes and Conway, Merchants Of Doubt: How A Handful Of Scientists Obscured The Truth On Issues From Tobacco Smoke to Global Warmina.

 $^{^{125}}$ In 2019, McKibben emphasized the fossil fuel industry's complicity in terms of how they lobbied publicly with claims that contradicted the internal conclusions of their scientists: "We have a crisis, we have a solution, we have a movement, and we have a foe. And let's be very clear about that... we've learned from great investigative reporting that the big fossil fuel companies knew everything that there was to know about climate change in the 1980s, before I did. They knew everything... We found now the documents in archives that demonstrate with uncanny accuracy that its scientists were predicting exactly what the temperature would be in 2019, and what the atmospheric concentration of CO_2 would be, and they were spot on. Not only that, they were believed by the executives at Exxon. Every drilling rig that the company built they built higher to compensate for the rise in sea level they knew was coming... What they did not do was tell the rest of us. Instead they invested billions of dollars in building this architecture of deceit and denial and disinformation." McKibben, What We've Learned About Climate Change in the Last 30 Years.

 $^{^{126}}$ On the multiple strategic goals of the movement, see: The CFFD movement's three strategic objectives p. 5

 $^{^{127}\}mbox{Healy}$ and Debski, "Fossil Fuel Divestment: Implications for the Future of Sustainability Discourse and Action Within Higher Education", p. 3.

¹²⁸Rowe et al. documented this phenomenon in the Harvard case, quoting former undergraduate council president Tara Raghuveer describing the university and those resisting divestment within it as "complicit." Rowe, Dempsey, and Gibbs, *The Power of Fossil Fuel Divestment (and its Secret)*, p. 18.

¹²⁹ Concordia Student Union. Divest Concordia Denounces Concordia University Foundation Refusal to Divest from Fossil Fuels. 2014. URL: https://web.archive.org/web/20150204145140/https://www.newswire.ca/en/story/1454625/divest-concordia-denounces-concordia-university-foundation-refusal-to-divest-from-fossil-fuels (visited on 08/29/2021).

 $^{^{130}} Jessica$ Prupas. Concordia Becomes First Canadian University to Partially Divest from Fossil Fuels. 2014. URL: https://rabble.ca/blogs/bloggers/jessprupas/2014/12/concordia-becomes-first-canadian-university-to-partially-divest--0 (visited on 01/01/2020).

¹³¹Karen Seidman. Concordia Becomes First Canadian University to Begin Divesting from Fossil Fuels. 2014. URL: https://montrealgazette.com/news/local-news/concordia-becomes-first-canadian-university-to-begin-divesting-from-fossil-fuels (visited on 08/26/2019).

is pretty minimal."^{132,133} When the UBC board of governors rejected full divestment in November 2019, UBC organizer Mukta Chachra said that: "UBC is complicit in an industry that is fueling climate crisis, targeting Black, Brown and Indigenous communities, and putting all of our futures at stake."¹³⁴ Similarly, when UVic approved a new investment policy intended to reduce future investments in high-carbon firms and support renewable energy about 100 angry students marched in protest and the director of campaigns and community relations announced that she would be asking alumni to stop donating to the school. ¹³⁵ In April 2016, after the administration's rejection of divestment, U of T organizer Graham Henry gave a speech to the governing council concluding with a statement that the decision "does not lead" and "is not courageous," adding that it was "the sign of a man, and sadly an institution, simply too scared to stand up and do what's right."¹³⁶

The idea of the university administration being in the position to support or condemn the fossil fuel industry 'enemy' broke down as the willingness of most schools to continue to be supporters became plain in Canada. For example, Clay Steell, from the Mount Allison campaign, described how the administration became the primary antagonist, as opposed to the fossil fuel industry. In October 2020, Divest MTA shared a social media post that asked "Are you in an abusive relationship with your school?" and listed a wide range of criticisms, from labour practices to race and inclusivity to pedagogy, with the only reference to investment matters being: "You do not know where your institution's endowment is invested." The same month, the Leap Manifesto campaign at U of T circulated an email update that described how U.S. News & World Report ranked the school 17th in the world, criticized U of T's rejection of divestment and "support for the Thirty Meter Telescope," and closed by saying: "One has to wonder whether this ranking is truly deserved, and if it would be much lower had the ranking system been based on ethical conduct." These examples demonstrate the depth of emotional involvement of campaign members, revealed in their willingness to reject calls to moderate the tone of their disapproval, and the limits of the influence of proliferators.

Enemy naming can increase the risk that strong and determined constituencies will emerge in opposition to climate action.¹³⁸ Even if kept at the abstract level of the global industry as a whole, assigning blame risks making people in communities dependent on fossil fuel extraction for income and jobs fear that decarbonization will entail intolerable personal sacrifices for them.¹³⁹ The moral element in climate activist rhetoric can

¹³² Victor Ferreira. University of Guelph Sidesteps Demands for Full Fossil Fuel Divestment With Partial Carbon Cut. 2019. URL: https://business.financialpost.com/investing/university-of-guelph-sidesteps-demands-for-full-fossil-fuel-divestment-with-partial-carbon-cut (visited on 08/07/2019).

¹³³When Harvard pledged to "pause" coal, gas, and mineral investments in 2017 Chloe Maxmin wrote that "Harvard's bottomup path to change is one more sign that too many people at the top of our most powerful institutions have forfeited—through intransigence, inaction, self-interest, or ignorance—their right to lead." Chloe Maxmin. How Harvard Divestment Was Won. 2017. URL: https://www.thenation.com/article/harvard-divestment-won/ (visited on 01/02/2012).

¹³⁴ Charlie Smith. UBC Board of Governors Committee Opts for Partial and not Full Divestment from Fossil Fuel Companies. 2019. URL: https://www.straight.com/news/1328841/ubc-board-governors-committee-opts-partial-and-not-full-divestment-fossil-fuel (visited on 01/04/2020).

¹³⁵ Richard Watts. UVic Won't Add Investments in High-carbon Firms, but Students Demand Complete Divestment. 2020. URL: https://www.timescolonist.com/news/local/uvic-won-t-add-investments-in-high-carbon-firms-but-students-demand-complete-divestment-1.24063682 (visited on 02/04/2020).

¹³⁶Henry, Address to the Governing Council of the University of Toronto on the Subject of Fossil Fuel Divestment.

¹³⁷Divest MTA. In light of Mount Allison ranking as the #1 top undergraduate university in Canada, we would like to provide an *alternate* checklist of evaluating the university's performance. 2020. URL: https://www.facebook.com/protesttodivest/posts/1805098559628568 (visited on 10/15/2020).

¹³⁸ See: Jocelyn Timperley. Who is Really to Blame for Climate Change? 2020. URL: https://www.bbc.com/future/article/20200618-climate-change-who-is-to-blame-and-why-does-it-matter (visited on 06/29/2020).

¹³⁹ This is a reason why many programmes for climate action emphasize job creation, and why the concepts of a "just transition" or "green new deal" include assistance to people and communities that depend on the fossil fuel sector. See for instance: Saul Griffith, Sam Calisch, and Alex Laskey. Mobilizing for a Zero Carbon America: Jobs, Jobs, Jobs, and More Jobs. A Jobs and Employment Study Report. 2020. URL: https://static1.squarespace.com/static/5e540e7fb9d1816038da0314/t/5f209173294b6f5ee41ea278/1595969952405/Jobs_White_Paper_Compressed_Release.pdf (visited on 08/06/2020).

also generate resistance through a strong emotional response. Georg Ortmann described the perspective of coal miners in Germany: "For climate protesters we are like filth and to be blamed for climate change. It feels unfair. If we could, we would earn our money in another way. But moral lectures don't really help when people's livelihoods are at stake." There are ethical and logical rebuttals to such arguments — people don't have the right to damage and threaten all of humanity because they have structured their economy in a particular way — but such arguments contradict the sense that people are entitled to keep behaving as they have in the past. That common sort of entitled thinking also links in with other frequent arguments against fossil fuel abolition, including the claim that people whose lives currently require fossil fuels are hypocrites to call for their elimination, and simply that it is impossible to maintain the standard of living we demand without using coal, oil, and gas.

The story of self and enemy naming techniques have clearly served as major influences on the repertoires of climate change and CFFD activists. Each is an effort to overcome the psychological barriers to action by increasing the emotional salience of the issue though the perception that the impacts are here and now rather than distant — and the harm is knowingly and deliberately, rather than innocently or ignorantly, caused. These techniques have been so successful that, as described in my pre-print, they have both been adapted into pro-fossil counter-repertoires, with fossil fuel advertising campaigns based on the personal stories and assurances of virtue from employees and the effort, most visible among politicians, to denounce the climate activist movement itself as an enemy threatening economic prosperity, high living standards, or poverty reduction. These techniques, and particularly the story of self, are widely embedded in activist norms and practices. Shared acceptance of their usefulness was a factor that helped keep groups in contention with one another within the CFFD movement to keep working together.

4.3 Tactics across a spectrum of contentiousness

While the political opportunity chapter focused on who campaigns sought to influence and to do what, the central question pertaining to repertoires is how campaigns sought to influence their targets and the consequences that had for the activists' campaigns and themselves. While many categorizations are possible, interview subjects readily classified their tactics on a scale running from most cooperative to most confrontational, with the cooperative edge consisting of providing information to target administrations while taking part in university-established processes and the most confrontational tactics employed in Canada extending to forms of non-violent direct action (NVDA) such as highly visual and media-friendly condemnatory per-

¹⁴⁰ Anna Saraste. 'For Climate Protesters, We are Like Filth': The German Village Where Coal is Still King. 2020. URL: https://www.theguardian.com/world/ng-interactive/2020/jun/01/climate-protesters-german-village-coal-still-king (visited on 06/19/2020).

¹⁴¹Even making the case that fossil fuel producers don't have the right to impose harm on others can be controversial and lead to blowback from the industry. For instance, after Whistler B.C. mayor Jack Crompton argued that the Alberta oil and gas sector ought to pay some of the costs which the city is experiencing from climate change it led to CIBC withdrawing the oil and gas portion of an investor conference there, leading to the mayor apologizing for making anyone feel "unwelcome here." Ryan Rumbolt. Whistler Wants to Bill Alberta Oil and Gas Company for Climate Change Expenses. 2018. URL: https://calgaryherald.com/news/local-news/whistler-wants-albertan-oil-and-gas-company-to-pay-for-resorts-climate-change-costs (visited on 06/20/2020).

¹⁴²Ryan Rumbolt. CIBC Pulls Energy Sector from Whistler Investor Conference, Mayor Apologizes for Climate Change Letter. 2018. URL: https://calgaryherald.com/news/local-news/cibc-cancels-oil-and-gas-conference-in-whistler-as-mayor-apologizes-for-climate-change-letter/ (visited on 06/20/2020).

¹⁴³This illustrates how the same communication techniques and tactics can be applied to contradictory objectives. See: Ilnyckyj, "Campus Fossil Fuel Divestment (CFFD) Counter-Repertoires".

¹⁴⁴This speaks to the gap in the literature described by Taylor and Van Dyke, who called for "further attention to the way different tactical repertoires result in changes in belief systems, identities, and cultural practices." Taylor and Van Dyke, "'Get Up, Stand Up': Tactical Repertoires of Social Movements", p. 284.

formances, building occupations, and extended on-campus camp outs. ^{145,146} This was integrated with the central emotional techniques of naming the fossil fuel industry as an enemy and activists using their biographical "story of self" to legitimize their demands. Tactics can also be classified based on which audience they sought to influence. CFFD campaigns often developed distinctive repertoires for the "inside game" of persuading target administrations to act through direct communication and the "outside game" of building community and public support and pressure. ^{147,148} The selection of campaign actions on the spectrum of contentiousness reflected this awareness of multiple audiences and also shifted with perceived changes in political opportunities and shifts in the dominant theory of change held by organizers coordinating each campaign at any given time.

Tarrow discussed how movements that employ the repertoire of contention can undertake collective action of three broad types: disruptive ones which "break with routine, startle bystanders, and leave elites disoriented, at least for a time;" violent ones which require people "willing to exact damage and risk repression;" and contained ones which "build... on routines that people understand and that elites will accept or even facilitate." ^{149,150} In each interview with a CFFD organizer I raised the idea of a spectrum of possible actions running from the most cooperative, from the perspective of the target university, to the most confrontational. ¹⁵¹ This was intended to gauge whether CFFD campaign members had thought of the repertoires accessible to them in these terms, as well as to collect information about where on the spectrum campaigns chose to be at different times and the causes of any shifts. A significant factor driving tactical selection was activists' awareness that actions perceived as novel, surprising, and creative would have more of an effect, whether that was a pretend dodge ball game between students and the administration, a photogenic "Slip 'N Slide" action on black garbage bags, a climate change slam poetry event attended by 150 people, or an activist dressed as Santa Claus soliciting suggestions from students about where to move when the Arctic melts. ¹⁵² Campaigns changed the emotional tone of their efforts for a variety of reasons, including in response to unwelcome decisions by target administrations, and also as a result of the shifting composition of

¹⁴⁵Specifically, I asked "CFFD campaigns are often distinguished by the degree to which they embrace cooperative as opposed to confrontational strategies and tactics. What would you say was the balance in your campaign? Did it change at any point and, if so, in response to what?" as part of my semi-structured interviews.

¹⁴⁶Despite these efforts, the CFFD movement consistently struggled to elicit mainstream media attention for its actions, which ended up mostly being publicized via social media and progressive outlets like *The Tyee*, *The Narwhal*, and *The National Observer*.

¹⁴⁷ Describing the interaction of university administrations with student activists, Diane Peters said: "actions range from in-your-face confrontations to behind-the-scenes hand-shakes with political representatives." Peters, The Hot Mess of Student Activism.

¹⁴⁸While the inside and outside efforts were meant to be complimentary, one proliferator staff member described an "extreme degree" of tension between supporters of each, with policy-minded people seeing the value in participating in established processes and radicals insisting that only transformational change is sufficient. They noted further that grassroots advocates "take a moral high ground over people who do policy based work."

 $^{^{149}}$ Tarrow, Power in Movement: Social Movements and Contentious Politics, 3rd ed. p. 99.

¹⁵⁰ Frances Fox Piven argued that: "For a very long time now, people who are sympathetic with movements from below and who study movements from below have drawn the line at violence. There's been a kind of fetish, almost a sort of religion of nonviolence in movement studies. There's a reason for this. Movements are playing to a public, because they interact with electoral politics, which depend on the behavior of mass publics in the voting booth. The public shrinks from violence, especially violence from below." and: "That has crippled our analysis, because there's always been violence associated with mass movements." Mie Inouye. Frances Fox Piven on Why Protesters Must 'Defend Their Ability to Exercise Disruptive Power'. 2020. URL: https://www.jacobinmag.com/2020/06/frances-fox-piven-protests-movement-racial-justice (visited on 06/19/2020).

 $^{^{151}}$ Peter Gibbs, from the University of Victoria campaign, said that the campaign's persuasive versus confrontational tactics were "on a spectrum or timeline."

¹⁵²The use of creative strategies and tactics has been advocated and applied in forms of contemporary activism outside of climate change and the environment, for instance in privacy policy. Interactive games have been used as an outreach tool in both contexts. See: Sharly Chan. "Canadian Privacy Advocacy Groups and Bill C-51". MA thesis. University of Toronto, 2019. URL: https://tspace.library.utoronto.ca/bitstream/1807/96055/1/Chan_Sharly_201906_MIS_thesis.pdf (visited on 08/16/2019), p. 58-62, 79-80.

the CFFD campaign's membership. Sometimes a progression toward escalated tactics arose from university actions perceived as unacceptable by activists, corresponding to the concept of cycles of contention as iterated back-and-forth interactions between claim makers and respondents.¹⁵³ Some campaigns also perceived a need to employ escalated tactics only when cooperative ones had been tried and found insufficient, as in Kate Brunette's explanation of how the American University campaign expected to progress to sit-ins, walkouts, and occupations, but only after cooperative tactics had been used to "demonstrate legitimacy and to justify the necessity of escalated action." Other campaigns did not appreciably escalate to more confrontational tactics even in the face of setbacks and rejections, perhaps because of a campus climate unsupportive of activism, or a large degree of influence from CO₂-e proponents.

However they are categorized, Canadian CFFD campaigns clearly drew from a common set of possible actions. All campaigns with any significant level of activity included petitions and social media messaging. Other campaign actions have been more distinctive. A discussion with CFFD activists in GUTS Magazine included photos showing actions ranging across the spectrum. They depicted an "Indigenous student-led opening ceremony and land acknowledgement" at the Mount Allison campout; "Divest Dal students standing as silenced witnesses at a recent Board of Governors' meeting as the Board voted to raise tuition and continued to ignore the issue of divestment"; activists conducting a "die-in" at Mount Allison; snow falling on about thirteen tents at the Mount Allison campout; a banner drop at the University of Winnipeg's fall convocation; and 25 Dalhousie students showing their "birthmark tattoos" of the CO₂ concentration in the year of their birth. 155,156 During a 2014 sustainability week at UVic focused on composting, the CFFD campaign floated a banner on helium balloons inside an administration building reading: "Compost Your Dirty Investments." At Dalhousie in 2015, activists responded to a \$600,000 donation from Shell by designing and flying a "Shellhousie flag." ¹⁵⁷, ¹⁵⁸, ¹⁵⁹ Gunningham argued that the divestment movement "rejects cooperative strategies such as investor-company dialogue." While CFFD activists have certainly feared, with good cause, that cozy relationships between institutional investors and the fossil fuel industry will mostly result in deceptive public relations and a worsening climate crisis, it is not true that the movement rejects cooperative strategies generally. CFFD campaigns have generally understood that universities might be persuaded but cannot plausibly be forced to change their investment practices, and many campaigns were consistently motivated in their tactical and strategic choices by the idea that winning over the campus community through calm and credible argument is a necessary part of advocating for divestment, even when those efforts are accompanied by more confrontational tactics when organizers decide on them. 161

¹⁵³ For instance, in 2020 members of Divest McGill said they would be persisting with escalated tactics like camp-outs, occupations, and the returning of degrees in response to the school's repeated rejections of divestment. Kate Addison. Divest McGill Holds Rally Protesting Invasion of Wet'suwet'en Territory. 2020. URL: https://www.mcgilltribune.com/news/divest-mcgill-holds-rally-protesting-invasion-of-wetsuweten-territory-021820/ (visited on 02/28/2020).

¹⁵⁴Bratman et al., "Justice is the Goal: Divestment as Climate Change Resistance", p. 686.

¹⁵⁵Katie Perfitt et al. A Conversation about the Canadian University Fossil Fuel Divestment Movement. 2017. URL: http://gutsmagazine.ca/divestment/ (visited on 09/11/2018).

¹⁵⁶The birthmark tattoo idea was adapted from the Liberate Tate movement targeting the Tate Modern art gallery in the UK. ¹⁵⁷Jesse Ward. Shellhousie Flag Flies in Protest of Dal's Relationship With Oil Company. 2015. URL: https://dalgazette.com/news/campus/shellhousie-flag-flies-in-protest-of-dals-oil-investments/ (visited on 05/31/2019).

¹⁵⁸ See also: Canadian Association of University Teachers. Canada's Campuses Emerge as Latest Battleground in Fast-growing Divestment Movement. 2015. URL: https://bulletin-archives.caut.ca/bulletin/articles/2015/12/canada-s-campuses-emerge-as-latest-battleground-in-fast-growing-divestment-movement (visited on 12/31/2019).

 ¹⁵⁹ McGray and Turcotte-Summers, "Austerity-Privacy & Fossil Fuel Divestment Activism at Canadian Universities", p. 43–4.
 160 Gunningham, "Review Essay: Divestment, Nonstate Governance, and Climate Change", p. 311.

¹⁶¹Chris Saltmarsh described a progression between tactics in UK campaigns, beginning with "innocuous and ineffective" petitions to build a base of support; creative non-violent actions to build a base of support; and marches, sit-ins, occupations, and hunger strikes coupled with insider lobbying tactics. Chris Saltmarsh. The Success of the Student Divestment Campaign Shows What the Climate Movement can Deliver. 2020. URL: http://bright-green.org/2020/01/13/the-success-of-the-student-divestment-campaign-shows-what-the-climate-movement-can-deliver/ (visited on 01/18/2020).

In part, campaigns chose their level of overall contentiousness based on their expectations about the likely responses of their university and the general political tone on campus (university norms influencing those of campus activities). At Waterloo, Élisabeth Bruins described how they chose to be less confrontational than the campaign at the University of Ottawa, which had featured sit-ins, because "we felt that our campus would not respond to such approaches." ¹⁶² At Queen's, an interview participant said "our campaign was never about shaming the oil and gas industry" because such an approach would have been ineffective in the school's conservative culture where a large number of graduates go on to work in the industry. ¹⁶³ They also argued that it was "best not to look too radical so as not to alienate our campus." The cognitive-relational processes through which interaction between activists foster an ability to question the current order and willingness to act to change it may be especially relevant in universities where few other activist movements exist. ¹⁶⁴ In such contexts, where other opportunities do not exist to learn about injustices like economic inequality, colonialism, or the oppression and exploitation of Indigenous peoples, the CFFD movement may have had an unusual ability to affect worldviews, relative to what students would otherwise have been exposed to, even if such campaigns more often chose cooperative tactics and emphasized solidarity and issue-linkage less than others.

Information sharing is at the least confrontational end of the spectrum. This involves actions like teachins and discussion panels and, in part because of bureaucratic requirements enacted by universities, many campaigns also presented detailed written arguments justifying divestment in public. At a number of universities, CFFD campaigns undertook considerable labour to produce thoroughly-documented briefs formally making the case for divestment. At U of T, the production of such a document was a requirement of the university's divestment policy. The U of T campaign opened a brief for endorsement by teaching staff, students, administrative staff, and alumni in March 2014 and presented an updated brief including responses to the presidentially-appointed ad hoc committee in April 2015. 166,167,168,169,170,171 In June 2015, the Memorial University campaign published a brief making the economic and ethical cases for divestment. Another productive tactic employed by numerous CFFD campaigns I studied was class talks, which provided simultaneous opportunities for the activist presenters to develop their public speaking skills, to recruit new volunteers from the audience, and to inform large numbers of students about the existence of the campaign and its justification, which itself advances the divestment-wide core objective of delegitimizing the fossil fuel industry. In January 2015, UVic CFFD organizer Malkolm Boothroyd and Crystal Lameman took part in

¹⁶²Another interview subject argued that all the student activists at Waterloo were on the moderate side of the militancy spectrum, particularly one student. With consensus decision making, this person was especially empowered.

¹⁶³A bit paradoxically, the participant said that they never expected a high likelihood of the administration choosing to divest, but the campaign nevertheless emphasized the institutional response objective of divestment rather than delegitimization or activist development.

¹⁶⁴Florence Passy and Gian-Andrea Monsch. "Biographical Consequences of Activism". In: The Blackwell Companion to Social Movements. Ed. by David A. Snow, Sarah A. Soule, and Hanspeter Kriesi. Wiley Online Library, 2004, p. 508.

¹⁶⁵Toronto350.org, The Fossil Fuel Industry and the Case for Divestment: Update, p. 216.

 $^{^{166}} Toronto 350. org. \ The Fossil Fuel Industry and the Case for Divestment. 2013. URL: http://www.uoftfacultydivest.com/files/fossil-fuel-divest.pdf (visited on 01/30/2017).$

 $^{^{167}}$ Toronto350.org, The Fossil Fuel Industry and the Case for Divestment: Update.

 $^{^{168}}$ For other examples of detailed briefs created by CFFD campaigns, see: Fossil Free York, Make YorkU a Climate Leader: The Case for Fossil Fuel Divestment.

¹⁶⁹ Divest MUN. Fossil Fuel Divestment Request for Memorial University of Newfoundland and Labrador. 2015. URL: https://issuu.com/divestmun/docs/divestmun_submission_to_board_of_re (visited on 01/02/2020).

¹⁷⁰ Emma Jackson et al. The Case for Fossil Fuel Divestment at Mount Allison University. 2015. URL: https://divestmta.files.wordpress.com/2015/02/divest-mta-final-report-2.pdf (visited on 10/10/2021).

¹⁷¹Ben Christman et al. Are We Exceptional? The Case for Queen's University Belfast to Divest from Fossil Fuels. 2015. URL: https://www.academia.edu/20116515/Are_We_Exceptional_The_Case_for_Queen_s_University_Belfast_to_Divest_from_Fossil_Fuels (visited on 01/01/2020).

¹⁷²Divest MUN, Fossil Fuel Divestment Request for Memorial University of Newfoundland and Labrador.

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"a dialogue on climate change, divestment, and society" with Steve Douglas, "the vice-president of investor relations at Suncor Energy." The event was "standing room only in one of UVic's biggest auditoriums," demonstrating the degree of interest. 173,174

Tactics can serve multiple objectives simultaneously. List building is an important example. CFFD campaigns frequently undertook public canvassing, usually with the direct aim of getting members of the university to sign a petition in support of fossil fuel divestment. Usually these petitions include an option to be contacted with follow-up information, either on an 'opt in' or 'opt out' basis. For example, Peter Gibbs described how the University of Victoria campaign used petitions as a key way to collect contact information via a 'I want to volunteer' checkbox, allowing the campaign to invite people to the next action or volunteer orientation, or schedule a one-on-one onboarding conversation. Campaigns which developed lists of hundreds or thousands of petition signatories along with contact information were later able to send updates about the progress of the campaign, share responses to administration actions, and sometimes mobilize people for in-person actions like marches or rallies. A research participant at the University of Winnipeg identified the large phone list they assembled through canvassing as a valuable way to bring people out for their largest in-person events. An organizer at UVic described how petitions are as much a tool for building organizations as for pressuring their ostensible targets. These lists were also used as part of a 'ladder of escalation' to get people who expressed interest during canvassing or tabling to take the next step and attend a planning meeting. Jed Lenetsky described how Divest McGill pursued multiple objectives with their 2014 Fossil Free week, including seeking to pressure the administration to stop any new fossil fuel investments while deliberating on divestment; trying to establish the principle that the school ought to prevent further harm while deliberating; and recruiting new volunteer organizers.

While the tone and messaging may vary between condemnation of inadequate or counterproductive actions so far and celebration of positive steps, large in-person actions like marches and rallies can best be understood as being in the middle of this spectrum of contention. This is reflected in part in how they are perceived by universities, which have deployed private security or called on the police to monitor such actions, or used their control of on-campus space, such as when they barred access to meetings that would previously have been public when a CFFD action is anticipated. At the University of Toronto, two marches were held in support of the divestment campaign in November 2014 and October 2015, each with about 150 people taking part.

CFFD campaigners have used opportunities to protest, question, or challenge university officials in contexts like speeches and graduation ceremonies. 175,176,177 Graduating CFFD activists have found many ways to incorporate an endorsement of the campaign or a criticism of the administration into their own graduations, whether by subtly incorporating the colour orange and the symbol of an 'X' adopted by the movement into their appearance (communicating only to audiences already fairly well informed about the campaign) or deploying a banner intended to convey a comprehensible message even to members of the audience not already aware of the campaign. At Mount Allison, graduates crossed the stage carrying divestment squares and handed a letter to the president. These kinds of tactics also took place outside the context of graduation ceremonies. One campaign identified presentations happening on campus, had organizers attend,

¹⁷³Maltese, Divestment Opens Dialogue at UVic.

¹⁷⁴See also: Pacific Institute for Climate Solutions. *A Dialogue: Climate Change, Divestment and Society.* 2015. URL: https://pics.uvic.ca/events/dialogue-climate-change-divestment-and-society (visited on 08/26/2019).

¹⁷⁵ See: Madi Haslam. Students vs. Big Oil. 2018. URL: https://this.org/2018/02/01/students-vs-big-oil/ (visited on 07/23/2019).

¹⁷⁶Gvozdic et al., Handbook: Lessons from a Divestment Campaign, p. 24.

¹⁷⁷Bratman et al. described similar tactics in US campaigns, including graduating students wearing orange felt squares symbolic of the CFFD campaign. Bratman et al., "Justice is the Goal: Divestment as Climate Change Resistance", p. 687.

asked the speaker about their views on divestment, filmed the responses, and used the endorsements collected as public validation for the campaign.¹⁷⁸ This tactic was used with distinguished guests and speakers including Winona LaDuke, Vandana Shiva, and David Suzuki. One interview participant explained how the administration perceived a silent banner drop with the message "Innovators don't invest in fossils" as highly contentious because divestment was one of the first activist campaigns on campus, an action like this had not been taken before, and so "the president was really taken aback." After climate activists including CFFD organizers in Edmonton dropped a "No Kinder Morgan" banner from the High Level Bridge after the Energy East pipeline cancellation they received death threats online.¹⁷⁹ In July 2019, CFFD activists at UBC interrupted a speech by President Santa Ono on climate change carrying signs reading "Commit Globally; Divest Locally" and "Migrant Justice is Climate Justice." ¹⁸⁰

Within CFFD campaigns in Canada the most confrontational tactics employed have been camp outs and building occupations, as seen at the University of Winnipeg, McGill, and Mount Allison. ^{181,182,183,184,185,186,187,188,189,190,191} Curnow and Gross cited the March 2015 occupation of Swarthmore College's administration building by the mountain justice campaign as a model for the use of the tactic by CFFD campaigns. ¹⁹² In fall 2016, 30 students from the Divest Dalhousie campaign occupied an administration building where "a handful" got

¹⁷⁸An interview participant said the campaign put together a video of prominent visitors to campus including eNGO staff members and honorary doctorate recipients and then shared the video via Facebook.

¹⁷⁹Haslam, Students vs. Biq Oil.

¹⁸⁰Henry Anderson. At Agents of Change Event, Students Demand Divestment. 2019. URL: https://www.ubyssey.ca/news/students-demand-divestment-at-climate-crisis-event/ (visited on 07/29/2019).

¹⁸¹Bruce Wark. Emotions Run High as Mt. A Students Step up Protest Against University Ties to Fossil Fuels. 2017. URL: https://warktimes.com/2017/03/22/emotions-run-high-as-mt-a-students-step-up-protest-against-university-ties-to-fossil-fuels/ (visited on 08/18/2019).

¹⁸²Some CFFD campaigns around the world have prepared confrontational actions as part of a range of possible responses. The Glasgow campaign prepared for an escalated action in the event the administration rejected divestment. Ric Lander. Campaign Stories: Looking Back at Glasgow University's Fossil Free First. 2019. URL: https://foe.scot/campaign-stories-looking-back-at-glasgow-universitys-fossil-free-first/ (visited on 12/16/2019).

¹⁸³At the University of Manchester, People & Planet UoM occupied the building housing the university's finance team. Lucca Di Virgilio and Anja Samy. Student Activists Occupy Finance Offices in Protest of University Fossil Fuel Investments. 2019. URL: https://mancunion.com/2019/11/21/uom-students-occupy-finance-offices-in-protest-of-university-fossil-fuel-investments/ (visited on 02/04/2020).

¹⁸⁴In another example, in November 2019 hundreds of students and alumni disrupted the Harvard-Yale football game to call for divestment, earning an exceptional amount of media coverage: Divest Harvard. BREAKING! Over 200 Yale and Harvard Students and Alumni Stormed the Field and Disrupted the #HarvardYale Football Game to Call for Climate Justice and Divestment! 2019. URL: https://www.facebook.com/divestharvard/photos/a.292260627558217/2537554783028779/ (visited on 01/04/2020).

¹⁸⁵Divest Harvard. Hundreds of Students and Alumni Disrupt the Harvard-Yale Game to Demand Climate Justice. 2019. URL: https://www.facebook.com/notes/divest-harvard/hundreds-of-students-and-alumni-disrupt-the-harvard-yale-game-to-demand-climate-/2537464063037851/ (visited on 01/04/2020).

¹⁸⁶Elizabeth, Protesters Interrupt Harvard-Yale Football Game to Fight Back Against Climate Change.

¹⁸⁷ Divest Harvard and Fossil Free Yale. Opinion: We Disrupted The Harvard—Yale Game Because Our Schools Profit From Disaster. 2019. URL: https://www.buzzfeednews.com/article/divestharvardyale/opinion-why-we-disrupted-the-harvard-yale-game (visited on 01/04/2020).

¹⁸⁸John Hilliard and John Powers. Hundreds of Climate Protesters Disrupt Harvard-Yale Game, Demand Fossil Fuel Divestment. 2019. URL: https://www.bostonglobe.com/metro/2019/11/23/hundreds-climate-protesters-disrupt-harvard-yale-game-demand-fossil-fuel-divestment/kl01207vrei4XisuxBBGFK/story.html (visited on 02/04/2020).

¹⁸⁹ The College Climate Coalition. Nobody Wins Without Fossil Fuel Divestment. 2019. URL: https://youtu.be/kthIpZuNM5c (visited on 10/21/2020).

¹⁹⁰Confrontational tactics used in some CFFD campaigns are also being used elsewhere in the climate activist movement. For example, in January 2020 dozens of children in California marched to the headquarters of their teachers' pension plan and held a die-in with some drenched in fake oil. Andrew Sheeler. Teens Drench Themselves in Fake Oil in Climate Change Protest at California Pension Fund. 2020. URL: https://www.sacbee.com/news/politics-government/capitol-alert/article239806898.html (visited on 02/04/2020).

¹⁹¹The Extinction Rebellion movement is notable for their enthusiasm for confrontational tactics, including those which inconvenience members of the public at large, like disrupting public transit.

¹⁹²Curnow and Gross, "Injustice Is Not an Investment: Student Activism, Climate Justice, and the Fossil Fuel Divestment Campaign", p. 367.

stick-and-poke "birthmark" tattoos showing the $\rm CO_2$ concentration in the year of their birth. 193,194,195 Divest Dal organizer Kathleen Olds explained that the Dalhousie campout led to concessions from the administration: a low carbon / fossil fuel free fund search by the university's investment committee and access to decision making bodies for campaign organizers. At Mount Allison in 2017, students assembled in Mawita'mkw, "a small gathering space for Indigenous students and community members," before a die-in for board members in the student centre's Tweedie Hall. 196,197 In March 2017, the Mount Allison campaign held a three-day campout on campus in -10 °C weather which escalated to a protest on the steps of president Robert Campbell's office, leading to a meeting between the president and campaign organizers. 198,199,200,201 In June 2017, dozens of Divest UWinnipeg supporters held a camp out on the university's front lawn to protest the board of governors' decision to establish "a renewable energy investment portfolio known as a green fund as an option for investors" instead of divesting their endowment. 202,203 A UBC faculty member argued that camp outs publicly demonstrate a level of concern, emphasize a gap in values between the administration and students, and speak to a broader audience beyond the campus. Other actions toward the confrontational end of the spectrum include criticism of fossil fuel donors, as when Divest Dalhousie flew a "Shellhousie" flag to protest a partnership between the university and the firm.

CFFD organizers in Canada, the US, and UK have also targeted fossil fuel corporation recruitment on campus and questioned why universities are training students for careers in an industry that must be phased out.^{204,205} At a university job fair, activists affiliated with the University of Winnipeg CFFD campaign held a banner in front of a booth from James Richardson & Sons, owners of Tundra Oil & Gas and the donors behind the university's Richardson College for the Environment and Science Complex which opened in 2011.²⁰⁶ An interview participant explained that the people tabling for the corporation called their office who sent over an executive to talk with the student activists. In the UK in 2021, People & Planet organized a "Fossil Free Careers" campaign calling for university career departments "to end recruitment pipelines into

¹⁹³Haslam, Students vs. Big Oil.

¹⁹⁴Carly Chuchill. Divest Dal Pushes Forward. 2018. URL: https://dalgazette.com/news/divest-dal-pushes-forward/(visited on 01/01/2020).

¹⁹⁵An interview participant commented that she had seen birthmark tattoos on Stephen Thomas, Katie Perfitt, and Kiki Wood shortly after COP-21 in 2015.

¹⁹⁶Haslam, Students vs. Big Oil.

¹⁹⁷On the progression toward more confrontational tactics at Mount Allison, see: Abram Lutes. *Challenging Mount Allison University's Complicity With the Fossil Fuel Industry: Tina Oh.* 2019. URL: http://nbmediacoop.org/2019/08/19/challenging-mount-allison-universitys-complicity-with-the-fossil-fuel-industry-tina-oh/ (visited on 09/24/2019).

¹⁹⁸ Stills and video from the camp out and occupation are included in: Louis Sobol. *Tide.* 2020. URL: https://www.youtube.com/watch?v=v1gCIOmxmoM (visited on 09/02/2020).

¹⁹⁹ See also: Louis Sobol. Lessons from Campaigning for Divestment at Mount Allison University. 2019. URL: https://www.nationalobserver.com/2019/02/04/opinion/lessons-campaigning-divestment-mount-allison-university (visited on 02/08/2019).

²⁰⁰Haslam, Students vs. Big Oil.

²⁰¹Wark, Emotions Run High as Mt. A Students Step up Protest Against University Ties to Fossil Fuels.

²⁰² Austin Grabish. Students Gear up for Battle After University of Winnipeg Board Rejects Fossil Fuel Divestment. 2017. URL: https://www.cbc.ca/news/canada/manitoba/university-winnipeg-divestment-fight-1.4168688 (visited on 01/02/2012).

²⁰³CBC News. University of Winnipeg Students Camp Outside for the Night to Support Fuel Divestment. 2017. URL: https://www.cbc.ca/news/canada/manitoba/university-students-fuel-divestment-campout-1.4166730 (visited on 01/02/2012).

²⁰⁴In February 2022, Divest McGill members took part in an RBC recruitment panel to ask questions. Banking on a Better Future. (1/4) We teamed up with McGill students to ask some questions at an RBC career panel. 2022. URL: https://twitter.com/bank4future/status/1494724071896059907 (visited on 02/18/2022).

 $^{^{205}\}mathrm{See}$ also: Damian Carrington. Do not Work for 'climate wreckers', UN Head Tells Graduates. 2022. URL: https://www.theguardian.com/environment/2022/may/24/do-not-work-for-climate-wreckers-un-head-tells-graduates-antonio-guterres (visited on 05/30/2022).

²⁰⁶University of Winnipeg News Centre. *Historic Grand Opening Of Richardson College For The Environment And Science Complex.* 2011. URL: https://news-centre.uwinnipeg.ca/all-posts/historic-grand-opening-of-richardson-college-for-the-environment-and-science-complex/ (visited on 06/25/2019).

the oil, gas, and mining industries."²⁰⁷ In September 2022, Birkbeck, University of London adopted a policy that their careers service "will not hold relationships of any kind with oil, gas or mining companies."²⁰⁸

University board of governors and board of regents meetings were also targeted with direct actions. At UVic, campaigners created a "human corridor" outside the Board of Governors meeting which governors had to walk through to get inside. When organizers brought in thousands of petition signatures written on origami wind turbines, Malkolm Boothroyd described how they "succeeded in making it quite uncomfortable for UVic's administrators." In 2019, Divest UVic blocked all entrances to the administration building to protest the board of governors' decision to delay a vote on divestment.²⁰⁹

To some extent, CFFD campaigns have also contentiously undertaken efforts to discourage new donations and student enrolment — though interview participants described this more as an idea which they considered than a strategy which was implemented to any meaningful degree.²¹⁰ At Mount Allison in March 2020, about 30 CFFD activists held a protest and march intended to influence prospective students and their parents.²¹¹ Several campaigns discussed or made an effort to implement a campaign for donors to withhold contributions until the university divested, or to promise donations if they committed to divest.

Die-ins – where participants symbolically represent climate change victims using their own bodies — are another confrontational tactic employed by CFFD campaigns. Tina Oh said that the Mount Allison die-in in the fifth year of the campaign was controversial and that the campus hadn't seen such activism in a while. Brad Walters described a die-in at a Mount Allison board of governors meeting as the peak of the campaign's contentiousness, along with the camp-out and occupation of the president's office. This was corroborated by Naomi Goldberg, who called it the "culminating point" of the campaign, driven by frustration with the administration's refusal so far to make a decision. A McGill organizer described how the campaign undertook a die-in at a pedestrian crosswalk to protest the bitumen sands, but found it personally embarrassing and uncomfortable compared to actions like putting up posters. Miriam Wilson used the example of die-ins at University College London to contrast the greater willingness to use direct action within UK campaigns compared with Canada, listing it alongside actions like occupations and jamming university phone lines.

Divestment campaigns outside Canada involved similar confrontational tactics. To give a few examples, Divest Harvard held sit-ins in February and April 2015, which persisted until campus police restricted access to bathrooms.²¹² They occupied University Hall again in February 2020.²¹³ In April 2016, University of Edinburgh activists undertook a second occupation, after a ten day action in May 2015.²¹⁴ Manchester

 $^{^{207} \}mbox{People \& Planet.}$ Fossil Free Careers. 2021. URL: https://web.archive.org/web/20211011120615/https://peopleandplanet.org/fossil-free-careers (visited on 02/05/2022).

²⁰⁸Waseem Mohamed and Damian Carrington. Fossil Fuel Recruiters Banned from UK University Careers Service. 2022. URL: https://www.theguardian.com/environment/2022/sep/28/fossil-fuel-recruiters-banned-from-birkbeck-university-of-london-careers-service (visited on 10/04/2022).

 $^{^{209} \}mathrm{Devon}$ Bidal. Student Protestors Blockade UVic Administrative Building, Fight for Fossil Fuel Divestment. 2019. URL: https://www.vicnews.com/news/student-protestors-blockade-uvic-administrative-building-fight-for-fossil-fuel-divestment/ (visited on 02/04/2020).

²¹⁰Conor Curtis, for instance, described how the MUN campaign considered a donation ban but disagreed internally about whether donations not meant to seek influence might be OK.

²¹¹Zoe Hunter. Divest Holds Protest During Open House. 2020. URL: http://www.since1872.ca/active-sections/1-news/divest-holds-protest-during-open-house/ (visited on 03/10/2020).

²¹²Toffel and Gulick, Harvard Business School Case: Fossil Fuel Divestment, p. 11.

²¹³Ellen M. Burnstein. Divest Harvard Protesters Occupy University Hall. 2020. URL: https://www.thecrimson.com/article/2020/2/14/divest-uhall-february-protest/ (visited on 09/02/2020).

²¹⁴Aftab Ali. Edinburgh University Student Protesters Occupy Building over Fossil Fuel Divestment. 2016. URL: https://www.independent.co.uk/student/news/edinburgh-university-student-protesters-occupy-building-over-fossil-fuel-divestment-a6969441.html (visited on 09/02/2020).

University had a seven day occupation in 2019.^{215,216} Other CFFD camp-outs and occupations included the University of Mary Washington, Yale, Swarthmore, and Tulane in 2015; Columbia, the University of Massachusetts, Northeastern, MIT, and Leeds in 2016; Cambridge and NYU in 2018; and the University of Pittsburgh in 2020.^{217,218,219,220,221,222,223,224,225,226,227,228,229}

Willingness to use confrontational tactics is an important feature of the CFFD movement. Ayling and Gunningham argue that because divestment "lies at the 'deep green' end of the spectrum, engaging in confrontational strategies far removed from those of the majority of climate NGOs and staging high-profile events attracting considerable media attention, it has gained a degree of prominence remarkable even to those closely involved with the movement."²³⁰

Naomi Goldberg, an organizer in the Mount Allison campaign, made an interesting comment about interactions with the rest of the student body and faculty during their 2017 campout. She found it exhausting to "explain again and again" that they had tried cooperative and inside game tactics beforehand. This highlights some complex features of performing for multiple audiences, including those who have not closely tracked the progress of the campaign so far. For many, excessive stridency can be sufficient reason to dismiss activist behaviour or demands, and such an impression may arise easily from the use of confrontational tactics when the context leading up to them is not widely known. Limited involvement by university governors and regents in campus life may also be relevant in this context. Several interview participants emphasized how little awareness members of their governing boards had of student and community life, suggesting that the

²¹⁵Ruth Hayhurst. Students End Occupation After University Agrees to Consider Fossil Fuel Divestment. 2019. URL: https://drillordrop.com/2019/11/25/students-end-occupation-after-university-agrees-to-consider-fossil-fuel-divestment/ (visited on 09/02/2020).

²¹⁶Nicole Wootton-Cane. University of Manchester to Review Fossil Fuel Shares After Student Protest. 2019. URL: https://www.theguardian.com/education/2019/nov/26/university-of-manchester-to-review-fossil-fuel-shares-after-student-protest (visited on 09/02/2020).

²¹⁷Lindley Estes. After Arrests, Divest UMW Group Vows to Demonstrate. 2015. URL: https://fredericksburg.com/news/local/fredericksburg/after-arrests-divest-umw-group-vows-to-demonstrate/article_346a1eba-e48b-11e4-8ed8-7bfbaa323f70.html (visited on 09/02/2020).

²¹⁸ Associated Press. 19 Cited, Fined at Protest Over Yale Fossil Fuel Investment. 2015. URL: https://www.nbcconnecticut.com/news/local/19-people-arrested-during-protest-at-yale-university-fossil-fuels/1965823/ (visited on 09/02/2020).
219 Suzanne Goldenberg. Students Occupy Swarthmore College in Fossil Fuel Divestment Protest. 2015. URL: https://www.theguardian.com/environment/2015/mar/19/students-occupy-swarthmore-college-in-fossil-fuel-divestment-protest (visited on 09/02/2020).

²²⁰Jed Lipinski. Tulane Students Occupy President's Office to Protest Fossil Fuel Investments. 2015. URL: https://www.nola.com/news/education/article_d56ce92a-1afd-5cbd-85e9-07670b062765.html (visited on 09/02/2020).

²²¹Ben Norton. As Students Sit-in Demanding Columbia University Divest from Fossil Fuels, Bernie Sanders Shows Support. 2016. URL: https://www.salon.com/2016/04/18/as_students_sit_in_demanding_columbia_university_divest_from_fossil_fuels_bernie_sanders_shows_support/ (visited on 09/02/2020).

²²²Leeds for Change. Students Occupy Leeds University to Protest its Failure to Divest from Fossil Fuels. 2016. URL: https://leedsforchange.org.uk/students-occupy-leeds-university-to-protest-its-failure-to-divest-from-fossil-fuels/(visited on 09/02/2020).

²²³Stephanie Murray. UMass Divestment Battle Sparks CAMPUS Arrests. 2016. URL: https://www.gazettenet.com/Home/UMass-arrests-15-divestment-protesters-1506219 (visited on 09/02/2020).

²²⁴Kate Nadel. Occupying UMass for Fossil Fuel Divestment. 2016. URL: https://socialistworker.org/2016/04/20/occupying-umass-for-fossil-fuel-divestment (visited on 09/02/2020).

²²⁵N'dea Yancey-Bragg. Northeastern Students Camp out and Demand Divestment from Fossil Fuels. 2016. URL: https://thegroundtruthproject.org/student-protestors-camp-out-northeastern-divest/ (visited on 09/02/2020).

^{//}thegroundtruthproject.org/student-protestors-camp-out-northeastern-divest/ (visited on 09/02/2020).

²²⁶Zahra Hirji. MIT Won't Divest, but Students End Protest After Compromise. 2016. URL: https://insideclimatenews.

org/news/03032016/mit-not-divest-students-sit-in-fossil-fuel-investment-climate-policy (visited on 09/02/2020).

227 Noella Chye. Students Occupy Central Administrative Building Ahead of Divestment Decision. 2018. URL: https://www.varsity.co.uk/news/15646 (visited on 09/02/2020).

²²⁸ Alex Domb. Divest and SLAM Relocate to Kimmel, Escalate Occupation. 2018. URL: https://nyunews.com/2018/03/28/03-29-news-slam/ (visited on 09/02/2020).

²²⁹ Bill Shackner. Divestment Protesters at Pitt Enter Fourth Day of Occupation and Chat Up Visitors About Global Warming. 2020. URL: https://www.post-gazette.com/news/education/2020/02/24/University-Pittsburgh-Fossil-Free-Pitt-divestment-protest-cathedral-learning-occupation/stories/202002240069 (visited on 09/02/2020).

²³⁰Ayling and Gunningham, "Non-state Governance and Climate Policy: The Fossil Fuel Divestment Movement", p. 10.

ultimate financial decision makers who CFFD campaigns sought to persuade may only have been exposed to a small subset of campaign actions, possibly including some of the most contentious. An informed source at Mount Allison explained how the university is isolated in a rural town with board members from elsewhere who only visit 3-4 times per year for meetings. 231

Campaigns certainly sought to employ cooperative and confrontational tactics in overlapping and mutually reinforcing ways. This parallels simultaneous efforts to engage with and to challenge university-established processes. For instance, Alexander Hemmingway said that the UBC campaign "did pretty well at doing both of these pretty evenly." An organizer in the UBC campaign argued that you need a "good cop / bad cop" strategy to change policy. For example, "good cop" actions include pointing out viable fossil free funds that exist and how they don't underperform the market as a whole. "Bad cop" actions included handing out flyers at an annual board meeting, with a "polite and implicit threat of occupation" or carrying out a banner drop at an alumni event after the administration chose not to consult with the campaign at a decision point. ^{232,233} An organizer in the Winnipeg campaign called the campout they held before a board of regents vote the "culmination" of their inside and outside game work, which had included key organizers serving on the student union executive and board of regents. An organizer at Concordia described how the student union and Divest Concordia drafted statements together using a "good cop / bad cop" approach.

There are fundamental limitations to pursuing such hybrid strategies, however.²³⁴ If a campaign hopes to win over university decision making bodies by framing arguments in ways that will appeal to them and be compatible with the norms they follow, like fiduciary duty and avoiding what they see as inappropriately political behaviour, it cannot simultaneously reject those processes as illegitimate delaying tactics from an administration not acting in good faith. It is also incoherent for campaigns which seek to integrate a wide-ranging critique of capitalism and mass global injustice to then seek only minor changes in university behaviour. There is a logic where cooperative and confrontational strategies can be nimbly employed during cycles of contention to reward positive administrative actions and punish counterproductive ones, but overall campaign messaging cannot veer dramatically between emphasizing the financial underperformance of the fossil fuel industry and the prudence of fiduciaries reducing exposure to that industry's risks and also emphasizing the incompatibility of capitalism generally with planetary stability. The breadth of a movement which is in some sense able to incorporate both market liberal environmentalists and social greens does help with coalition building, in which each person or organization chooses their own level of radicalism. At the same time, it requires making choices among organizers whose main objectives differ or are even incompatible, contributing to disagreements and complicating the probable long-term effects of the CFFD movement on climate and environmental activism and the decision-makers it has sought to influence. Holding back from the level of criticism which most campaign members saw as justified, with the strategic intention of perhaps winning over influential actors on campus who are disinclined to radicalism, added to the level of tension

²³¹Mikkelson called the McGill board "a self-selected group of wealthy individuals who neither work nor study at the university." Mikkelson, "Divestment and Democracy at a Canadian University", p. 11.

²³²Aidid described how the University of Glasgow campaign "used a balance of insider tactics (working with the student union and university) to negotiate, and outsider tactics (direct action) to aid in increasing social pressure." Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. 30.

²³³Discussing anticorporate activism, Soule alluded to such hybrid strategies: "Some of these tactics (e.g., protest, boycotts, and so on) draw explicitly on the outsider status of the critics, while some (e.g., shareholder resolutions, socially responsible investment) require that the critics are insiders (e.g., hold shares of stock) to the corporation. One of the key points that I made with respect to this large tactical repertoire is that protesters often, and perhaps increasingly, draw on both kinds of strategies — insider and outsider strategies — in a multipronged strategy designed to encourage corporations to change." Sarah A. Soule. Contention and Corporate Social Responsibility. New York: Cambridge University Press, 2009, p. 152.

²³⁴For one thing, pointing out potential alternative investments and commenting on investment performance may seem like a threatening incursion into the areas of responsibility and expertise of university financial managers and thus not be interpreted as benign or helpful information sharing.

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and stress within campaigns; this manifested itself in disagreements about tone, allyship, and tactics, chiefly between CJ and $\rm CO_2$ -e proponents.

Several interview participants described the concept of a "ladder of escalation" and the need to build trust among group members before people will be willing to take part in more confrontational actions. A UBC organizer described elements of the ladder of escalation, while also linking it to the perception within the campaign that CFFD efforts across Canada ranged in contentiousness, the issue of practical skill development, and the value of support from experienced organizers and groups for undertaking direct action:

I think UBCc350 was a little bit of an intro to climate activism and then people would go on in some cases to the more contentious actions... UBC was the stepping stone to stronger action, and the stepping stone in the sense that we were not a radical group at UBC and this was something we talked about a number of times. We always viewed ourselves as being less radical than other campaigns... I'm not trying to imply criticism here at all. It's that those campaigns were much more substantivist and we were a bunch of students relatively new to divestment so it made sense to dip our toes in the water with 350 at UBC and if people wanted they could move on to 350.org or Greenpeace or so on. The other part of this is that we didn't really have any direct action at UBC. When you gently interrupt board meetings those are very basic interruptions, so the trainings that would be necessary, the skills or confidence around a full occupation, that's not something that we did at UBC. We talked about it and it hasn't seemed to fit in well with our strategy.

Other campaigns both employed direct action on campus with their administrations as the target and had campaign members take part in arrestable climate change actions happening in parallel outside of universities. Describing her early involvement with the Dalhousie campaign, Laura Cutmore explained that she was initially hesitant about more disruptive tactics that went beyond the creative visual actions which she already saw as moving and effective, but that her trust toward other group members made her accept a more disruptive approach. Naomi Goldberg said that the experience of taking part in the arrestable Climate 101 action, as well as the civil disobedience training provided by 350.org beforehand, provided necessary skills for the later camp out and occupation at Mount Allison.

Some tactics are hard to categorize on a spectrum between cooperativeness and confrontation. For example, CFFD campaigns at Dalhousie, U of T, and elsewhere have organized "birthmark" tattooing sessions where organizers get the CO₂ concentration at the year of their birth stick-and-poke tattooed onto themselves. Another research participant described how a motion brought to the Board of Regents by their CFFD campaign was "more of an outside game strategy" and "not something the university would have wanted," intended more to increase the visibility of the effort and level of media coverage. There were also potential strategies that were discussed within multiple CFFD campaigns but not implemented as far as I can determine. These included major efforts to discourage donations to target universities and efforts to encourage high school students who had applied for places at target universities to express their support for divestment.²³⁶ At Harvard, students attempted a lawsuit to compel divestment.²³⁷ While seeking to enforce divestment through the courts is in some senses highly contentious, it is also true that any kind of lawsuit requires a level of resources, discipline, and organization which is likely beyond what CFFD campaigns can provide in most instances. It may also be a technique with limited movement-building power given the

²³⁵Arrestable actions or civil disobedience have some high-profile supporters, including former UNFCCC executive secretary Christiana Figueres. Jeff McMahon. Former UN Climate Chief Calls For Civil Disobedience. 2020. URL: https://www.forbes.com/sites/jeffmcmahon/2020/02/24/former-un-climate-chief-calls-for-civil-disobedience/ (visited on 03/30/2020). ²³⁶Preliminary consideration of donation boycotts was mentioned by Malkolm Boothroyd.

²³⁷Benjamin Franta. "Litigation in the Fossil Fuel Divestment Movement". In: Law & Policy 39.4 (2017), pp. 393-411. URL: https://onlinelibrary.wiley.com/doi/full/10.1111/lapo.12086 (visited on 02/05/2020).

expertise and time commitment needed to take part and the limited emotional satisfaction associated with the process.

4.4 Inside game: convincing a target administration

Campaigns frequently divided their planning process and the efforts of their members between "inside game" strategies intended to influence the university administration directly and "outside game" strategies meant to build a coalition of support and get positive attention from the media and the community. 238, 239, 240, 241, 242, 243 Bratman et al. identified an "inside-outside strategy of exerting pressure upon and simultaneously collaborating with campus authorities." ²⁴⁴ They acknowledged the existence of campaigns which only used an inside strategy — "working through official university channels to accomplish their goals" — and provided the Georgetown campaign as an example.²⁴⁵ In Canada, Lakehead and Massey College (an independent graduate residential community at U of T which privately deliberated on divestment with no public campaign) can be similarly interpreted. Generally, however, campaigns sought to make use of both approaches. In the American University case, Bratman et al. described the dual strategies as "complementary and mutually beneficial" and quoted an organizer describing how inside strategies attracted "students who are usually interested in policy and only official avenues to create change" while outside strategies "involve[d] more radical students who are comfortable with confrontation, though might not have the patience for lobby sessions and lessons in endowment finance."²⁴⁶ Grady-Benson and Sarathy also describe hybridization of inside and outside game strategies, with inside negotiations complemented with human oil spills and demonstrations of broad community support.²⁴⁷ An organizer at Concordia described the campaign's "boots and suits theory" and the idea that both could be employed simultaneously, while Peter Gibbs at UVic described how they had followed a blueprint from the start where they would "ask very nicely in force to have the credibility to then escalate." Alexander Hemmingway said that the UBC campaign employed cooperative and confrontational techniques in a balanced way, that using one approach exclusively may have

 $^{^{238}}$ The terms "inside" and "outside" game were used independently in several Canadian campaigns, including Winnipeg, UBC, and U of T.

²³⁹They were also used at Pitzer College in the US prior to 2014 and at Harvard. Emily Pontecorvo. *Harvard Activists' new Fossil Fuel Divestment Strategy: Make it an Inside Job.* 2020. URL: https://grist.org/climate/harvard-activists-new-fossil-fuel-divestment-strategy-make-it-an-inside-job/ (visited on 02/05/2022), p. 11.

²⁴⁰People & Planet's 2017 divestment guide described using an "inside track" of "engaging with the institution's administration in a respectful and professional way" and "building and making a serious case for why they should divest" and an "outside track" of confrontational tactics like sit-ins or demonstrating at a graduation ceremony "if you think you are being delayed for no reason or that you are not being listened to." People & Planet. Fossil Free Action Guide: Divestment. 2017. URL: https://peopleandplanet.org/system/files/resources/Fossil%20Free%20Action%20Guide.pdf (visited on 01/18/2020), p. 22–3.

²⁴¹One interview subject described the inside game as a "government relations style" focused on "light" actions, writing proposals, and negotiating with the administration. The subject described how this demonstrates the tension between the three movement objectives of securing divestment, delegitimizing the industry, and building a student movement, since the non-confrontational tactics optimized for the first objective poorly serve the other two.

²⁴²Fisher also discussed inside / outside tactics in environmentalism more broadly, and specifically in relation to COP-15 in Copenhagen: Dana R. Fisher. "COP-15 in Copenhagen: How the Merging of Movements Left Civil Society Out in the Cold". In: Global Environmental Politics 10.2 (2010), pp. 11–17. URL: https://www.mitpressjournals.org/doi/abs/10.1162/glep. 2010.10.2.11 (visited on 04/03/2020).

²⁴³Divest UVic's highly professional website included a history, documents, and a timeline from their dialogue with the university administration: Divest UVic. *Dialogue with Administration*. 2020. URL: https://web.archive.org/web/20200831221749/https://divestuvic.com/?page_id=79 (visited on 01/18/2020).

²⁴⁴Bratman et al., "Justice is the Goal: Divestment as Climate Change Resistance", p. 678.

²⁴⁵Bratman et al., "Justice is the Goal: Divestment as Climate Change Resistance", p. 685.

²⁴⁶Bratman et al., "Justice is the Goal: Divestment as Climate Change Resistance", p. 686.

²⁴⁷Grady-Benson and Sarathy, "Fossil Fuel Divestment in US Higher Education: Student-led Organising for Climate Justice", p. 12.

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been ineffective, and that using a balance of both helped hold the group together as a coalition.

Numerous Canadian CFFD campaigns subdivided their efforts into an 'inside game' strategy or committee intended to influence and negotiate with the target university and an 'outside game' strategy meant to build campus support. As in US campaigns, inside game strategies in Canada included writing reports with detailed rationales for divestment and presenting to university decision making bodies. While the common terminology raises the possibility that this division of labour was recommended by proliferators or some outside document, it also corresponds with a useful bureaucratic distinction made meaningful in part by the different temperaments and future plans of those involved in CFFD activism. Wearing a suit and making a presentation to university officials about investment risks, diversification, and strategy appeals to and serves the perceived long-term interests of some activists whereas negotiating statements of mutual support with student governments and other on-campus movements while organizing events calculated to generate public and media interest serves others.

The defining features of inside game strategies are willingness to participate in administration-established processes and forums and the use of relatively cooperative tactics. As one Concordia organizer explained: "Our strategy had been more trying to discuss with the administration and try to stay on their good side so they'll listen to us." An organizer who was involved in the Mount Allison and Carleton campaigns described this aspect of their efforts as "a lot of working through the nitty gritty of the policy process." Emma Jackson summarized this, saying:

Students often willingly begin their campaigns within these [university-established procedural] channels, seeing them as the only spaces in which they can be taken seriously by their universities' bureaucracies. They adopt administrative language, toy with economic arguments, and sometimes, they even go so far as to dust off 'business attire' that somehow never seems to fit. In sum, they play the administrative game in a last-ditch attempt to have their concerns about the future of the planet taken seriously.²⁵⁰

In the first University of Toronto campaign, the brief making the case for divestment was dedicated to the members of the *ad hoc* committee appointed by the president to consider the question, and copies of the document printed as books at the Toronto Reference Library were hand-delivered to the committee members by campaign organizers seeking a chance to humanize themselves and get a bit of one-on-one exposure. At McGill, one organizer devoted "hundreds of hours of research, presentations, lobbying and other efforts" to preparing the argument for divestment for the board of governors.²⁵¹

These inside game strategies took for granted some things which more radical CFFD advocates challenged in other contexts, specifically the general corporatization of universities and their consistent prioritization of investment returns and the advice of asset managers over their stated ethical principles and the concerns raised by members of the university community. This highlights how the CFFD campaign was an awkward fit for activists who are profoundly critical of capitalism, as the core assumption that universities under capitalism should act as profit maximizers is unchallenged and even affirmed.²⁵² As one faculty interview

²⁴⁸Deirdre Shelly, an organizer in the American University campaign, described how: "Meetings, even now, are often divided into 'inside' and 'outside' conversations, working groups and tactics." Bratman et al., "Justice is the Goal: Divestment as Climate Change Resistance", p. 686.

²⁴⁹Grady-Benson and Sarathy, "Fossil Fuel Divestment in US Higher Education: Student-led Organising for Climate Justice", p. 11.

²⁵⁰Emma Jackson. Student Activists Aren't Just Fighting Climate Change. They're Fighting Corporate University Bureaucracy. 2016. URL: http://rabble.ca/blogs/bloggers/campus-notes/2016/11/student-activists-arent-just-fighting-climate-change-theyre-figh (visited on 08/18/2019).

²⁵¹Kyle Empringham. Divestment Leader Bronwen Tucker is Organizing for Change at McGill. 2015. URL: http://thestarfish.ca/journal/2015/4/divestment-leader-bronwen-tucker-is-organizing-for-change-at-mcgill (visited on 09/03/2020).

 $^{^{252}}$ More radical activists could also choose to see themselves as 'moving past' the divestment movement, having suitably

participant explained, the divestment movement begins by "accepting the basic rules of stock markets and investment." They went on to say:

It's almost funny that the students who want to take down capitalism are engaging in a campaign about moving investments from one stock market choice to another stock market choice. Both elements are there: one of them is presenting a radical challenge to assumptions about investments and how the university if funded, and the other is making arguments about carbon bubble and rates of return. Divestment is calling for divestment from certain stocks and bonds, within capitalism. 253,254,255,256,257

The emphasis on inside game strategies in many campaigns also feeds the criticism that universities were using procedural delaying tactics as a mechanism to counter campaigns without conceding their demands, and therefore that campaigns essentially allowed themselves to be neutralized through good behaviour. After the 2016 rejection at U of T, supporters of the campaign argued that the administration's unwillingness to divest even with the exceptional amount of evidence for the social injury caused by climate change rendered the university's divestment policy meaningless by showing how even in the cases where it is most clearly satisfied the university is unwilling to act.²⁵⁸

Campaigns also tried lobbying individual decision makers. At the University of Winnipeg the campaign developed a spreadsheet of everyone on the Board of Regents and sought to lobby the undecided. This approach was also taken in campaigns outside Canada, as when American University organizers used a "personal appeal rooted in values" to try to change the minds of board members.²⁵⁹ For twenty days, the campaign sent board members handwritten letters from a student directly impacted by climate change or fossil fuel extraction. Deirdre Shelly, an organizer from the campaign, described handwritten letters send to board members from activists who had personal experiences of climate change and fossil fuel extraction:

As much as these letters were intended to pull on the heartstrings of Trustees, they also did a lot to motivate our core campaign members. Recognizing why we were working on these issues, and sharing those reasons with the broader community was cathartic and inspired other students to see the issue in a more personal and urgent light. 260

This shows the story of self technique in action.

popularized the core concepts in universities and the investing world the activists can now seek new projects which were as innovative as fossil fuel divestment when the movement proliferated in 2012.

²⁵³Belliveau quoted a U of T CFFD organizer on how the movement seeks to use "the stock market, to try and influence public opinion on climate change, which is the epitome of capitalist tools." Belliveau, "Climate Justice in the Fossil Fuel Divestment Movement: Critical Reflections on Youth Environmental Organizing in Canada", p. 59.

²⁵⁴Belliveau also described the CFFD movement as "a site of transformative learning experiences for young environmentalists to become attuned to the restrictions of capitalist approaches to climate action" and "a potential force for counter-hegemony, specifically through its role in establishing systematically subversive logics to neoliberal climate solutions within a new generation of environmental movement participants." Belliveau, "Climate Justice in the Fossil Fuel Divestment Movement: Critical Reflections on Youth Environmental Organizing in Canada", p. 60, 62.

²⁵⁵Aidid identified "a reoccurring battle against market-based climate solutions" within the CFFD movement and called the movement a way to "bring people together to transform our current capitalist system and challenge neoliberal discourse." She also noted: "But despite their efforts, organizers lament that FFD does not dismantle capitalism or colonialism." Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. 68, 71, 100.

²⁵⁶Describing the Darfur divestment campaign, Soederberg described the effort as "the marketisation of social justice" in which the resolution of human rights violations is pursued through "the (self-regulatory) market." Susanne Soederberg. "The Marketisation of Social Justice: the Case of the Sudan Divestment Campaign". In: *New Political Economy* 14.2 (2009), pp. 211–229. URL: https://www.tandfonline.com/doi/abs/10.1080/13563460902825999 (visited on 12/31/2019), p. 225.

²⁵⁷Neville noted how "divestment can also reinforce a market logic. Rather than being the first step in a fundamental restructuring of the economy, divestment can offer a growth-oriented solution to climate change that maintains and expands the power of the current economic order." Neville, "Shadows of Divestment: The Complications of Diverting Fossil Fuel Finance",

²⁵⁸Kristy Bard et al. Op-ed: President Gertler's Retreat from Responsibility. 2017. URL: https://thevarsity.ca/2017/07/08/op-ed-president-gertlers-retreat-from-responsibility/ (visited on 01/02/2012).

²⁵⁹Bratman et al., "Justice is the Goal: Divestment as Climate Change Resistance", p. 683.

²⁶⁰Bratman et al., "Justice is the Goal: Divestment as Climate Change Resistance", p. 683.

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The emotional investment of some CFFD organizers in university-established processes where they had expended a great deal of effort contributed to strategic disagreements within campaigns. Inside game strategies were more appealing to CFFD activists who maintained a theory of change based on respectful relationships, and were also more compatible with the interests of people who seek to maintain non-contentious relations with university administrators into the future. Some faculty members described the limits of their support for divestment explicitly in terms of rejecting actions which might threaten their ability to earn tenure or otherwise jeopardize good relations with university officials who have influence over their careers and funding. These inside game strategies were criticized within many campaigns as taking too much about the status quo for granted and lacking the kinds of activities which would be inspiring and motivating for most activists. This disagreement reflects key elements of the ${\rm CJ} \,/\, {\rm CO}_2$ -e divide: who they each saw as legitimate participants in decision making, the scale of political and economic change needed to control climate change, and the relative importance of alliances with activists compared with decision makers.

4.4.1 The financial argument for divestment

Ayling and Gunningham documented how environmental organizations have long sought to use financial as well as moral arguments against the fossil fuel industry. In the early 1990s, Greenpeace attempted "with little success" to convince the insurance industry that climate change threatened them with future losses and therefore that they should stop investing in fossil fuels. ^{261,262,263} Many of the fossil fuel divestment movement's underlying tensions are revealed by the role financial arguments played in CFFD campaigns. Two crucial notions are those of a "carbon bubble" — in which governmental inaction so far on climate change has left fossil fuel firms over-valued based on the assumption of a continued lax regime — and "stranded assets," costly fossil fuel infrastructure projects which would be unusable in a low carbon fu-

 $^{^{261}}$ Ayling and Gunningham, "Non-state Governance and Climate Policy: The Fossil Fuel Divestment Movement", p. 2.

²⁶²Jeremy Leggett. Climate Change and the Insurance Industry: Solidarity Among the Risk Community? 1993. URL: http://lib.riskreductionafrica.org/bitstream/handle/123456789/1034/climate%20change%20and%20the%20insurance% 20industry.%20solidarity%20among%20the%20risk%20community.pdf (visited on 01/09/2020).

²⁶³Matthew Paterson. "Risky Business: Insurance Companies in Global Warming Politics". In: *Global Environmental Politics* 1.4 (2001), pp. 18–42. URL: https://www.mitpressjournals.org/doi/10.1162/152638001317146354 (visited on 01/09/2020).

ture. ^{264,265,266,267,268,269,270,271,272,273,274,275} Other scholarship is better placed to evaluate whether these arguments are convincing, but their use definitely distinguishes CFFD activism from other efforts to encourage university divestment, including tobacco, South African apartheid, and Israeli BDS. When university administrators emphasize their fiduciary duty to maximize returns as grounds for rejecting fossil fuel divestment, campaigners can make arguments about how investments in the industry have performed so far relative to other possible portfolios, as well as how the risk of more stringent climate regulations in the future may harm the future value of holdings in the industry. ^{276,277,278,279,280,281} Both of these bases for questioning the future financial performance of the fossil fuel industry could serve as justifications for divest-

²⁶⁴The potential of fossil fuel assets being stranded has attracted corporate interest, including Aviva Investors, HSBC, Standard & Poor's partly funding a research program on it at the University of Oxford's Smith School of Enterprise and the Environment. Damian Carrington. Campaign Against Fossil Fuels Growing, Says Study. 2013. URL: https://www.theguardian.com/environment/2013/oct/08/campaign-against-fossil-fuel-growing (visited on 01/30/2017).

²⁶⁵See also: Ayling, "A Contest for Legitimacy: The Divestment Movement and the Fossil Fuel Industry", p. 353.

²⁶⁶Andrew Cheon and Johannes Urpelainen. Activism and the Fossil Fuel Industry. London: Routledge, 2018, p. 123.

 $^{^{267} \}rm Mike$ Berners-Lee and Duncan Clark. The Burning Question: We Can't Burn Half the World's Oil, Coal, and Gas. So How Do We Quit? Vancouver: Greystone Books, 2013.

²⁶⁸Christophe McGlade and Paul Ekins. "The Geographical Distribution of Fossil Fuels Unused when Limiting Global Warming to 2 C". in: *Nature* 517.7533 (2015), pp. 187–190. URL: https://www.nature.com/articles/nature14016 (visited on 02/23/2020).

²⁶⁹ Kjell Kühne et al. "'Carbon Bombs' — Mapping Key Fossil Fuel Projects". In: Energy Policy (2022), p. 112950. URL: https://www.sciencedirect.com/science/article/pii/S0301421522001756 (visited on 05/30/2022).

²⁷⁰ Damian Carrington and Matthew Taylor. Revealed: The 'carbon bombs' Set to Trigger Catastrophic Climate Breakdown. 2022. URL: https://www.theguardian.com/environment/ng-interactive/2022/may/11/fossil-fuel-carbon-bombs-climate-breakdown-oil-gas (visited on 05/16/2022).

²⁷¹Damian Carrington. Shut Down Fossil Fuel Production Sites Early to Avoid Climate Chaos, Says Study. 2022. URL: https://www.theguardian.com/environment/2022/may/17/shut-down-fossil-fuel-production-sites-early-to-avoid-climate-chaos-says-study (visited on 05/30/2022).

²⁷²Fiona Harvey, Matthew Taylor, and Damian Carrington. Climate Chaos Certain if Oil and Gas Mega-projects Go Ahead, Warns IEA Chief. 2022. URL: https://www.theguardian.com/environment/2022/may/12/oil-gas-mega-projects-climate-iea-fatih-birol-carbon-bombs-global-energy-crisis-fossil-fuel (visited on 05/30/2022).

²⁷³Hopke and Hestres described how the carbon budget concept predates divestment, emerging in the late 1980s and early 1990s. Jill E. Hopke and Luis E. Hestres. *Communicating About Fossil Fuel Divestment*. 2017. URL: https://oxfordre.com/climatescience/view/10.1093/acrefore/9780190228620.001.0001/acrefore-9780190228620-e-566 (visited on 01/18/2020).

²⁷⁴Lemphers described the financial danger associated with stranded assets: "rapid adoption of new technologies, such as connected, autonomous and shared electric vehicles, could devastate unprepared and poorly diversified oil exporting nations, especially those with high-cost oil sands or LNG facilities." Lemphers, "Beyond the Carbon Curse: a Study of the Governance Foundations of Climate Change Politics in Australia, Canada and Norway", p. 286.

²⁷⁵The financial justification for divestment at UBC cited the risk of stranded assets, arguing that "the majority of planned projects would not proceed under a below 2-degree scenario" and that "the value of unburnable reserves could be as high as 100 trillion USD by 2050." Mantle314. Financial Risk of Climate Change in a Transition to a Low-Carbon World: A Deep-dive Into Climate-related Risks. 2020. URL: https://bog3.sites.olt.ubc.ca/files/2020/04/2.2_2020.04_Divestment-Financial-Justification.pdf (visited on 08/23/2022), p. 2, 3.

²⁷⁶See for instance "The financial case for divestment" in: Katie Krelove et al. Why U of T Should Divest from Fossil Fuels. 2015. URL: http://uoftfacultydivest.com/files/divest-u-of-t.pdf (visited on 03/02/2017).

²⁷⁷See also: Samantha McCabe. Finance Committee Advises Board of Governors Against Divestment. 2016. URL: https://www.ubyssey.ca/news/finance-committee-advises-board-of-governors-against-divestment/ (visited on 07/21/2019).

²⁷⁸Dennis Pavlich and Jocelyn Stacey. *UBC Divestment Decision Based on Perplexing Understanding of Legal Obligations*. 2016. URL: https://www.ubyssey.ca/opinion/ubc-divestment-decision-perplexing-understanding-legal-obligations/ (visited on 07/21/2019).

²⁷⁹SFU350. Letter to the BOG on Fiduciary Duty. 2014. URL: https://static1.squarespace.com/static/5380f07ae4b092b699c32fc7/t/54727e71e4b06ebd66352ba5/1416789617953/A+Submission+in+Regards+Fiduciary+Duty+and+Responsible+Divestment+from+Fossil+Fuels.pdf (visited on 07/29/2019).

²⁸⁰Bergman argued that "focusing on economic arguments" was a way for CFFD organizers to "present a less radical branding that is more suitable for mainstream investors." Bergman, "Impacts of the Fossil Fuel Divestment Movement: Effects on Finance, Policy and Public Discourse", p. 3.

²⁸¹Lenferna argued that the CFFD movement "can pressure... endowments through drawing on the financial case and the language and responsibilities of fiduciary duty and the accompanying duty of care." In this way, the divestment movement can "politicize the fulfillment of fiduciary duty" without having "endowment managers use their endowments as political tools." Alex Lenferna. *Investing in Climate Failure: The Ethics and Economics of Fossil Fuel Divestment.* 2013. URL: https://www.academia.edu/3562785/Investing_in_Climate_Failure_The_Ethics_and_Economics_of_Fossil_Fuel_Divestment (visited on 06/29/2020), p. 20.

ment compatible with fiduciary duty.^{282,283} They have been supported by independent assessments which concluded that divestment need not carry a financial penalty, such as the Grantham Foundation for the Protection of the Environment's determination that "any sector could be removed from an investment portfolio with negligible effects." ²⁸⁴, ²⁸⁵, ²⁸⁶ Returns of the S&P index from 1989 to 2017 were 9.71% on average, while the same portfolio without energy stocks returned 9.74%. Even going back to 1925 there is "hardly any gap" between divested and non-divested portfolios of this index. 287,288 Unity College also announced in 2019 that: "Divestment has had no negative effect on our endowment portfolio." 289,290 A 2020 analysis by Ryan and Marsicano examined 35 American universities which divested between 2011 and 2018 and found that "divestment does not yield discernible consequences — either positive or negative — for endowment values, at statistically significant level." ^{291,292} In 2019, the Institute for Energy Economics and Financial Analysis found that index funds without fossil fuel investments (themselves likely created in part because of the divestment movement) outperformed those which include fossil fuel investments over the previous five years, noting: "Finding alternatives to fossil fuel companies will not be difficult — every other sector in the economy is growing faster, smarter and healthier." ^{293,294} In a 2022 master's thesis, Eduardo Nogueira Bessa examined the effect of fossil fuel divestment on US portfolios between 1990 and 2021 and found that "the non-fossil fuel portfolio perform better than the market and its fossil fuel portfolio counterpart." 295 Divestment campaigns could thus rebut the argument that divestment would have a short-term financial penalty, while also calling attention to the long-term threats of carbon regulation and competition from renewables facing the industry.

²⁸²A faculty member at SFU said that the university became the first in Canada with a fossil free option available in the pension plan, noting that this was especially difficult to achieve because trustees held the view that they had a legal obligation to promote only the financial best interests of the fund.

²⁸³Noam Chomsky argued that the financial counter-argument to divestment is "accurate but irrelevant," and argued that divestment activists should accept that selling fossil fuel holdings would carry a financial penalty, but that MIT and other universities are obliged to act regardless because the alternative is everybody "racing to the precipice." Fossil Free MIT. *Noam Chomsky Rocks MIT Fossil Fuel Divestment.* 2015. URL: https://www.youtube.com/watch?v=AQJQU2GzVOw (visited on 10/15/2020).

²⁸⁴Toffel and Gulick, Harvard Business School Case: Fossil Fuel Divestment, p. 13.

²⁸⁵Jeremy Grantham. The Race of Our Lives Revisited. 2018. URL: https://mahb.stanford.edu/wp-content/uploads/2018/08/TheRaceofourLivesRevisited_JeremyGrantham.pdf (visited on 02/21/2020).

²⁸⁶Jeremy Grantham. The Mythical Peril of Divesting from Fossil Fuels. 2018. URL: http://www.lse.ac.uk/GranthamInstitute/news/the-mythical-peril-of-divesting-from-fossil-fuels/(visited on 02/21/2020).

²⁸⁷The Economist. Jeremy Grantham on Divesting from Big Oil. 2020. URL: https://www.economist.com/finance-and-economics/2020/01/09/jeremy-grantham-on-divesting-from-big-oil (visited on 02/21/2020).

²⁸⁸Trinks et al. also found that fossil fuel stocks do not outperform stock markets as a whole and provide limited diversification benefits — calculating also that fossil fuel divestment would not have reduced performance between 1927 and 2016. Arjan Trinks et al. "Fossil Fuel Divestment and Portfolio Performance". In: *Ecological Economics* 146 (2018), pp. 740–748. URL: https://www.academia.edu/59378806/Fossil_Fuel_Divestment_and_Portfolio_Performance (visited on 07/20/2021).

²⁸⁹Unity College. *Divestment: Three Years Later.* 2019. URL: https://www.unity.edu/news_and_events/fifty/1st-in-the-nation-to-divest-from-fossil-fuels/ (visited on 02/21/2020).

²⁹⁰ Spinnaker Trust. Perfomance Review: Fossil Fuel Free Portfolio. 2018. URL: https://president.unity.edu/wp-content/uploads/2018/10/Unity-College-58438742_ii._endowment_fourth_quarter_performance_review.pdf (visited on 02/21/2020).

²⁹¹C.J. Ryan and Christopher Marsicano. "Examining the Impact of Divestment from Fossil Fuels on University Endowments". In: New York University Journal of Law and Business 17 (2020). URL: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3501231 (visited on 03/30/2020).

²⁹²Leanna Orr. The Cost of Divestment for Endowments. 2019. URL: https://www.institutionalinvestor.com/article/b1j18ctg32r65x/The-Cost-of-Divestment-for-Endowments (visited on 06/19/2020).

²⁹³ Jacob Wallace. Oil Price Crash Revives Fossil Fuel Divestment Campaigns. 2020. URL: https://foreignpolicy.com/2020/05/15/oil-price-crash-revives-fossil-fuel-divestment-campaigns-climate-change-activism/ (visited on 05/22/2020).

²⁹⁴Tom Sanzillo and Kathy Hipple. Fossil Fuel Investments: Looking Backwards May Prove Costly to Investors in Today's Market. 2019. URL: https://ieefa.org/wp-content/uploads/2019/02/Divestment-Brief-February-2019.pdf (visited on 05/22/2020).

²⁹⁵ Eduardo Nogueira Bessa. "The Impact of Fossil Fuel Divestment on Portfolio Performance". MA thesis. Braga, Portugal: Universidade do Minho, 2022. URL: https://repositorium.sdum.uminho.pt/bitstream/1822/79121/1/Eduardo%20Nogueira% 20Bessa.pdf (visited on 08/09/2022), p. v.

It is worth drawing attention to how there are two separable financial arguments which commonly arise in CFFD campaigns, one specific to the target institution's interests and one focused on the societal consequences of continued investment in fossil fuel infrastructure. The macro-scale argument about humanity's global infrastructure can be found in expert advice to governments, since it has been taken up by many bodies and individuals who they likely consider authoritative, particularly the 2006 Stern review on the economics of climate change. In the context of individual CFFD campaigns, the micro-scale argument about their own future investment returns distinguishes fossil fuel divestment from other divestment campaigns which are purely moral, and provides a response to administration arguments that divestment should not be undertaken because the financial harm they fear it will impose on the institution. 296,297,298,299,300 The macro and micro arguments are naturally linked, since the idea that in the long-term the fossil fuel industry will produce poorer returns than alternative investments probably depends on governments eventually acting on the argument that continuing to allow and facilitate fossil fuel infrastructure development is at odds with planetary stability and their own interests, since market dynamics in the absence of government climate policy would not incentivize emission reductions sufficient to keep warming below 2 °C. The macro argument can be understood as part of the context for the CFFD movement, while the micro argument has been an important part of the messaging of individual campaigns.

The plausibility of financial arguments for fossil fuel divestment is bolstered by some of the credible institutions and individuals, not generally known as climate action advocates, who have endorsed the perspective.^{301,302} Former Bank of Canada governor Mark Carney, for instance, has been outspoken about

²⁹⁶Essentially the case is that the industry is "riskier than the market recognized" and "as the probability increased that carbon taxes or cap-and-trade laws would emerge to address climate change, there was a growing danger that the value of fossil fuel investments could drastically diminish." Toffel and Gulick, *Harvard Business School Case: Fossil Fuel Divestment*, p. 13, 14

²⁹⁷In September 2019, the University of California decided to divest their \$80 billion endowment from fossil fuels. Umair Irfan. The University of California System is Ending its Investment in Fossil Fuels. 2019. URL: https://www.vox.com/2019/9/18/20872112/university-california-divestment-fossil-fuel-climate-change (visited on 10/07/2019).

²⁹⁸This was referred to as a \$13.4 billion endowment and \$70 billion pension fund in: Toffel and Gulick, *Harvard Business School Case: Fossil Fuel Divestment*, p. 2.

²⁹⁹ Jagdeep Singh Bachher, their chief investment officer, stressed that this was motivated by concern about financial risk and not by the ethical case against the fossil fuel industry. Jagdeep Singh Bachher and Richard Sherman. *Opinion: UC Investments are Going Fossil Free. but not Exactly for the Reasons You May Think.* 2019. URL: https://www.latimes.com/opinion/story/2019-09-16/divestment-fossil-fuel-university-of-california-climate-change (visited on 10/07/2019).

³⁰⁰UC Santa Barbara (UCSB) students Emily Williams and Theo LeQuesne responded to Bachher's op-ed, saying it "tried to erase the vast movement that had forced this epic result—arguably the largest anti-corporate campaign in history." Williams and LeQuesne argue that if UC's motives were purely financial they would have divested years ago, not after student and faculty referendums, a three day occupation in 2017, and the endorsement of UCSB chancellor Henry Yang. Emily Williams and Theo LeQuesne. The University of California Finally Has Divested From Fossil Fuels: Now, Fossil Free UC Wants to Set the Record Straight About Why. 2019. URL: https://www.thenation.com/article/archive/california-fossil-fuels/(visited on 02/04/2020).

³⁰¹This aligns with Dianne Saxe's claim that people are convinced by: "Simple clear messages, repeated often, by a variety of trusted voices."

³⁰²See: Edward Maibach, Teresa Myers, and Anthony Leiserowitz. "Climate Scientists Need to set the Record Straight: There is a Scientific Consensus That Human-caused Climate Change is Happening". In: *Earth's Future* 2.5 (2014), pp. 295–298.

financial risks from climate change. ^{303,304,305,306,307,308,309,310,311} In 2019, the Bank of Canada's annual financial system review stated: "Climate change continues to pose risks to both the economy and the financial system." ^{312,313} Carney also told the BBC:

If we were to burn all those oil and gas (reserves), there's no way we would meet carbon budget... Up to 80 per cent of coal assets will be stranded, (and) up to half of developed oil reserves. A question for every company, every financial institution, every asset manager, pension fund or insurer: what's your plan?^{314,315,316}

Former US treasury secretary Henry "Hank" Paulson wrote a 2014 op-ed for the *New York Times* arguing: "We're staring down a climate bubble that poses enormous risks to both our environment and economy." Following an appeal from McKibben in October 2019, the European Investment Bank agreed to become the world's first "climate bank" by ending financing for oil, gas, and coal projects after 2021. 319,320,321

303 Jessica Shankleman. Mark Carney: Most Fossil Fuel Reserves can't be Burned. 2014. URL: http://www.theguardian.com/environment/2014/oct/13/mark-carney-fossil-fuel-reserves-burned-carbon-bubble (visited on 03/18/2017).

304Bank of England. Open Letter on Climate-related Financial Risks. 2019. URL: https://www.bankofengland.co.uk/news/2019/april/open-letter-on-climate-related-financial-risks (visited on 05/30/2019).

305 Damian Carrington. Firms Ignoring Climate Crisis Will Go Bankrupt, Says Mark Carney. 2019. URL: https://www.theguardian.com/environment/2019/oct/13/firms-ignoring-climate-crisis-bankrupt-mark-carney-bank-england-governor (visited on 10/15/2019).

306 Geoffrey Morgan. Canada's Oilpatch Braces for More Scrutiny After Mark Carney Sees Half of World's Reserves Left in the Ground. 2020. URL: https://business.financialpost.com/commodities/mark-carneys-new-focus-on-climate-financing-would-lead-to-greater-scrutiny-oilpatch (visited on 01/09/2020).

³⁰⁷See also "Fossil fuel divestment is financially responsible" in : Toronto350.org, *The Fossil Fuel Industry and the Case for Divestment: Update*, p. 77–95.

³⁰⁸Before leaving his position as the head of the Bank of England, Carney reiterated these warnings to the BBC. Roger Harrabin. Bank of England Chief Mark Carney Issues Climate Change Warning. 2019. URL: https://www.bbc.com/news/business-50868717 (visited on 12/29/2019).

³⁰⁹Strangely, Carney also said: "I absolutely disagree with divestment campaigns. The whole point of the (climate finance) measures are to ensure that investors and banks have the information they need to finance all companies who are improving carbon efficiency whether they are in the oilsands or renewable energy." Terence Corcoran. Mark Carney 'Absolutely' Opposes Oil Divestment. 2020. URL: https://business.financialpost.com/opinion/terence-corcoran-mark-carney-absolutely-opposes-oil-divestment (visited on 01/18/2020).

³¹⁰In August 2020, it was announced that Carney would be joining Brookfield Asset Management to "lead an ambitious expansion into environmental and social investing." Scott Deveau and Jason Kelly. *Mark Carney Joins Brookfield to Lead Firm's Expansion into ESG Funds.* 2020. URL: https://www.bnnbloomberg.ca/carney-joins-brookfield-to-lead-firm-s-expansion-into-esg-funds-1.1485153 (visited on 08/28/2020).

³¹In 2021, US Federal Reserve chair Jerome Powell defended steps taken to consider climate change risks to the US financial system. Al Jazeera. *Powell Defends Fed's Increasing Focus on Climate Change Threats*. 2021. URL: https://www.aljazeera.com/economy/2021/4/14/powell-defends-feds-increasing-focus-on-climate-change-threats (visited on 05/14/2021).

³¹²Stephen S. Poloz et al. Financial System Review Summary — 2019. 2019. URL: https://www.bankofcanada.ca/2019/05/fsr-summary-2019/ (visited on 07/22/2019).

313 Karina Roman. Climate Change Threatens 'Both the Economy and the Financial System,' Says Bank of Canada. 2019. URL: https://www.cbc.ca/news/politics/climate-change-bank-of-canada-financial-system-review-1.5137625 (visited on 07/22/2019).

314Terence Corcoran. Mark Carney and How to Create a Sub-prime Energy Crisis. 2020. URL: https://business.financialpost.com/opinion/terence-corcoran-how-to-create-a-sub-prime-energy-crisis (visited on 01/18/2020).

³¹⁵In December 2020, for example, New York's state pension fund was considering divestment from the riskiest fossil fuel firms. The Economist, Big Oil's Diverging Bets on the Future of Energy.

³¹⁶In 2021, the Californian CalPERS and CalSTRS public pension funds supported the addition of advocates of a lower carbon strategy to the ExxonMobil board. Jennifer Hiller and Svea Herbst-Bayliss. CalPERS to Back Activist's Four Director Nominees in Exxon Board Fight. 2021. URL: https://www.reuters.com/business/energy/calpers-back-activists-four-director-nominees-exxon-board-fight-2021-04-26/ (visited on 05/30/2022).

317 Henry M. Paulson Jr. The Coming Climate Crash. 2014. URL: https://www.nytimes.com/2014/06/22/opinion/sunday/lessons-for-climate-change-in-the-2008-recession.html?_r=0 (visited on 02/23/2020).

³¹⁸Mangat, Dalby, and Paterson, "Divestment Discourse: War, Justice, Morality and Money", p. 199.

319 Bill McKibben. Divestment Works — And One Huge Bank Can Lead the Way. 2019. URL: https://www.theguardian.com/commentisfree/2019/oct/13/divestment-bank-european-investment-fossil-fuels (visited on 01/18/2020).

320 Jillian Ambrose and Jon Henley. European Investment Bank to Phase Out Fossil Fuel Financing. 2019. URL: https://www.theguardian.com/environment/2019/nov/15/european-investment-bank-to-phase-out-fossil-fuels-financing (visited on 01/18/2020).

321 Carolyn Fortuna. 2019 Divestment Year In Review. 2020. URL: https://cleantechnica.com/2020/01/02/2019-divestment-year-in-review/(visited on 01/18/2020).

In research conducted by BlackRock on behalf of the New York City teachers' and public employees' retirement funds, analysts concluded that based on "divestment actions by hundreds of funds worldwide" their portfolios "experienced no negative financial impacts from divesting from fossil fuels." In fact, they found evidence of "modest improvement in fund return" and that "no investors found negative performance from divestment; rather, neutral to positive results."322 This kind of legitimation is especially important in the context of competitions over expertise in the field of investments.^{323,324} University money managers have training and backgrounds which bolster the credibility of their conclusions, and they provide analysis with such perceived value that top investment managers are often among the most highly-paid university employees. As president and CEO of their asset management corporation, U of T's William Moriarty was paid over \$1 million per year in 2015 and 2016, which suggests that he provided value worth more in compensation from the school than any of 2,500 academic staff members including world-class researchers and Nobel laureates. 325,326 Claims from student activists and pro-divestment experts run against the recommendations of these managers and challenge the idea that they are uniquely trained and placed to make the best financial decisions for the university. Since the CFFD claim is a direct challenge to their authority and the justification for their generous pay, it is unsurprising that university investment managers have resisted divestment and won agreement from university administrations which have allowed them to present their own analysis in secret and without challenge or rebuttal from outsiders. This prevented CFFD campaigns from being able to scrutinize the advice of investment managers, reducing the pressure they were able to exert and the risk of bad publicity for the university. Money managers opposing divestment protect their relationships with fossil fuel corporations which are investment recipients, as well as the broader banking and financial sectors which continue to support and finance the fossil fuel status quo. These dynamics are broader than intra-university power arrangements and extend into the role of the financial system in society and politics generally. While a growing countermovement calls for repurposing finance to serve the goal of decarbonization, the global financial system continues to invest massive resources in continued fossil fuel expansion.³²⁷ If the carbon bubble argument came to be widely accepted — with the perceived value of these investments falling or even becoming negative because of fears about future compensation for climate change damages — the resulting restructuring of the global economy and power relations would be profound.³²⁸

³²²Bill McKibben. The Powerful New Financial Argument for Fossil-Fuel Divestment. 2021. URL: https://www.newyorker.com/news/daily-comment/the-powerful-new-financial-argument-for-fossil-fuel-divestment (visited on 04/02/2021).
323A UBC professor who met with the chair of the board of governors privately said that it was alien for him to consciously limit areas for investment and said that divestment was "a fundamental challenge to his professional experience and principles."
324In 2017, UVic faculty member James Rowe wrote about how UVic treasurer Andrew Coward's decision to reject divestment on purely financial grounds is at odds with how the Norweigian central bank chose to divest on the same day, based on purely financial arguments. James Rowe. Fossil-fuel Divestment a Sensible Financial Choice. 2017. URL: https://www.timescolonist.com/opinion/letters/fossil-fuel-divestment-a-sensible-financial-choice-1.23099762 (visited on 2016).

³²⁵ ontariosunshinelist.com. William Moriarty: President and Chief Executive Officer, University of Toronto Asset Management Corporation. 2016. URL: http://www.ontariosunshinelist.com/people/ntjbry (visited on 07/12/2019).

³²⁶Darren Smith, who took over Moriarty's job, was the second highest paid public servant in Ontario in 2018, following the CEO of Ontario Power Generation, the organization responsible for 10 operable nuclear reactors at the Pickering and Darlington nuclear generating stations. Laura Howells. *Ontario Power Generation Executives Dominate 2018 Sunshine List Top 10.* 2019. URL: https://www.cbc.ca/news/canada/toronto/ontario-releases-annual-sunshine-list-for-2018-1.5073389 (visited on 07/12/2019).

³²⁷On the case for using the capitalistic financial system to drive fossil fuel abolition, see: Rand, The Case for Climate Capitalism: Economic Solutions for a Planet in Crisis.

³²⁸As a corollary, this implies that investments which will gain from strong governmental action to constrain climate change could benefit from a real commitment to climate stabilization. While theoretically this creates an incentive for financial managers to favour such investments, some of the structural barriers to climate change action still apply. Investment managers can benefit from relationships with firms that are profitable in the here and now, and can only hypothetically benefit from relationships with firms that would benefit from stronger climate policies. Managers questioning the wisdom of further fossil fuel investments also face political risks in Macdonald's "carbon provinces" and from political parties that prioritize continued fossil fuel revenues over climatic stability. The sheer size of the fossil fuel industry and its importance to the Canadian financial sector mean that

Rather than accepting the argument that a carbon bubble now exists creating a threat to future returns, universities generally accepted arguments that a financial penalty would arise from divestment. At the University of Winnipeg the administration reversed the onus on the campaign, asserting that a financial "gap" would arise from divestment because of lower future returns from a divested portfolio and asked the campaign to explain how they would "fill" it. Assertions about financial losses were helpful to resistant administrations because it let them emphasize fears that reduced returns from the endowment would threaten student funding, allowing them to present their concern in terms of tangible impacts on students rather than more abstract arguments about maximizing returns and fiduciary duty. Such assertions have been made in some cases by university administrations themselves, and at other times by third parties hoping to discourage fossil fuel divestment.³²⁹ The openness of target administrations to the assumption that divestment will harm returns may have been exacerbated by the economic crisis arising from COVID-19, and particularly how it may have depressed fossil fuel share prices below the 'fair' value investors take as a psychological anchor.^{330,331,332}

As discussed by Ayling and Gunningham, the macro scale financial case for divestment seeks to motivate investors and discourage fossil fuel projects largely by creating uncertainty. If future decarbonization policies and actions turn their reserves into stranded assets, fossil fuel investors who had been hoping to profit from those projects would likely experience losses instead.³³³ In 2014, the Carbon Tracker Initiative calculated that \$1.1 trillion in capital expenditure was planned for oil projects which would require prices over \$95 out to 2025 for profitability, chiefly deepwater offshore reserves, Arctic reserves, and the bitumen sands.³³⁴ The bitumen sands are the largest potential recipient of this investment, making up 40% of the global total.^{335,336} Many forms of uncertainty threaten the profitability of the fossil fuel industry: governments might take strong action to reduce fossil fuel demand while using policy to limit supply, increased respect for Indigenous rights may make projects which violate them non-viable, and damages arising from climate change could lead to the pursuit of compensation through lawsuits. The fossil fuel divestment movement is 'breeding uncertainty' by drawing attention to the fundamental interconnection of three things: the size of

investment managers who choose stocks based on the hope or expectation of future government action risk experiencing a backlash in the short term. Furthermore, the financial benefit from betting on low-carbon investments which are then boosted by new government action is likely years off in the future, whereas bonuses and performance pay for investment managers likely only consider results in the shorter term.

³²⁹Matthew Lau argued after UBC's 2019 divestment commitment that: "The expected result of fossil fuel divestment is reduced investment income on a risk-adjusted basis. We know this because if the university believed it was unprofitable to invest in the fossil fuel industry, or in funds that hold oil and gas stocks, it wouldn't hold any such investments to begin with." Lau also argued that if universities make choices that decrease their expected investment returns it calls into question whether they should receive further taxpayer support. Matthew Lau. *Divestment Doesn't Always Come Cheap.* 2019. URL: https://theorca.ca/visiting-pod/divestment-doesnt-always-come-cheap/ (visited on 12/26/2019).

³³⁰ In part because of reduced fossil fuel demand from COVID-19, 2019-20 was an especially poor period for US fossil fuel corporations. In 2019 an index of American exploration and production companies fell by 20% while the S&P 500 rose by 30%. During 2020, the S&P Global Clean Energy Index climbed 70% by late October. The Economist. What Donald Trump Did for Hydrocarbons. 2020. URL: https://www.economist.com/united-states/2020/10/24/what-donald-trump-did-for-hydrocarbons (visited on 11/09/2020).

³³¹See also: Financial Post. Canadian Energy Companies Pile on Losses in Third Quarter as Virus Dents Oil Demand. 2020. URL: https://financialpost.com/commodities/energy/canadian-energy-companies-pile-on-losses-in-third-quarter-as-virus-dents-oil-demand (visited on 11/09/2020).

³³² Kevin Crowley. Exxon Posts Record Loss, Warns of Epic \$30bn Shale Writedown. 2020. URL: https://www.aljazeera.com/economy/2020/10/30/exxon-posts-record-loss-warns-of-epic-30bn-shale-writedown (visited on 11/09/2020).

³³³Ayling and Gunningham, "Non-state Governance and Climate Policy: The Fossil Fuel Divestment Movement", p. 4.

³³⁴ Carbon Tracker Initiative. Carbon Supply Cost Curves: Evaluating Financial Risk to Oil Capital Expenditures. 2014. URL: https://www.carbontracker.org/reports/carbon-supply-cost-curves-evaluating-financial-risk-to-oil-capital-expenditures/ (visited on 01/09/2020), p. 2.

³³⁵Carbon Tracker Initiative, Carbon Supply Cost Curves: Evaluating Financial Risk to Oil Capital Expenditures, p. 16.

³³⁶In fact, between 2014 and 2019 investment in Alberta's oil and gas sector fell to C\$26 billion from over C\$60 billion. The Economist. Oil-rich Alberta Seeks Ways to go Green. 2020. URL: https://www.economist.com/the-americas/2020/12/05/oil-rich-alberta-seeks-ways-to-go-gree (visited on 12/14/2020).

the reserves the fossil fuel industry hopes to exploit, the level of future profits they will earn, and the amount of damage or social injury imposed on the world at large by burning those fuels.³³⁷ That in turn legitimates the 'keep it in the ground' idea which is fundamentally at odds with an extractivist mindset which seeks to accrue maximum profits through resource exploitation while ignoring and limiting legal exposure to any consequences that creates for third parties. Universities that embrace an interpretation of fiduciary duty as an absolute obligation to maximize investment returns regardless of social or environmental consequences end up being aligned with that extractivist mindset: inclined to invest in firms that reflect it, and not to use whatever influence they possess to encourage better environmental outcomes at the cost of profitability.

The financial case for fossil fuel divestment is a unique feature in comparison with other divestment campaigns in which the sole motive is to stop investing in entities engaged in destructive practices. In cases like BDS, tobacco, or Sudan divestment activists could argue that a university risked a reputational hit from staying invested, but there wasn't the same dynamic where government action to mitigate a problem which they have pledged to control risks cutting off the long-term revenue stream from projects otherwise expected to produce profits for decades. CFFD campaigns argued that even if universities are determined to ignore all matters of ethics and seek only to maximize profits continued investment in the fossil fuel industry is at odds with their plans. At the same time, internal debates about finance and economics demonstrate the $\rm CO_2$ -energy / climate justice split among activists, and the lack of agreement among activists about the depth of institutional reform needed to combat climate change. Prioritization of the inside game is a characteristic feature of $\rm CO_2$ -e advocacy, as reflected in their efforts to seem non-threatening and their willingness to use concepts and vocabulary which board members accept as legitimate. Likewise, a central axis of $\rm CJ$ / $\rm CO_2$ -e contention was whether or not to emphasize arguments which administrations did not readily accept, either because activists saw them as morally obligatory or as part of a solidarity-based strategy for coalition building.

4.5 Outside game: winning campus support

A central strategy pursued by Canadian CFFD campaigns has been seeking endorsements and active support from on-campus constituencies.^{339,340} This corresponds in part to the "WUNC" (worthiness, unity, numbers, and commitment) displays discussed in both academic writing on social movements and writing by activists themselves.^{341,342,343,344} While in a few cases interview participants described what they thought were administration delay strategies in which they were pressed to organize referendums or get formal endorsements from student governments, other campaigns emphasized how this kind of outreach originated

³³⁷ Ayling and Gunningham, "Non-state Governance and Climate Policy: The Fossil Fuel Divestment Movement", p. 4.

³³⁸ Aidid noted that research participants from Waterloo and Concordia described board members as "conservative-leaning" and often coming from the insurance and banking industries. Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. 70.

³³⁹Maina-Okori et al. cited an unavailable literature review by Jaylene Murray saying that students "built alliances and collaborations with faculty, staff, alumni, and international and national organizations, similar to other student-led movements." Maina-Okori, Murray, and McKenzie, "Climate Change and the Fossil Fuel Divestment in Canadian Higher Education: The Mobilities of Actions, Actors, and Tactics (journal pre-proof)", p. 20.

³⁴⁰Jaylene Murray. "Student-led Action for Sustainability in Higher Education: A Literature Review". In: *International Journal of Sustainability in Higher Education* 19.6 (2018), pp. 1095–1110. URL: https://www.emerald.com/insight/content/doi/10.1108/IJSHE-09-2017-0164/full/html (visited on 12/31/2019).

³⁴¹For instance: Charles Tilly. Social Movements, 1768–2004. Boulder, Colorado: Paradigm Publishers, 2004.

³⁴² Ruud Wouters and Stefaan Walgrave. What Makes Protest Powerful? Reintroducing and Elaborating Charles Tilly's WUNC Concept. 2017. URL: https://www.researchgate.net/publication/313179891_WHAT_MAKES_PROTEST_POWERFUL_REINTRODUCING_AND_ELABORATING_CHARLES_TILLY'S_WUNC_CONCEPT (visited on 05/30/2019).

 $^{^{343}\}mathrm{Tilly},\ Contentious\ Performances,\ p.\ 121.$

 $^{^{344}}$ Taylor and Van Dyke, "'Get Up, Stand Up': Tactical Repertoires of Social Movements", p. 281–2.

with the strategic thinking of the campaign itself and helped to legitimize their demands to university officials. Malkolm Boothroyd described the student body at UVic as "passively in favour of our position." Through their outside game strategies, Canadian CFFD campaigns sought to cultivate active support for divestment among university constituencies, while also seeking to influence decision makers and the public directly and through the media. Training materials from 350.org describe a spectrum of support running from the most determined opponents to those already strongly committed to divestment, and encourage campaigns to work in particular on converting broad passive support in the student population into active support.³⁴⁵

Referendums were used to build and demonstrate campus support in many campaigns. In 2015, Mychaylo Prystupa counted student divestment referendums at ten universities: UBC, UVic, SFU, the University of New Brunswick, Dalhousie, Guelph, Trent, McMaster, McGill, and Concordia. Prystupa also identified faculty votes at UVic, SFU, U of T, and Mount Allison — though in at least the U of T case this is conflating a vote within the faculty association to endorse the campaign with a school-wide faculty referendum. 346,347 Maina-Okori et al. argued that campaigns used student and faculty votes both to "popularize their initiatives" and as part of getting student governments to divest, and noted that student votes have passed at 17 institutions while faculty votes have passed at seven.³⁴⁸ At UBC, the Alma Mater Society (AMS) held a student referendum in 2014 which earned 76% support and there was a faculty referendum in February 2015 with 62% in favour. 349,350,351 These were requested by the administration after the official proposal was made to the board of governors in October 2014, which led the university to ask the campaign to have the proposal approved by two voting blocks within the school. In a 2016 student union referendum at Concordia, 80% of students agreed with Divest Concordia's demand to remove investment from the fossil fuel industry and reinvest it in a socially and environmentally responsible manner; 70% said that the student union should actively support the campaign until the university divested.³⁵² At the University of Victoria, a student referendum in 2015 won 77% support. 353,354 In 2019, 77% of UVic faculty voted in support of divestment. 355 In March 2016, 72% of students in a Guelph Central Student Association (CSA) referendum voted in favour of divestment. 356 In January 2020, faculty at Harvard voted 179 to 20 in favour of divestment. 357

³⁴⁵As one handbook put it: "Our work is to steadily move passive allies, neutrals, and passive opponents in our direction. We keep our active allies engaged." Daniel Hunter. Climate Resistance Handbook: Or, I Was Part of a Climate Action. Now What? 2019. URL: https://trainings.350.org/wp-content/uploads/2019/05/Climate-Resistance-Handbook-PDF.pdf (visited on 09/26/2020), p. 29, 31.

³⁴⁶Mychaylo Prystupa. Fossil Fuel Divestment Fever Hits UBC and Other Canadian Campuses. 2015. URL: https://www.nationalobserver.com/2015/01/25/news/fossil-fuel-divestment-fever-hits-ubc-and-other-canadian-campuses (visited on 01/01/2020).

³⁴⁷Scott Prudham. Divestment Letter to President Gertler. 2014. URL: https://www.utfa.org/content/divestment-letter-president-gertler (visited on 01/01/2020).

³⁴⁸Maina-Okori, Murray, and McKenzie, "Climate Change and the Fossil Fuel Divestment in Canadian Higher Education: The Mobilities of Actions, Actors, and Tactics (journal pre-proof)", p. 17.

 $^{^{349}\}mathrm{Peters},\,Activists$ want Universities to Stop Investing in Fossil Fuels.

 $^{^{350}\}mathrm{Prystupa},\ Fossil\ Fuel\ Divestment\ Fever\ Hits\ UBC\ and\ Other\ Canadian\ Campuses.$

³⁵¹ Canadian Press. UBC Faculty Vote in Favour of Divestment. 2015. URL: https://globalnews.ca/news/1823330/ubc-faculty-vote-in-favour-of-divestment/ (visited on 02/05/2022).

 $^{^{352} \}mbox{Nelly Serandour-Amar.}$ Students Vote YES to Divest. 2016. URL: http://theconcordian.com/2016/11/students-vote-yes-to-divest/ (visited on 08/07/2019).

³⁵³ Vancouver Observer. Why University of Victoria Students Voted to Divest. 2015. URL: https://www.vancouverobserver.com/news/why-u-victoria-students-voted-overwhelmingly-divest-photos (visited on 07/06/2019).

³⁵⁴Oak Bay News. UVic Students Throw Support Behind Divestment. 2015. URL: https://www.oakbaynews.com/news/uvic-students-throw-support-behind-divestment/ (visited on 08/26/2019).

³⁵⁵ William Gaetz. Majority of UVic Faculty Vote to Divest from Fossil Fuels. 2019. URL: https://vancouverisland.ctvnews.ca/majority-of-uvic-faculty-vote-to-divest-from-fossil-fuels-1.4733684 (visited on 02/04/2020).

³⁵⁶The Ontarion. Fossil Fuel Divestment at the University of Guelph. 2017. URL: https://theontarion.com/2017/10/18/fossil-fuel-divestment-at-the-university-of-guelph/ (visited on 08/07/2019).

³⁵⁷Divest Harvard. Harvard Faculty Votes for Divestment Resolution. 2020. URL: https://medium.com/@DivestHarvard/harvard-faculty-votes-for-divestment-3b7e00fbb2ea (visited on 02/04/2020).

Winning faculty endorsements was also an important part of outside game strategies within CFFD campaigns. Across Canada and throughout the CFFD movement, many professors have endorsed divestment in joint letters and public statements. In March 2014, six SFU professors submitted an open letter to their board of governors.³⁵⁸ In February 2015, over 100 McGill faculty members including Order of Canada and Royal Society of Canada members signed an open letter calling for fossil fuel divestment. 359,360 Faculty members have also published op-eds in mainstream media sources and student newspapers. 361,362 Notably, after their recommendations were rejected by the university administration, the presidentially-appointed ad hoc committee at the University of Toronto published an op-ed in defence of what was dubbed "the Toronto" Principle" by Benjamin Franta in the Harvard Crimson, based on the standard of divestment from firms whose "actions blatantly disregard the international effort to limit the rise in average global temperatures to not more than one and a half degrees Celsius above pre-industrial averages by 2050."363,364,365,366 Faculty members at universities outside Canada have also supported fossil fuel divestment through open letters, including 59 Oxford faculty members in 2014 including Lord Professor Robert May, the UK's former chief scientific advisor, and Professor Gordon Clark, director of the Smith School of Enterprise and the Environment and former chair of the university's socially responsible investment committee. 367 In December 2019. tenured McGill professor Gregory Mikkelson resigned from the university after 18 years, prompting principal Suzanne Fortier to argue that McGill's plan to reduce the carbon footprint of their investments would be more effective than divestment. 368,369 In 2019, the McGill University Non-Academic Certified Association (MUNACA) helped promote a walkout to demonstrate campus support for divestment before a meeting of the socially responsible investment committee. 370,371 In their analysis of faculty support for fossil fuel

³⁵⁸ Michael T. Schmitt et al. Fossil Fuel Divestment: Open Letter from Faculty to the Simon Fraser University Board of Governors. 2014. URL: https://static1.squarespace.com/static/5380f07ae4b092b699c32fc7/t/54727ddde4b0f566604f7ca1/1416789469756/facultydivestmentletter.pdf (visited on 07/29/2019).

³⁵⁹McGill Faculty for Divestment. Open Letter from Faculty to McGill's Board of Governors. 2015. URL: https://web.archive.org/web/20150417091040/http://www.mcgillfacultyfordivestment.com/open-letter-from-faculty-to-mcgills-board-of-governors-2/ (visited on 08/28/2020).

³⁶⁰ Amanda Kelly. McGill University Faculty Members Call for Divestment from Fossil Fuels. 2015. URL: https://globalnews.ca/news/1819635/mcgill-university-faculty-members-call-for-divestment-from-fossil-fuels/ (visited on 07/19/2019).

³⁶¹For instance: David Tindall. Opinion: Protect Future of Our Students. 2015. URL: http://www.vancouversun.com/technology/Opinion+Protect+future+students/10771623/story.html (visited on 07/21/2019).

³⁶²Kathryn Harrison, George Hoberg, and David Tindall. *Getting Rid of Petroleum Stocks is a Crucial First Step for Universities*. 2018. URL: https://www.theglobeandmail.com/opinion/getting-rid-of-petroleum-stocks-is-a-crucial-first-step-for-universities/article22799215/ (visited on 07/21/2019).

³⁶³Karney et al., Report of the President's Advisory Committee on Divestment from Fossil Fuels.

 $^{^{364}} Benjamin A.$ Franta. On Divestment, Adopt the Toronto Principle. 2016. URL: http://www.thecrimson.com/article/2016/2/8/franta-divestment-toronto-principle/ (visited on 03/18/2017).

³⁶⁵Hoffmann et al., A Committee Replies.

³⁶⁶In January 2020 the Brunel Pension Partnership, with £30 billion in assets, said it would pressure companies to align their emissions with Paris Agreement targets, vote against the reappointment of board members deemed to not be doing enough, and potentially divest after 2022 if insufficient action is taken. Jasper Jolly. £30bn Pension Fund: We'll Sack Asset Managers That Ignore Climate Crisis. 2020. URL: https://www.theguardian.com/business/2020/jan/27/30bn-pension-fund-well-sack-asset-managers-that-ignore-climate-crisis (visited on 02/04/2020).

³⁶⁷BBC News. Oxford University Academics Support Fossil Fuel Divestment. 2014. URL: https://www.bbc.com/news/uk-england-hampshire-27655081 (visited on 01/09/2020).

³⁶⁸Franca G. Mignacca. Tenured McGill Prof Resigns over University's Refusal to Divest from Fossil Fuels. 2020. URL: https://www.cbc.ca/news/canada/montreal/mcgill-university-professor-resigns-amid-refusal-to-divest-1.5426979 (visited on 01/18/2020).

³⁶⁹ Morgan Lowrie. McGill Principal Defends Decision not to Divest After Prof's Resignation. 2020. URL: https://montreal.ctvnews.ca/mcgill-principal-defends-decision-not-to-divest-after-prof-s-resignation-1.4774776 (visited on 02/04/2020).

³⁷⁰ McGill University Non-Academic Staff Association. Walkout for Fossil Fuel Divestment: Nov. 12, 2019. 2019. URL: http://www.munaca.com/index.php/fr/2019/11/09/walkout-for-fossil-fuel-divestment-nov-12-2019/ (visited on 09/03/2020).

³⁷¹See also: McGill University Non-Academic Staff Association. MUNASA's Statement on Divest McGill. 2018. URL: https://www.munasa.com/post/munasa-s-statement-on-divest-mcgill (visited on 09/03/2020).

divestment in colleges and universities, Stephens, Frumhoff, and Yona found that those with tenure were significantly more likely to sign publicly available letters endorsing divestment (15.4% versus 10.7% on average), possibly because their more junior colleagues feared that such advocacy would harm their career advancement (itself a demonstration that CFFD activism is not entirely palatable).³⁷² This was based on examining 4,550 faculty members from 30 institutions in the US and Canada.³⁷³ They also noted that faculty at some institutions have voted to divest at the departmental level, including Sociology and Anthropology; Culture, Societies, and Global Studies; and Public Policy and Urban Affairs at Northeastern University.³⁷⁴

Student unions were also targets of CFFD allyship efforts. For example, in 2013 the Dalhousie Student Union (DSU) voted unanimously to endorse Divest Dalhousie. When the board of governors rejected divestment in November of that year, the DSU expressed public disapproval. In December, the DSU held a vote on divesting just under \$100,000 of its own assets from the 16 companies out of the 200 in the Carbon Underground where it had holdings. The student union voted to do so, shifting about 4% of its assets. In 2017, a Dalhousie Student Union board representative introduced a motion supported by Divest Dalhousie, calling for the university to undertake third party research on implementing the proposals from the senate's report on fossil fuel divestment and put divestment back on the board agenda in February. The motion passed. At Concordia in 2017, the student union posted "big red and black CSU banners decrying tuition hikes and advocating for fossil fuel divestment." In 2018, the UBC AMS voted unanimously to divest its own assets.

Many CFFD campaigns made efforts to solicit support from alumni, especially prominent and influential ones. Yona and Lenferna note divestment endorsements from influential alumni at US schools, including Christiana Figueres, Cornel West, and Natalie Portman. Some of the actions taken by alumni to support the movement in Canada seem idiosyncratic and uncoordinated. Jed Lenetsky at McGill described one alumnus returning a degree to Dalhousie; more dramatically, Scott Vrooman publicly destroyed his Dalhousie degree in 2015. A queen's divestment organizer called Vrooman alumni campaign. Lenetsky

³⁷²Stephens et al., "The Role of College and University Faculty in the Fossil Fuel Divestment Movement", p. 1, 4.

 $^{^{373}}$ Stephens et al., "The Role of College and University Faculty in the Fossil Fuel Divestment Movement", p. 4.

³⁷⁴Stephens et al., "The Role of College and University Faculty in the Fossil Fuel Divestment Movement", p. 6.

³⁷⁵ Jesse Ward. Dalhousie Student Union to Vote on Divesting Their Portfolio of Fossil Fuels. 2014. URL: https://dalgazette.com/news/dalhousie-student-union-to-vote-on-divesting-their-investments-of-fossil-fuels/ (visited on 01/01/2020).

^{3&}lt;sup>76</sup>Dalhousie Student Union. Divest Dalhousie Gains Student Union Support for Fossil Fuel Divestment Campaign. 2013. URL: http://halifax.mediacoop.ca/newsrelease/20022 (visited on 01/01/2020).

³⁷⁷ Josh Dehaas. Dalhousie Student Union Wants Out of Fossil Fuels. 2013. URL: https://www.macleans.ca/education/uniandcollege/dalhousie-student-union-wants-out-of-fossil-fuels/ (visited on 01/01/2020).

 $^{^{378}}$ Isabel Ruitenbeek. *Understanding Divest Dal.* 2016. URL: https://medium.com/@dalgazette/understanding-divest-dal-def01020ebb (visited on 01/01/2020).

³⁷⁹ Robert Devet. Student Pressure Puts Divestment Back on the Table at Dalhousie University. 2017. URL: https://nsadvocate.org/2017/11/29/news-release-student-pressure-puts-divestment-back-on-the-table-at-dalhousie-university/ (visited on 01/01/2020).

³⁸⁰ The senate report's recommendation was: "That Senate initiate and pursue meaningful joint discussions with the Board of Governors to engage the broader Dalhousie Community under a mandate to develop and enact formal institutional policy on ethical investment and other strategic initiatives to address climate change." Dalhousie Ad hoc Committee of Senate on Fossil Fuel Divestment. Final Report to Senate. 2016. URL: https://cdn.dal.ca/content/dam/dalhousie/pdf/dept/university_secretariat/Senate%20Docs/ad%20hoc%20committeee%20-%20Divestment%20Report%20Jan%2027,%20vs3.pdf (visited on 09/24/2019), p. 11-2.

³⁸¹ Emmanuel Cuisinier. The Right to Learn Comes Before the Right to Free Speech. 2017. URL: http://theconcordian.com/2017/08/the-right-to-learn-comes-before-the-right-to-free-speech/ (visited on 01/02/2012).

³⁸²University of British Columbia Alma Mater Society. AMS Celebrates Fossil Fuel Free Investment Portfolio. 2018. URL: https://www.ams.ubc.ca/news/ams-celebrates-fossil-fuel-free-investment-portfolio/ (visited on 09/02/2020).

³⁸³Yona and Lenferna, Fossil Fuel Divestment Movement within Universities (Chapter in the Forthcoming: G. Sosa-Nunez & E. Atkins (2016). Climate Change & International Relations.) p. 8.

³⁸⁴ Hadyn Watters. Scott Vrooman Rips Up his Dalhousie Degree over Fossil Fuels, Sends it Back to School. 2015. URL: https://www.cbc.ca/news/technology/degree-ripped-fossil-fuels-dalhousie-1.3312121 (visited on 01/01/2020).

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also describes a coordinated diploma returning ceremony at McGill, with 22 alumni taking part, after the committee considering their petition rejected it on the grounds that the social injury caused by the fossil fuel industry was insufficiently grave.³⁸⁵

Outside game strategies are considered by many activists to be more inclusive and compelling than the 'inside baseball' of influencing and negotiating with the university administration. Narratives about building power and 'forcing divestment' are compatible with emphasizing movement-building and delegitimization objectives over the narrower aim of institutional action.³⁸⁶

While outside game strategies could theoretically be entirely cooperative in their tone and tactical choices, several forces encouraged them to be more confrontational. Endorsements between CFFD and other student activist campaigns were often reciprocal, linking CFFD activism to more controversial pursuits like BDS or resistance to the global arms trade. Successfully organizing large in-person events like marches and rallies also involves reaching out to and mobilizing activist populations which are inclined to criticize university administrations more vociferously than may be ideal for an inside game strategy, and who conceptualize fossil fuel divestment less as a unique one-off justified by the particular risks arising from climate change and more as part of a pattern of demands generally seeking greater global equity. Low-risk actions were not the only ones that had their numbers bolstered by allies who were not involved in organizing the CFFD campaign. When the Mount Allison campaign occupied the president's office, many of those involved were allies rather than campaign organizers.

Tensions between emphasizing inside versus outside game strategies relate to the relative priority accorded to divestment's three top level objectives. Since achieving success in terms of administration action essentially requires a persuasion-based campaign, maintaining the possibility of achieving the direct 'ask' of divestment campaigns was often at odds with the objectives of movement building in terms of delegitimization and activist development. Likewise, given the broad concern among target administrations that acceding to fossil fuel divestment demands would lead to further unwelcome demands to divest from other things, there was tension between pursuing a broad, intersectional, "climate justice" approach to allyship and doing everything possible to achieve divestment in the fossil fuel case specifically.

There are limits to how effectively inside and outside game approaches can be hybridized. While there is evidence that many Canadian CFFD campaigns made use of both approaches, including in complementary and mutually reinforcing ways, there are also limits to such hybrid approaches. As will be discussed in the framing chapter, tactical preferences correspond to theories of change and world views. Campaigns focused on working on persuasion strategies targeting the decision makers and bodies with the authority to divest cannot make unlimited use of confrontational tactics without risking the cooperative relationships they are trying to build; at the same time, radical campaigns seeking transformative political and economic change will be frustrated and stymied by the measured messaging and patience to allow formal processes to operate which are emphasized in cooperative campaigns.

 $^{^{385}}$ This was contemporaneous with other relatively confrontational actions, including a sit-in and campout over the Easter Weekend in 2016.

 $^{^{386}}$ On the multiple strategic goals of the movement, see: The CFFD movement's three strategic objectives p. 5

4.6 CFFD activists' actions outside universities

Leehi Yona and Alex Lenferna argued that CFFD campaigns have allowed activists to "directly connect with communities on the front line of fossil fuel extraction and infrastructure development." Among US campaigns they described efforts to support carbon pricing and resist mountaintop removal coal mining, Arctic drilling, and hydraulic fracturing. They also noted connections beyond the climate change movement, including collaboration with Black Lives Matter and support to private prison divestment campaigns. Members of US campaigns took part in parallel arrestable actions, including when four Harvard students were arrested at the Boston Federal Reserve, where the Harvard management corporations offices are, during "Heat Week" in 2016. My interview participants described many parallel cases in Canada — both of CFFD activists being simultaneously involved in often more contentious forms of climate activism off-campus, and of linkages between the CFFD movement and other social movements. For example, Paul Berger, a faculty member at Lakehead, described how student divestment activists lobbied simultaneously for municipal action and against the Energy East pipeline.

The CFFD movement overlapped in timing and membership with broader climate change activism campaigns, with many CFFD organizers taking part in arrestable acts of civil disobedience by occupying the offices of members of Parliament in July 2015; the November 2015 "Climate Welcome" for the Trudeau government which obstructed Sussex Drive and the entrances to the prime ministerial residence in an attempt to provoke arrests; arrestable actions to resist the Kinder Morgan Trans Mountain expansion; and crossing a designated arrest line on Parliament Hill in actions like Climate 101, where 99 young people were arrested in October 2016. 390,391,392,393,394,395,396,397,398 Approximately four CFFD activists from Mount Allison were arrested during Climate 101, and others took part in the Climate Welcome. For Tina Oh, her arrest led to being impeached from her position as vice-chair of the New Brunswick Student Alliance, at the same time as she was part of the CYCC's youth delegation to the UNFCCC COP-22 in Morocco. 399 Oh explained that the organization removed her from her position because of what they saw as the "inappropriateness of an

³⁸⁷Leehi Yona and Alex Lenferna. *The Fossil Fuel Divestment Movement within Universities (excerpt)*. 2016. URL: https://www.e-ir.info/2016/05/15/the-fossil-fuel-divestment-movement-within-universities/ (visited on 12/29/2019).

³⁸⁸See: Divest Harvard. Divest Harvard Statement On Black Lives Matter. 2014. URL: https://web.archive.org/web/20150403180203/http://divestharvard.com/divest-harvard-statement-on-black-lives-matter/ (visited on 02/20/2020).
389Toffel and Gulick, Harvard Business School Case: Fossil Fuel Divestment, p. 11.

³⁹⁰Naomi Goldberg from the Mount Allison campaign explained that the Climate 101 action was organized by Katie Perfitt from 350.org and included civil disobedience training and the development of other skills which they applied in their campout and occupation.

³⁹¹Belliveau described the action as "the mass arrest of students and youth on Parliament Hill in the fall of 2016, who aimed to deliver the message to newly elected Liberal federal government that 'climate leaders don't build pipelines." Belliveau, "Climate Justice in the Fossil Fuel Divestment Movement: Critical Reflections on Youth Environmental Organizing in Canada", p. 103. ³⁹²In their address to the crowd before the March for Jobs, Justice, and the Climate, Jody Chan and Amanda Harvey-Sánchez described the recent MP office occupations as "the first time the student divestment movement has taken the fight off campus." Rebel Sage. *March for Jobs, Justice, and the Climate, Toronto, July 5/15 — Jody Chan and Amanda Harvey-Sánchez.* 2015. URL: https://www.youtube.com/watch?v=wJY1h7Yb0Ig (visited on 07/30/2019).

³⁹³Cam Fenton discussed the strategy behind the Climate Welcome: Cameron Fenton. Canada's Climate Movement Welcomed a New PM and a New Era of Organizing. 2015. URL: https://wagingnonviolence.org/2015/11/canada-climate-welcometrudeau/ (visited on 06/26/2019).

 $^{^{394}\}mathrm{Regarding}$ Climate 101: Haslam, Students vs. Big Oil.

³⁹⁵Belliveau, "Climate Justice in the Fossil Fuel Divestment Movement: Critical Reflections on Youth Environmental Organizing in Canada", p. 103.

 $^{^{396}} Laura$ Cutmore. Trudeau, we were Arrested for Protesting Kinder Morgan, and we'd do it Again in a Heartbeat. 2017. URL: https://350canada.medium.com/climate101-arrested-once-and-wed-do-it-again-ad0bcb88c9da (visited on 10/10/2021). $^{397} Activists$ from Divest York took part in both the MP office occupations and Climate 101.

³⁹⁸While not undertaking occupations, Climate Justice UBC and other youth climate activist groups also held protests outside the offices of three MPs in the Vancouver area in September 2020, in protest of the inadequate promises in that week's Speech from the Throne. Charlotte Alden. Climate Groups Protest for Just COVID-19 Recovery in Front of MP Offices. 2020. URL: https://www.ubyssey.ca/news/climate-groups-protest-for-just-recovery/ (visited on 09/26/2020).

³⁹⁹Turnbull, Oh Resigns from MASU, Cites Systemic Racism.

elected official being arrested so publicly." Oh also resigned as vice president of external affairs for the student union, citing the body's resistance to her political efforts as the reason. Diana Yoon said that several Queen's campaign members were arrested at Climate 101 and that she found the experience had a strong personal effect, including through the training they received on non-violent direct action. CFFD activists from SFU took part in arrestable actions opposing the Trans Mountain pipeline expansion in Burnaby, BC. One rappelled down from Vancouver's Ironworkers' Memorial Bridge on July 3, 2018 in an anti-tanker direct action dubbed an "aerial blockade" and meant to stop traffic to the Westridge Marine Terminal. In August 2020, health sciences professor Tim Takaro occupied a tree in order to resist the Trans Mountain pipeline expansion.

At several points during the CFFD movement — and particularly during solidarity actions for the Wet'suwet'en resisting the CGL pipeline — campaign organizers and activists have occupied the offices of members of Parliament and ministers. While this choice of tactic has been met with a fair measure of toleration from the authorities while actions have been ongoing, it is worth noting and perhaps underappreciated among CFFD organizers that such office occupations are monitored as serious security threats, especially when they are undertaken in support of Indigenous activism. For instance, the Canadian Security Intelligence Service (CSIS)'s Integrated Terrorism Assessment Centre (ITAC) "monitored and reported" on a protest at MP Lawrence Cannon's constituency office during the Algonquins of Barriere Lake conflict in 2016. An RCMP briefing note included "Offices of MP's [sic]" along with bridges and airports as sites vulnerable to disruption by protest. An intelligence report prepared by the RCMP's Critical Infrastructure Intelligence Team cites targeting Conservative MP offices including that of Industry minister James Moore as evidence of criminality. A05,406,407 Peaceful occupations which were met with restraint by staff members and the police may therefore have brought activists within the scope of security state surveillance and monitoring, as well as information sharing about potential threats with other governments and resource corporations.

Gunningham said that the divestment movement "has eschewed any engagement with the state" but this is not true. 408 CFFD groups also undertook election organizing, applied direct pressure to their federal and provincial representatives, and organized or supported municipal divestment campaigns. 409 Members

⁴⁰⁰Turnbull, Oh Resigns from MASU, Cites Systemic Racism.

⁴⁰¹ A photo of the action can be seen in: Hamdi Issawi and Ainslie Cruickshank. Faces of the Resistance: Six Pipeline Opponents on Why They Oppose the Trans Mountain Expansion and What They're Prepared to Do About It. 2019. URL: https://www.thestar.com/vancouver/2019/08/15/faces-of-the-resistance-six-pipeline-protesters-on-why-they-oppose-the-trans-mountain-expansion-and-what-theyre-prepared-to-do-about-it.html (visited on 08/19/2019).

⁴⁰² Megan Stewart. SFU Professor Occupies Treetops to Protest Pipeline Expansion. 2020. URL: https://bc.ctvnews.ca/sfu-professor-occupies-treetops-to-protest-pipeline-expansion-1.5052434 (visited on 08/06/2020).

⁴⁰³ Jeffrey Crosby and Andrew Monaghan. *Policing Indigenous Movements: Dissent and the Security State.* Halifax: Fernwood Books, 2018, p. 43.

⁴⁰⁴Crosby and Monaghan, Policing Indigenous Movements: Dissent and the Security State, p. 106.

⁴⁰⁵Crosby and Monaghan, Policing Indigenous Movements: Dissent and the Security State, p. 185–6.

⁴⁰⁶ An RCMP Powerpoint deck explained the team's work: Noel Flatters. Critical Infrastructure Protection: a Public/Private Shared Responsibility. 2019. URL: https://gpacanada.com/wp-content/uploads/2019/08/Critical-Infrastructure-Protection.pdf (visited on 08/04/2022).

⁴⁰⁷A 2014 RCMP critical infrastructure intelligence assessment listed among key findings that "There is a growing, highly organized and well-financed anti-Canadian petroleum movement, that consists of peaceful activists, militants and violent extremists, who are opposed to society's reliance on fossil fuels" and that "These extremists pose a realistic criminal threat to Canada's petroleum industry, its workers and assets, and to first responders." Royal Canadian Mounted Police. Critical Infrastructure Intelligence Assessment: Criminal Threats to the Canadian Petroleum Industry. 2014. URL: https://www.statewatch.org/media/documents/news/2015/feb/can-2014-01-24-rcmp-anti-petroleum-activists-report.pdf (visited on 08/04/2022), p. 1.

⁴⁰⁸Gunningham, "Review Essay: Divestment, Nonstate Governance, and Climate Change", p. 312.

⁴⁰⁹The climate activist movement broadly may be increasing youth participation in election organizing. See for example: Alex Nguyen. *B.C. Youth are Organizing for Climate Candidates This Election* — *Even if Many Can't Vote.* 2020. URL: https://ricochet.media/en/3335/bc-youth-are-organizing-for-climate-candidates-this-election-even-if-many-cant-vote (visited on 10/20/2020).

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of CFFD campaigns sought to influence ongoing provincial and federal politics through a variety of means, including canvassing during election campaigns and 'bird-dogging' politicians by protesting the insufficiency of their climate change actions at public events. For example, Sadie-Phoenix Lavoie stood behind prime minister Trudeau at a Winnipeg town hall with a banner reading: "Water is Sacred / No Pipelines!" The Divest Dalhousie campaign bird-dogged prime minister Trudeau in Halifax. SFU350 released climate change report cards for Burnaby city council elections in 2014. In the lead-up to the 2017 BC election UBCc350, SFU 350, and the Capilano Students' Union created a non-partisan coalition called Young Climate Voters BC and a campaign called "Together for Tomorrow." The group aimed to encourage young people to vote and to show political candidates that climate change is a priority for young people. 412

These beyond-campus activities demonstrate how members of the CFFD movement simultaneously pursued multiple targets and objectives. They also show how the spectrum of activist actions within universities is only a subset of what Canadian CFFD activists were undertaking between 2012 and 2020. Having students take part in arrestable actions outside their universities at the same time as CFFD campaigns were ongoing reveals how activists were willing to accept the risks arising from such actions and therefore opted not to generally use them during campaigns targeting universities because of other considerations, presumably the expected impact on university administrations and the wider campus community.

4.7 Counter-repertoires and cycles of contention

The account of activist repertoires in this chapter is mirrored by the discussion of university responses in my counter-repertoires pre-print.

As of June 2022, Laval, UQAM, Concordia, UBC, Guelph, Lakehead, UVic, Waterloo, U of T, SFU, Carleton, and l'Université de Montréal had committed to divestment, but among all the universities with campaigns none has announced that they will do nothing in response to climate change and the demands of CFFD activists. All Rather, they have worked to emphasize pre-existing actions which they deem to be suitable climate change responses while also announcing new non-divestment actions intended to respond to activist concerns without suffering the controversy and resistance which has dissuaded them so far from actually divesting.

In Power in Movement, Sidney Tarrow defined a "cycle of contention" as:

a phase of heightened conflict across the social system, with rapid diffusion of collective action from more mobilized to less mobilized sectors, a rapid pace of innovation in the forms of contention employed, the creation of new or transformed collective action frames, a combination of organized and unorganized participation, and sequences of intensified information flow and interaction between challengers and authorities. 414

While part of these shifts in CFFD repertoires can be understood in terms of cycles of contention between campaign actions, university reactions, and campaign reactions to those, there have also been other forces driving tactical shifts. Particularly from the perspective of activist development, it is also important to note that many CFFD organizers took part simultaneously in other dimensions of the contentious politics

⁴¹⁰Haslam, Students vs. Big Oil.

⁴¹¹ SFU350. Candidate Report Cards. 2014. URL: http://www.sfu350.com/candidate-report-cards/ (visited on 08/13/2019).

⁴¹² Alyse Kotyk. B.C.'s Students Serve Notice to Kinder Morgan and Premier Clark for Provincial Election. 2017. URL: https://rabble.ca/environment/bcs-students-serve-notice-kinder-morgan-and-premier-clark-provincial-election/(visited on 10/06/2021).

 $^{^{413}}$ For a list of commitments to act by Canadian universities up to the time of writing, see: Campaign outcomes at Canadian universities p. 221

⁴¹⁴Tarrow, Power in Movement: Social Movements and Contentious Politics, 3rd ed. p. 199.

of climate change, particularly arrestable actions of civil disobedience directed at policy makers. Numerous interview subjects described how prior to their CFFD involvement they would not have imagined themselves taking such actions, lending credibility to the concept of a "ladder of escalation" in which participation in incrementally more contentious actions, supported through interpersonal bonds between activists, gradually expands the scope of what individual activists are willing to do and consider to be effective. ⁴¹⁵ This willingness is crucially rooted in social relations. As an organizer explained about the outcome of the Divest Dal campaign: "I feel better. I feel way more hopeful and supported by people who have the same values as me and are willing to act on them in sometimes somewhat dramatic ways."

There is a temptation to attribute any change in campaign tactics to the most recent decisions of the target university. (Or conversely to attribute any change of policy to activists' latest tactical choices, as Soule described in the shantytown apartheid example.)⁴¹⁶ At a school where the administration is seen to have taken a positive step, campaigns may publicly celebrate or forbear to criticize it as inadequate. Where campaign efforts have just been harried, "escalation" is commonly advised by divestment proliferator staff, albeit with inconsistent meanings in terms of how confrontational approach they recommended.⁴¹⁷ There are also other factors that affect how contentious campaigns choose to be at particular times. An important one is the pre-existing tactical perspectives and preferences of the people who join. 418 One interview participant at SFU described how there has been "rhythm to the fossil fuel divestment movement" with some student cohorts "much more interested and activist" than others. Another interview participant argued that the reason the UBC campaign had not progressed into confrontation, despite receiving a similar response to contentious campaigns like McGill and Mount Allison, was because of the personalities and disciplinary backgrounds of the most active student leaders. Drawing on past experience or historical examples, organizers may see a particular set of actions as simply the way successful campaigns ought to operate, though those judgments often vary between relative pragmatists with an emphasis on public opinion and winning people over (CO₂-e) and radicals with a theory of change that calls for going beyond what most people in the broader population of students or university community members will see as justified or suitable (CJ). The graduation and departure of an influential set of pragmatists or radicals may significantly shift the behaviour of the campaign along the cooperative to confrontational spectrum, even if nothing being done by the university has changed. Exogenous political events may also have an influence, including the election of a federal or provincial government with different climate change policies, developments in international climate negotiations, or extreme weather events attributable to climate change. 419,420,421 Finally, the intended future plans of CFFD campaign organizers likely influenced their preferences on tone and tactics, with those committed to long-term involvement in activism encouraged to implement approaches that would find favour within

 $^{^{415}} See: \ \ Hunter, \ \textit{Climate Resistance Handbook: Or, I Was Part of a Climate Action. Now What?}, \ p. \ 40-3.$

⁴¹⁶Soule, "The Diffusion of an Unsuccessful Innovation", p. 121.

⁴¹⁷See: 350.org, Escalation Guide.

⁴¹⁸A UBC organizer commented that the campaign generally chose "good cop" tactics "for a variety of sort of random reasons, in part because of some of the people who happened to be involved."

⁴¹⁹Jacobs emphasized the cognitive salience of focusing events, especially "clear, vivid signals that prefigure future harms." These can help support a loss-avoidance framing where policy makers are willing to expend resources in the near-term to avoid greater long-term losses. Jacobs, *Governing for the Long Term: Democracy and the Politics of Investment*, p. 264.

⁴²⁰For example, in a 2020 Gallup poll 70% of South Koreans surveyed "said recent floods underlined the seriousness of climate change." The Economist. *Typhoon Season Makes Japan and the Koreas Ponder Climate Change*. 2020. URL: https://www.economist.com/asia/2020/09/12/typhoon-season-makes-japan-and-the-koreas-ponder-climate-change (visited on 09/16/2020).

⁴²¹Ronald Brownstein noted that disasters like California's 2020 wildfires do not spur climate change mitigation action when "attitudes within the GOP coalition both reflect and reinforce Republican officials' rejection of any effort to reduce carbon emissions." Ronald Brownstein. Why Republicans Still Don't Care About Climate Change. 2020. URL: https://www.theatlantic.com/politics/archive/2020/09/california-wildfires-and-politics-climate-change/616380/ (visited on 10/21/2020).

that community, while others who aspired to work within non-radical organizations may thus have been encouraged to engage non-confrontationally with policy-makers rather than call them out. These dynamics are broader than the CFFD movement specifically. For instance, there were similar disagreements about confrontation versus engagement when debating the approach that the CYCC's Canadian Youth Delegation should take at UNFCCC COP meetings.

The balance of influence between climate justice and CO₂-energy advocates within CFFD campaigns partially drove the campaigns' tactical choices. This is somewhat at odds with the idea of cycles of contention wherein the other side's most recent actions are theorized to have the largest influence on what their challengers do next, as opposed to pre-existing tactical preferences. Because the criteria for success differ between those willing to accept (or who even prefer) a narrow win on investment policy and those seeking root-and-branch political reform, actions favoured by those on each side within CFFD campaigns are often undesirable or counterproductive to the other. That said, cycles of contention retain some relevance insofar as university responses to campaign actions and demands affect the relative influence of climate justice and CO₂-energy advocates. Major refusals and setbacks understandably evoked feelings of frustration, disappointment, and anger and undermined the pragmatic argument that only persuasive tactics could be successful with an administration that had no obligation or strong compulsion to do as activists ask. This progression risks being counterproductive in terms of university response, however, since — despite the theory of change of some organizers and proliferators — there isn't convincing evidence that escalated confrontational actions lead to reversals of university decisions. The later successes in Canada came from the continued application of old tactics, not escalation to new ones, and the most contentious campaigns have not been successful. In terms of activist development, the tensions between these two camps and the experiences of each during campaigns help explain why CFFD participants who remain active in climate organizing have largely been encouraged onto either one trajectory of another: either moving more deeply into a policy-minded view which focuses on climate change narrowly, and particularly on public policy on energy infrastructure investment, or becoming more committed to intersectional analysis and organizing in which climate change is treated as one consequence of political and economic structures at the societal level which must be reformed wholesale.

4.8 Indigenous allyship

Within climate change activism, the connection to Indigenous rights is seen as important and Indigenous allyship has been an important mechanism for resisting fossil fuel projects. Still, CFFD campaigns struggled to integrate Indigenous allyship into their efforts and universities refused to see fossil fuel divestment as part of their reconciliation efforts.

Among areas of intersectionality, special importance needs to be accorded to the relationship between Indigenous rights movements and environmentalism.⁴²² This connection has been emphasized by proliferator organizations and CFFD campaigns.⁴²³ That emphasis arose from practical as well as philosophical consid-

⁴²²Pamela Palmater referred to "the core treaty promise that we would all live together peacefully and share the wealth of the land," and cited how "many First Nations are being subjected to multiple, overlapping crises like the housing crisis in Attawapiskat, the water crisis in Kashechewan, and the suicide crisis in Pikangikum." Pamela Palmater. "We are We Idle No More?" In: *The Winter We Danced: Voices from the Past, the Future, and the Idle No More Movement.* Ed. by The Kino-nda-niimi Collective. Winnipeg: Arbeiter Ring Publishing, 2014, p. 37–8.

⁴²³Lakanen described the emphasis on the issue among climate justice organizers, arguing that the youth climate movement had "begun to boost Indigenous sovereignty and leadership within its organizing efforts" between 2006 and 2015, and that "climate solidarities can be helpful in advancing the causes of Indigenous-led social movements like Idle No More, and instituting recommendations of the Truth and Reconcilliation Commission through the building of respectful relations between Indigenous

erations, namely the possibility that constitutionally protected Indigenous rights could be a mechanism for blocking fossil fuel projects along with the ideational hope that Indigenous ways of knowing — in contrast with western, colonialist, or capitalistic ones — could assist with the broader project of reconciling human desires with the planet's limits. 424,425

From the beginning, CFFD campaigns have involved some notion of Indigenous allyship. For instance, when Divest Harvard began in 2012 it involved the group Native Americans at Harvard College. 426,427,428 Rowe, Dempsey, and Gibbs argued that "the settler students we work with on divestment are prioritizing a decolonizing lens in their organizing efforts."429 Aidid argued: "FFD campaigns have provided space for settler students to learn about the ongoing colonialism of Indigenous land and have given them the opportunity to create alliances with frontline communities."430 CFFD campaigns principally incorporated Indigenous allyship by replicating how proliferator organizations emphasize the adverse impacts of the fossil fuel industry on Indigenous communities as a central rationale for delegitimizing and defunding it. 431,432,433 At times, divestment activists also emphasized the potential for alliances with Indigenous peoples to aid decarbonization, as with resistance to oil pipelines and gas fracking. 434 Klein argued that "an army of sorts" coalescing "around the fight to turn Indigenous land rights into hard economic realities that neither government nor industry can ignore" was "perhaps the most politically significant development of the rise of Blockadia-style resistance." This allyship manifested practically in CFFD campaigns which emphasized impacts on Indigenous communities in their formal submissions to universities. As far as I can determine, all Canadian

and non-Indigenous Canadians." Lakanen, "'A Battle for the Soul of the Climate Movement': The Expansion of the Intersectional Climate Justice Frame Among Young Activists in Canada", p. 154-6, 189, 191.

⁴²⁴ See for instance: David Suzuki. Decolonization Requires Action and New Ways of Seeing. 2020. URL: https://www.straight.com/news/david-suzuki-decolonization-requires-action-and-new-ways-of-seeing (visited on 11/08/2020).

⁴²⁵Aidid noted that solidarity with Indigenous peoples was strategic as well as "morally imperative" for CFFD campaigns because they "have a unique power to assert their rights which threatens fossil fuel projects." Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. 86.

⁴²⁶Toffel and Gulick, *Harvard Business School Case: Fossil Fuel Divestment*, p. 10.

⁴²⁷See also: Alexandra A. Chaidez. *Harvard Activists Rally, Petition for Divestment From Farmland, Prison Industry.* 2019. URL: https://www.thecrimson.com/article/2019/2/12/divestment-prisons-farmland-rally/ (visited on 11/17/2020).

⁴²⁸ Andrew Price and Matteo N. Wong. The Rebirth of Harvard's Divestment Movement. 2019. URL: https://www.thecrimson.com/article/2019/2/14/divestment-HMC/ (visited on 11/17/2020).

 $^{^{429}}$ Rowe, Dempsey, and Gibbs, The Power of Fossil Fuel Divestment (and its Secret), p. 5.

⁴³⁰Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. iii.

⁴³¹Tormos-Aponte and Garcia-Lopez argued that the climate justice movement's polycentric character has helped integrate Indigenous peoples and concerns into climate policy debates including by securing the position of Indigenous leaders in the UNFCCC process, greater influence for marginalized groups and frontline communities, and incorporating traditional knowledge into climate negotiations. Fernando Tormos-Aponte and Gustavo A. Garcia-Lopez. "Polycentric Struggles: The Experience of the Global Climate Justice Movement". In: *Environmental Policy and Governance* 28.4 (2018), pp. 284–294. URL: https://onlinelibrary.wiley.com/doi/abs/10.1002/eet.1815 (visited on 01/04/2019), p. 290.

⁴³²There are eNGO instructional materials on Indigenous allyship. For instance, the Montreal Urban Aboriginal Safety Network released an Indigenous Ally Toolkit in 2018: Montreal Urban Aboriginal Safety Network. *Indigenous Ally Toolkit*. 2018. URL: http://reseaumtlnetwork.com/wp-content/uploads/2019/04/Ally_March.pdf (visited on 08/03/2019).

⁴³³ Jessica Deer. Montreal Non-profit Launches Toolkit on How to be an Indigenous Ally. 2019. URL: https://www.cbc.ca/news/indigenous/montreal-indigenous-ally-toolkit-1.4988074 (visited on 08/03/2019).

⁴³⁴Klein, This Changes Everything: Capitalism vs. The Climate, p. 156.

⁴³⁵Klein also argued that downstream First Nations have the strongest legal levers to control bitumen sands expansion, because it threatens treaty-protected hunting and fishing grounds, and that Arctic Indigenous peoples have the greatest power to stop Arctic oil drilling. Klein also noted successful Indigenous resistance to fossil fuel development in Australia and the Amazon. Klein, *This Changes Everything: Capitalism vs. The Climate*, p. 370, 375-6.

⁴³⁶Hoberg raised the concern that "Blockadia" strategies which have proven effective in delaying or preventing some fossil fuel projects may also be used against the deployment of non-fossil energy alternatives. Under this "resistance dilemma," environmentalists strengthening rules and norms about local control "creates a paradoxical risk to the necessary clean energy transition." For example, in the 2000s run of the river hydro projects in BC "were strongly opposed by local and provincial environmental groups." George Hoberg. "How the Battles over Oil Sands Pipelines have Transformed Climate Politics". In: APSA Preprints (2019). URL: https://preprints.apsanet.org/engage/apsa/article-details/5d7c66f02f41c7001256af20 (visited on 02/05/2022), p. 10, 20.

⁴³⁷Hoberg, The Resistance Dilemma: Place-Based Movements and the Climate Crisis.

campaigns also incorporated land recognitions into their meetings and events. The most active campaigns provided material assistance to Indigenous land defenders while continuing with their divestment advocacy.

The appropriate form of Indigenous allyship remains contested within climate activism. Throughout Canada, many CFFD organizers were concerned about the low Indigenous representation inside their campaigns and were correspondingly wary about speaking or acting in ways that may be appropriative or exploitative. Aidid called "lack of Indigenous representation" a "common theme" of the CFFD campaigns she studied, and cited how an interview participant felt it was "problematic to discuss issues that affect Indigenous communities without their participation." University administrations were not receptive to arguments for divestment on the basis of harms to Indigenous communities, and generally sought to de-link their environmental and Indigenous policies while resisting efforts to demand divestment on the basis of their public statements about championing Indigenous reconciliation.

Alongside the rise of climate change as a major political issue, perhaps the most important ongoing political development in Canada has been the shifting legal status and political influence of Indigenous peoples, often manifested in debates about resource development. 439 The high-profile work of the Truth and Reconciliation Commission of Canada and the publication of their 94 calls to action in June 2015 drew additional public and decision maker attention to Indigenous politics in Canada and the UN Declaration on the Rights of Indigenous Peoples (UNDRIP). 440 Writing for the Pembina Institute in 2010, Danielle Droitsch and Terra Simieritsch argued that Indigenous concerns about oil sands development are increasingly "manifesting themselves as formal resolutions and legal challenges." 441 Perhaps most challenging of all is Crosby and Monaghan's assertion that "authentic nation-to-nation relations require a retraction of Canadian sovereignty" and thus a genuine loss of the ability to control resource rents from Indigenous territory. 442,443 In the period since the patriation of Canada's constitution in 1982, a succession of Supreme Court precedents have examined the relationship between the government and Indigenous peoples, including the 1990 Sparrow, 1973 Calder, 1997 Delgamuukw, and 2014 Tsilhqot'in decisions. 444,445 While not entirely consistent in their implications, these court cases have highlighted how Indigenous peoples in Canada have legal mechanisms to resist policies and actions which harm their interests. In parallel with these legal developments there has been a prominent and deliberate front-staging of Indigenous allies and impacts of climate change on Indigenous communities by climate change activist organizations like 350.org. This raises complex sets of questions, including whether environmentalists seeking to use the legal rights of Indigenous peoples to resist fossil fuel development are being exploitative or opportunistic in so doing. When 350.org put Indigenous

⁴³⁸Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. 81.

⁴³⁹In response to environmentalist support for the Wet'suwet'en resistance to the Coastal GasLink pipeline, Mohawk Scholar Taiaiake Alfred said: "I can remember saying 15, 20 years ago, that if we ever had a development in our movement where the power of Indigenous nationhood and Indigenous rights could be melded and brought together with the power of young Canadians who are committed to the environment and social justice, it would be revolutionary... And I think that that's what we're witnessing." Carlito Pablo. Wet'suwet'en Protests a Revolutionary Moment in Canada: Mohawk Scholar Gerald Taiaiake Alfred. 2020. URL: https://www.straight.com/news/1360101/wetsuweten-protests-revolutionary-moment-canada-mohawk-scholar-gerald-taiaiake-alfred (visited on 08/25/2022).

⁴⁴⁰Truth and Reconciliation Commission of Canada, Truth and Reconciliation Commission of Canada: Calls to Action.

⁴⁴¹Danielle Droitsch and Terra Simieritsch. Canadian Aboriginal Concerns With Oil Sands: A Compilation of Key Issues, Resolutions and Legal Activities. 2010. URL: https://www.pembina.org/reports/briefingnoteosfntoursep10.pdf (visited on 01/01/2020), p. 1.

⁴⁴²Crosby and Monaghan, Policing Indigenous Movements: Dissent and the Security State, p. 22.

⁴⁴³Along with the idea that decarbonization and fossil fuel development can go together, the contradiction between Indigenous reconciliation and providing guaranteed access to resources across Canada seems to have not been internalized – or been actively rejected – by the Trudeau government. This leaves them left in the triple contradiction of having promised decarbonization and reconciliation and resource-development-based economic growth.

⁴⁴⁴See: Peter Russell. Constitutional Odyssey: Can Canadians Become a Sovereign People? Third Edition. Toronto: University of Toronto Press, 2004.

⁴⁴⁵Peter Russell. Canada's Odyssey: A Country Based on Incomplete Conquests. Toronto: University of Toronto Press, 2017.

members of frontline communities at the front of the 400,000 person People's Climate March in Manhattan in 2014 under a "Frontlines of Crisis Forefront of Change" banner, were they making primarily a philosophical or a strategic point? 446,447 There is an extent to which 'we endorse the world views and legitimacy of these Indigenous groups who are working to fight climate change' and 'we are allied with these Indigenous groups which have growing legal powers to block fossil fuel development' are compatible ideas. The compatibility may become disjointed in some contexts, however. For instance, in Canada the Indigenously-owned and -controlled Eagle Spirit Energy Holding is proposing to use the same legitimacy and legal powers which fossil fuel activists are counting on to block projects in order to get a pipeline built after several others from non-Indigenous proponents have been delayed and blocked. 448,449,450,451,452,453,454 Pro-fossil groups emphasize support for development projects from Indigenous individuals and groups. 455,456 Some Indigenous peoples also depend on fossil fuel revenue, putting them in a position where calls to restrict or shut down the fossil fuel industry would deepen poverty and reduce payments which somewhat compensate for environmental and other damages from the industry's operation, or royalties which were offered as an accommodation for projects which have been built and which the Indigenous peoples were denied any power to stop. 457 These tensions are not easily handled within the CFFD movement. One interview participant went in the span of a few minutes from describing how supporting Indigenous rights is a responsibility for Canadians and that support should not be based on gaining something in return to describing how the rights of Indigenous

 $^{^{446} \}rm Joe \ Brusky.$ Front of March. 2014. URL: https://secure.flickr.com/photos/40969298@N05/15130286509/in/album-72157647481551918/ (visited on 08/04/2019).

⁴⁴⁷ On the PCM, see also: Terran Giacomini and Terisa Turner. "The 2014 People's Climate March and Flood Wall Street Civil Disobedience: Making the Transition to a Post-fossil Capitalist, Commoning Civilization". In: Capitalism Nature Socialism 26.2 (2015), pp. 27–45. URL: https://www.tandfonline.com/doi/full/10.1080/10455752.2014.1002804 (visited on 02/22/2020).

⁴⁴⁸See: Jorge Barrera. Pipeline Company CEO says Alberta Premier Supports an Indigenous Rights Challenge to Ottawa's Regulatory Laws. 2019. URL: https://www.cbc.ca/news/indigenous/eagle-spirit-pipeline-alberta-legal-challenges-1.5343626 (visited on 07/12/2020).

⁴⁴⁹ Reuters. Indigenous Group Natural Law Energy to Invest up to \$1 Billion in Keystone XL. 2020. URL: https://calgaryherald.com/commodities/energy/indigenous-group-to-invest-up-to-c1-bln-in-tc-energys-keystone-project-3/wcm/afba2b5a-fc77-4f3c-a8df-2d80abe84d43 (visited on 12/15/2020).

⁴⁵⁰Another example is the proposed Ksi Lisims LNG project in BC which is being supported by the Nisga'a Nation, with an aspiration for the facility to be carbon neutral by 2027 or 2028 based on the use of renewable energy, offsets, and potentially CCS. Kyle Bakx. B.C. First Nation and Partners Propose New \$10B LNG Megaproject. 2021. URL: https://www.cbc.ca/news/business/bakx-ksi-lisims-lng-1.6107901 (visited on 07/20/2021).

⁴⁵¹In September 2022, Enbridge announced that it would sell stakes in seven fossil fuel pipelines to Indigenous groups for \$1.12 B. CEO Al Monaco said: "We believe this partnership exemplifies how Enbridge and Indigenous communities can work together, not only in stewarding the environment, but also in owning and operating critical energy infrastructure." Naimul Karim. Enbridge to Sell Stakes in Seven Pipelines to Indigenous Groups for \$1.12 Billion. 2022. URL: https://financialpost.com/commodities/energy/oil-gas/enbridge-pipeline-stake-first-nation-metis-groups (visited on 10/12/2022).

⁴⁵²In Alaska, the senators and congressman wrote to federal regulators arguing that banks which are refusing to fund Arctic oil and gas projects are discriminating against Indigenous Alaskans. Ilana Cohen. Fossil Fuel Advocates' New Tactic: Calling Opposition to Arctic Drilling 'Racist'. 2020. URL: https://insideclimatenews.org/news/21072020/fossil-fuel-arctic-drilling-alaska (visited on 07/30/2020).

⁴⁵³ James Brooks. Alaska Congressional Delegation Suggests Banks' Turn Against Arctic Oil Discriminates Against Natives. 2020. URL: https://www.adn.com/politics/2020/06/17/alaska-congressional-delegation-suggests-banks-turn-against-arctic-oil-might-be-driven-by-racism/ (visited on 07/30/2020).

⁴⁵⁴Dan Sullivan, Lisa Murkowski, and Don Young. We write to follow up on a letter we sent to the President with thirty-three other members of the Senate and House regarding a disturbing trend of major U.S. financial institutions folding to activist environmental groups' pressure to put in place poorly drawn policies against investing in new oil and gas operations in the Arctic. 2020. URL: https://assets.documentcloud.org/documents/6950908/06-16-20-AK-Delegation-Letter-to-the-Federal.pdf (visited on 07/30/2020).

 $^{^{455}} For\ example:$ Students for Canada. Supporting Further Canadian Oil and Gas Development. 2020. URL: https://web.archive.org/web/20200918043638/https://static1.squarespace.com/static/5c65d44411f7841d20f808a5/t/5ee945183b8c526cdca8976b/1592345883437/Letter+To+PM+Justin+Trudeau+%281%29.pdf (visited on 10/24/2020).

⁴⁵⁶Gregory John and Mark Milke. Busting the Myth of Anti-oil and Gas First Nations. 2020. URL: https://www.canadianenergycentre.ca/busting-the-myth-of-anti-oil-and-gas-first-nations/(visited on 10/25/2020).

⁴⁵⁷See: Kyle Bakx. First Nations Losing Oil Revenue Amid Fall in Consumption, Drilling. 2020. URL: https://www.cbc.ca/news/business/first-nations-oilpatch-downturn-1.5636673 (visited on 07/12/2020).

Chapter 4. Repertoires

peoples under Canadian and international law can be a "lever against the Canadian state" and a means to block fossil fuel infrastructure.

McKibben identified both the strategic and the philosophical rationales behind alliances between Indigenous peoples and climate activists. On the one hand, places to which they were "relocated and relegated" are now known to have major fossil fuel deposits, or intersect major routes for fossil fuel transport. At the same time, he says the "oldest and newest wisdom traditions on the planet are now converging on some of the same notions" which are "at odds with the conventional view of the world that we're just going to keep growing all the time." Here he identifies a longstanding and central critique of industrialized society: that the impulse toward never-ending growth is fundamentally incompatible with the limits of a finite Earth. Indeed, as I have described several times, humanity is confronted now with the disjuncture between our political ideologies and the knowledge we are gaining about the impact of our behaviours on the Earth. Reconciling those and producing a genuinely sustainable politics for humanity is a project that goes well beyond controlling climate change, and those who advocate Indigenous allyship on the basis that their traditional ways of knowing could help lead us toward a sustainable form of global technological society are describing a plausible and potentially non-exploitative mechanism for gaining such wisdom.

The Indigenous allyship connection to divestment is also important because of the coalition of forces which are working to defend the fossil *status quo*. Pro-fossil government security services perceive a threat from solidarity between environmental and Indigenous activists. Crosby and Monaghan argued that:

Notably, this 'alignment' is presented in itself as menacing and even inauthentic. The language of the passage [in an RCMP report on 'Aboriginal Opposition'] presents the 'alignment' as an act of opportunism – enemies colluding against a more noble cause. Casting these colluding elements as 'factions' and 'extremists,' they are dismissed as fringe or illegitimate actors whereas the implicit non-factions and non-extremists are assumed to be supportive of extractive capitalism. ⁴⁶⁰

This aligns with and inadvertently bolsters elements of the intersectional worldview and theory of change held by progressive activists. Here we do not see a democratic government attempting to respect public opinion while promoting universally beneficial economic growth, but rather government captured by the interests of an industry through the corrupting influence of capitalism. Here estimations of total societal or global profit and loss from fossil fuel extraction and climate change, such as the Stern Review, hold no relevance because the government-industry relationship holds the latter's profits to be axiomatically justified, while complaints about their misconduct and the harm they impose are illegitimate and even criminal. A planetary perspective is far from sight.

With the prominence of Indigenous reconciliation efforts and discussions in Canada during the periods when these CFFD campaigns took place it is not surprising that divestment campaigns sought to incorporate Indigenous politics and solidarity into their behaviour and decisions. There is a broad consensus among activists that a major moral argument for constraining climate change and avoiding fossil fuel development is that those things have and will continue to have disproportionate negative impacts on Indigenous peoples who have done little to contribute to the problem, forming part of a strong case for why climate change

 $^{^{458} \}rm Mike$ Doherty. Bill McKibben on How we Might Avert Climate Change Suicide. 2019. URL: https://www.macleans.ca/society/environment/bill-mckibben-on-how-we-might-avert-climate-change-suicide/ (visited on 05/30/2019).

 $^{^{459}}$ See: The long-term view: reconciling our political theories and philosophies with environmental science p. 40

⁴⁶⁰Crosby and Monaghan, Policing Indigenous Movements: Dissent and the Security State, p. 183-4.

⁴⁶¹In the monopolistic world of US electricity production, Stokes described "a small set of interest groups that has captured the regulatory process — the very mechanism that is supposed to serve and protect the public interest." Stokes, Short Circuiting Policy: Interest Groups and the Battle over Clean Energy and Climate Policy in the American States, p. 33.

⁴⁶²Discussing Australia, Lemphers argued that "many of the apparently objective competitiveness risks voiced by industry were in reality gratuitous rent seeking." Lemphers, "Beyond the Carbon Curse: a Study of the Governance Foundations of Climate Change Politics in Australia, Canada and Norway", p. 224.

mitigation is morally obligatory.⁴⁶³ At the same time, many interview participants noted their discomfort about the limited or absent representation of actual Indigenous people within their organizations, as well as worries about how they can or cannot speak or advocate for Indigenous communities. Describing the extent to which impacts on Indigenous communities were used to make the case for divestment, one organizer said:

We were struggling with how to amplify without appropriating. The advice we got from Kiki [Wood of the CYCC] is that it's better to not speak for people, so say less about how it impacts marginalized or Indigenous communities because you risk speaking for them. It was always on our mind, and I would say that it was a frequent topic for discussion... It was a big learning curve for a lot of us.

At times, Canadian CFFD campaigns between 2012 and 2020 did incorporate and emphasize Indigenous voices in their actions. Maina-Okori et al. found evidence of collaboration between CFFD campaigns and Indigenous activists: "site-specific messaging aligning with Indigenous groups was identified in nearly 30% or 11 out of the 37 divestment campaigns." At the Mount Allison campout, Indigenous water protectors and land defenders from New Brunswick presented at the same teach-in as supportive professors. The Queen's divestment campaign collaborated with the Indigenous student centre to send a bus to Toronto to allow 30–40 people to take part in a Standing Rock solidarity march, supporting efforts in North Dakota to stop the Dakota Access pipeline. Indigenous voices were particularly promoted in actions and events organized by divestment proliferators, including large marches and Power Shift conferences. Indigenous voices have also played a role in the broader climate activist movement and efforts to address multiple injustices through policy and legislative change. For instance, Julian Brave NoiseCat argued:

The Indigenous movement both in the United States and in Canada really has played a significant underlying role that people haven't fully appreciated in producing the Green New Deal... First Nations have often been some of the loudest voices, putting their very bodies on the line in front of pipelines and projects that are going to damage the environment and public health. 467

This emphasis on non-violent direct action and land defence is compatible with the idea of divestment and other challenges to fossil fuel infrastructure as parallel and reinforcing strategies. Each can play a role in delegitimizing the industry and raising concern about risk among investors. Indeed, perhaps some of the discomfort involved in trying to subsume Indigenous thinking into environmentalism might be relieved if Indigenous climate advocates are reinterpreted as a flanking force in support of the progressive movement, rather than people who need to be subsumed into the entirety of the progressive effort.

The one near-universal Indigenously-related feature of CFFD campaigns is the use of land acknowledgements. When asked, nearly all interview participants said that their campaigns involved acknowledgements. At the same time, they have become very common in Canadian educational institutions, frequently being included at the beginning of events. Online climate activist meetings in 2020 nearly always involved everyone

 $^{^{463}}$ A similar case can be made about persistent organic pollutants that are used in industry and agriculture globally but which disproportionately accumulate in the Arctic.

⁴⁶⁴Maina-Okori, Murray, and McKenzie, "Climate Change and the Fossil Fuel Divestment in Canadian Higher Education: The Mobilities of Actions, Actors, and Tactics (journal pre-proof)", p. 16, 17.

⁴⁶⁵See also: Bill McKibben. *Hillary Clinton Needs to Take a Stand on The Dakota Access Pipeline*. 2016. URL: https://www.latimes.com/opinion/op-ed/la-oe-mckibben-standing-rock-sioux-clinton-20160907-snap-story.html (visited on 09/24/2019).

⁴⁶⁶ Alison Cagle. Still Standing: Youth Activism and Legal Advocacy Work Hand in the Fight for Justice. 2020. URL: https://earthjustice.org/features/standing-rock-still-standing (visited on 07/11/2020).

⁴⁶⁷ Kyle Muzyka. Green New Deal Legislation Must be Indigenous-led, says Julian Brave NoiseCat. 2020. URL: https://www.cbc.ca/radio/unreserved/how-b-c-s-indigenous-communities-are-facing-climate-change-and-creating-solutions-1.5587019/green-new-deal-legislation-must-be-indigenous-led-says-julian-brave-noisecat-1.5588721 (visited on 06/20/2020).

present giving a land acknowledgement as part of their personal introduction, with organizers successively listing Indigenous peoples, treaties, and concepts like unceded land. Asher, Curnow, and Davis analyzed the broader land recognition phenomenon, questioning the assumption that such recognitions achieve their intended pedagogical aims. He daily concluded that while acknowledgements do work against the daily erasure of Indigenous peoples, they are also often a box-ticking "move to innocence" "that attempt to relieve the settler of feelings of guilt or responsibility without giving up land or power or privilege, without having to change much at all." Often those particularly concerned with Indigenous justice issues will now flag at the beginning of an event or presentation the risk that land acknowledgements have become boilerplate which is glossed over by the audience, replacing or expanding upon a prepared text with some extemporaneous discussion of history or explanation of the importance of these recognitions, along with specific calls to action.

Some CFFD campaigns provided material assistance to Indigenous political movements, especially efforts to resist fossil fuel extraction projects. 470 An interview participant reported that more substantive forms of allyship undertaken by their CFFD campaign included regularly providing food to an Indigenously-led protest camp, raising funds for it, and helping provide legal aid for camp inhabitants. Crosby and Monaghan argued that participation in fossil fuel project resistance efforts like opposing the Northern Gateway pipeline "provided elements of the environmental movement the opportunity to place a critique of settler colonialism at the forefront of their political struggle."471 Arielle Garsson explained how the UBC campaign branched out from divestment to collaborate with the Tsleil-Waututh on events related to climate change mitigation and the UNFCCC Paris conference. In 2014, the UVic campaign raised funds to help Indigenous youth attend the Tar Sands Healing Walk. The Dalhousie campaign supported the efforts of water protectors to stop the Alton Gas project to store natural gas in salt caverns, with brine to be released into the Shubenacadie River. 472,473,474,475 The CFFD campaign supported this multi-year effort by preparing a meal weekly, holding awareness raising workshops, promoting Stop Alton Gas events, and providing regular financial support. The UBC campaign supported Pull Together: an Indigenous-led movement to challenge Kinder Morgan, as well as the Coast Salish watch house on Burnaby Mountain. 476,477 The Divest Waterloo campaign did fundraising for the efforts of the Chippewa of the Thames First Nation to resist the Enbridge Line 9 pipeline reversal. Guelph organizers traveled to Ottawa in support of the Chippewa of the Thames. Individual members of the Mount Allison campaign supported the Elsipogtog anti-fracking camp in New Brunswick, some having previously taken field trips to anti-fracking marches and the Elsipogtog blockage in an activism class run by

⁴⁶⁸ Lila Asher, Joe Curnow, and Amil Davis. "The Limits of Settlers' Territorial Acknowledgments". In: Curriculum Inquiry 48.3 (2018), pp. 316-334. URL: https://www.tandfonline.com/doi/abs/10.1080/03626784.2018.1468211?journalCode=rcui20 (visited on 08/23/2018).

⁴⁶⁹See also: Kelsey Blair. "Empty Gestures: Performative Utterances and Allyship". In: *Journal of Dramatic Theory and Criticism* 35.2 (2021), pp. 53–73. URL: https://muse.jhu.edu/article/801567/pdf (visited on 08/20/2021).

⁴⁷⁰See: Belliveau, "Climate Justice in the Fossil Fuel Divestment Movement: Critical Reflections on Youth Environmental Organizing in Canada", p. 104–5.

⁴⁷¹Crosby and Monaghan, Policing Indigenous Movements: Dissent and the Security State, p. 76.

⁴⁷² Dale Andrew Poulette and Rachael Greenland-Smith. The Fight to Save the Shubenacadie River. 2019. URL: https://nsadvocate.org/2019/10/08/dale-andrew-poulette-and-rachael-greenland-smith-the-fight-to-save-the-shubenacadie-river/(visited on 10/09/2019).

⁴⁷³ See also: Taryn Grant. Siding with First Nation, N.S. Judge Overturns Alton Gas Approval. 2020. URL: https://www.cbc.ca/news/canada/nova-scotia/alton-gas-nova-scotia-supreme-court-appeal-decision-1.5508130 (visited on 03/30/2020).

⁴⁷⁴In 2021, AltaGas decided they would not proceed with the project but rather would decommission it. AltaGas. *Alton Natural Gas Storage Project Update*. 2021. URL: https://altonnaturalgasstorage.ca/news/alton-natural-gas-storage-project-update/ (visited on 10/24/2021).

⁴⁷⁵ Haley Ryan. Alton Gas Project Cancelled After Years of Opposition. 2021. URL: https://www.cbc.ca/news/canada/nova-scotia/alton-gas-project-cancelled-after-years-of-opposition-1.6221165 (visited on 10/24/2021).

⁴⁷⁶ See also: Cara McKenna. Coast Salish Watch House Built Near Kinder Morgan Pipeline. 2018. URL: https://salishseasentinel.ca/2018/03/coast-salish-watch-house-built-near-kinder-morgan-pipeline/ (visited on 08/16/2019).
477 Pull Together. About. 2014. URL: https://pull-together.ca/background/ (visited on 08/16/2019).

faculty member Brad Walters. An Indigenous protector from the Elsipogtog camp was also present at their 2017 camp out.

CFFD campaigns also emphasized adverse and non-consensual impacts from the fossil fuel industry in their formal petitions to target administrations, including at the University of Winnipeg, Memorial University, the University of Toronto, and McGill. 478,479,480 After a UBCc350 gathering outside a 2019 board of governors meeting, Mukta Chachra described divestment as partly justified as a defence of Indigenous rights:

As we all know, we are all settled on this land which is Indigenous land and by investing in fossil fuel companies we are actively contributing to destroying this land... It's like if someone goes into your home and destroys it and just leaves. 481

While harshly criticized by Curnow as demonstrative of some campaigners' insensitivity to Indigenous issues, the effort of the first U of T divestment campaign to add an "Indigenous criterion" to those recommended by the president's ad hoc committee represented an effort to link a pro-Indigenous agenda to core divestment demands. The concerns about not having meaningful relationships with Indigenous groups which Curnow emphasized are represented in detail in the campaign's ultimate recommendation to the university, which called for a university-established committee to select a specific criterion based on misconduct toward Indigenous people based on extensive consultation, which was beyond the means and timeframe of the campaign to carry out. 483,484

Research participants both inside and outside the campaign identified the CFFD effort at the University of Winnipeg as the most Indigenously-led within Canada. Avery Letkemann said that the campaign was initially led by Indigenous activists, which reduced concern about inappropriately speaking on behalf of Indigenous peoples, and it sought to emphasize the contradiction between the University of Winnipeg's efforts at reconciliation with continuing investment in fossil fuel corporations. That said, with only three research participants from the campaign, this dissertation has little data from which to comment on the Indigenous politics of that campaign. One participant noted that the CFFD campaign itself had been an effort to "build on the momentum" of the prior campaign which helped create the university's Indigenous course requirement. Sadie-Phoenix Lavoie, an organizer with the campaign, criticized the school on the basis of the disjoint between their claimed commitment to reconciliation and their ongoing financial involvement with the fossil fuel industry:

It's disrespecting Indigenous land rights, the right to denial of consent to pipelines, and Indigenous knowledge of what sustainability means... It's just a huge slap in the face for Indigenous students who want to come to a university where the school is respecting them and their connection to the environment. 485

As with universities' universal tendency to tout their supposed green credentials, the experience of the CFFD

⁴⁷⁸ Ryan Broe et al. The Case for Queen's University Divestment of the Pooled Endowment Fund from the Fossil Fuel Industry. 2015. URL: https://docs.wixstatic.com/ugd/10cac0_675b1c6b70fd4233b3a73c83fe75c360.pdf (visited on 11/18/2020), p. 18.

⁴⁷⁹ Ana Maria Martinez et al. Make YorkU a Climate Leader: The Case for Fossil Fuel Divestment. 2016. URL: https://yuacri.info.yorku.ca/files/2016/11/Fossil-Free-York.pdf (visited on 01/02/2020), p. 8.

⁴⁸⁰Toronto350.org, The Fossil Fuel Industry and the Case for Divestment: Update, p. 50.

⁴⁸¹Emma Livingstone and Henry Anderson. Students Demand Fossil Fuel Divestment at Board of Governors Meeting. 2019. URL: https://web.archive.org/web/20190419045644/https://www.ubyssey.ca/news/bog-student-divestment-protest/(visited on 08/29/2021).

⁴⁸²Curnow, "Politicization in Practice: Learning the Politics of Racialization, Patriarchy, and Settler Colonialism in the Youth Climate Movement", p. 101–3.

⁴⁸³Asher et al., U of T Community Response to the Report of the Fossil Fuel Divestment Committee, p. 26–33.

⁴⁸⁴Aidid noted the challenge of supporting Indigenous leadership without being a burden on those communities. Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. 90. ⁴⁸⁵Haslam, *Students vs. Big Oil*.

movement suggests that universities are more inclined to make supportive statements about the depth of their concern than to undertake substantive reforms to advance Indigenous reconciliation. The consistent resistance of university administrations to link climate change and Indigenous issues demonstrates how they have not internalized an intersectional view of ethics, and perhaps also that they worry that acknowledging a link between the injustices experienced by Indigenous peoples and their investment policies could eventually compel them to act.

CFFD organizers also took part in off-campus solidarity actions in support of Indigenous activism. In 2014, after:

several Mi'kmaq women shut down a Maritimes Energy Association briefing held at the Westin Nova Scotian this morning by Nova Scotia Energy Minister Andrew Younger ... a hundred youth [participants in PowerShift Atlantic conference] occupied the hotel lobby to support Indigenous communities in rejecting the Energy East tar sands pipeline and increased fracking pushes in Atlantic Canada 486

⁴⁸⁶Amanda Lickers. NS Energy Minister Shut Down by Mi'kmaq Women Demanding Treaties be Upheld. 2014. URL: https://nbmediacoop.org/2014/03/31/ns-energy-minister-shut-down-by-mikmaq-women-demanding-treaties-be-upheld/(visited on 11/17/2020).

⁴⁸⁷Jillian Kestler-D'Amours. A Year After RCMP's Violent Raid, Wet'Suwet'en People Fear Repeat. 2020. URL: https://www.aljazeera.com/news/2020/01/year-rcmp-violent-raid-wet-people-fear-repeat-200107134353922.html (visited on 01/09/2020).

⁴⁸⁸ Unist'ot'en Clan. Unist'ot'en Declaration. 2015. URL: http://unistoten.camp/wp-content/uploads/2015/08/Press-Kit-Unistoten-Declaration-August-6-2015.pdf (visited on 02/29/2020).

⁴⁸⁹Sean Boynton. 'The World is Watching': B.C. Pipeline Opponents Brace for Possible Police Action. 2020. URL: https://globalnews.ca/news/6399938/bc-pipeline-protesters-speak/ (visited on 01/12/2020).

⁴⁹⁰ Jesse Winter, Perrin Grauer, and Alex McKeen. What You Haven't Heard from Inside the Battle of Gidimt'en Checkpoint. 2019. URL: https://www.thestar.com/vancouver/2019/01/12/what-you-havent-heard-from-inside-the-battle-of-gidimten-checkpoint.html (visited on 01/12/2020).

⁴⁹¹In federal documents obtained by APTN news in 2018 the Unist'ot'en blockade was described as "the ideological and physical focal point of Aboriginal resistance to resource extraction projects." Justin Brake. Government Document Calls Unist'ot'en Leader 'Aboriginal Extremist'. 2018. URL: https://aptnnews.ca/2018/12/03/government-document-calls-unistoten-leader-aboriginal-extremist/ (visited on 01/18/2020).

⁴⁹²Justin Brake. RCMP Concerned Indigenous Rights Advocates Will Gain Public Support: New Study. 2019. URL: https://thenarwhal.ca/rcmp-concerned-indigenous-rights-advocates-will-gain-public-support-new-study/ (visited on 01/18/2020).

⁴⁹³The Unist'ot'en were subject to a major surveillance campaign by RCMP officers with the Critical Infrastructure Intelligence Team (CIIT) and Aboriginal Intelligence Group (AIG) who "closely monitored their every move." Crosby and Monaghan, *Policing Indigenous Movements: Dissent and the Security State*, p. 64, 88–93.

⁴⁹⁴Bethany Lindsay. B.C. Supreme Court Grants Injunction Against Wet'suwet'en Protesters in Pipeline Standoff. 2020. URL: https://www.cbc.ca/news/canada/british-columbia/bc-injunction-coastal-gaslink-1.5411965 (visited on 01/12/2020). 495Boynton, 'The World is Watching': B.C. Pipeline Opponents Brace for Possible Police Action.

⁴⁹⁶ United Nations Committee on the Elimination of Racial Discrimination. Decision 1 (100). 2019. URL: https://tbinternet.ohchr.org/Treaties/CERD/Shared%20Documents/CAN/INT_CERD_EWU_CAN_9026_E.pdf (visited on 01/09/2020).

⁴⁹⁷Eva Uguen-Csenge. B.C. Human Rights Commissioner Calls on Canada to Stop Eviction of Wet'Suwet'en People in

banks involved in funding the project.⁴⁹⁸ Claire O'Manique, a climate activist with Our Time Vancouver, argued that stopping new fossil fuel projects including CGL and the Trans Mountain expansion is crucial for fighting climate change.⁴⁹⁹ In 2020, approximately 150 UVic students took part in a demonstration of solidarity and support outside the BC legislature. Juliet Watts, an executive in the UVic student society, said that the student government planned to make a financial contribution toward Wet'suwet'en legal costs.⁵⁰⁰ About 100 people also rallied in Halifax.⁵⁰¹ In February 2020, Divest McGill held a rally in support of the Wet'suwet'en, calling for the university to divest from Coastal Gaslink.⁵⁰²

CFFD campaigns expressed support for Indigenous peoples resisting fossil fuel projects both in person and via social media. On January 10, UBCc350 members joined Our Time Vancouver and the UBC Social Justice Centre to "call on our federal and provincial governments to respect Wet'suwet'en law and withdraw RCMP presence from Wet'suwet'en territories." They also put out a press release a month after UBC committed to divestment, expressing solidarity with the Wet'suwet'en and calling for the BC government to condemn the fossil fuel industry and withdraw the RCMP. UBCc350 also released a statement expressing solidarity with Indigenous youths arrested at the BC Ministry of Energy, Mines and Petroleum Resources. In mid-January 2020, the UVic campaign released a press released in solidarity with the Wet'suwet'en Nation, calling for the university to take a public stand in favour of the group and remove a member of the university's foundation board with an alleged conflict of interest. The Leap Manifesto divestment group at U of T also took part in a Wet'suwet'en land defence solidarity rally organized by Rising Tide Toronto and Climate Justice Toronto. On January 27th, 700 high school and university students in Vancouver walked out of class to express opposition to the CGL pipeline.

Pipeline Standoff. 2020. URL: https://www.cbc.ca/news/canada/british-columbia/b-c-human-rights-commissioner-calls-on-canada-to-stop-eviction-of-wet-suwet-en-people-in-pipeline-standoff-1.5423639 (visited on 01/12/2020).

⁴⁹⁸Tanya Mok. Hundreds Gather in Front of Toronto Banks to Protest Pipeline. 2020. URL: https://www.blogto.com/city/2020/01/toronto-protest-pipeline/ (visited on 01/12/2020).

⁴⁹⁹Sean Bonynton and Sarah Macdonald. B.C. Indigenous Pipeline Opponents Stage Rallies as Clock Ticks on Injunction Order. 2020. URL: https://globalnews.ca/news/6394809/bc-northern-pipeline-rally/ (visited on 01/12/2020).

 $^{^{500}} Richard~Watts.~ \Bar{U} Vic~Students~Walkout~in~Solidarity~With~Wet'Suwet'en~Chiefs~over~Pipeline.~2020.~URL:~https://www.timescolonist.com/news/local/uvic-students-walkout-in-solidarity-with-wet-suwet-en-chiefs-over-pipeline-1.24050590~(visited~on~01/12/2020).$

⁵⁰¹Stacey Gomez. 'We All Have the Same Fight': Halifax Rally Highlights Solidarity from Mi'kma'ki to Wet'suwet'en Territory. 2020. URL: https://nsadvocate.org/2020/01/11/we-all-have-the-same-fight-halifax-rally-highlights-solidarity-from-mikmaki-to-wetsuweten-territory/ (visited on 01/12/2020).

⁵⁰²Addison, Divest McGill Holds Rally Protesting Invasion of Wet'suwet'en Territory.

 $^{^{503}}$ For instance, a short-lived 'story' on the Divest Guelph Instagram account expressed solidarity for Indigenous youths arrested in Victoria and echoed their demands.

⁵⁰⁴UBCC350. Today, UBCC350, Our Time — Vancouver and the UBC Social Justice Centre gathered outside David Eby's office to call on our federal and provincial governments to respect Wet's wet'en law and withdraw RCMP presence from Wet's wet'en territories. 2020. URL: https://web.archive.org/web/20200113004252/https://www.facebook.com/UBCC350/posts/2803219933033009 (visited on 01/12/2020).

 $^{^{505}} UBCC350.\ What's\ Next\ for\ the\ Divestment\ Movement\ at\ UBC?\ Stand\ With\ the\ Wet'Suwet'en\ Nation.\ 2020.\ URL: https://web.archive.org/web/20200119035024/https://drive.google.com/file/d/1ZRURLzfnbbvkFQJnZ-UwZc7rqJaVmITW/view (visited on 01/18/2020).$

 $^{^{506}} UBCC350.$ 22/01/20 Statement. 2020. URL: https://docs.google.com/document/d/lv7UfNRsbUa0Ye6DC_KtJFe5ZMfS10A84pbIr8o9YkqQ/edit (visited on 02/04/2020).

⁵⁰⁷Nigel Henri-Robinson. *Indigenous Youth Occupying Office of Minister of Energy, Mines, and Petroleum Resources.* 2020. URL: https://www.indigenousclimateaction.com/post/indigenous-youth-occupying-office-of-minister-of-energy-mines-and-petroleum-resources (visited on 02/04/2020).

⁵⁰⁸ Divest UVic. Divest UVic Stands Firmly in Solidarity with the Wet'suwet'en Nation. 2020. URL: https://web.archive.org/web/20200118194024/https://drive.google.com/file/d/1IADjFeJeai0gw-emQ54TGa9hs-HmI015/edit (visited on 01/18/2020).

⁵⁰⁹ Rising Tide Toronto. Indigenous Solidarity Rally — Support Wet'suwet'en Land Defence! 2020. URL: https://www.facebook.com/events/2235129013457777/ (visited on 01/18/2020).

⁵¹⁰ Charlie Smith. Hundreds of Students Walk Out of Classes in Metro Vancouver in Support of Wet's wet'en Hereditary Chiefs. 2020. URL: https://www.straight.com/news/1352291/hundreds-students-walk-out-classes-metro-vancouver-support-wetsuweten-hereditary-chiefs (visited on 01/28/2020).

an occupation of BC attorney general David Eby's office, demanding an end to construction, withdrawal of permits, and respect for Indigenous rights.^{511,512,513} Extinction Rebellion Vancouver held a parallel action at the constituency office of environment minister Jonathan Wilkinson.⁵¹⁴ Indigenous Climate Action found that over 45 actions took place globally in support of the Wet'suwet'en in January 2020.⁵¹⁵

Interestingly, a statement from three young activists arrested during the Eby action stated: "This was not about climate change. Some media coverage has stated this. We are three settler youth who refuse to stand for the status quo of colonial violence in the illegal state known as 'canada'." The statement also described how those arrested did not act in isolation but "answered a call to solidarity and follow[ed] the leadership of the Wet'suwet'en nation and the Indigenous youth who peacefully occupied Michelle Mungall's office last week." Plausibly, these statements about motivation are a response to the concern that Indigenous rights are being appropriated or exploited by the environmental movement, as well as to the fossil fuel industry counter-repertoires based around claims that natural resource projects will be good for Indigenous people and have their support. ⁵¹⁸

Nobody who I spoke with claimed that their campaign had done enough or been particularly successful in their efforts at Indigenous allyship.^{519,520} Several scholarly sources warned about the risks of a superficial or even counterproductive engagement with Indigenous issues by non-Indigenous activists. Asher, Curnow, and Davis discussed the limits of territorial acknowledgements.⁵²¹ Snelgrove, Dhamoon, and Corntassel warned that studies of settler colonialism and practices of solidarity risk replicating settler colonial domination if they do not centre Indigenous peoples' articulations and deploy a relational approach.⁵²² In the end, there are surely risks involved in trying to broaden environmental activism to appropriately take into consideration the injustices imposed on Indigenous peoples. There is nonetheless a great deal of discussion about the linkage between the issues among activists, and there is reason to think both the legal rights and the philosophy of Indigenous peoples could play a role in helping to win the fight to control climate change, though the challenges experienced by CFFD campaigns attempting Indigenous allyship illustrate how the effort is contentious and incomplete.

 $^{^{511}} UBCC350.$ Action Demands. 2020. URL: https://docs.google.com/document/d/1_z4x10SJj4N_E7tF3nmRE72yWpllxHfJk78_aiL2iD0/edit (visited on 01/28/2020).

⁵¹²UBCC350. We will do everything we can to hold this colonial government accountable for the violence you are enacting. We stand in solidarity with the Wet'suwet'en Nation, and we will stay in this office until these demands are met. 2020. URL: https://twitter.com/UBCC350/status/1222246058593595393 (visited on 01/28/2020).

⁵¹³ Simon Little. Vancouver Police Arrest 3 After Occupation of B.C. Attorney General's Office. 2020. URL: https://globalnews.ca/news/6477618/vancouver-police-arrest-3-occupation-bc-attorney-generals-office/ (visited on 02/04/2020).

⁵¹⁴ Charlie Smith. Climate Activists Arrested in David Eby's Office; RCMP Orders Others Out of Jonathan Wilkinson's Office. 2020. URL: https://www.straight.com/news/1352781/climate-activists-arrested-david-ebys-office-rcmp-orders-others-out-jonathan-wilkinsons (visited on 02/04/2020).

⁵¹⁵ Henri-Robinson, Indigenous Youth Occupying Office of Minister of Energy, Mines, and Petroleum Resources.

⁵¹⁶UBCC350. Statement by the Three Youth Arrested at David Eby's Office. 2020. URL: https://twitter.com/UBCC350/status/1223414464575205377 (visited on 02/04/2020).

⁵¹⁷UBCC350. Statement by Youth Arrested at David Eby's Office. 2020. URL: https://docs.google.com/document/d/1KOvKOmtMKIoIAlRMlVYk5f3dcTu4CH_RAOAGOCVAzvc/edit (visited on 02/04/2020).

⁵¹⁸Ilnyckyj, "Campus Fossil Fuel Divestment (CFFD) Counter-Repertoires", p. 30–3.

⁵¹⁹ Aidid noted that CFFD "organizers believed their solidarity efforts were insufficient yet were unaware of how to connect with frontline communities respectfully." Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. 107–8.

⁵²⁰On methods CFFD organizers could use to build trust and reciprocal relationships with Indigenous communities, see: Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. 87–8.

⁵²¹Asher, Curnow, and Davis, "The Limits of Settlers' Territorial Acknowledgments".

⁵²²Corey Snelgrove, Rita Kaur Dhamoon, and Jeff Corntassel. "Unsettling Settler Colonialism: The Discourse and Politics of Settlers, and Solidarity with Indigenous Mations". In: *Decolonization: Indigeneity, Education & Society* 3.2 (2014). URL: https://www.corntassel.net/Unsettling.pdf (visited on 02/29/2020).

4.9 Performing for multiple audiences

The harsh criticism of university decisions and administrators by some CFFD campaigns when they had their central demands rejected is in a sense puzzling. A Mount Allison interview participant noted the paradox that it can be harder to get the administration to say yes after a radical action. 523,524 While some activists and proliferators talk about escalating to "force" divestment, the plausibility of such a strategy is questionable in this context. 525,526 Ultimately, universities make investment decisions based on their best judgment about what will support the future they want for their organization. They might be persuaded that an industry should not be invested in because of its morally culpable behaviour or its questionable future economic prospects, but the process of getting them to take that decision is at root one of convincing an independent actor to voluntarily make a choice. When facing an administration — often personalized in a single individual or governing-council-like body formally charged with investment policy — which has recently rejected a divestment demand, activist performances which emphasize harsh criticism are most likely to drive those actors to further justify their decision, both within their own minds and in the public debate. Furthermore, it is probable that such actions will make decision-makers and influential but skeptical members of the university community see the CFFD campaign participants as unreasonable or excessively radical, likely limiting their future influence. Why then would campaigns risk undermining themselves in the eyes of the 'audience' which they have been 'performing' for?

Certainly part of the answer is the sincere conviction of fossil fuel activists, their belief that radical and immediate change is necessary to prevent catastrophe, and their hopes that the eloquence and credibility of their argument alongside the degree of campus support which they had been able to build would win the day. At the same time, once we identify that activists are actually performing for multiple audiences simultaneously — and activists with different theories of change prioritize different audiences — these harsh rejections become easier to understand. 527,528,529 CFFD activists are in part performing for the other members of their campaign, who have collectively reached some sense of what responses to their demands are acceptable or unacceptable. Responding to a decision by their target university which they found unacceptable through restrained criticism or finding a way to portray the outcome as an incremental victory may be experienced as a breach of solidarity with the other campaign members who had been striving for a better outcome. These performances of anger and outrage are also directed at the broader climate change activist community, in which willingness to escalate into confrontational actions like sit-ins and camp-outs is seen as evidence of commitment and determination. Finally, strong protests directed at recalcitrant university administrations

⁵²³Commenting on why the UBC campaign was less confrontational than those at McGill and Mount Allison, an interview participant argued that at least in early rounds divestment is more likely to be achieved using cooperative tactics since money managers are not influenced by angry protests.

⁵²⁴At UVic, an organizer argued that the transition to more confrontational tactics "contributed to the campaign's decline in volunteer numbers."

 $^{^{525}}$ One faculty interview participant said: "I don't even know what that means: to force divestment."

⁵²⁶When Lakehead committed to divestment in 2020, both the chair of the board of governors and the university president praised the decision, perhaps suggesting that they were persuaded rather than forced. Lakehead University. Lakehead University's Board of Governors Announces Plan to Divest from Fossil Fuel Holdings. 2020. URL: https://www.lakeheadu.ca/about/news-and-events/news/archive/2020/node/61934 (visited on 11/26/2020).

⁵²⁷Pfefferle argued that the FFD movement has been directed at two audiences, the private sector and the state. Pfefferle, "Between Morals and Markets — Fossil Fuel Divestment, Business, and the State", p. 41.

⁵²⁸Belliveau, Rowe, and Dempsey argued: "Organizers reported how they strategically modify their arguments, according to the audience they are addressing," and suggested that the broad appeal of the movement is partly due to this ideological flexibility. Belliveau, Rowe, and Dempsey, Fossil Fuel Divestment, Non-reformist Reforms, and Anti-capitalist Strategy, p. 462–3.

⁵²⁹When performing for multiple audiences it can be impossible to simultaneously frame messaging in ways equally appealing to all. Jed Lenetsky at McGill noted how criticism that was interpreted by some as especially convincing caused lost influence with others who took it as too strident and as evidence that the CFFD campaign was extreme and unreasonable.

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may be calculated to have some effect on their peers, demonstrating that there is at least some reputational risk associated with choosing not to divest (though the university may still care more about alienating donors or pro-fossil fuel alumni). 530,531

The birthmark tattoo exercises also demonstrate how actions within CFFD campaigns ought to be interpreted with multiple audiences borne in mind. In the examples I found at Dalhousie and U of T, the tattooing didn't seem directed at the university administration or even the student body, as it could have been by changing where the action was done or how it was publicized. Rather, it came across more as an opportunity for organizers to demonstrate the depth of their commitment to each other and their awareness that the fight against climate change will be multi-decadal or lifelong. Permanently marking one's body with a political statement at an in-person event with fellow activists may be an especially poignant example of activists performing for one another: asserting that responding to climate change will be a lifelong challenge and reaffirming their ties of solidarity with one another. It also demonstrates how — though student careers and campaigns are short-lived — CFFD activists feel committed to a long fight.

Speaking more generally, CFFD campaigns have all been aware of a public which is distinct from the target administrations who they are trying to persuade to divest. Tilly describes the public as experienced by social movements as "potential participants in future campaigns, citizens whose interests the campaign's outcome will affect, and spectators who learn something about the politics of their regime from the struggle, even if they do not participate."532 Using Tilly's breakdown of social movements into claimants, objects of claims, and the public, we can identify multiple publics the CFFD movement sought to influence. On a personal level this includes fellow students who could be motivated to support divestment or other manifestations of climate change activism. It includes the broader university community, which is relevant both in terms of the totality of future actions undertaken by universities themselves and in terms of the broader role members of universities play in guiding society and policy-making. At the broadest level, it includes governmental decision makers in Canada and around the world and people everywhere with an interest in how much climate change takes place. One imperfect feature of Tilly's categorization is the separation of claimants from the public, implying that the former are not part of the audience for activist performances. As discussed in the "birthmark" example above, activists may sometimes choose performances with one another as the intended audience to a significant degree. This is the mechanism through which the "ladder of escalation" functions, as claimants observing and taking part in actions proposed by other claimants become more willing to use such tactics themselves in future instances. Activist-to-activist performances are also an important part of alliance building and coalition formation, as it affects the willingness of activists who are prioritizing efforts other than climate change mitigation to support movements like fossil fuel divestment.

In the political opportunities chapter, we saw how 350.org and the CYCC share the intersectional view-point of climate justice advocates and sought to embed it in the campaign in a box which they provided. 533 Oddly, this has set up a dynamic in which both CO_2 -energy and climate justice advocates have been able to see themselves as rebels within their own movement. Scholarly analyses of CFFD campaigns which have

 $^{^{530}}$ This is substantiated to some degree by an interview participant's claim that Sherbrooke sought to keep things amicable with the CFFD campaign because they had seen the harsh condemnation of insufficient action at other schools.

⁵³¹Describing the South Africa apartheid divestment movement, Soule noted that "activists often target multiple systems of authority, some of which are private, others of which are governmental." Soule noted that "this movement was about the policies of an intermediary target (the university) designed to ultimately impact the policies of a foreign state"; this closely parallels the fossil fuel divestment movement, which has sought to impact the fossil fuel industry and government policy using universities as intermediaries. Soule, *Contention and Corporate Social Responsibility*, p. 98, 102.

⁵³²Tilly, Contentious Performances, p. 120.

⁵³³Kiki Wood also told me that the Power Shift 2012 conference which helped kick off Canadian CFFD campaigns deliberately sought to inject a climate justice narrative.

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praised the climate justice perspective present its growth into the dominant perspective within divestment organizing as a shift which they accomplished rather than something which proliferators intended to be built in from the beginning. CO₂-energy advocates, by contrast, have found themselves taking positions which are more palatable to policy makers within universities but which somewhat alienate them from the approach to organizing dominant in the movement. In the mobilizing structures chapter, we saw the relationship between activists' theory of change and their preferred organizational structures and processes — and particularly how the absence of formal decision making processes has sustained a continuing ambiguity within the CFFD movement about which objectives have the greatest priority and the extent to which actions seen as morally praiseworthy but not closely connected to climate change ought to be undertaken when they likely stiffen university resolve against divestment. In this chapter, we have seen how the actions advocated and undertaken by campaign organizers have reflected this disagreement about worldview and how campaigns have distinguished themselves on a spectrum from those like Waterloo which prioritized cordial relations with the university administration through those like UBC which made some use of tactics from across the spectrum of contention to those like Mount Allison which have consistently undertaken the most confrontational and critical approach. In terms of activist development, this demonstrates why the CFFD movement has not produced a monolithic cohort with coherent objectives and tactical preferences, but rather a shifting pattern of influence within individual campaigns and two identifiable trajectories for CFFD participants who have remained involved in climate activism: committing more deeply to either a policy-minded approach with talk about gigawatts of energy output and the relative radiating forcing effect of different GHGs or a justice-minded approach focused and condemning and seeking to counter structural injustices within states and global society including racialization, settler colonialism, and patriarchy. When we discuss framing in the next chapter, I will argue that it is neither plausible nor necessary to try to overcome that difference of worldviews to produce a universally shared perspective. Rather, progressive advocates of climate action ought to recognize that for their efforts to be successful they must be accompanied by a willingness to act and to keep decarbonization policies in place among non-progressives. The implausible alternative of hoping to achieve universal conversion to a progressive worldview is at odds with pluralism, public sentiment, and history.

Chapter 5

Merits and limitations of the CJ and CO_2 -e frames

It's nearly impossible to make someone care about climate change for the same reasons I do. But I don't think I have to, and you don't, either. Through thousands of conversations, I've become truly convinced that nearly everyone already has the values they need to care about the future of the world, even if they aren't the same as mine or yours. And if they don't think they care, it's because they just haven't connected the dots. When they do, they'll see that caring about climate change is entirely consistent with who they are.

—Katharine Hayhoe, Saving Us: A Climate Scientist's Case for Hope and Healing in a Divided World. 2021. p. 13 (italics in original)

In this normative chapter I want to challenge the claim that the climate justice (CJ) perspective is an analytically and normatively superior perspective when compared with the scientific framing that preceded it. There is an assumption common among CJ proponents that simple exposure to their viewpoint and supporting argument will win over most or all people to their perspective. The endurance of the minority CO_2 -energy (CO_2 -e) perspective throughout the movement (and the way in which this perspective has arguably had more impact on universities and the financial system than CJ) demonstrates that the normative, empirical, and prescriptive conclusions of the CJ group will not simply replace an antiquated scientific perspective as people take them in. Rather, the most just and politically efficacious analysis of climate change will continue to be contested and, by taking CO_2 -e criticisms of CJ seriously, we can engage with crucial questions about how to build and sustain a political coalition that can entrench strong climate change mitigation. We may be able to defend a livable future without a political revolution which lacks public support and which carries no assurance of effectively curbing fossil fuel use.

5.1 The empirical and prescriptive division of this dissertation

As discussed in my preface on positionality, studying the CFFD movement from the perspective of wanting to avoid catastrophic climate change is an undertaking embedded with normative preferences and agendas.¹ While I have sought to provide a credible and predominantly empirical account of what happened in the chapters on political opportunity, mobilizing structures, and repertoires, this chapter includes most of my explicitly normative or prescriptive analysis, describing how things ought to be and what ought to be done rather than what took place and how to make sense of it empirically and analytically. In part, this is to conform with scholarly standards of writing. Perhaps more importantly, it should help readers tease apart and engage with my argument step by step. They may find my empirical descriptions to conform with their observations and research, yet disagree with the conclusions I draw. Or readers may agree with me about what ought to be done, but on the basis of a different rationale. Through this separation in structure, readers and critics should have the opportunity to distinguish at which points they disagree with me.

The structure of this research project and dissertation is derived from the central concepts and analogies of the contentious politics theoretical framework. Since the internal contention in the CFFD movement chiefly concerns the root causes of climate change and the political strategy for bringing it under control, my normative discussion is chiefly about the competing framings of the climate change problem evident in the CFFD movement: the CJ framing which emphasizes linkages between social justice issues and the need for revolutionary reorganization of society in response, and the CO₂-e framing which interprets climate change principally as a matter of energy supply and the most promising response as the replacement of fossil fuels with alternatives. Framing is a prescriptive domain since the task of making sense of a political movement at the level of the worldview it holds and seeks to spread to others requires background assumptions about what is desirable, what promotes human flourishing, and how to balance one objective against another. Empirical evidence cannot adjudicate between the correctness of a CJ or CO₂-e approach.

The issue of framing is also bound to political efforts and outcomes that continue to occur. Just as McAdam's Freedom Summer emphasized how participation in the Mississippi drive for black voters changed their political views and behaviours, the CFFD movement can be assessed in terms of how it influenced the political beliefs and behaviours of its organizers. Given the prominent roles many of them have subsequently taken on in the climate change activist and climate justice movements, what they have learned and how they have changed will be relevant for how the fight goes going forward. Just as lessons from Occupy have been identifiably present in the CFFD movement, the political lessons learned by CFFD organizers will influence climate change politics going forward.

To try once again to be as clear as possible, I am not arguing here that the $\rm CO_2$ -e perspective is correct and the CJ analysis is wrong, or that CJ advocates would become more successful by reverting to a scientific and technical framing. The CJ framing provides enormous motivation and solidarity among adherents, while the $\rm CO_2$ -e struggles to be salient with most people given the structural barriers to climate change. My main point is that the CJ perspective doesn't command sufficient support among the populations of Canada, the US, and UK to generate and sustain an effective transition off of fossil fuels. Given that, achieving its objective of avoiding catastrophic climate change requires support in the area of energy transition from voters and parties that are not progressive in areas like income redistribution or sexual politics. These flanking coalitions would not be comprised of former intersectional activists turned technocrats, but rather of people with non-progressive political philosophies and ideologies who nonetheless recognize that catastrophic climate change would undermine everything that they value and hope to achieve. In Iason Gabriel's language, discussed below, the coalition between progressive CJ advocates and those willing to pursue fossil fuel abolition for other reasons would need to be founded in "strategic compromise" rather than "moral agreement."

¹See: Preface on positionality p. xii

²See: Depth of agreement needed for allyship p. 185

5.2 Framing climate change

As the repertoires chapter showed, those on each side prioritized different audiences and thus matched their messaging and decided between trade-offs with priorities that reflected that. CJ advocates often focused on competing to persuade their fellow organizers, who were far more receptive to an anticapitalist and intersectional world view than target administrations were, while tolerating incremental demands and financial arguments from CO₂-e organizers as part of "inside game" strategies to persuade their universities.³ CO₂-e advocates prioritized decision makers as an audience, and chose their approach based on three kinds of skepticism: that the CJ account of the nature and causes of climate change is correct, that revolutionary political and economic change would let humanity control climate change, and that the political strategy of intersectionality would succeed in producing effective climate change policies. CO₂-e activists saw replacing fossil fuel energy as fundamentally more tractable and plausible, even though it is an enormous and unprecedented task, than eliminating structural injustice from the global system. CO_2 -e advocates tolerated the desire for issue linkage because most CFFD organizers became strongly inclined that way, and the climateenergy advocates wanted to stay part of a high profile movement which is perceived to be important and successful. They also tended to personally share the non-climate policy preferences of the CJ advocates, even if they questioned their relevance to climate change or their usefulness for advancing fossil fuel abolition policies.

This dissertation has explored how CFFD activists thought about what was needed to address the problem of climate change and the consequences that had for the collective action they initiated. The CFFD movement has been comprised of activists who have enough in common to be committed to shared goals, but who retain fundamental differences in how they interpret the problem of climate change and the political programme of action which they propose in response. The CJ and CO₂-e framings overlap in seeing climate change as a critical and even existential challenge for humanity. They both see the fossil fuel industry as a morally culpable actor, and they both embrace the concept of leaving most of the world's remaining fossil fuels underground for the sake of climatic stability. The major difference between them is that while the CJ perspective sees climate change as fundamentally arising from the global injustices of racism, patriarchy, and economic and political inequality — and asserts that climate change can only be controlled by overcoming those systemic injustices — the CO₂-e perspective sees the problem as rooted in the unintended side effects of fossil fuel combustion and the solution in replacing our sources of energy. This disagreement is reflected in all parts of the CFFD movement, and all parts of this dissertation, since it influenced how activists in each camp interpreted the political opportunity structure confronting them and thus their strategic planning; shaped their preferences about how to organize their campaigns and make choices; and determined which audience each side found it most important to perform their repertoires for, and therefore the messaging they chose and what they prioritized when confronted with trade-offs.

Now that we have considered political opportunities, mobilizing structures, and repertoires we are well placed to return to the discussion of three narratives about climate justice in the CFFD movement from the introduction. Curnow and Gross described the reorientation of the divestment movement toward CJ, driven by the Divestment Student Network (DSN) and Canadian Youth Climate Coalition (CYCC), as a highly

³Belliveau quoted an interview participant: "We've spent so much time as activists arguing with other activists, who on the scale of Canadian public opinion are such a small fraction of the population, that we have left behind the discussion of how do we actually sell these ideas to the other 95% of the population. And I think that the inclusion of climate justice and those ideas is important, is incredibly beneficial, but it's not if it's just us patting ourselves on the back and feeling good about having agreed on this — it needs to be about changing people's' minds outside of our movement who don't currently agree with us." Belliveau, "Climate Justice in the Fossil Fuel Divestment Movement: Critical Reflections on Youth Environmental Organizing in Canada", p. 54.

positive and desirable development and model for other climate activists to emulate. McKibben presented the shift in 350.org's thinking by saying "everyone figured out what worked in different circumstances" and "I don't remember any internal contention, then or now." The third narrative — and the one I am defending in this dissertation — is that the climate justice (CJ) and $\rm CO_2$ -energy (CO₂-e) views have been in contention throughout the movement, and the hope among CJ advocates that sufficient exposure to their ideas will lead to all or nearly all other climate activists accepting them is at odds with the experience of Canadian CFFD campaigns from 2012–20.

5.2.1 Interpreting contention between the CJ and CO₂-e framings

Curnow's narrative and mine both disagree with McKibben about the presence of contention within the CFFD movement, which is extensively documented in this dissertation and in other scholarly work. My disagreement with Curnow is chiefly normative. The idea that all climate activists should embrace the CJ perspective is based on the beliefs that its diagnosis of the causes of climate change is accurate, that adopting an intersectional perspective is morally preferable to focusing on climate change separately, and that there is a strategically sound pathway to use intersectionality, linkage between issue areas in social justice, and an approach to allyship based on solidarity to achieve effective climate change mitigation policies. While the empirical evidence supports the view that the CFFD movement largely socialized participants toward or into the CJ perspective, I worry that CJ advocates are insufficiently focused on the specific actions needed to control climate change, in part because of their rejection of the idea that climate change is a problem that should be prioritized above others because of its potential severity and because the success of other political projects demands avoiding catastrophic climate change. I also worry that an approach to climate change mitigation based on an effort to implement a broad progressive agenda will be vulnerable in the present and foreseeable political contexts of Canada, the US, and UK. Given the reality that parties alternate in power, and that avoiding catastrophic climate change will require decades of consistent policy, there needs to be a broader supporting coalition than just the more progressive supporters of left-wing parties. Ironically, given the hope that the CFFD movement could challenge capitalism itself, some of its most important consequences have been in the financial and corporate realms, where the concepts of the carbon bubble and stranded assets have been effectively raised and given importance. That success hints at the possibility of forming flanking coalitions which would accept the need for strong and consistent climate change mitigation policies, without embracing all the other elements of a progressive agenda. That could create a path to avoiding catastrophic climate disruption without converting or marginalizing non-progressives, neither of which seems plausible or likely.

My focus on the problems with the CJ approach should not be interpreted as a complete rejection of that perspective. As the CFFD movement developed, the climate justice framing emerged as the dominant understanding among Canadian organizers — though its origins precede the divestment movement and the broader culture of progressive activism is an important reason why the intersectional view has won so many adherents among climate activists. The growth of the intersectional climate justice movement has been a major achievement with ramifications that are perceptible in government action and public opinion.

At the same time, the CJ viewpoint relies on liberal and progressive assumptions about humankind's ability to plan society rationally and preferences for policy action in non-climate areas including economic redistribution, women's rights, LGBTQ rights, and Indigenous rights. The hope that simple exposure to their arguments would lead to a broad societal consensus for action along the lines they prescribe has not been realized in Canada, the US, and the UK. Furthermore, since effective climate policy requires

stability from government to government, establishing and maintaining an effective climate change mitigation regime will require support from flanking coalitions of non-progressives that hold compatible climate change mitigation goals but who otherwise differ in their preferences and political analysis. Otherwise, there will be an intolerable risk that governments with other political philosophies that follow a progressive government that implemented a comprehensive and effective climate plan will reverse it under industry and ideological pressure.

My central normative conclusion about the CFFD movement depends upon empirical claims about climate science which have already been set out, crucially that the severity of climate change depends on the accumulation of emissions across many decades, and therefore it is the total fraction of the world's fossil fuels that end up burned that will determine the severity of climate change, rather than where and when specifically that combustion occurs.⁴ This means policies to forego fossil fuel exploitation and to deploy alternatives must be in place for decades to matter. The implications of this are at odds with the idea that an ambitious progressive policy like a Just Transition or Green New Deal will resolve the problem in the long term, calling into question whether the CJ strategy can achieve its climate aims. The other central scientific fact is the potentially cataclysmic impact of unmitigated climate change and the one-off nature of our opportunity to constrain it. That makes success in avoiding catastrophic climate change a precondition for advancing nearly any other political project, and implies that the prioritization given to fossil fuel abolition should exceed that in other issue areas where the stakes are less existential for humanity and where there are opportunities for trial-and-error and incremental improvements in public policy approaches between efforts.⁵ At a spring 2022 gathering set up by the Climate Justice organizing HUB and intended to gauge the state of the movement, a lead staffer argued that anyone who questioned whether climate change mitigation can really be pushed by activists at the same time as demands across a broad range of other issues had a "scarcity mindset." This lack of emphasis and prioritization on climate change specifically is at odds with the science on how serious the problem is, and how we only have once chance to resolve it. The lack of a consistent and determined focus on supporting fossil fuel alternatives is one reason to conclude that the progressive climate justice movement will only succeed in entrenching strong climate change mitigation policies with the support of flanking coalitions based around different values.^{6,7}

The core political point is that, while an intersectional progressive agenda clearly holds enormous appeal for a portion of the population and for many student activists, there is no indication of a decisive shift in popular support in that direction in the US, UK, or Canada. The climate justice worldview has not

⁴For references to the specific scientific publications that are the source of the empirical claims behind my analysis, see the summary of climate science in the salience section of the political opportunities chapter.

⁵Monbiot summarized the depth of the environmental crisis more broadly: "With the exception of all-out nuclear war, all the most important problems that confront us are environmental. None of our hopes, none of our dreams, none of our plans and expectations can survive the loss of a habitable planet. And there is scarcely an Earth system that is not now threatened with collapse." George Monbiot. Earth is Under Threat, yet you Would Scarcely Know It. 2022. URL: https://www.theguardian.com/environment/2022/sep/28/guardian-climate-crisis-reporting-fearless-monbiot (visited on 10/12/2022).

⁶Aidid listed several reasons why CFFD activists might resist alternatives to fossil fuel energy, including the risk that resources needed for renewable energy will feed conflict in the Global South, that biofuel production will displace farmers, and that market-based approaches cannot address climate change. Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. 72.

⁷The objectives of the Climate Justice Alliance demonstrate this lack of realism about what providing energy to the world will require. They argued: "Energy Democracy represents a shift from the corporate, centralized fossil fuel economy to one that is governed by communities, is designed on the principle of no harm to the environment, supports local economies, and contributes to the health and well-being for all peoples. CJA is committed to the goal of maintaining global temperatures at a 1.5 Celsius increase above pre-industrial levels." What this misses is the enormous effort involved to achieve stabilization at less than 1.5 °C of warming and the inevitability that whatever energy sources used will cause some kind of environmental harm. Climate Justice Alliance. Energy Democracy. 2019. URL: https://climatejusticealliance.org/workgroup/energy-democracy/ (visited on 08/02/2022).

broadly permeated into the demands of voters or the policy platforms of political parties likely to hold power. With little prospect for an enduring string of progressive governments in any of these countries, effective climate change mitigation policies will require continued support from the parties that do hold power. Cultivating that support implies the formation of flanking coalitions which share the central demand of avoiding catastrophic climate change but which otherwise retain the values and political priorities of the varied societal groups which would comprise them (and which cannot be supplanted as easily as CJ advocates hope).

Creating such flanking coalitions is not a matter of fragmenting or redirecting the efforts of intersectional progressive activists, who insist on the logical and strategic connections between their varied objectives and tend to temperamentally reject such outreach as a compromise of their ideals. The progressive climate movement has been an enormous achievement and has brought forward the discussion of meaningful climate policy substantially. At the same time, an all-progressive climate movement risks acting as a vice with one jaw, unable to hold on to anything. Perhaps ironically, given the CFFD movement's anti-capitalist roots and the popularity of an anti-corporate stance within its membership, the movement has been able to communicate meaningfully to the corporate and financial sectors, and has initiated consequential and substantive discussions about stranded assets, the carbon bubble, and what they mean for firms' investment and business plans. This success in broadcasting core ideas about what climate change mitigation requires demonstrates one way in which the CO₂-e framing has enduring value and a role to play in helping humanity control climate change.

A common argument among advocates of strong decarbonization action is that climate change has traditionally been described in technical and scientific terms, and that framing has failed to engage people psychologically and politically and thus drive action.^{8,9,10,11} Scientists themselves deliberate on how to present their results to conform with the norms of their profession while also trying to communicate effectively with non-expert decision makers and the public. As with scholars in other fields, scientists have been conflicted between the importance of controlling climate change and expectations in their fields about expertise and impartiality. While deniers accuse scientists of fear-mongering or alarmism, others highlight how scientific assessments have often been over-cautious:

While climate skeptics and deniers often accuse scientists of exaggerating the threats associated with the climate crisis, the available evidence suggests the opposite. By and large, scientists have either been right in their assessments, or have been unduly conservative. We noticed a clear pattern of underestimation of certain key climate indicators, and therefore underestimation of the threat of climate disruption. When new observations of the climate system have provided more or better data, or permitted us to re-evaluate earlier conclusions, the findings for ice extent,

⁸For some analysis of efforts to communicate climate change through the scientific frame, see: Nathaniel Geiger, Janet K. Swim, and John Fraser. "Creating a Climate for Change: Interventions, Efficacy and Public Discussion About Climate Change". In: Journal of Environmental Psychology 51 (2017), pp. 104-116. URL: https://www.sciencedirect.com/science/article/abs/pii/S0272494417300440 (visited on 12/26/2019).

⁹Janet K. Swim et al. "Social Construction of Scientifically Grounded Climate Change Discussions". In: *Psychology and Climate Change*. Elsevier, 2018, pp. 65–93. URL: https://www.sciencedirect.com/science/article/pii/B9780128131305000047 (visited on 12/26/2019).

¹⁰Some of the same scholars also looked at participation in marches as a motivator for climate action: Janet K. Swim, Nathaniel Geiger, and Michael L. Lengieza. "Climate Change Marches as Motivators for Bystander Collective Action". In: Frontiers in Communication 4 (2019), p. 4. URL: https://www.frontiersin.org/article/10.3389/fcomm.2019.00004 (visited on 06/26/2019).

¹¹Sovacool et al. were also skeptical of limiting energy policy and technology discussions to engineering and economics, advocating that broader social justice concerns ought to be considered, including involuntary resettlements they cause and human rights. Benjamin K. Sovacool et al. "Energy Decisions Reframed as Justice and Ethical Concerns". In: *Nature Energy* 1.5 (2016), pp. 1–6. URL: https://www.nature.com/articles/nenergy201624 (visited on 01/01/2020).

sea level rise and ocean temperature have generally been worse than previously thought. 12,13

IPCC reports have included ever-clearer and more evocative language when describing the projected consequences of unconstrained fossil fuel use. Nonetheless, there is a widespread perception among climate activists that the scientific framing has been ineffective at building emotional salience, driving political action, and properly expressing the human impacts of climate change.¹⁴ This is contrasted with a climate justice frame which is explicitly normative and often advocated as more motivating and engaging.^{15,16} Naomi Klein explained:

You know, I've been making these arguments around economics, but there is nothing more powerful than a values-based argument. We're not going to win this as bean counters. We can't beat the bean counters at their own game. We're going to win this because this is an issue of values, human rights, right and wrong. We just have this brief period where we also have to have some nice stats that we can wield, but we shouldn't lose sight of the fact that what actually moves people's hearts are the arguments based on the value of life.¹⁷

Here we see enemy naming and a more abstracted version of the story of self: not literally using an activist's own biography to legitimize their policy preferences or demands, but seeking to frame the conversation around values to humanize and make the concerns of activists emotionally salient.

5.2.2 Merits of a scientific or technical framing

While the broad trend among climate activists has been to question and discourage framing climate change as a scientific and technical problem, there may nonetheless be justifiable reasons for persisting with that approach. Among the many efforts to summarize all of the causes of climate change, the world GHG emissions flow charts produced and updated by the World Resources Institute deserves some consideration.

While it can't be called politically neutral, there is a neutrality in the allocation of emissions to specific gases, industries, and processes rather than to states, corporations, or other organizations deemed morally responsible.¹⁸ The flowchart also demonstrates all the areas in which humanity must act rapidly to maintain any hope of stabilizing the climate below the 1.5–2.0 °C targets agreed in Paris, including transportation, electricity generation, industrial processes, deforestation, and agriculture. Presenting the problem in this

¹²Dale Jamieson, Michael Oppenheimer, and Naomi Oreskes. The Real Reason Some Scientists Downplay the Risks of Climate Change. 2019. URL: https://www.theguardian.com/commentisfree/2019/oct/25/the-real-reason-some-scientists-downplay-the-risks-of-climate-change (visited on 11/14/2019).

¹³See also: Michael Oppenheimer et al. *Discerning Experts: The Practices of Scientific Assessment for Environmental Policy.* Chicago: University of Chicago Press, 2019.

¹⁴One factor that explains this limited effectiveness is pro-fossil fuel actors deliberately seeking to confuse the public discourse. John Cook argued: "Conservative think tanks, supported with funding from vested interests, have been and continue to be a prolific source of misinformation about climate change. A major strategy by opponents of climate mitigation policies has been to cast doubt on the level of scientific agreement on climate change, contributing to the gap between public perception of scientific agreement and the 97% expert consensus." John Cook. "Countering Climate Science Denial and Communicating Scientific Consensus". In: Oxford Research Encyclopedia of Climate Science. Ed. by Hans Von Storch. 2016, p. 1.

¹⁵David Schlosberg and Lisette Collins provided a history of the climate justice framing: David Schlosberg and Lisette B. Collins. "From Environmental to Climate Justice: Climate Change and the Discourse of Environmental Justice". In: Wiley Interdisciplinary Reviews: Climate Change 5.3 (2014), pp. 359–374. URL: https://onlinelibrary.wiley.com/doi/abs/10.1002/wcc.275 (visited on 06/04/2019).

¹⁶Healy and Debski argued: "The movement is shifting the conventional framing of climate change from a technocratic 'environmental issue' to one elevating the social justice, justice, and health impacts of climate change." Healy and Debski, "Fossil Fuel Divestment: Implications for the Future of Sustainability Discourse and Action Within Higher Education", p. 2.

¹⁷Grist. Naomi Klein on Why Low Oil Prices Could be a Great Thing. 2015. URL: https://grist.org/climate-energy/naomi-klein-on-why-low-oil-prices-could-be-a-great-thing/ (visited on 07/04/2019).

¹⁸ An energy-focused framing has a sort of 'intersectionality' of its own. Jaffe and Taylor argued: "the concept of energy unifies virtually all of modern physics into a coherent conceptual framework" and: "It is possible to understand the behaviour of most physical systems by following the flow of energy through them." Jaffe and Taylor, *The Physics of Energy*, p. xvi, 3.

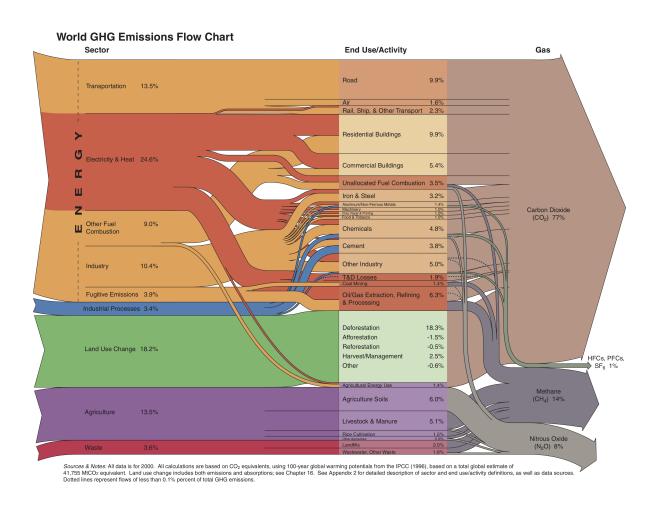


Figure 5.1: World GHG emissions by use type and gas

way doesn't help in explaining how pro-fossil advocates have so far resisted effective regulation, but it could help to build support for decarbonization beyond those who have accepted the intersectional analysis of the climate justice movement. Presenting the problem in terms of processes and gases does fail to evoke emotional salience, but that may have advantages if effective climate change policies are being stymied in part by high political polarization. Political movements and parties which accept the findings in climate science that show that unmitigated climate change would be a catastrophe — but which are reluctant or unwilling to link the issue to social justice or economic redistribution more broadly — could find in this technical framing an outline of the areas in which action is required to solve the problem, potentially allowing for the formulation of a comprehensive and effective climate plan which excludes issue-linkages which they reject. It could also counter efforts of industry to pass off responsibility or refocus attention on climatically irrelevant metrics like emissions per dollar of output (emissions intensity — a favoured metric of bitumen sands producers and their government supporters). 19 Framing the problem around the need to replace fossil fuel energy sources can be linked to the idea that fossil fuel dependence (especially on imports) is undesirable, which has some traction among conservatives, and could emphasize the large co-benefits from fossil fuel abandonment, notably reducing the number of deaths from toxic pollution. 20,21,22,23 The narrow approach is not plausible for those who view climate change as just a symptom of capitalism and colonialism, but it offers a chance for those pressed to engage with climate change as a chemical and atmospheric phenomenon an option other than the overt or implied climate change denial which has become dominant in conservative politics. The concept that climate change could be solved more or less on its own, without simultaneously changing things beyond the energy system, reduces how many status quo actors are likely to rise in opposition, as well as negating the common argument that climate activists are using the crisis as an excuse to implement their pre-existing ideological agendas. 24,25

5.3 Intersectionality and coalition building

Hadden emphasized how the world views, theories of change, and inter-organizational affiliations of activist groups relate to their positions in organizational networks. As such, it is worth considering how the competing framings in the CFFD movement influenced how they built networks with and interacted with

¹⁹Canada still used environmentally irrelevant weasel metrics in its 2022 National Inventory Report (NIR) to the IPCC—first, showing a chart with flat GHG emissions going back to the late 1990s but falling emissions intensity, then GHG emissions in per capita terms. Both conceal huge growth in fossil fuel sector emissions which offset major positive steps like Ontario's coal phase-out. Government of Canada. *Greenhouse Gas Sources and Sinks in Canada: Executive Summary 2022.* 2022. URL: https://www.canada.ca/en/environment-climate-change/services/climate-change/greenhouse-gas-emissions/sources-sinks-executive-summary-2022.html (visited on 07/18/2022).

²⁰A 2006 World Health Organization (WHO) assessment estimated that particulate matter air pollution alone caused 0.8 million premature deaths and 6.4 million years of lives lost. Aaron J. Cohen et al. "The Global Burden of Disease due to Outdoor Air Pollution". In: *Journal of Toxicology and Environmental Health, Part A* 68.13-14 (2005), pp. 1301–1307. URL: https://www.tandfonline.com/doi/full/10.1080/15287390590936166 (visited on 07/18/2022).

²¹Research published in *Nature* in 2015 estimated that outdoor air pollution caused 3.3 million premature deaths worldwide, predominantly in Asia. Jos Lelieveld et al. "The Contribution of Outdoor Air Pollution Sources to Premature Mortality on a Global Scale". In: *Nature* 525.7569 (2015), pp. 367-371. URL: https://www.nature.com/articles/nature15371 (visited on 07/18/2022).

²²On health and economic co-benefits from reducing toxic pollution from fossil fuels, see also: David Wallace-Wells. *Air Pollution Kills 10 Million People a Year. Why Do We Accept That as Normal?* 2022. URL: https://www.nytimes.com/2022/07/08/opinion/environment/air-pollution-deaths-climate-change.html (visited on 07/12/2022).

²³Mikkelson, "Divestment and Democracy at a Canadian University", p. 2.

²⁴In 2002, Stephen Harper famously called the Kyoto Protocol a "socialist scheme to suck money out of wealth-producing nations." CBC News. *Harper's Letter Dismisses Kyoto as 'Socialist Scheme'*. 2007. URL: https://www.cbc.ca/news/canada/harper-s-letter-dismisses-kyoto-as-socialist-scheme-1.693166 (visited on 08/05/2020).

²⁵Lemphers, "Beyond the Carbon Curse: a Study of the Governance Foundations of Climate Change Politics in Australia, Canada and Norway", p. 138.

other activist movements and organizations. There are three places where the existing scholarly literature aids us particularly in this. These are also places where this research contributes to the scholarly literature with the empirical example of Canadian CFFD cases from 2012–20. First, Ayling and Gunningham describe patterns of interaction between powerful societal actors and the beliefs and norms of the population as "legitimacy networks." Their conception of patterns of mutual influence can be applied to which legitimators the CFFD movement emphasized across time, as the emphasis on climate justice in 350.org and other divestment proliferators developed. Second, considering Clapp and Dauvergne's 1991 typology of participant types and worldviews in the environmental movement, there is an emphasis on the importance of framing and worldviews on activist behaviour and particularly intra-movement politics. CFFD contention in areas like whether to endorse other movements further demonstrates how cleavages among activists concentrated where deep differences in worldview were present and made relevant by decisions the campaign needed to take. Third, Iason Gabriel provided a useful distinction between types of allyship with a distinction between "strategic compromise" and "moral agreement" which pertains to what was discussed in the chapters about how CFFD organizers made decisions and to the delicate endurance of cooperation between CJ and CO₂-e organizers in the context of CFFD campaigns.

Julie Ayling and Neil Gunningham described network building between the divestment movement's own constituents and other legitimate actors as a mechanism for institutionalizing the norms and practices which divestment activists promote. These legitimate actors can become part of "legitimacy networks" which enhance the influence of all involved. ^{26,27} This theory, however, brushes against the internal contentiousness of the CFFD movement, in which activists are of different minds over which actors are legitimate and who they want to be linked with.²⁸ This contradiction arises from the prioritization of different audiences. Relatively status quo actors who fear that divestment is too radical might be pacified by endorsements from conservative economic organizations, but for climate justice advocates such endorsements are undesirable or counterproductive because they reinforce existing power structures by suggesting the climate problem can be managed without revolutionary reform. The CFFD movement demonstrates that there is considerable potential for progressive movement building among individuals and groups inclined to reflexive solidarity and the desire for a fundamental redesign of the world's economic and political systems. This programme may not, however, have sufficient appeal across the population to lead to effective decarbonization policies.²⁹ The statements of relatively conservative legitimators, like the pope and Mark Carney, do hint at the potential for flanking coalitions which could be formed in support of decarbonization; the most transformational of these would be a coalition of conservatives sincerely seeking to mitigate climate change and willing to call for and support policies with the potential to phase out fossil fuel use quickly enough to avoid the worst impacts. As Gunningham argues elsewhere, if universities do choose to divest — "consenting to be 'governed" by the principles of the movement — they add to the authority of the CFFD movement and themselves become

²⁶ Ayling and Gunningham, "Non-state Governance and Climate Policy: The Fossil Fuel Divestment Movement", p. 9.

²⁷Julia Black. "Constructing and Contesting Legitimacy and Accountability in Polycentric Regulatory Regimes". In: *Regulation & Governance* 2.2 (2008), pp. 137–164. URL: https://onlinelibrary.wiley.com/doi/full/10.1111/j.1748-5991.2008.00034.x (visited on 12/17/2019).

²⁸Coalitions in favour of particular policies can emerge for contingent historical reasons, with unpredictable or chaotic effects on issue linkage. Lemphers, for instance, argued that the coalition opposing gas plants in Norway was "nearly identical" to the one opposing EU membership before the 1994 referendum. Lemphers, "Beyond the Carbon Curse: a Study of the Governance Foundations of Climate Change Politics in Australia, Canada and Norway".

²⁹One discouraging example is Yoram Bauman's effort at a "unite the left" approach to passing a carbon tax ballot measure in Washington State. Initially opposed by some environmental groups on the left because they wanted the revenues spent on clean energy investments and redistribution, it received only marginally more support (43% versus 41%) when reorganized to use all revenues for green investment. The Economist. The World Urgently Needs to Expand its Use of Carbon Prices. 2020. URL: https://www.economist.com/briefing/2020/05/23/the-world-urgently-needs-to-expand-its-use-of-carbon-prices (visited on 06/19/2020).

part of a legitimacy network for it.³⁰

In *Paths to a Green World*, Jennifer Clapp and Peter Dauvergne presented four labels for types of environmentalists which were intentionally transdisciplinary: market liberals, institutionalists, bioenvironmentalists, and social greens.³¹ Based on my interviews and the available scholarship today, most Canadian CFFD organizers could be categorized as "social greens" who see an integrated environmental and social justice agenda as both desirable and necessary. As defined by Clapp and Dauvergne:

Social greens, drawing primarily on radical social and economic theories, see social and environmental problems as inseparable. Inequality and domination, exacerbated by economic globalization, are seen as leading to unequal access to resources as well as unequal exposure to environmental harms.³²

Linking individually contentious demands into a collectively even more transformative global blueprint for revolutionary change is part of a strategy for movement building embraced by CJ activists in the CFFD movement, at the same time as the compounding unlikelihood of prompt success on a multitude of fronts fed $\rm CO_2$ -e skepticism. Particularly when it comes to convincing relatively conservative actors including universities to take action, linking already-contentious decarbonization demands with other contentious global justice demands risks deepening their fears that fossil fuel divestment will be a 'slippery slope' and strengthen those who reject action.

Beyond the strategic objective of institutional action, broad intersectionality has complex consequences for divestment's delegitimization and development objectives.³³ In both cases, it likely deepens the commitment of those who are already favourable toward a broadly intersectional understanding. At the same time, it risks impeding the formation of alliances with influential actors which might be convinced to support decarbonization as a prerequisite for a prosperous and stable world but who question or reject its linkage to social justice issues. The intersectional approach risks asking potential allies to accept too many elements of an unfamiliar world view and feeding the idea that progressive activists are using climate change to advance an agenda which they have supported for other reasons all along.^{34,35}

When they contrasted between the four worldviews, Clapp and Dauvergne tried to emphasize how the framing embraced by each is a defining characteristic for different types of environmental organizer: "Each view has its own logic, which fits with its assumptions." They argued that inconsistent and difficult-to-reconcile claims about the severity of various global environmental crises including climate change can be explained not by there being no factual answers or because the parties are dishonest, but because they have a worldview predicated on a framing. People with "different interpretations and different values—that is, different worldviews—can shape which information an analyst chooses to *emphasize*." They discussed how basic and personally fundamental something one's outlook and expectations about the future of the Earth are, and this is reflected in several elements of what I observed about the CFFD movement, including the tendency for differences in worldview to manifest themselves behaviourally in disagreements about contro-

 $^{^{30}}$ Gunningham, "Review Essay: Divestment, Nonstate Governance, and Climate Change", p. 312.

³¹Clapp and Dauvergne, Paths to a Green World: The Political Economy of the Global Environment, p. 3–14.

³²Clapp and Dauvergne, Paths to a Green World: The Political Economy of the Global Environment, p. 12.

 $^{^{33}}$ On the multiple strategic goals of the movement, see: The CFFD movement's three strategic objectives p. 5

³⁴Sikina Jinnah used the term "climate bandwagoning" to describe how civil society organizations working on a wide variety of topics began to reframe their agendas to incorporate climate change to get more attention from the media, donors, and their members. Sikina Jinnah. "Climate Change Bandwagoning: the Impacts of Strategic Linkages on Regime Design, Maintenance, and Death". In: *Global Environmental Politics* 11.3 (2011), pp. 1–9. URL: https://direct.mit.edu/glep/article/11/3/1/14520/Climate-Change-Bandwagoning-The-Impacts-of (visited on 07/21/2022).

³⁵Hadden, Networks in Contention: The Divisive Politics of Climate Change, p. 19.

³⁶Clapp and Dauvergne, Paths to a Green World: The Political Economy of the Global Environment, p. 15.

³⁷Clapp and Dauvergne, Paths to a Green World: The Political Economy of the Global Environment, p. 15.

versial organizational choices. As a somewhat tentative and unstable coalition, CFFD campaigns which experienced a large amount of CJ / $\rm CO_2$ -e contention were most fractious at times when each worldview implied a different and exclusive course of action, and when views about how to proceed polarized between those who emphasized the audience of the immediate institutional decision makers empowered to divest and those prioritizing a broader audience that might be moved by a gesture of solidarity. As described in the chapter on repertoires, this diversity in worldviews among CFFD activists led to differentiation in assigned tasks and hybrid approaches incorporating "inside game" negotiations and "outside game" pressure- and community-building.

5.3.1 Depth of agreement needed for allyship

A key part of my pragmatic skepticism about the plausibility of a global justice-driven systematic reform is the lack of substantial popular support leading to electoral success in the US, Canada, and UK. In Iason Gabriel's 2013 Oxford DPhil dissertation, which considered the failure of those in presently affluent societies to aid those evidently in extreme poverty now, Gabriel made a comment on NGOs seeking to address global poverty that applies as well to the climate change activist movement, including CFFD. Specifically he considers the need to appeal to a broader societal audience than pre-existing activists, and the need for both "strategic compromise" and "moral agreement" in different aspects of organizing:

[B]eliefs and attitudes to world poverty tend to vary across the population. One result of this is that a single message is unlikely to appeal to everyone: NGOs may need to embrace different perspectives if they want to be heard. At the same time, these organisations also need to maintain high levels of energy and cohesion among their core support. Adherence to a single principled argument is often the best device for this purpose. Therefore, efforts to accommodate different viewpoints sometimes backfire, with support flaring up for a short period of time and then dissipating rapidly after that. In order to avoid this outcome, NGOs need to try to draw a clearer distinction between strategic compromise (which is a necessary part of political life) and moral agreement (which is not). By proceeding in this way, it may be possible to win over the support of new constituencies of people by identifying convergence or affinity of aims, without weakening their commitment to the moral principles that they affirm. Yet this is a fine balance to strike in practice. Efforts to recruit new allies must, therefore, be based upon a realistic appraisal of the ways in which support from different groups would help to bring about reform of the kind that is required by this pathway of transition.³⁸

In drawing the distinction between strategic compromise and moral agreement, climate change activists must consider and decide whether their highest priority is climatic stability and they are pursuing various political strategies toward that aim, or whether they are prioritizing a broader programme of political change which happens to include climate change mitigation or fossil fuel abolition. They must also decide what degree of compatibility they consider necessary to justify cooperation with other organizations and movements: which shared objectives are nice to have but optional with potential coalition members, and which are important enough to preclude cooperation even when the possibility of improving climate change outcomes exists. That was precisely the tension between the CJ and the CO₂-e perspectives. Strategic compromise held the CFFD movement together, but lack of full moral agreement within larger and more contentious campaigns was the source of and an explanation for the specific forms of contention which took place in the movement.

³⁸Iason Gabriel. "On Affluence and Poverty: Morality, Motivation and Practice in a Global Age". PhD thesis. Oxford University, UK, 2013. URL: https://ora.ox.ac.uk/objects/uuid:13e93067-01ec-48ed-9b24-4bf6f32ce378 (visited on 08/01/2020), p. . 182.

5.4 Climate justice and its limitations

Fighting for a future and climate solutions that are just and that put people first, and in doing so it's really important to fight for solutions that are raising up the most vulnerable communities and taking leadership from them instead of perpetuating injustices that are perpetuated by the fossil fuel industry. I see that as 100% renewable energy. I see that as community-led renewable energy projects. I see that as supporting Indigenous-led renewable energy development. Of course, there is a huge component in that in making sure there are just solutions for workers, and working towards an economy that is able to offer jobs to everyone and offer good work to everyone that is safe and unionized.

—A 350.org staff member defining climate justice

The climate justice framing has three central features: a focus on the disjuncture between those who have contributed most to climate change and those who are being most impacted by it, willingness to link climate change mitigation to other justice-based causes which aren't directly or uncontroversially connected to climate change, and a worldview that sees the root causes of climate change as linked to other social ills. This viewpoint emphasizes climate change as "a crisis that disproportionately affects poor communities and communities of color worldwide." The Divestment Student Network "seeks to highlight the disproportionate impacts of the climate crisis on historically marginalized communities of colour and amplify the stories of those fighting on the front lines." Grady-Benson and Sarathy argued that:

movement leaders... are committed to organizing in solidarity with those experiencing the brunt of climate change and fossil fuel extraction impacts — primarily low-income communities of colour and other historically oppressed peoples. Students are working to build relationships with impacted communities. 42

And explained:

Our use of the term climate justice draws on that of activists' [sic], and highlights the disproportionate impacts of climate change and fossil fuel industrial activity on 'frontline' or 'fence-line' communities, those who have historically been oppressed on the basis of race, economic status, and other marginalising factors. As a form of environmental justice, moreover, climate justice aspires to the fair treatment of all people and seeks to rectify the environmental burdens posed by discriminatory policies and systems, and by climate change itself. 43,44

Either as a matter of ethics or of strategy, activists operating under this framing see it as necessary to link climate change with other injustices and seek to address them simultaneously. This complicates coalition building and achieving influence over governments. If you're marginalized you're not influential, so a political

³⁹Toffel and Gulick, Harvard Business School Case: Fossil Fuel Divestment, p. 2.

⁴⁰Grady-Benson and Sarathy, "Fossil Fuel Divestment in US Higher Education: Student-led Organising for Climate Justice", p. 6.

⁴¹It is worth considering whether the utility of foregrounding marginalized voices does not have the efficacy which CJ proponents believe. Their voices may be seen as more legitimate by those who accept CJ preconceptions, and those activists may also be more moved by the ethics of those with the lowest emissions suffering the worst climate change impacts. For the population at large, however, marginalized voices may have less ability to change their beliefs and their behaviours, and emphasizing the impact of climate change on the poor may dampen their willingness to act by making the general public feel safe themselves.

⁴²Grady-Benson and Sarathy, "Fossil Fuel Divestment in US Higher Education: Student-led Organising for Climate Justice".

p. 7. 43 Grady-Benson and Sarathy, "Fossil Fuel Divestment in US Higher Education: Student-led Organising for Climate Justice", p. 18.

⁴⁴Hilary Moore and Joshua Kahn Russell. Organizing Cools the Planet: Tools and Reflections to Navigate the Climate Crisis. 2011. URL: https://climateaccess.org/system/files/Moore%20and%20Russell_Organizing%20Cools%20the%20Planet.pdf (visited on 02/22/2020), p. 18-23.

programme based on emphasizing such voices needs to be broader than just decarbonization, incorporating structural changes in who holds influence over policy making.

5.4.1 The appeal of the CJ framing for activists

The climate justice perspective has enormous appeal and salience to Canadian climate change activists. The program of action which it proposes is multidimensional and aspirational, and promises to avoid catastrophic climate change while also reducing economic inequality, combatting forms of intolerance like racism and homophobia, and improving outcomes of practical importance to university students, from labour conditions to housing.⁴⁵ The idea that the world is beset by many injustices and that a coherent social movement can address and gradually rectify many of them simultaneously is a core belief of the solidarity- and intersectionality-focused progressive left. It also demonstrates what could be called an evangelical character: the hope or expectation that when people are exposed to the viewpoint they will hear the good news and accept it. For example, Aidid said:

Another shortfall of consensus-based decision-making is that the opinion of a minority who fail to grasp the intersections of CJ issues can discourage radical CJ approaches as evident in the hesitancy to support a statement of solidarity for Palestine at CJUBC. 46

What this conceals is the possibility that those who do not adopt the CJ framing when exposed may do so out of principled normative disagreement or from the view that another approach would be more strategic for combating climate change. CJ advocates divide the world between those who have been enlightened by the intersectional perspective and those who have not yet been so, obscuring and concealing the reality of political disagreement. CJ advocates assert that a CO_2 -e perspective is too limited to achieve success, because it does not target the root causes of climate change and environmental degradation crises more broadly. CO₂-e activists (or "reasonables" in Curnow's terminology) respond by saying that replacing our energy sources is manifestly a more concrete and tractable problem than changing the global economic and political order, and that based on the urgency of action there must be a degree of prioritized action on fossil fuel abolition which takes precedence over solidarity with other causes. The CO₂-e view can be accused of focusing on emotionally and thus politically unpromising technical problems of energy system replacement, when the main problem with climate change is political institutions that know the projected severity of climate change and action needed to avert it, but are choosing year-to-year to mostly replicate business as usual (replicating the inaction Gabriel discussed). It's fair to say that the challenge in avoiding dangerous climate change is not technical or scientific but motivational and political, however the CO₂-e framing emphasizes political effectiveness in the sense of requiring a broader coalition than just progressives for durable success. The challenge could be summarized as driving the reluctant to change, which is attended to in the CJ view of achieving profound systematic reform but not directly or explicitly in the CO₂-e view. Organizations like the Citizens Climate Lobby, which have been simultaneously working on climate change advocacy during the CFFD movement, suggest a possible model for issue-based and cross-partisan advocacy for climate change mitigation policies to limit the severity of the disturbance we cause and the loss and suffering that will result.

⁴⁵For an example of an effort to link climate change with economic inequality and police brutality, see: Alec Connon. What Do the Racial Wealth Gap, Police Brutality, and the Climate Crisis Have in Common? Wall Street. 2020. URL: https://www.commondreams.org/views/2020/07/08/what-do-racial-wealth-gap-police-brutality-and-climate-crisis-have-common-wall (visited on 08/13/2020).

⁴⁶Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. 105.

5.4.2 CJ implemented in the CFFD movement

While sometimes portrayed as an innovation of the CFFD movement or the kind of intersectional climate change organizing advocated by 350.org and the CYCC since 2012, the divide between conventional climate advocacy and climate justice activism was already evident in the NGO network active at the Copenhagen UNFCCC summit in 2009.⁴⁷ Hadden identified three "important intellectual currents" within this worldview or framing: putting priority on politics over climate science, skepticism about international institutions and a focus on decentralized approaches, and opposition to carbon markets.⁴⁸ These prior currents had an identifiable influence in the CFFD movement, though the aspects of climate justice emphasized by research participants are somewhat different and grounded more in ethics and the hope of solidarity than pragmatic notions about how to solve climate change institutionally. We can interpret the CFFD movement as having been shaped by lessons learned from the prior climate activism Hadden examined, especially the progressive loss of faith that conventional political strategies and institutions can address the problem.⁴⁹ The prescriptions arising from that analysis seem to have deepened the divide Hadden identifies between conventional advocacy and climate justice activism, particularly insofar as climate justice activists now often demand adherence to a broad range of views about the oppressive nature of global society and the fundamental inter-linkage between various movements for justice.

A public 350 Canada group strategy call in May 2020 was revealing about what can be seen as issue linkage shifting into an inversion of priorities, with a plan to promote a Green New Deal-style "Just Recovery" through virtual teach-ins (on account of the ongoing COVID-19 lockdown). The principles described include strengthening the social safety net, "prioritiz[ing] the needs of workers and communities," "build[ing] solidarity and equity across communities, generations, and borders," and "uphold[ing] Indigenous rights" but said nothing specifically about shutting down existing fossil fuel use, preventing new fossil fuel projects, or building alternatives to fossil fuel energy.^{50,51} The structural features of climate change discussed in the introduction are pertinent here.⁵² Because the fight against it is always long-term and largely for the benefit of others, it is understandable that activists are more easily motivated to work on things which promise a near-term or personal benefit, such as income redistribution and expanded social welfare schemes.^{53,54} The evolving prioritization within 350.org itself may also drive a self-selection effect in recruitment. When a certain political analysis is dominant within an organization it means those already in agreement with that view are most likely to be recruited. That leads to a false sense of broad public support for that political programme, while actually narrowing the range of views among those who may consider joining the group.

⁴⁷Hadden, Networks in Contention: The Divisive Politics of Climate Change, p. 89–141.

⁴⁸Hadden, Networks in Contention: The Divisive Politics of Climate Change, p. 122.

⁴⁹Hadden speculated that post-Copenhagen climate change activists may have refocused their activities from the international negotiations to domestic targets, along with a stronger emphasis on normative contestation as a means of movement building. Hadden, *Networks in Contention: The Divisive Politics of Climate Change*, p. 174–5.

 $^{^{50}350}$ Canada. Organizing for a Just Recovery: Mass Strategy Session with the 350 Canada Team. 2020. URL: https://youtu.be/h-FI2f91qHI (visited on 05/22/2020).

⁵¹Materials from other proliferators demonstrate a similar lack of focus on fossil fuel energy and alternatives. People & Planet's 2022 Power Shift conference programme included sessions on power and privilege; "radical reimagination in a world defined by oppression;" border detention, deportation, and surveillance; creative direct action; and confronting the fossil fuel industry at your university. People & Planet. Power Shift 2022: 5th — 19th July. 2022. URL: https://peopleandplanet.org/power-shift-2022 (visited on 05/19/2022).

⁵²For an extended discussion, see: Ilnyckyj, Structural Barriers to Avoiding Catastrophic Climate Change.

⁵³Wiktorowicz noted the role of Olson's conception of selective benefits for participation in a social movement, as part of a rational explanation of why people take part. Wiktorowicz, *Islamic Activism: A Social Movement Theory Approach*, p. 10.

⁵⁴Olson argued that a separate and selective incentive is needed for an individual in a latent group to behave in a group-oriented way. Creating a personal benefit for working to advance the group's interest encourages coordinated action: "social incentives... can distinguish among individuals: the recalcitrant individual can be ostracized and the cooperative individual can be invited into the centre of the charmed circle." Mancur Olson. *The Logic of Collective Action: Public Goods and the Theory of Groups.* Cambridge: Harvard University Press, 1965, p. 51, 61, 63, 72, 75, 133–4, 140, 159–61, 167.

In the end you risk being left with a small population which wrongly holds itself to be typical of the majority (as when Occupy presumed to represent 99% of the population when they evidently never had anything like that level of support, as shown by subsequent electoral outcomes) and is thus unable to understand why its preferred policies are not proposed or enacted by parties and politicians.⁵⁵ In a sufficiently self-selected group, the evangelical tendency to see their own conclusions as the natural end point of universal reasoning is strengthened when contact with public political debate is lost by a group that recruits and selects participants strongly based on conformity to existing political views among members.

The strategy call also demonstrated aspects of why I call 350.org a vanguard organization. An invitation to participate was sent out to a 350.org email list and over 250 people took part. At no point were those invited on the call asked about what they wanted or what ought to be done. Instead, organizers took it as a given that the those on the call agreed with their program of action and focused on mobilizing them in a pre-determined way: in this case, to hold virtual teach-ins about a "just recovery" to the COVID-19 crisis. The one interactive poll undertaken during the call demonstrated this directive style, offering only the option to commit to holding a teach-in or to commit to "amplifying" the teach-ins online. The strategy (income redistribution and a more expansive government support net) and tactic (virtual teach-ins, with centrally-provided slides and speaking notes) had been decided by 350.org staff before the call began. The same pattern held for subsequent 350.org organizing calls, demonstrating the paradox of the group cultivating a "grassroots" movement with strategy set at the centre and only implementation delegated outward.

The climate justice framing likely increased the level of resistance from university administrations. In part this is because language about large-scale persistent global injustices seemed overly political and controversial to their administrators. ^{56,57,58} It also fed concern that conceding to these demands about fossil fuel corporations would lead to an endless succession of further social justice demands, from the BDS movement to racial justice, police violence, private prisons, industrial agriculture, and all manner of other issues of concern to students and activists. Due to the wide-ranging nature of its demands and its emphasis on fundamental changes to how politics is practiced, the climate justice framework is inherently threatening to conservative status quo forces which universities rely upon for everything from funding to staff. The high willingness to see issues as linked in a climate justice framework also risks allowing it to be dismissed as part of a politically unsophisticated and marginalized idealist perspective held only by activists, often taken to be irrelevant or inferior to the practical perspectives of those seeking to advance their self-interest in narrow and immediate ways. 'Why should I try to save the climate when I can't afford to pay my bills?' is a line of reasoning welcomed and encouraged by pro-fossil fuel forces hoping to blunt the challenge to the way in which they have been powering the world, and dismissals of justice-based claims as naïve and impractical

⁵⁵In 2022, *The Economist* noted research by the Pew Research Center that found that only 12% of Democrats are progressives, and 70% of those are white (making it the least racially diverse Democratic group). The newspaper also reported that progressives are highly over-represented in campaign offices, advocacy groups, and the media. The Economist. *Democrats in America are Realising They Must Moderate or Die.* 2022. URL: https://www.economist.com/briefing/2022/07/14/democrats-in-america-are-realising-they-must-moderate-or-die (visited on 07/21/2022).

⁵⁶This is demonstrated by persistent concerns that fossil fuel divestment would be a "slippery slope" that would obligate universities to act in other areas as well. Jed Lenetsky said in an interview that the "really big fear" of the McGill administration was that CFFD would be a precedent for BDS.

⁵⁷McGray argued: "administrators resist divestment because of its hidden subversive potential as a slippery slope to an increased democratisation of capital. Even when not among the primary aims of divestment campaigns, their very existence serves to cast a certain amount of public scrutiny on institutions and call into question their level of austerity-privacy. Although yielding to calls to divest might dissipate such scrutiny in the short term, it could represent an institutional acknowledgement that this scrutiny is sometimes legitimate, opening the door to more challenges to their austerity-privacy." McGray and Turcotte-Summers, "Austerity-Privacy & Fossil Fuel Divestment Activism at Canadian Universities", p. 45–6.

⁵⁸On the slippery slope objection to CFFD, see also: Ilnyckyj, "Campus Fossil Fuel Divestment (CFFD) Counter-Repertoires", p. 19.

serve that agenda.⁵⁹

5.5 Climate justice within the CFFD movement

Mangat et al. argued that the social movement literature "typically situates the FFD movement in relation to climate justice, arguing this is the principal motivation for FFD activists." ^{60,61,62} This is supported by what Canadian CFFD activists told me in interviews. Whenever an interview participant mentioned the term "climate justice" I took the next opportunity to ask them to define what the term meant for them. The answers were very consistent, though sometimes with differences in emphasis. They also corresponded with definitions in the scholarly literature and connect to earlier discussion in the literature on "environmental justice." ⁶³ Bratman et al. explained that the call for environmental justice:

has since its earliest days served not just as impetus for new forms of environmental activism but also as a critique of mainstream environmentalism, contending that it too often ignores the protection of particular people and populations from social and political abuses. 64,65

This point relates closely to the idea of environmental racism: that the unsustainable lifestyles of the affluent and enfranchised are sustained at the cost of impacts on the health and safety of communities that supply the necessary materials and accept the resulting wastes. 66,67,68 Global emission statistics are also seriously distorted because imports to the rich world are counted as pollution from the countries of origin. Bratman et al. also argued that the climate justice movement began in the late 1990s and early 2000s, referencing a Climate Justice Summit organized around the UNFCCC meeting in 2000. 69,70 They identified the climate justice movement as an influential precursor to the CFFD movement. 71

Before elaborating on the internal tensions and limitations of the climate justice framing, it is worth describing the prominent role it has played in the CFFD movement. Scholarly analyses like those of Joe Curnow, Fiona Del Rio, and Eve Bratman et al. have emphasized both the prominence and the desirability of the framing. Climate Justice Toronto (CJTO), an activist group supportive of the Leap Manifesto divestment effort at U of T and prominent on social media in support of Indigenous resistance to fossil fuel projects, has adopted as their mission statement:

Be an irresistible and powerful movement that stops the climate crisis by confronting its root

⁵⁹Numerous counter-arguments against divestment are discussed in my APSA pre-print. These include the argument that fossil fuels are economically indispensable, as well as specific lines of argument used by resistant universities, governments, and fossil fuel corporations: Ilnyckyj, "Campus Fossil Fuel Divestment (CFFD) Counter-Repertoires", p. 26–9.

⁶⁰Mangat, Dalby, and Paterson, "Divestment Discourse: War, Justice, Morality and Money", p. 188-9.

 $^{^{61}\}mathrm{Bratman}$ et al., "Justice is the Goal: Divestment as Climate Change Resistance".

⁶²Noel Healy and John Barry. "Politicizing Energy Justice and Energy System Transitions: Fossil Fuel Divestment and a 'Just Transition". In: *Energy Policy* 108 (2017), pp. 451-459. URL: https://www.sciencedirect.com/science/article/pii/S0301421517303683 (visited on 01/01/2020).

⁶³Klein cited the 1991 First National People of Color Environmental Leadership Summit as establishing a set of principles "that remains a movement touchstone to this day." Klein, *This Changes Everything: Capitalism vs. The Climate*, p. 205.

⁶⁴Bratman et al., "Justice is the Goal: Divestment as Climate Change Resistance".

⁶⁵Luke W. Cole and Sheila R. Foster. From the Ground Up: Environmental Racism and the Rise of the Environmental Justice Movement. New York: NYU Press, 2001.

⁶⁶See: Robert D. Bullard. Unequal Protection: Environmental Justice and Communities of Color. San Francisco: Sierra Club Books, 1996.

⁶⁷Cole and Foster, From the Ground Up: Environmental Racism and the Rise of the Environmental Justice Movement.

⁶⁸Klein, This Changes Everything: Capitalism vs. The Climate, p. 106.

⁶⁹Bratman et al., "Justice is the Goal: Divestment as Climate Change Resistance", p. 679–80.

 $^{^{70}}$ Schlosberg and Collins, "From Environmental to Climate Justice: Climate Change and the Discourse of Environmental Justice".

⁷¹Bratman et al., "Justice is the Goal: Divestment as Climate Change Resistance", p. 680.

causes: capitalism, colonialism, and white supremacy.⁷²

As Amanda Harvey-Sánchez, an organizer in the first U of T divestment campaign, explained:

The struggle for economic, social, racial, and environmental justice is not something that will be 'won' in any single campaign, but rather a life-long endeavour that we work towards across movements and generations. We learn from each campaign (win or lose), and most importantly, we grow our movements at every step along the way.⁷³

This perspective can be contrasted with a narrow interest-based analysis in which those with a status quo interest in continued or expanded fossil fuel use seek to influence government policy. Instead, the CJ analysis reveals the assumptions, ideologies, and power structures which favour status quo actors in their efforts and make governments sympathetic to their policy preferences. ^{74,75,76,77,78,79,80,81,82} It also provides a comprehensive political analysis running from root causes, to a theory of change, to an appealing vision for a post-carbon global society. For the marginalized people whom the climate justice movement seeks to incorporate and foreground, it also promises near-term non-climatic benefits if the movement succeeds, which is especially important for those so overwhelmed by societal injustices that it seems impossible to prioritize the energy mix in 2050 or 2100 over matters of immediate and personal importance. ⁸³ There is more of a moral, emotional, and personal incentive to take part in a movement that promises to improve working conditions and reduce discrimination than one principally organized for the benefit of future generations and non-human nature. ^{84,85}

 $^{^{72}}$ Quinton Bradshaw. Climate Justice TO. 2022. URL: https://www.cjru.ca/project-feature/climate-justice-to/(visited on 06/20/2022).

⁷³ Amanda Harvey-Sánchez. Thank You, Bernie Sanders: A Climate Activist's Thoughts on the Next Steps for the Political Revolution. 2020. URL: https://ricochet.media/en/3032/thank-you-bernie-sanders (visited on 04/17/2020).

⁷⁴Tamara Toles O'Laughlin argued: "The call to 'defund police' isn't that much of a stretch from divestment from the fossil fuel industry — a commonly accepted rallying cry in many environmental advocacy circles" and asserted: "And it's not just about carbon emissions. Racism is deeply embedded in the business model of the fossil fuel industry. In order to extract resources, there are always 'sacrifice zones,' usually Black, Indigenous, or other communities of color that are put in harm's way and plunged into a violent and multigenerational cycle of economic disinvestment. The history of devastation and the disproportionate impacts of the climate crisis on people of color are well known." Tamara Toles O'Laughlin. If You Care About the Planet, You Must Dismantle White Supremacy. 2020. URL: https://grist.org/fix/opinion-if-you-care-about-the-planet-you-must-dismantle-white-supremacy/ (visited on 07/12/2020).

⁷⁵ For other arguments for why a climate change mitigation movement must be intersectional, see: Angely Mercado. What Does Pollution Have to do With Police Violence? 2020. URL: https://grist.org/justice/pollution-police-george-floyderic-garner-covid/ (visited on 07/12/2020).

⁷⁶Colleen Lynch. Toronto350 Statement on Defunding the Police. 2020. URL: https://www.toronto350.org/toronto350_statement_on_defunding_the_police (visited on 07/12/2020).

⁷⁷Vancouver Just Recovery Coalition. Vancouver Just Recovery Statement on Defunding the VPD and Supporting Black and Vulnerable Communities. 2020. URL: https://www.vancouverjustrecovery.ca/defund-vpd-and-support-black-commun (visited on 07/12/2020).

⁷⁸Jennifer Deol. Climate Justice Means Justice for Black Lives. 2020. URL: https://medium.com/@350Canada/climate-justice-means-justice-for-black-lives-19d794d4ec3 (visited on 07/12/2020).

⁷⁹Angela Park. Everybody's Movement: Environmental Justice and Climate Change. 2009. URL: https://climateaccess.org/sites/default/files/Everybodys-movement-climate-social-justice.pdf (visited on 07/12/2020).

⁸⁰ Climate Justice Alliance. Just Transition Principles. 2017. URL: https://drive.google.com/file/d/OBxqkHpiiFq_eWk9QR1JwNFRDSndzZEVwRmtWZkZFcXdWWTBn/view (visited on 07/12/2020).

⁸¹Carol Linnitt. 'This is About Vulnerability': Ingrid Waldron on the Links Between Environmental Racism and Police Brutality. 2020. URL: https://thenarwhal.ca/vulnerability-ingrid-waldron-environmental-racism-police-brutality/(visited on 07/12/2020).

^{82350.}org. 350.org Holds Webinar on Dismantling White Supremacy, Calls on Climate Movement to Prioritize Racial Justice and Show Up for Black Lives. 2020. URL: https://350.org/press-release/webinar-climate-m4bl/ (visited on 07/12/2020).

⁸³ This aligns with Olson's emphasis on the importance of selective incentives to encourage participation in social movements.
Olson, The Logic of Collective Action: Public Goods and the Theory of Groups.

⁸⁴Some CFFD organizers have argued that a movement focused exclusively on controlling climate change would not appeal to them. For example, Amil in the first U of T campaign argued: "That is not the goal of the campaign. That's not the reason I get involved in any climate change or environmental struggle... my focus is on justice. And this is a way of getting to that. I see all of our struggles as being linked." Curnow, "Politicization in Practice: Learning the Politics of Racialization, Patriarchy, and Settler Colonialism in the Youth Climate Movement", p. 105.

⁸⁵Lila, also from the first U of T campaign, argued: "It's not just divesting. If we divest and that's it, we've failed. We have

Many CFFD campaigns adopted a climate justice framing from the outset. At UBC, by contrast, Stephanie Glanzmann described how the initial faculty-driven campaign took the minority climate-energy view within the CFFD movement and sought to prioritize engagement specifically on climate change with as many groups and people as possible, rather than developing strong ties of solidarity with non-climate justice-based campaigns on campus. This approach did not persist, however, and Glanzmann described how in the two years prior to our 2018 interview the group was "very much embracing" the more intersectional view. This helps demonstrate that the climate justice perspective has become dominant, as encouraged by proliferators.

The climate justice perspective has been developed and strongly promoted by climate change proliferator organizations. In the "About" section on their website, 350.org described a perspective on intersectionality:

Climate change is not just an environmental issue, or a social justice issue, or an economic issue — it's all of those things at once. The only way we will be strong enough to put pressure on governments and stand up to the fossil fuel industry is if we all work together. That means bringing people together and building diverse coalitions — from students, to labor unions, human rights and social justice groups; from marginalized communities and faith groups, to universities, business owners and all those who believe in the need for transformational change. 86

Their 2018 annual report included a section called "Expanding Progressive Movement Partnerships in the U.S." which described partnerships with the Poor People's Campaign and Keep Families Together Coalition.⁸⁷ Similarly, Toronto350.org issued a statement in solidarity with Black Lives Matter.^{88,89} These examples demonstrate the advantages of emotional salience and coherence among political objectives which have helped the climate justice framing become popular, but also indirectly demonstrate the limits of who can be motivated by this analysis and how quickly it can lead to changes in where we get our energy from.

5.6 Purity versus effectiveness

A central concern of CFFD campaigns has been living up to their own ideals, including in terms of the composition of their membership, their methods for making decisions, and the demands they make of

to build something bigger." Curnow and Gross, "Injustice Is Not an Investment: Student Activism, Climate Justice, and the Fossil Fuel Divestment Campaign", p. 381.

 $^{^{86}350.}$ org. 350.org — About. 2019. URL: https://web.archive.org/web/20190513130218/https://350.org/about/ (visited on 05/23/2019).

^{87350.}org. 2018 Annual Report: Growing + Organizing the Climate Movement. 2019. URL: https://350.org/2018-annual-report-organizing/ (visited on 05/23/2019).

^{§8} Tresanne Fernandes. Black Lives Matter-Toronto #BLMTOTENTCITY Solidarity Statement. 2016. URL: https://web.archive.org/web/20190524063017/https://www.toronto350.org/black_lives_matter_toronto_blmtotentcity_solidarity_statement (visited on 05/23/2019).

⁸⁹See also: Naomi Klein. Why BlackLivesMatter Should Transform the Climate Debate. 2014. URL: https://www.thenation.com/article/what-does-blacklivesmatter-have-do-climate-change/(visited on 07/04/2019).

others. ^{90,91,92,93,94} This was prompted in part by the routine accusations from fossil fuel advocates that climate change activists are hypocrites, though such comments are often either disingenuous or non sequiturs. ^{95,96,97,98} Indeed, a standard method for redirecting discussion away from a proposed climate change mitigation measure is to refocus on the moral failings of some other group: Why regulate Canadian oil when the government of Saudi Arabia is so much more oppressive? ^{99,100,101,102} Why listen to advocates of climate action like Al Gore when they personally produce large emissions by flying? The broader societal context, where these hypocrisy allegations are interpreted as policy relevant, in combination with the dynamics among activists working on various causes today, helps produce a strong emphasis on campaigns being inclusive, non-hierarchical, and committed to all forms of progressive social, economic, and racial justice. In part prompted by proliferator organizations, CFFD campaigns also had a strong focus on internal equity and interrogating oppressive power structures within their own membership and activities. ¹⁰³ On a micro scale, this can be seen in a 350.org recruiting ad specifying that they are "looking for a fast learner & skilled writer

⁹⁰Belliveau described "how campaigns struggle to live up to their stated intentions and climate justice values." Belliveau, "Climate Justice in the Fossil Fuel Divestment Movement: Critical Reflections on Youth Environmental Organizing in Canada", p. 53.

p. 53.

91 Lakanen described how climate change activists experienced self-consciousness in trying to prove that they were not hypocrites and that criticism between activists fed alienation. Lakanen, "'A Battle for the Soul of the Climate Movement': The Expansion of the Intersectional Climate Justice Frame Among Young Activists in Canada", p. 170–4.

⁹²Tormos-Aponte and Garcia-Lopez linked this to the First National People of Color Environmental Leadership summit in 1991 and the Working Group meeting on Globalization and Trade which drafted the Jemez Principles for Democratic and Inclusive organizing in 1996. Tormos-Aponte and Garcia-Lopez, "Polycentric Struggles: The Experience of the Global Climate Justice Movement", p. 288.

⁹³These principles feature many elements of the climate justice framing: inclusiveness within campaigns, bottom-up organizing, foregrounding the voices of frontline communities, and broad intersectionality among progressive activists. Southwest Network for Environmental and Economic Justice. *Jemez Principles for Democratic Organizing*. 1996. URL: https://www.nrdc.org/sites/default/files/jemez-principles-organizing.pdf (visited on 01/09/2020).

⁹⁴See also: Fernando Tormos-Aponte. "Mobilizing Difference: The Power of Inclusion in Transnational Social Movements". PhD thesis. Purdue University, 2017. URL: https://search.proquest.com/docview/1960621571 (visited on 01/09/2020).

⁹⁵There are several plausible rejoinders to the idea that calls for decarbonization from people who rely on fossil fuels are invalid. First, it confuses the scope of change that is possible through individual choices with what could be possible through policy at the national and global levels. Second, it is based on the faulty assumption that people living in an unjust system must forswear it entirely along with all its benefits in order for their critiques to be valid. Third, an individual's actions aren't strictly relevant for evaluating whether their claims are true or not.

⁹⁶On critics accusing environmentalists of hypocrisy because of their personal behaviour and reliance on fossil fuels, see: Zoe Williams. When Calling Out Environmental Hypocrisy is Nothing but a Cynical Ploy. 2019. URL: https://amp.theguardian.com/commentisfree/2019/aug/23/environmental-hypocrisy-climate-crisis-green-politics (visited on 07/26/2022).

⁹⁷Robin McKie. Climate Change Deniers' New Battle Front Attacked. 2019. URL: https://www.theguardian.com/science/2019/nov/09/doomism-new-tactic-fossil-fuel-lobby (visited on 11/14/2019).

⁹⁸ Thomas Sinclair. The Real Problem of Hypocrisy for Extinction Rebellion. 2019. URL: https://medium.com/extinction-rebellion/the-real-problem-of-hypocrisy-for-extinction-rebellion-4a6851dcdeb7 (visited on 07/26/2022).

⁹⁹In 2021, Saudi Arabian oil minister Abdulaziz bin Salman said: "We are still going to be the last man standing, and every molecule of hydrocarbon will come out." Javier Blas. *The Saudi Prince of Oil Prices Vows to Drill 'every last molecule'*. 2021. URL: https://financialpost.com/commodities/energy/oil-gas/the-saudi-prince-of-oil-prices-vows-to-drill-every-last-molecule (visited on 08/25/2022).

¹⁰⁰ In 2020, Alberta premier Jason Kenney had said: "It is preferable that the last barrel in that transition period comes from a stable, reliable liberal democracy with among the highest environmental, human-rights and labour standards on earth." Don Braid. In Public Shift, Kenney Says Alberta has to Go Green Over Time. 2020. URL: https://calgaryherald.com/news/politics/braid-in-public-shift-kenney-says-alberta-has-to-go-green-over-time (visited on 08/25/2022).

¹⁰¹Jacob Rees-Mogg, who was appointed Secretary of State for Business, Energy and Industrial Strategy under the Liz Truss government in the UK in September 2022, told staff that "Britain must get every cubic inch of gas out of North Sea." Helena Horton. Rees-Mogg: 'Britain must get every cubic inch of gas out of North Sea.' 2022. URL: https://www.theguardian.com/politics/2022/sep/23/rees-mogg-tells-staff-britain-must-get-every-cubic-inch-gas-out-of-north-sea (visited on 09/25/2022).

¹⁰² See also: John Harris. The British Right's Hostility to Climate Action is Deeply Entrenched — And Extremely Dangerous. 2022. URL: https://www.theguardian.com/commentisfree/2022/nov/13/british-right-climate-action-fires-floods-tories (visited on 11/27/2022).

¹⁰³This is taken even further in Curnow's militant ethnography methodology, as it is based on the view that "it is inadequate for researchers to merely observe or even accompany the political contestation that has such significant consequences for research-subjects' lives, but that researchers must be engaged in their struggle." Curnow, "Politicization in Practice: Learning the Politics of Racialization, Patriarchy, and Settler Colonialism in the Youth Climate Movement", p. 36.

who is committed to anti-oppression principles."¹⁰⁴ On a macro level it is evident in the policy linkages CFFD organizers champion, the members they seek to recruit, and the alliances they have been building. One Canadian CFFD organizer explained:

The biggest issue we had in the year when we escalated a lot is that not all organizers believed that we needed to get the support of the university [community]. Some people felt that if we were trying to open up and get more student support and more organizers, then that meant that we were compromising our values by, let's say, accepting people who weren't justice oriented and didn't understand our anti-racist policies. And it wasn't people who were racist. I don't think it was people who were considered problematic. The worry was more like there would be an issue in the future if people came in and didn't know enough about anti-oppression. That was a big source of debate because a lot of other people felt that we needed to gain more passive and active supporters in order for our campaign to go somewhere and also that — you know how I talked about the small group of 'better than thou' progressive students — I think a lot of people were trying to work against that and we felt that if we didn't include more students then we would always be known as just like a little radicalist campaign group.

How strict an ideological screen to apply to prospective organizers is one dimension of how commitment to particular principles in organizing affects the practical choices of campaigns. There is also a question of relative emphasis, between seeking to achieve ideals of equity in organizing within campaigns and seeking to influence outside actors who are generally indifferent to such considerations. This tension between idealism and pragmatism can be seen as well when movement leaders like Thunberg and McKibben de-platformed themselves in favour of marginalized voices. As identified in the quote above, there is also a degree to which an organization's membership affects the perception in the public and among decision makers of the type of framing they seek to employ, potentially allowing them to be dismissed as impractical, unrealistic, or naïve.

Theoretically, these dynamics establish a tension between short-term campaign effectiveness in terms of institutional response and a long-term vision for the composition and organization of the movement. For instance, a campaign might take advantage of the existing (unjust) influence and priority granted by university administrators to individuals who represent historically advantaged groups. Many Canadian campaigns did this by seeking endorsements and support from high-profile alumni and donors. ^{106,107,108} Alternatively, campaigns can adopt counter-hegemonic practices of foregrounding members of historically disadvantaged groups, improving their internal dynamics in terms of anti-oppressive principles popular with many activists, but conceivably making it harder to influence target administrations likely to be resistant to demands from people who lack power. ¹⁰⁹ At the same time, the long-term process of internalizing anti-

 $^{^{104}350}$ Canada. Our team is hiring a new Digital Organizer. We're looking for a fast learner & skilled writer who is committed to anti-oppression principles. We welcome candidates with a range of experience working for justice. 2018. URL: https://twitter.com/350canada/status/1059600693823033344 (visited on 08/31/2022).

¹⁰⁵Karl Mathiesen. Greta Thunberg Doesn't Want You to Talk About Her any More: The Swedish Activist has a new Message: Don't Just Listen to the Science, Listen to the Most Vulnerable. 2022. URL: https://www.politico.eu/article/greta-thunberg-climate-change-activism-fridays-for-future-profile-doesnt-want-you-to-talk-about-her-anymore-2022/(visited on 09/14/2022).

¹⁰⁶ For example, the first U of T campaign secured endorsements from David Suzuki, Tzeporah Berman, and Naomi Klein. Toronto350.org. *Divestment Supporters*. 2015. URL: https://www.toronto350.org/divestment_supporters (visited on 08/23/2020).

¹⁰⁷ Divest McGill organized a diploma-returning ceremony for alumni in 2016. Martin Lukacs. Why Graduates of a Top Canadian University are Returning Their Diplomas. 2016. URL: https://www.theguardian.com/environment/true-north/2016/mar/15/why-graduates-of-a-top-canadian-university-are-returning-our-diplomas (visited on 07/26/2022).

¹⁰⁸ Sean Price noted in an interview that the Queen's campaign circulated a large research document, including to alumni. An organizer from the SFU campaign described alumni outreach as a major area of strategic effort, along with board relations. A UBC organizer said that convincing alumni and donors to withdraw donations could be an effective pressure tactic.

¹⁰⁹Notably, Bill McKibben's justification for stepping back from an "active" to an "emeritus" role at 350.org in July 2020 was chiefly about reducing his own visibility in comparison to "different kinds of voices" which "need to be at the forefront."

oppressive principles within campaigns is seen by some justice-oriented organizers as a necessary part of building a broad effective movement capable of overturning the existing power structures which perpetuate climate change and other forms of injustice. That perspective is compatible with the idea that the most important consequence of the CFFD movement was how it developed activists, in many cases leaving them with a strong sense that climate change cannot be addressed in the absence of a programme to address related injustices also arising from capitalism, colonialism, and patriarchy.

Being uncompromising also affects coalition formation. Climate change activists who demand certain policy positions on issues which they see as linked but which may not be fundamental to decarbonization may have a harder time courting the support of potential allies. Choosing to support BDS despite the lack of a clear connection to climate change is an example. At the same time, demanding action across a broad agenda may deepen the resolve of those who are opposed to climate action and potentially add allies to the pro-fossil coalition through issue linkages some people find intolerable. These effects may be worsened by a persistent tendency on the progressive left to overestimate public support for their proposed policies and to misinterpret public opinion polls which reflects weak or abstract support for a meaningful commitment. 111,112,113,114,115,116,117 For instance, despite their claim to speak for "the 99%" the Occupy movement in North America was not accompanied by electoral success for parties endorsing their redistribu-

McKibben, A Letter to My Colleagues at 350.org (and Friends in the Broader Movement), (italics in original).

¹¹⁰For example, numerous Canadian CFFD campaigns argued that fossil fuel divestment should be part of universities' efforts at fostering Indigenous reconciliation, while university administrations refused to recognize the linkage. Certainly the hope that the CFFD movement will contribute to the eventual abolition of capitalism is at odds with the common ideological positions of university board members and administrators.

¹¹¹ For example, despite the belief of many progressives that defunding the police is popular, Gallup found in summer 2020 that "nearly equal proportions of Black Americans say they would like the police to spend more time in their area (20%) as say they'd like them to spend less time there (19%)" and a CNBC poll found 68% of respondents were very or somewhat favourable to their local police department compared to 14% somewhat or very unfavourable — calling into question the breadth of public support for policies to defund or abolish the police. Lydia Saad. Black Americans Want Police to Retain Local Presence. 2020. URL: https://news.gallup.com/poll/316571/black-americans-police-retain-local-presence.aspx (visited on 08/28/2020).

¹¹²CNBC and Change Research. Change Research — CNBC 'State of Play' Poll National Likely Voters. 2020. URL: https://9b1b5e59-cb8d-4d7b-8493-111f8aa90329.usrfiles.com/ugd/9b1b5e_60ae756d4809453cb978652c93db3747.pdf (visited on 08/28/2020).

¹¹³In 2021, The Economist called "defund the police" "one of the most counterproductive political slogans of recent times," noting reversals in Minnesota, Baltimore, and Oakland The Economist. Violent Crime is Rising in American Cities, Putting Criminal-justice Reform at Risk. 2021. URL: https://www.economist.com/leaders/2021/06/05/violent-crime-is-rising-in-american-cities-putting-criminal-justice-reform-at-risk (visited on 06/17/2021).

 $^{^{114}} The \ Economist.\ Liberals\ and\ Crime\ Spikes.\ 2021.\ URL:\ https://www.economist.com/united-states/2021/06/05/liberals-and-crime-spikes\ (visited\ on\ 06/17/2021).$

¹¹⁵ See also: John Avlon. Deep Blue Cities Don't Want to 'Defund the Police'. 2021. URL: https://edition.cnn.com/2021/06/24/opinions/new-york-voters-in-a-moderate-mood-avlon/index.html (visited on 06/25/2021).

of the 2012 presidential election loss by the US Republican Party included the comment: "Devastatingly, we have lost the ability to be persuasive with, or welcoming to, those who don't agree with us." The Economist. America's Battle over Election Laws. 2021. URL: https://www.economist.com/united-states/2021/03/13/americas-battle-over-election-laws (visited on 08/27/2021).

¹¹⁷ Shushannah Walshe. RNC Completes 'Autopsy' on 2012 Loss, Calls for Inclusion Not Policy Change. 2013. URL: https://abcnews.go.com/Politics/OTUS/rnc-completes-autopsy-2012-loss-calls-inclusion-policy/story?id=18755809 (visited on 08/27/2021).

tion agenda. 118,119,120,121,122,123,124,125 This tendency to overestimate support leads to a misreading of the political situation and thus to ineffective strategies and policy positions which alienate rather than attract much of the mass public. Furthermore, in cases where activist policy preferences *are* enacted, this limited support leaves them vulnerable to subsequent reversal by centrist and right-wing governments.

Tension between how organizers conform with their own values versus how much they win their target objectives from others was perceptible among 350.org and CYCC staff. In one interview, I asked about whether the pan-progressive approach risks producing fragile climate mitigation policies likely to be reversed by the next more right-wing government, and about the risk that linking many non-climate issues to the struggle will alienate more potential supporters than it will attract. The staff member's response first highlighted the analysis that climate change has only emerged as a problem because of structural injustice, and then argued that any desirable solution must improve the conditions in vulnerable communities and empower them. The staffer argued that we can't replace the fossil fuel industry with a renewable power industry which similarly violates Indigenous rights because we "can't replace injustice with injustice." At a minimum, this perspective can be criticized for lack of prioritization — asserting that a broad set of political problems are similarly urgent contradicts the emphasis within the climate change activist movement on the urgency of taking action, which itself echoes the scientific conclusions of the IPCC and economic analyses like the Stern Review. At a maximum, this arguably reflects a 'let justice be done though the heavens fall' attitude, in which experiencing catastrophic climate change while trying to follow a fully laudable ethical agenda is preferable to avoiding catastrophe through morally staining compromises and granting lesser precedence to non-existential issues. 126,127,128 This view dismisses the need for Gabriel's strategic compromise. Climate activists whom I pressed on this point often fell back to a pragmatic argument, saying the intersectional and pan-progressive approach is both the most moral and the only potentially successful strategy. That claim, however, seems unjustified based on the development of climate change politics to date,

¹¹⁸For instance, even within the NDP the Leap Manifesto was controversial. After being created in 2015, it was not adopted as part of the next NDP election platform under Thomas Mulcair. In the October 2015 election, the NDP won 19.72% of the vote and lost 51 seats. At their 2016 convention, the NDP voted to debate the manifesto in riding associations rather than adopt it. This illustrated how even on the political left this sort of broad agenda cannot find full support.

¹¹⁹See: Canadian Press. A Few Facts Comparing Mulcair's Moderate Agenda to the Leap Manifesto. 2016. URL: https://archive.canadianbusiness.com/business-news/ndps-adoption-of-leap-manifesto-would-signal-end-of-mulcairs-moderate-agenda/ (visited on 07/26/2022).

 $^{^{120} \}mathrm{Barry}$ Weisleder. Tom Mulcair's Plea for Redemption. 2016. URL: https://nowtoronto.com/tom-mulcair-plea-for-redemption (visited on 07/26/2022).

¹²¹ Canadian Press. Leap Manifesto: NDP Agrees to Explore Staunch Stance on Fossil Fuels. 2016. URL: https://www.cbc.ca/news/politics/ndp-to-debate-leap-manifesto-1.3529570 (visited on 07/26/2022).

¹²² Daniel León Rodríguez. Leap Manifesto Highlights Divisions Within NDP. 2016. URL: https://www.nationalobserver.com/2016/04/12/news/leap-manifesto-highlights-divisions-within-ndp (visited on 07/26/2022).

¹²³ Sarah Bridge. A Look at the Leap Manifesto That is Dividing the NDP. 2016. URL: https://www.cbc.ca/news/politics/ndp-leap-manifesto-policy-1.3538439 (visited on 07/26/2022).

¹²⁴ Avi Lewis. Sorry, Pundits of Canada. the Leap Will Bring Us Together. 2016. URL: https://www.theglobeandmail.com/opinion/sorry-pundits-of-canada-the-leap-will-bring-us-together/article29629853/ (visited on 07/26/2022).

¹²⁵CBC News. Avi Lewis Rules Out Run for NDP Leadership, Says Leap Manifesto Still 'going strong'. 2016. URL: https://www.cbc.ca/news/politics/avi-lewis-ndp-leap-manifesto-1.3763855 (visited on 07/26/2022).

¹²⁶For substantiation of the claim that climate change could pose an existential threat to humanity see the discussion of warming scenarios of 4 °C in the summary of climate science in the political opportunities chapter.

¹²⁷Belliveau, Rowe, and Dempsey argued that the divestment movement included "political perfectionism" that could be counterproductive: "given the fundamental messiness and unpredictability of the political terrain... waiting for the ideal tactic, campaign, organization, or movement that perfectly reflects one's principles can result in inaction, disconnection, and even resentment." They also identified "the left's tendency toward political perfectionism" and how "leftists can easily confuse righteous critique with political efficacy" — especially "in the absence of political power" where "righteousness can seem like the next best thing." Belliveau, Rowe, and Dempsey, Fossil Fuel Divestment, Non-reformist Reforms, and Anti-capitalist Strategy, p. 454, 463–4.

¹²⁸ An organizer at Dalhousie argued that environmentalists must support Black Lives Matter and Idle No More, and that it is "morally repugnant" to "fight for one kind of justice while ignoring another kind of injustice," concluding that: "I don't think one campaign can effectively win unless we all win."

both because pan-progressive allyship hasn't yet encouraged good climate policy in major economies and because there are cases of compromises with ideological opponents being successful, like collaborating with right-wing opponents of eminent domain to resist pipelines or other fossil fuel infrastructure development. The claim is also literally unprovable given that we cannot know in advance what strategies will succeed in solving an unprecedented problem.¹²⁹

Unwillingness to separate climate change activism from the pursuit of more fundamental changes in the organization of society turns being uncompromising into a point of pride or feeling of superiority. The perspective that the fight to control how much the planet warms must be linked to a set of potentially harder to win and not necessarily directly relevant other fights may seem unstrategic, but we need to consider the three core strategic objectives for the divestment movement.¹³⁰

Intersectional anti-racist and anti-colonial critiques may indeed frighten university administrators and reduce the odds of the direct aim of divestment — changes in investment policy by target institutions. At the same time, the broader processes of delegitimizing the fossil fuel industry and developing student activists may be better served by such campaigns. Since nearly everyone agrees that the secondary knock-on effects of divestment are more important than the direct ones, it is possible that the usefulness of advancing these latter two aims outweighs the elevated risk a campaign will be rejected by the target organization. 131,132,133,134,135,136,137,138,139 Some organizers may prefer a campaign which emphasizes solidarity and intersectionality and which fails to convince the target administration to divest over a narrowly focused campaign which is successful in its most direct aim but leaves the decision makers' broader political analysis unchanged. Seeing activist development of this type as a climate success, however, depends on the climate justice perspective eventually becoming appealing to policy makers and the mass public. Otherwise, it may sustain the entrenched dynamic where even left-wing parties are too nervous to admit that climatic sta-

 $^{^{129}}$ Taylor and Jaffe noted that since there is no geological record of climate change as rapid as what we are causing now paleoclimate records "provide only a partial analogy." Jaffe and Taylor, $The\ Physics\ of\ Energy$, p. 727.

¹³⁰On the multiple strategic goals of the movement, see: The CFFD movement's three strategic objectives p. 5

¹³¹Divestment proliferator staff members and campaign organizers stressed that delegitimizing the fossil fuel industry and building the climate activist movement were more important than getting universities to sell their fossil fuel stock holdings.

¹³²An organizer from the Ryerson campaign explained: "Divestment is about the stigmatization and the movement building. That's what will carry things forward. The idea is that we take away the social license – so, like, the entire thing is about taking fossil fuels and turning those into toxic investments." Curnow and Gross, "Injustice Is Not an Investment: Student Activism, Climate Justice, and the Fossil Fuel Divestment Campaign", p. 373.

¹³³Commenting on the Laval precedent, where the administration agreed to divest after a single meeting, a UVic organizer explained: "I think having some resistance helps build a campaign. You see in the pipeline campaigns in BC too — your resistance builds your movement" and noted that LeadNow "found organizing much more difficult after Harper was defeated." ¹³⁴An interview participant described how the Divest Dal campaign achieved many of its objectives, including delegitimizing the fossil fuel industry and acting as a "meeting place and a training place for young activists," going on to say "there would almost have been a downside to Dal divesting early."

¹³⁵An organizer from Dalhousie noted that if the school had agreed to divest in 2014 they may not have been able to find an equally engaging task for students and may not have recruited the people who joined later. She explained: "I don't know who or where I would be now if it weren't for Divest Dal."

¹³⁶Describing the Mount Allison campaign, an interview participant argued that opposition from the administration helped the campaign motivate and develop activists, radicalizing them and changing their perspective on how change can be brought about. They emphasized how the campaign remained strong for six years despite total turnover of membership and in so doing "has created a lot of student leaders." Furthermore, if the administration had said yes to divestment early on "the group wouldn't have had the same presence on campus" and "wouldn't have affected or touched as many people."

¹³⁷UVic CFFD organizer Peter Gibbs said: "One of the things that we actually needed was for the university to be somewhat resistant: for there to be a conflict to look at, and for the media to report on, and for us to talk about."

¹³⁸Similarly, Élisabeth Bruins described how the Waterloo campaign lost purpose and momentum, and experienced a lot of turnover, after a successful student vote on the Waterloo Environment Students Endowment Fund (WESEF) which many organizers had mobilized for specifically. This contradicts the perspective on momentum in which any win adds to morale and the odds of future successes.

¹³⁹When she describing "shantytowns" which were erected as part of anti-apartheid divestment — and some of which were destroyed with sledgehammer by counter-protestors — Soule argued that resistance can help spread and strengthen movements, in this case by bringing a great deal of media attention which spread awareness about the divestment movement across America. Soule, "The Student Divestment Movement in the United States and Tactical Diffusion: The Shantytown Protest", p. 858.

bility requires fossil fuel abolition, while right-wing parties opportunistically capitalize on how voters often feel threatened by and resistant to demands for lifestyle change, with the two sides working together to unintentionally delay decarbonization until catastrophe is assured.

One potentially misleading claim in the analysis of Curnow et al. is that, after the U of T divestment rejection and the campaign's condemnatory rally and oily footprint action, they said the "Radicals" "were angry, ready to escalate their tactics, and highly politicized." ^{140,141,142} In fact, the campaign dissolved in acrimony in the aftermath of that action and undertook no more efforts to achieve divestment. This is indirectly acknowledged in the same text when the authors refer to "the last rally." Doubtless, some CFFD organizers from the U of T campaign have continued with climate and social justice activism, but it was not within the organization that had been created to urge divestment and it was not noticeably directed toward that organization's former objectives. There was some intention to establish an Environmental Justice Collective to continue pursuing a radical and intersectional approach to divestment at U of T, but that organization never emerged to the extent that it engaged in public messaging or actions. When the divestment cause was taken up again at U of T, it was by a student Leap Manifesto chapter which broadly employed the same tactics as the prior UofT350.org campaign and maintained a similar CJ framing, though it shifted its strategy to target constituent colleges rather than the university itself. Roxana Erazo emphasized how the Leap group has maintained the UofT 350.org group's focus on climate justice:

I think there's been a huge change in the way that people talk about climate change. Now everything is seen through a climate justice framework, as opposed to an abstract science issue that people found hard to connect with. Now people see it as a social justice issue, which it is, and people are learning more about how fossil fuels directly impact communities that are already struggling.¹⁴³

The climate justice focus was not a spontaneous development of either the Toronto350.org or Leap Manifesto U of T campaign, but something present in the culture of progressive activism and 350.org's framing of the rationale for divestment from the outset. The people who created the campaign in a box think of themselves as climate justice organizers, yet participants in some CFFD campaigns progressively understood their own actions as a rejection of entrenched patriarchal, colonial, and capitalist power structures within climate change and environmental activism itself. 145

Curnow, Davis, and Asher's analysis may also overstate the practical incompatibility of disagreements about framing, tactics, and messaging between "Radicals" and "Reasonables." They present the speech made by a campaign member inside a board of governors meeting and the rally taking place outside as though they

¹⁴⁰Curnow, Davis, and Asher, "Politicization in Process: Developing Political Concepts, Practices, Epistemologies, and Identities Through Activist Engagement", p. 717.

¹⁴¹At the first town hall meeting held by the "Divestment & Beyond" campaign at U of T in January 2020, Julia De Silva (effectively the head of the second Leap Manifesto-run divestment campaign at U of T) said there was no active student campaign for fossil fuel divestment at the time they initiated theirs.

¹⁴²Maina-Okori et al. made a similar claim to Curnow's about the movement as a whole in Canada: "The escalation to direct action evident among campaigners show that these roadblocks have only invigorated the movement and students are reemerging stronger." Maina-Okori, Murray, and McKenzie, "Climate Change and the Fossil Fuel Divestment in Canadian Higher Education: The Mobilities of Actions, Actors, and Tactics (journal pre-proof)", p. 22.

 $^{^{143} \}text{Justin Fisher.} \ \textit{University of Toronto Students Leap Towards a Fossil Free Future.} \ 2019. \ \text{URL: https://theleap.org/portfolio-items/university-of-toronto-students-leap-towards-a-fossil-free-future/ (visited on <math>10/12/2019$).}

¹⁴⁴Describing the successive emergence of "environmental justice" and "climate justice" from the 1970s to the early 2000s, Bratman et al. stated that: "The climate justice movement is influential as a precursor to the contemporary fossil fuel divestment movement." Bratman et al., "Justice is the Goal: Divestment as Climate Change Resistance", p. 680.

¹⁴⁵Among transnational climate change initiatives, Ayling and Gunningham called divestment "one of a small minority that take a more radical approach to what is required economically and environmentally to combat climate change." Later they called it "one of only a small number of initiatives that eschew engagement and posit the need for far more fundamental change to the global economy to bring about climate change mitigation." Ayling and Gunningham, "Non-state Governance and Climate Policy: The Fossil Fuel Divestment Movement", p. 3, 8.

were efforts at odds with one another, initiated by sub-groups in conflict within the CFFD campaign. Which is fairer to call the simultaneous actions part of the campaign's effort to maintain a productive hybrid between inside game and outside game strategies as discussed in the repertoires chapter. Which is presentation of the campaign as a conflict between two camps, with the intersectional radicals ending up dominant, seems at odds with how the organization broadly followed the "campaign in a box" strategy and messaging, with climate justice emphasized at the outset rather than being gradually introduced by a more critical faction at U of T. Perhaps the analysis of the final rally and of disagreements within the campaign demonstrate how challenging a hybrid messaging and tactical strategy is to devise and carry out. At a messaging level, it can be hard even for campaign participants to distinguish between letting those with different tactical preferences each try their favoured approach within an overall effort meant to be complementary and mutually reinforcing versus having a campaign in which sub-groups in conflict each implement what they hope will work, seeking to persuade each other as well as the administration.

It is important once again to remember the distinction between a preference for escalated versus cooperative tactics as opposed to a radically reformist versus incrementalist theory of change. The broad
disagreement about tactical choices which Curnow et al. described was about emphasis more than fundamental disagreement.¹⁵¹ Everyone involved in divestment campaigns was exposed to both insider-preferring
strategies focused on winning support in target administrations concerned about fiduciary duty and to intersectional strategies based on willingness to escalate conflicts with the university administration which
were not necessarily related to climate change mitigation. There were good reasons for activists to not be
entirely convinced by the account in which climate arises directly from colonialism or any other specific
human failing beyond a need for energy and a willingness to harm others in many ways to obtain it. We
can imagine a world in which far fewer prejudices existed, with less discrimination on the basis of factors
like race, sex, or sexuality, but in which the attractions of fossil fuels as energy sources were realized, to the
detriment of the climate. On planets with coal, oil, and gas reserves, at some stage of intelligent tinkering
and scientific understanding someone would realize that these materials offer enormously more energy for
their mass and the effort needed to obtain them than anything else. Whether good or ill for other social

¹⁴⁶ Curnow, Davis, and Asher, "Politicization in Process: Developing Political Concepts, Practices, Epistemologies, and Identities Through Activist Engagement", p. 742.

¹⁴⁷Bratman et al. described a hybrid approach in the American University case, in which outside game tactics were used in support of board lobbying to increase the sense of student pressure. They quoted Deidre Shelly saying: "'Direct action gets the goods' is another frequent line of the campaign, and lead organizers have always understood that without pressuring your target, your inside efforts would be insufficient. Our outside actions, whether confrontational or larger mobilizations, are always informed by our inside strategy. We escalate as we see fit, based off the progress we are (or aren't) making with our Board." Bratman et al., "Justice is the Goal: Divestment as Climate Change Resistance", p. 686–7.

¹⁴⁸At Guelph in 2019 CFFD organizers planned a similar set of actions around a board of governors meeting, including a noisy march, a protest inside the meeting, and the disruption of the meeting with a cowbell after the board carried on to other business. Chris Seto. *University of Guelph Board Says No to Divestment from Fossil Fuels.* 2019. URL: https://www.guelphmercury.com/news-story/9140966-university-of-guelph-board-says-no-to-divestment-from-fossil-fuels/(visited on 02/04/2020).

¹⁴⁹Chris Seto. Around 70 people marched to the Arboretum Centre from the University Center for the U of G board of governors meeting. A committee will soon decide on whether or not the school will divest from fossil fuel companies. 2019. URL: https://twitter.com/topherseto/status/1088134825519837187 (visited on 02/04/2020).

¹⁵⁰The specific claim was that: "The Radicals had reframed the entire campaign, centering climate justice and attending to questions of representation in the campaign." Curnow, Davis, and Asher, "Politicization in Process: Developing Political Concepts, Practices, Epistemologies, and Identities Through Activist Engagement", p. 729.

¹⁵¹Relative pragmatists like Jaccard do not argue that no other injustices exist in the world, they simply challenge the necessity and strategic value of linking those issues to decarbonization. There is also a question of sequencing. It is possible to use the process of decarbonization to try to combat inequality or advance Indigenous reconciliation, but those things don't need to be part of a grand plan from the outset. The Green New Deal and Leap Manifesto are partly based on the idea that linking in social and economic justice will add to the political salability of the plan. If instead they narrow the constituency of supporters, it is possible to pursue those objectives as part of ordinary incremental policy-making instead of part of a grand reform that will also deal with climate change.

movements, the question of how much we warm the planet is conceptually and practically separable from other political agendas. Potentially, that creates opportunities for activists focused on climate change mitigation to form alliances with strategic elements in other political movements and supporters of popular but more conservative parties, and to try to persuade those with non-progressive politics that their vision of the good life also requires a stable climate. Many accounts rightly emphasize the huge human vulnerability to climate change of the world's most marginalized and displaced people, and indeed there are many reasons to expect it to exacerbate worldwide issues of poverty and forced relocation. Large populations exposed to such disruptions — whether from extreme hurricanes on the US gulf coast, Bangladesh losing arable land to sea level rise and salt water infiltration, or other heat-worsened extreme weather events around the world will plausibly experience most of the human suffering which will ultimately arise as a result of the disruption to the climate which we are causing. The rich also have cause to be fearful. On a planet where all the infrastructure is adapted for the past prevailing climatic conditions, those structures and human systems face a future outside their design specifications and past experience. Potentially when global wealth-holders begin to properly price in the risks to their assets from climate change, further movement toward depriving the fossil fuel industry of access to capital will take place, particularly as major insurers consider their potential losses, and corporations and individual wealth-holders around the world consider the enormous prospect of laws uits based on CO_2 emissions and the damage they have caused. ^152,153

One reason to question the depth of the climate justice / CO₂-energy split in practice within CFFD campaigns is how 'inside game' and policy-focused analyses of climate change politics frequently include elements of the climate justice agenda. For instance, Lemphers endorses a key plank of the 'just transition' concept, saying: "state assistance would be needed for location-relevant worker training and economic diversification for communities dependent on fossil fuel extraction." This is more focused and limited than policies like a universal basic income or a universal government job guarantee which are sometimes included in proposed broad social justice policies for addressing climate change like the Green New Deal. In 2018, Environment and Climate Change Minister Catherine McKenna announced the creation of a committee to advise on a 'just transition' plan to accompany the Trudeau government's planned Canada-wide coal phase-out. The task force's report contains key messages which align with elements of justice-based plans like the Green New Deal, saying "[a]ffected workers and communities must be at the heart of decision-making during the transition to a low-carbon economy" and calling for government support to affected workers and communities, including by funding local infrastructure projects. The report's top recommendations are to

¹⁵²In 2022, the United Nations Office for Disaster Risk Reduction found "alarming trends" in the "growing economic cost of disasters." They noted that between 1970 and 2000 the world averaged about 90–100 medium- and large-scale disasters per year, and that it rose to between 350–500 per year between 2001 and 2020. United Nations Office for Disaster Risk Reduction. Global Assessment Report on Disaster Risk Reduction 2022. 2022. URL: https://reliefweb.int/sites/reliefweb.int/files/resources/Global%20Assessment%20Report%20on%20Disaster%20Risk%20Reduction%202022_0.pdf (visited on 08/02/2022), p. 32, 17.

 $^{^{153}} Seth \ Borenstein. \ \textit{Weary of Many Disasters? UN Says Worse to Come.} \ 2022. \ \textit{URL: https://www.ctvnews.ca/climate-and-environment/weary-of-many-disasters-un-says-worse-to-come-1.5875906} \ (visited on 08/02/2022).$

¹⁵⁴Lemphers, "Beyond the Carbon Curse: a Study of the Governance Foundations of Climate Change Politics in Australia, Canada and Norway", p. 300, 285–6.

¹⁵⁵Enhanced or engineered geothermal energy is one promising example. It requires technology "not far beyond the range of closely related drilling and extraction technologies developed in the oil industry" and "could in principle power humanity for thousands or tens of thousands of years." Jaffe and Taylor, *The Physics of Energy*, p. 767.

 $^{^{156}}$ The use of expertise and personnel from the fossil fuel industry could also increase the political attractiveness of the technology, since its development could be concentrated in places where fossil fuel employment is falling.

¹⁵⁷ Carl Meyer. McKenna Introduces a Team That Will Tackle the 'Charm, Agony, Pain' of Coal Phase-out. 2018. URL: https://www.nationalobserver.com/2018/04/25/news/mckenna-introduces-team-will-tackle-charm-agony-pain-coal-phase-out (visited on 12/26/2019).

¹⁵⁸ Stefanie Maroetta. Coal Phase-out Task Force to Consult Workers, Communities to Soften Blow. 2018. URL: https://www.cbc.ca/news/politics/mckenna-task-force-coal-phase-out-1.4635379 (visited on 12/26/2019).

"embed just transition principles in planning, legislative, regulatory, and advisory processes." A recent Pembina Institute report also called for a "comprehensive Just Transition plan, developed with municipalities and workers to enable them to succeed in a decarbonized economy." These documents do not call for the same scale of societal transformation endorsed by some progressive activists, but they arguably demonstrate how concepts from climate justice are diffusing and being translated into more limited and politically palatable form in the policy analysis and recommendations of non-activists. Admittedly, the form of justice emphasized here is compensation for those adversely affected by the need to shut down fossil fuel production and use in the near term, not victims of climate change impacts.

Beyond the question of emphasis, however, these disagreements may demonstrate fundamental incoherence within the climate change activist movement, with some content to understand climate change as a problem of energy sources and atmospheric chemistry which could be solved or not solved independently of progress on other issues (CO₂-e), and others believing that only a broadly intersectional campaign with wide issue-linkage would be able to address the climate change problem (CJ). Those hoping to change the world based on the intersectional all-issues approach need to win everybody over to their way of thinking or totally disempower their opponents, whereas those who reject reflexive solidarity and are willing to agree about climate change mitigation with people who they otherwise disagree with may have a better chance to achieve decarbonization in the absence of a mass political revolution and foundational changes in how society functions — neither of which have set or predictable consequences in terms of how severe climate change becomes, and neither of which climate justice advocates have a plausible plan for achieving.

5.7 Policy durability

Nathan Lemphers' PhD dissertation documented a frightening record of government giveaways to polluting industries, intended as 'sweeteners' to accompany decarbonization policies, which were distributed to polluters but then not taken back when the policies they were intended to soften were cancelled. 161,162,163,164,165,166

Tisp Canada's Task Force on Just Transition for Canadian Coal Power Workers and Communities. Final Report by the Task Force on Just Transition for Canadian Coal Power Workers and Communities. 2018. URL: http://publications.gc.ca/collections/collection_2019/eccc/En4-361-2019-eng.pdf (visited on 12/26/2019), p. viii, ix.

¹⁶⁰Isabelle Turcotte. Winning on Climate: Action Plan for a Decarbonized Canadian Economy. 2019. URL: https://www.pembina.org/reports/winning-on-climate.pdf (visited on 12/26/2019), p. 3.

¹⁶¹For instance, \$2.5 billion in tax cuts for low-income earners in Australia which were meant to soften the impact of a carbon price ended up being kept in place despite the tax being repealed. Lemphers also described "overly-generous compensation" to industry (including \$5 billion in lump sum payments), which then did not support the continuation of carbon pricing. Lemphers, "Beyond the Carbon Curse: a Study of the Governance Foundations of Climate Change Politics in Australia, Canada and Norway", p. 235, 239, 246.

¹⁶²Lemphers also cited how the 2011 Garnaut Review on the economics of climate change advised against the allocation of free permits as part of a pollution pricing scheme, saying that such free allocation is unjustified and would undermine industry's restructuring responsibilities. Lemphers, "Beyond the Carbon Curse: a Study of the Governance Foundations of Climate Change Politics in Australia, Canada and Norway", p. 222.

¹⁶³ Ross Garnaut. The Garnaut Review 2011: Australia in the Global Response to Climate Change. 2011. URL: https://webarchive.nla.gov.au/awa/20190509030847/http://www.garnautreview.org.au/update-2011/garnaut-review-2011.html (visited on 01/23/2017).

¹⁶⁴ A 2022 study from the UK eNGO Transport & Environment found that British airlines were given 4.4 million free pollution permits in 2021, enough to exempt them from any need to pay for actual emissions and with a giveaway of an excess of 900,000 permits which could be sold for £72m. Transport & Environment. UK ETS: Broken, but Fixable. 2022. URL: https://www.transportenvironment.org/wp-content/uploads/2022/06/UK-ETS-Briefing.pdf (visited on 06/24/2022).

¹⁶⁵ Damien Gayle. UK Gave Airlines 4.4m Free Pollution Permits in 2021, Study Finds. 2022. URL: https://www.theguardian.com/environment/2022/jun/24/uk-gave-airlines-44m-free-pollution-permits-in-2021-study-finds (visited on 06/24/2022)

¹⁶⁶See also: Damian Carrington. Big Polluters Given Almost €100bn in Free Carbon Permits by EU. 2022. URL: https://www.theguardian.com/environment/2022/nov/29/big-polluters-given-almost-100bn-in-free-carbon-permits-by-eu (visited on 11/30/2022).

Lemphers called Canadian climate policy in the 1980s and 90s "late, narrow in scope, limited in means and not durable." ^{167,168,169,170171} This illustrates the industry's ability to cultivate undue favour from elected governments and bureaucrats and the ever-present risk that climate change policies will be corrupted and reduced to Gardiner's "shadow solutions." ¹⁷² The policy instability Lemphers documented is also entirely at odds with the advice from economic experts. Industry needs a measure of confidence about what policy will be for decades to come in order to make investment decisions, but the experience of climate policy in countries like Canada and Australia has shown them instead that each new government is fairly likely to reverse the choices of the prior one — and there is always scope for corporations which represent jobs, GDP, and tax revenue to lobby the government for special treatment. As Jaccard put it, the efforts of wealthy countries in combatting climate change have "oscillated depending on the vagaries of public will and electoral shifts" and "no climate policy can be inoculated against the will of future governments to eliminate it." ¹⁷³ Creating durable climate policies requires forming political coalitions which will keep effectively supporting them even through changes of government, which in turn raises questions about allyship and intersectionality within polities where most citizens do not share the political sympathies of most progressive climate change activists.

Even once implemented, climate change mitigation policies always face the risk of reversal, and reserves of fossil fuels whose use has been forborne out of concern for climate change are always vulnerable to future extraction.^{174,175} The implementation of climate change mitigation policies has seen many reversals with changes of government or of public mood.¹⁷⁶ These are the "faux paradigmatic" equilibria discussed by Levin et al. "in which what appears to be a significant change only ends up being reversed (often following the election of a new government)."¹⁷⁷ As a minor example, the *gilets jaunes* protests against French President

 $^{^{167}}$ Lemphers, "Beyond the Carbon Curse: a Study of the Governance Foundations of Climate Change Politics in Australia, Canada and Norway", p. 105.

¹⁶⁸The subsequent Chrétien Liberal government "also lacked the autonomy from major industrial emitters to implement policies that could meaningfully reduce emissions." Lemphers, "Beyond the Carbon Curse: a Study of the Governance Foundations of Climate Change Politics in Australia, Canada and Norway", p. 119.

¹⁶⁹ Chrétien's chief of staff Eddie Goldenberg called the Kyoto Protocol a "first step in galvanizing public opinion." Tom Mulcair. The Stakes Couldn't be Higher as Canada's Top Court Decides Whether to Hear Climate Class Action Lawsuit. 2022. URL: https://www.ctvnews.ca/politics/tom-mulcair-the-stakes-couldn-t-be-higher-as-canada-s-top-court-decides-whether-to-hear-climate-class-action-lawsuit-1.6002655 (visited on 08/02/2022).

¹⁷⁰On the Chrétien government's lack of seriousness about its Kyoto target, see also: Toronto Star. Not Ready for Kyoto, Chretien Adviser Says. 2007. URL: https://www.thestar.com/news/2007/02/22/not_ready_for_kyoto_chretien_adviser_says.html (visited on 08/13/2020).

¹⁷¹Tom Mulcair. How Canada Became an Environmental Outlier. 2020. URL: https://www.macleans.ca/opinion/how-canada-became-an-environmental-outlier/ (visited on 08/13/2020).

¹⁷²Gardiner's sixth proposition on climate ethics states: Given this compromised moral position as "judges in our own case, with no one to properly hold us accountable", "we are susceptible to proposals for action that do not respond to the real problem. This provides a good explanation of what has gone wrong in the last two decades of climate policy, from Rio to Kyoto to Copenhagen. However, the form of such 'shadow solutions' is likely to evolve as a the situation deteriorates. Some recent arguments for pursuing geoengineering may represent such an evolution." Gardiner, A Perfect Moral Storm: the Ethical Tragedy of Climate Change, p. xiii.

¹⁷³Jaccard, The Citizen's Guide to Climate Success: Overcoming Myths that Hinder Progress, p. 65, 115.

¹⁷⁴Lemphers defined policy durability as the capacity to resist retrenchment across time and especially across changes of government. Lemphers, "Beyond the Carbon Curse: a Study of the Governance Foundations of Climate Change Politics in Australia, Canada and Norway", p. 42.

¹⁷⁵ In an effort to create a commitment device which can endure between governments, a 2020 Dutch climate law requires annual majority parliamentary approval of its global and national climate strategies; Dutch legislators assembled a coalition to support the law which includes eight out of ten parties in parliament, which collectively held 95% of the seats; and made a "legally binding science-based target... the backbone of its new law." Jocelyn Timperley. The Law that Could Make Climate Change Illegal. 2020. URL: https://www.bbc.com/future/article/20200706-the-law-that-could-make-climate-change-illegal (visited on 07/12/2020).

¹⁷⁶ Rabe provides numerous examples of carbon pricing "failing the electoral transition test." There are also more encouraging examples, as when the BC Liberals were re-elected in May 2009 despite the provincial NDP promising to "axe the tax." Rabe, Can We Price Carbon?, p. 57–61, 92.

¹⁷⁷Playing it Forward: Path Dependency, Progressive Incrementalism, and the "Super Wicked" Problem of Global Climate

Emmanuel Macron challenged French government policy to raise diesel and gasoline taxes, leading to the reversal of the change. 178,179,180 More significantly there have been major reversals between the Liberal premiership of Kathleen Wynne in Ontario and the Conservative government of Doug Ford, and between the relative ambition of President Barack Obama's Clean Power Plan and the Donald Trump administration's efforts to roll back pollution restrictions and promote $\operatorname{coal}.^{181,182,183,184,185,186,187,188,189,190,191,192}$ The Australian carbon tax implemented by the government of prime minister Julia Gillard in 2011 was repealed by the Tony Abbott government in 2014. 193, 194 Re-reversals are also possible, eroding industry certainty about what regulations they will operate under in the future and encouraging resources to be

Change. Citeseer. 2007. URL: https://iopscience.iop.org/article/10.1088/1755-1307/6/50/502002/meta (visited on 12/29/2019), p. 10.

¹⁸³President Obama implemented the Clean Power Plan through executive action to avoid being blocked by Congress, but that allowed the Trump administration to easily cancel the plan and accompanying tighter regulations on vehicle emissions. Jaccard, The Citizen's Guide to Climate Success: Overcoming Myths that Hinder Progress, p. 108-9, 114-5.

 184 Trump's support for the fossil fuel industry was rewarded with millions of dollars in donations toward his 2020 campaign, demonstrating the industry-government linkages which McKibben emphasizes as a blockage to effective climate policy. Peter Stone. Biq Oil Remembers 'Friend' Trump with Millions in Campaign Funds. 2020. URL: https://www.theguardian.com/us- ${\tt news/2020/aug/09/big-oil-trump-campaign-donations-fossil-fuel-industry\ (visited\ on\ 08/13/2020)}.$

¹⁸⁵The Trump administration also rolled back Obama-era fuel efficiency increases for automobiles, theoretically helping the industry in the short-term but perhaps also adding to uncertainty about how long any set of rules will apply for, thus hampering long-term investment decisions. The Economist. The Car Industry Faces a Short-term Crisis and Long-term Decline. 2020. URL: https://www.economist.com/leaders/2020/04/25/the-car-industry-faces-a-short-term-crisis-and-long-term-decline (visited on 05/19/2020).

186 The Economist. Think a Respiratory Virus Pandemic is a Good Time to Cut Air-quality Regulations? 2020. URL: https://www.economist.com/united-states/2020/04/25/think-a-respiratory-virus-pandemic-is-a-good-time-to-cutair-quality-regulations (visited on 05/19/2020).

¹⁸⁷The administration also rolled back Obama-era rules on methane leakage, increasing the risk that fracked methane will be an even more climatically damaging form of energy than coal: Emily Holden. Trump Rolls Back Methane Climate Standards for Oil and Gas Industry. 2020. URL: https://www.theguardian.com/environment/2020/aug/13/trump-rolls-back-methaneclimate-standards-oil-gas-industry (visited on 08/13/2020).

¹⁸⁸Johannes Urpelainen examined the June 2017 decision of the Trump administration to withdraw the US from the Paris Agreement, creating a risk that "other parties to the Paris Agreement might backtrack on their initial pledges regarding emission reductions or financial contributions." Johannes Urpelainen and Thijs Van de Graaf. "United States Non-cooperation and the Paris agreement". In: Climate Policy 18.7 (2018), pp. 839-851. URL: https://www.tandfonline.com/doi/full/10.1080/ 14693062.2017.1406843 (visited on 06/19/2020).

¹⁸⁹On other Trump administration rollbacks of environmental protections, see also: Nadja Popovich and Hiroko Tabuchi. Tracking the Environmental Rules Reversed Under Trump. 2020. URL: https://www.nytimes.com/2020/05/13/climate/nytclimate-newsletter-trump-rollbacks.html (visited on 07/12/2020).

190 BBC News. Trump Weakens Environmental Law to Speed Up Infrastructure Projects. 2020. URL: https://www.bbc.com/ news/world-us-canada-53425238 (visited on 07/15/2020).

191 Lisa Friedman. Trump Weakens Major Conservation Law to Speed Construction Permits. 2020. URL: https://www. $\begin{array}{c} {\rm nytimes.com/2020/07/15/climate/trump-environment-nepa.html~(visited~on~07/15/2020).} \\ {\rm ^{192}Sharon~Lerner.~} \textit{As~the~West~Burns,~the~Trump~Administration~Races~to~Demolish~Environmental~Protections.~2020.~URL:} \\ \end{array}$

https://theintercept.com/2020/09/19/wildfires-trump-election-epa-environment/ (visited on 09/26/2020).

193 The Economist. Australia's Bushfires Intensify its Debate About Climate Change. 2020. URL: https://www.economist. com/asia/2020/01/02/australias-bushfires-intensify-its-debate-about-climate-change (visited on 01/12/2020).

¹⁹⁴After being elected in September 2013, the Abbott government was able to persuade the Australian senate to repeal the carbon price by July 2014. This made them the first country to repeal a national carbon pricing scheme. Lemphers, "Beyond the Carbon Curse: a Study of the Governance Foundations of Climate Change Politics in Australia, Canada and Norway", p. 245-6.

¹⁷⁸A point discussed by Mark Jaccard as a reason for advocating a non-carbon-tax regulatory approach: Geddes, Solving the Climate Crisis Isn't on Consumers. It's on the People in Power.

 $^{^{179}} Jaccard, \ The \ Citizen's \ Guide \ to \ Climate \ Success: \ Overcoming \ Myths \ that \ Hinder \ Progress, p. \ 118.$

¹⁸⁰The French government also established a citizens' climate convention with a representative sample of citizens to make recommendations on how to meet the country's climate goals: The Economist. France Asks its Citizens How to Meet its Climate-change Targets. 2020. URL: https://www.economist.com/europe/2020/03/05/france-asks-its-citizens-how-tomeet-its-climate-change-targets (visited on 03/30/2020).

¹⁸¹Jaccard argued that Ontario's coal phase-out was principally motivated by local air quality concerns. Jaccard, The Citizen's Guide to Climate Success: Overcoming Myths that Hinder Progress, p. 219-20.

¹⁸²In 2018 the Ford Conservatives positioned themselves as "a friend to struggling motorists" by promising to eliminate the Liberal Wynne government's cap-and-trade policy. In 2019, Ford said he was "proud" to cancel hundreds of renewable energy contracts. Shawn Jeffords. Doug Ford 'proud' of Decision to Tear up Hundreds of Green Energy Contracts. 2019. URL: https://globalnews.ca/news/6199860/doug-ford-proud-cancelling-hundreds-green-energy-contracts/(visited on 08/15/2022).

spent on lobbying rather than decarbonization. ^{195,196,197,198} Labor said during the 2019 election that they would re-implement the tax if elected. ^{199,200} Even governments that have been unusually committed to decarbonization have re-prioritized other objectives when pushed. After the 2011 Fukushima Daiichi nuclear disaster, Germany and Japan retreated from their commitment to nuclear power, at the cost of their progress toward decarbonization. ^{201,202,203,204,205,206,207} The BC NDP used an "axe-the-tax campaign" to try to unseat the Gordon Campbell government in 2008. ²⁰⁸ As of June 2020, both leadership candidates for Canada's Conservative Party were promising to remove prime minister Trudeau's federal carbon price backstop if elected. ^{209,210} Erin O'Toole, elected to lead the party in summer 2020, said he would "fight the carbon tax with every last breath." ^{211,212} During the 2021 Canadian federal election, O'Toole rejected the Trudeau Liberals' increased climate targets in favour of the weaker Harper government targets. ^{213,214} In 2022, and driven

¹⁹⁵As The Economist noted: "Mr. Biden could roll back the Trump administration's own rollbacks of regulations on environmental protection and other things, putting back in force the rules that have been dropped, enforcing those that have been ignored." The Economist. Joe Biden Has a Good Chance of Becoming a Surprisingly Activist President. 2020. URL: https://www.economist.com/briefing/2020/07/04/joe-biden-has-a-good-chance-of-becoming-a-surprisingly-activist-president (visited on 07/20/2020).

¹⁹⁶ Tony Seskus and Kyle Bakx. Cloudy Outlook for Pipelines Gets Even Murkier Amid Court Rulings, U.S. Election. 2020. URL: https://www.cbc.ca/news/business/kenney-kxl-dakota-access-biden-1.5645372 (visited on 07/30/2020).

¹⁹⁷The non-participation of major fossil fuel firms in Alaskan fossil fuel drilling rights auctions in the dying days of the Trump administration demonstrates that the expectation of policy instability can affect corporate behaviour. Jennifer A. Dlouhy. *Big Oil Sits Out Trump's Last-ditch US Arctic Drilling Auction*. 2021. URL: https://www.aljazeera.com/economy/2021/1/6/bb-big-oil-sits-out-trumps-last-ditch-us-arctic-drilling-auction (visited on 05/14/2021).

¹⁹⁸ As expected, the Trump administration's last minute decision to offer oil and gas drilling leases in ANWAR was reversed by the Biden administration. John Harwood. Biden Administration to Suspend Oil and Gas Drilling Leases in Arctic Refuge, Undoing a Trump-era Decision. 2021. URL: https://www.cnn.com/2021/06/01/politics/oil-and-gas-arctic-leaders/index.html (visited on 06/20/2021).

¹⁹⁹The Economist. Australia's Voters are Poised to Punish the Government. 2019. URL: https://www.economist.com/asia/2019/05/11/australias-voters-are-poised-to-punish-the-government (visited on 07/18/2019).

²⁰⁰The Economist. Australian Voters are Increasingly Concerned About Climate Change. 2019. URL: https://www.economist.com/asia/2019/05/16/australian-voters-are-increasingly-concerned-about-climate-change (visited on 07/18/2019).

²⁰¹On Japan, see: Kyodo. Abe Looking to Renege on Emissions Pledge: 25% cut by 2020 not Possible as Fossil Fuels Replace Energy from Idled Nuclear Reactors. 2013. URL: https://www.japantimes.co.jp/news/2013/01/25/national/abe-looking-to-renege-on-emissions-pledge/ (visited on 08/03/2022).

²⁰²The Economist. Power Struggle: the Shadow of Fukushima, the World's Worst Nuclear Disaster After Chernobyl, Hangs over Japan's Energy Future. 2013. URL: https://www.economist.com/asia/2013/09/21/power-struggle (visited on 08/03/2022).

²⁰³ Hiroko Tabuchi. Japan Races to Build New Coal-burning Power Plants Despite the Climate Risks. 2020. URL: https://www.nytimes.com/2020/02/03/climate/japan-coal-fukushima.html (visited on 08/03/2022).

²⁰⁴On Germany, see: The Economist. A greener future? 2011. URL: https://www.economist.com/europe/2011/03/31/a-greener-future (visited on 08/03/2022).

²⁰⁵The Economist. Nuclear? Nein, Danke: a Nuclear Phase-out Leaves German Energy Policy in a Muddle. 2011. URL: https://www.economist.com/europe/2011/06/02/nuclear-nein-danke?story_id=18774834 (visited on 08/03/2022).

²⁰⁶Peter Fairley. Germany Folds on Nuclear Power: Berlin's Decision to Shut Down Reactors Means Tough Energy Choices Ahead. 2011. URL: https://spectrum.ieee.org/germany-folds-on-nuclear-power (visited on 08/03/2022).

²⁰⁷Daniel Oberhaus. Germany Rejected Nuclear Power — and Deadly Emissions Spiked. 2020. URL: https://www.wired.com/story/germany-rejected-nuclear-power-and-deadly-emissions-spiked/ (visited on 08/03/2022).

²⁰⁸Jaccard, The Citizen's Guide to Climate Success: Overcoming Myths that Hinder Progress, p. 97–8.

²⁰⁹The Economist. Canada's Conservative Contenders. 2020. URL: https://www.economist.com/the-americas/2020/06/06/canadas-conservative-contenders (visited on 07/07/2020).

²¹⁰Lemphers noted: "While the federal backstop may ensure a carbon pricing scheme in Canada, this assurance is contingent upon future governments not weakening or repealing the policy." Lemphers, "Beyond the Carbon Curse: a Study of the Governance Foundations of Climate Change Politics in Australia, Canada and Norway", p. 168.

²¹¹Chloé Farand. Prospect of Snap Election Reanimates Canada's Carbon Tax Battle. 2020. URL: https://www.climatechangenews.com/2020/08/25/prospect-snap-election-reanimates-canadas-carbon-tax-battle/ (visited on 08/28/2020).

²¹² See also: Ainslie Cruickshank. Where New Conservative Leader Erin O'Toole Stands on Climate Change, Carbon Tax, Oil and LNG. 2020. URL: https://thenarwhal.ca/conservative-leader-erin-otoole-climate-change-carbon-tax/ (visited on 08/30/2020).

²¹³ Stephanie Taylor. Conservative Leader Erin O'Toole Rejects Canada's New Emissions Target in Favour of Lower One. 2021. URL: https://www.theglobeandmail.com/politics/article-conservative-leader-erin-otoole-rejects-canadas-new-emissions-target/ (visited on 08/27/2021).

²¹⁴Peter Zimonjic. O'Toole Would Cut Emissions to Meet Target Set by Harper, Rejects Liberals' New, More Aggressive

in part by the impacts of COVID-19 on global supply chains and the Russian invasion of Ukraine, European states re-activated coal plants and scrambled to increase liquefied natural gas (LNG) imports. ^{215,216,217} As they competed for the leadership of Canada's Conservative party, Pierre Poilievre and Jean Charest both promised to remove the Liberal carbon tax. ²¹⁸ Meanwhile, president Joe Biden went to Saudi Arabia to plead for increased production and lower oil prices. ²¹⁹ In the United States, even if Democrats are able to pass an ambitious Green New Deal on climate change it has every prospect of being reversed by Republicans. ²²⁰ As Levin et al. explained, responding to the characteristics of climate change requires us to find policies that "bind our future selves" — an objective presently at odds with the trend in most rich democratic major emitters to alternate between governments more and less willing to act on the problem, and potentially even at odds with the view that democratic governments should choose policies exclusively based on the support of those currently enfranchised. ²²¹ The inability to represent and protect the interests of future generations is an obvious and profound failure of present democratic systems of government.

5.8 Potentially productive non-progressive framing for fossil fuel abolition

While very limited in its empirical basis, work by Feygina et al. suggested an approach to building support for climate change mitigation action among conservatives by framing it as "patriotic and consistent with protecting the status quo."²²² They emphasized how a psychological drive to see the world and political systems as good and just encourages people to reject perspectives on climate change which challenge those pleasant thoughts, pushing them instead to regard it as not a problem or one that will be solved automatically by behaviours like profit-seeking and technological innovation (techno-utopianism or cornucopianism). Because seeing environmental problems as a profound threat to the way of life of those in rich countries poses "a challenge to the very foundations of our socioeconomic system" such claims "may stimulate defensive, system-justifying responses and, therefore, continued indifference and exploitation with respect to the

Goal. 2021. URL: https://www.cbc.ca/news/politics/o-toole-trudeau-emissions-targets-un-1.6155972 (visited on 08/27/2021).

²¹⁵ Alex Lawson. *UK Close to Deal With EDF to Keep Coal-fired Power Station Open.* 2022. URL: https://www.theguardian.com/business/2022/jun/13/uk-close-to-deal-with-edf-to-keep-coal-fired-power-station-open-nottinghamshire-west-burton-a (visited on 08/03/2022).

²¹⁶Al Jazeera. Germany turns to coal as Russia cuts gas supplies. 2022. URL: https://www.aljazeera.com/news/2022/6/19/germany-to-limit-use-of-gas-for-electricity-production (visited on 08/03/2022).

²¹⁷Matt McGrath. Climate Change: Green Energy 'stagnates' as Fossil Fuels Dominate. 2022. URL: https://www.bbc.com/news/science-environment-61802802 (visited on 06/18/2022).

²¹⁸Both potential leaders also promised to help facilitate further growth in Canadian oil and gas production and exports. Hébert. Chantal. Whether it's Pierre Poilievre or Jean Charest, Climate Change Policy Could Sink the Next Conservative Leader. 2022. URL: https://www.thestar.com/politics/political-opinion/2022/08/20/whether-its-pierre-poilievre-or-jean-charest-climate-change-policy-could-sink-the-next-conservative-leader.html (visited on 08/25/2022).

²¹⁹Peter Bergen. Opinion: Mr. Biden Goes to Riyadh (Hat in Hand). 2022. URL: https://www.cnn.com/2022/07/11/opinions/biden-saudi-arabia-mbs-bergen/index.html (visited on 08/03/2022).

 $^{^{220} \}text{The Economist.}$ Imagine There's No Politics. 2019. URL: https://www.economist.com/united-states/2019/02/28/imagine-theres-no-politics (visited on 07/18/2019).

²²¹Levin et al., Playing it Forward: Path Dependency, Progressive Incrementalism, and the "Super Wicked" Problem of Global Climate Change, p. 8.

²²²The article is based on three experiments, one with 340 University of Oregon undergraduates; one with 563 New York University (NYU) undergraduates; and one with 41 NYU undergraduates. In the third experiment, some participants were prompted with system preservation messages before being asked about their environmental views. Irina Feygina, John T. Jost, and Rachel E. Goldsmith. "System Justification, the Denial of Global Warming, and the Possibility of 'System-sanctioned Change". In: *Personality and Social Psychology Bulletin* 36.3 (2010), pp. 326–338. URL: https://journals.sagepub.com/doi/abs/10.1177/0146167209351435 (visited on 07/18/2019), p. 326, 335.

natural environment, rather than a commitment to recognizing and remedying the problem."^{223,224} Klein's *This Changes Everything: Capitalism vs. The Climate* could hardly be better calibrated to threaten a *status quo* "just world" perspective. The behaviours you would use to appeal to those with conservative values — essentially arguing that controlling climate change is necessary to sustain the *status quo* — fundamentally contradict those championed within a climate justice framework which rejects much of how politics and economics function as manifestations of deeply embedded forms of injustice. ²²⁵ Beneath the specific form of the messaging which Feygina et al. discuss is a conceptualization of climate change which is actively rejected by justice-focused CFFD activists: as essentially a technical or scientific problem which requires changes in infrastructure to address, but not a profound rethinking and reorganization of politics, at least not in the form of abrupt and revolutionary systematic change.

A programme to reach beyond the progressive political left to build durable support for climate change mitigation could conceivably happen alongside the reinterpretation of the problem among progressives as one of deeply embedded structural injustice requiring massive change, but the two frames do conflict in much of their analysis and many of their prescriptions for action. It may be hard for those speaking to conservatives to cater to their preferences for only limited and incremental change at the same time as most people in the climate activist movement are calling for global political and economic transformation. The Alberta Narrative Project found that:

discussion groups repeatedly explained their views in two related ways: as an expression of their own values and identity, and as a rejection of the values held by people who, they felt, criticized or undermined them. Most people felt under attack from people with different politics or worldviews. They then tended to project onto these opponents views that were opposite to their own, saying that they were dishonest, ungrateful, or disrespectful. People who were loyal to the oil and gas industry were particularly critical of 'environmentalists,' who, they said, combined all of these negative qualities. ^{226,227}

They also note that "many people expressed sympathy with environmental concerns but deep distrust of environmentalists." This illustrates how perspectives on climate change make up part of world views and identities which people are sensitive about and try to defend when they feel threatened. It also shows how viewpoints which are so common as to be unremarkable within groups of environmental activists may be very much at odds with how larger segments of the mass public interpret things, and thus messaging and persuasion strategies that connect with them based on their existing values, per Hayhoe. 229

Levin et al. described the disagreement between those advocating one-off "paradigmatic" policies and those seeking "politically feasible" policy choices, before going on to suggest that a superior option exists

²²³Feygina, Jost, and Goldsmith, "System Justification, the Denial of Global Warming, and the Possibility of 'System-sanctioned Change", p. 327 (emphasis mine).

²²⁴For example, climate activist Greta Thunberg argued: "We are at the beginning of mass extinction, and all you can talk about is money and fairy tales of eternal economic growth." Jennifer Ellen Good. *Greta Thunberg's Radical Climate Change Fairy Tale is Exactly the Story We Need.* 2019. URL: https://www.salon.com/2019/09/29/greta-thunbergs-radical-climate-change-fairy-tale-is-exactly-the-story-we-need_partner/ (visited on 07/26/2022).

²²⁵Feygina et al. discussed how to "reframe environmental messages so that they work *with* rather than against system justification motivation" (italics in original); "reframing pro-environmental change as a means of preserving the 'American way of life'"; and emphasizing that environmental protection is patriotic. Feygina, Jost, and Goldsmith, "System Justification, the Denial of Global Warming, and the Possibility of 'System-sanctioned Change", p. 333.

²²⁶Alberta Narratives Project, Communicating Climate Change and Energy with Different Audiences in Alberta, p. 55.

²²⁷The point about how people respond psychologically to criticism links back to the concept of psychological reactance as a barrier to change: Ilnyckyj, Structural Barriers to Avoiding Catastrophic Climate Change, p. 11–2.

²²⁸ Alberta Narratives Project, Communicating Climate Change and Energy with Different Audiences in Alberta, p. 58 (italics in original).

²²⁹Katharine Hayhoe. Saving Us: A Climate Scientist's Case for Hope and Healing in a Divided World. New York: Simon & Schuster, 2021.

focused on exploiting path dependency.²³⁰ After listing structural barriers to adequate action on climate change, they suggested creating and taking advantage of critical junctures; fostering winning coalitions; paying attention to norm generation; nurturing forward-looking technologies; tinkering; training; and thinking about tipping points and thresholds.²³¹ This is to avoid the Scylla of climate change policies which are too bold to be implemented and the Charybdis of strong policies which are implemented only to be reversed. While the attention to policy durability in this analysis is welcome, the approaches proposed seem slow, tentative, and uncertain while climate change requires massive change in where the world gets its energy before the window for a 1.5–2.0 °C stabilization pathway closes. The apparent insufficiency of incremental solutions even those designed to take advantage of phenomena like lock-in, increasing returns, and self-reinforcement — helps explain why such approaches have little appeal for many climate change activists. Rather than seeking to 'shift the Overton window' and make previously unthinkable policies possible, Levin's theory of change is to plant small seeds whose growth will become increasingly unstoppable over time. Avoiding reversals is indeed crucial, but it is hard to imagine any combination of the approaches Levin et al. suggested producing outcomes on the magnitude of the complete abandonment of fossil fuels — or the nullification of remaining emissions with CCS or geoengineering — quickly enough to avoid committing the Earth to much more than 2 °C of warming.²³² In one sense, these authors' analysis does furnish an important criticism of 350.org's theory of change. The authors advocate "forward reasoning" including scenario-building and the consideration of multiple alternative futures.²³³ In responding to a problem with the potential severity of climate change and with so many structural barriers to action, there is a case for pursuing all plausible decarbonization strategies, not just the one expected to be least costly or with the greatest appeal to one's direct constituency. 350.org justifies their rejection of nuclear energy as a proven low-carbon energy option on the basis that they expect it to be more costly than the 100% renewables option they favour and reject CCS as a handout to an already-coddled industry, but a "forward reasoning" strategy would support the pursuit of multiple possible paths to success. ²³⁴ That redundancy would raise the total cost of the transition, since both more and less cost-effective approaches would be pursued simultaneously, but it would reduce the danger of betting everything on one approach that fails. The relative costs of different technologies at scale can also only be confidently ascertained through trial deployments and prototypes. 235 Since we cannot reset the Earth and start over, keeping multiple paths to success open seems preferable to the excessive dogmatism of choosing just one, even if economic trends presently suggest that it will be easiest or cheapest, as with McKibben's call for a solution based on 100% renewable energy.

Other strategies may exist for reconciling those on the political right to the desirability of controlling

²³⁰Levin et al., Playing it Forward: Path Dependency, Progressive Incrementalism, and the "Super Wicked" Problem of Global Climate Change, p. 22–3.

²³¹Levin et al., Playing it Forward: Path Dependency, Progressive Incrementalism, and the "Super Wicked" Problem of Global Climate Change, p. 17–22.

²³²I fear that as the opportunity to mitigate climate change through fossil fuel abolition is lost, the political discussion about climate change will shift to how to counteract it through mechanisms like bio-energy with carbon capture and storage or dimming the sky with aerosols. Questions about who would use such technologies, to what extent, whether they would work, and what side effects they would have all remain unresolved.

²³³They note that the concept of "applied forward reasoning" builds on: Steven Bernstein et al. "God Gave Physics the Easy Problems: Adapting Social Science to an Unpredictable World". In: European Journal of International Relations 6.1 (2000), pp. 43–76. URL: https://journals.sagepub.com/doi/abs/10.1177/1354066100006001003 (visited on 07/18/2022), p. 53–8.

²³⁴On opposition to nuclear energy in 350.org, see: Chuck Baclagon. Nuclear: A Deadly and Costly Distraction. 2022. URL:

https://350.org/nuclear-a-deadly-and-costly-distraction/ (visited on 08/20/2022).

²³⁵Saul Griffith expressed this idea as a "yes, and" approach: "If carbon capture sequestration works out, great. If next-gen nuclear reactors work out, great. If hydrogen-based fuels work out, great. But we shouldn't rely on any of them until they are real. We need to figure out how to do the job with the technology available." David Roberts. How to Drive Fossil Fuels Out of the US Economy, Quickly. 2020. URL: https://www.vox.com/energy-and-environment/21349200/climate-change-fossil-fuels-rewiring-america-electrify (visited on 08/06/2020).

global CO_2 pollution and overcoming fossil fuel dependence. An appeal through religion may be possible, for instance. 236,237,238,239,240 Beginning with an analysis of the role of churches in the debate over nuclear power, Patricia Townsend suggested that a broader examination of the ethics of energy could help break the political stalemate arising from the issue being discussed in scientific and political terms. 241 Of course, other religious organizations are intensely hostile to environmentalism and actively teach climate denial to children. 242,243,244,245 Markowitz and Shariff argued that:

liberals tend to base their moral priorities on two foundations of individual welfare – harm and fairness – whereas conservatives supplement these with three additional foundations focused on protecting the in-group – in-group loyalty, authority respect and purity/sanctity. The moral framing of climate change has typically focused on only the first two values. 246,247,248

They suggested that messaging focused on "profaning the sanctity of the natural world" could appeal to purity / sanctity values. 249 Further analysis would be welcome on religious ethics and climate change policy preferences among conservatives. In 2015, Pope Francis posted on Twitter that: "The earth, our home, is

²³⁶Markowitz and Shariff referred to the "What would Jesus drive?" campaign and Pope Benedict XVI's *Caritas in veritate* encyclical which stated: "the protection of the environment, of resources and of the climate obliges all international leaders to act jointly and to show a readiness to work in good faith, respecting the law and promoting solidarity with the weakest regions of the planet." Markowitz and Shariff, "Climate Change and Moral Judgement", p. 243.

²³⁷Pope Benedict XVI. Caritas in Veritate. 2009. URL: http://www.vatican.va/content/benedict-xvi/en/encyclicals/documents/hf_ben-xvi_enc_20090629_caritas-in-veritate.html (visited on 12/29/2019).

²³⁸Looking at members of faith communities in Alberta, the Alberta Narratives Project concluded that "found little evidence that people's faith had a strong influence on their attitudes to climate change and energy" but did find that Baptists were highly polarized on the issue and at least some faith community members justify climate change action in religious terms. Alberta Narratives Project, Communicating Climate Change and Energy with Different Audiences in Alberta, p. 52.

²³⁹See also: J. Arjan Wardekker, Arthur C. Petersen, and Jeroen P. van Der Sluijs. "Ethics and Public Perception of Climate Change: Exploring the Christian Voices in the US Public Debate". In: *Global Environmental Change* 19.4 (2009), pp. 512–521. URL: https://www.sciencedirect.com/science/article/pii/S0959378009000648 (visited on 12/29/2019).

²⁴⁰Nancy G. Wright. "Christianity and Environmental Justice". In: *CrossCurrents* 61.2 (2011), pp. 161–190. URL: https://www.jstor.org/stable/24461938?seq=1#metadata_info_tab_contents (visited on 01/05/2020).

²⁴¹Patricia K. Townsend. "Energy Policy in American Faith Communities: 'The Power to Change''. In: *Culture, Agriculture, Food and Environment* 35.1 (2013), pp. 4-15. URL: https://anthrosource.onlinelibrary.wiley.com/doi/10.1111/cuag. 12001 (visited on 02/22/2020).

²⁴²Katherine Stewart cited several examples of Christian anti-environmentalism in the US, including a Family Research Council manual that called environmentalism a "litany of the Green Dragon" and "one of the greatest threats to society and the church today"; Ralph Drollinger's assertion that environmentalism is a "false religion" in which efforts to protect animal species and preserve resources contradict the book of Genesis; and a Christian Reformed Church in North America report that argued that multi-cultural education "is often used as a cover to introduce pagan and New Age spiritualities such as the deification of mother earth (Gaia) and to promote social causes such as environmentalism." Stewart, *The Power Worshippers: Inside the Dangerous Rise of Religious Nationalism*, p. 16, 42, 193.

²⁴³A contrasting concept is "creation care" — which accepts the premise that a divine being created the universe and has an interest in human beings, but rejects the idea that the Earth was created for human exploitation or that god would not allow catastrophic climate change to occur. Rather, it presents humans as having a religious obligation to care for other elements of nature, including by moderating GHG pollution.

²⁴⁴See: Chris Meehan. Caring for God's Creation. 2021. URL: https://www.crcna.org/news-and-events/news/caring-gods-creation (visited on 02/15/2022).

²⁴⁵Debra Rienstra. All Creation Groans: An Interview with Katharine Hayhoe. 2021. URL: https://worship.calvin.edu/resources/resource-library/all-creation-groans-an-interview-with-katharine-hayhoe/ (visited on 02/15/2022).

²⁴⁶Markowitz and Shariff, "Climate Change and Moral Judgement", p. 244.

²⁴⁷Haidt and Graham argued that: "five psychological systems ... provide the foundations for the world's many moralities. The five foundations are psychological preparations for detecting and reacting emotionally to issues related to harm/care, fairness/reciprocity, ingroup/loyalty, authority/respect, and purity/sanctity. Political liberals have moral intuitions primarily based upon the first two foundations, and therefore misunderstand the moral motivations of political conservatives, who generally rely upon all five foundations." Jonathan Haidt and Jesse Graham. "When Morality Opposes Justice: Conservatives Have Moral Intuitions That Liberals may not Recognize". In: Social Justice Research 20.1 (2007), pp. 98–116. URL: https://link.springer.com/article/10.1007/s11211-007-0034-z (visited on 12/29/2019).

²⁴⁸Matthew Feinberg and Robb Willer found that liberals but not conservatives consider the environment in moral terms, but that "reframing proenvironmental rhetoric in terms of purity, a moral value resonating primarily among conservatives, largely eliminated the difference between liberals' and conservatives' environmental attitudes." Matthew Feinberg and Robb Willer. "The Moral Roots of Environmental Attitudes". In: *Psychological Science* 24.1 (2013), pp. 56–62. URL: https://journals.sagepub.com/doi/full/10.1177/0956797612449177 (visited on 11/08/2020).

²⁴⁹Markowitz and Shariff, "Climate Change and Moral Judgement", p. 244.

beginning to look more and more like an immense pile of filth."^{250,251,252} Interestingly, when Boston College (a Jesuit university) rejected divestment in 2020, they felt some need to respond to Francis' Laudato Si' encyclical and the guide on implementation released five years later, with the vice president for university communications stating: "While we welcome the Vatican document, our position regarding divestment remains unchanged."^{253,254} The Dalai Lama has also appealed to world leaders to take more substantial action on climate, joking that we should lock them in a room and "pipe carbon dioxide into it until they realise what climate change really means."²⁵⁵ Figures like the pope and archbishop of Canterbury are not able to prescribe actions to their congregants, but they do have the potential to influence audiences who progressive activists are missing and to alter what conservative voters demand of their elected representatives. If American Catholics embraced the call to decarbonize and demanded the same of their political representatives, it would transform the politics of the issue domestically.

5.8.1 Alternative and non-progressive coalitions for climate stability

While McKibben's insight that a movement is necessary for climate-protecting fossil fuel abolition policies to be enacted and sustained is justified, it does not follow that only a pan-progressive coalition based around the political preferences of most young activists can play that role, or even that such a coalition alone will necessarily be the most effective. Indeed, as emphasized in my discussion of policy durability, there is a considerable risk that such a coalition will lack the necessary focus, support, and stability. The fossil fuel divestment movement has also generated some noteworthy if insufficient responses in non-activist communities which bear consideration. The possibility exists for a decarbonization movement which incorporates political conservatives, which could serve as a second flank in the fight against fossil fuels, reduce the monolithic hostility to climate action on the right, make effective mitigation policy easier to pass, and — crucially — increase the odds that these policies will survive from government to government. We must retain and develop an ability to see our future collectively and make choices where it will conform to the kind of world we would have wanted for ourselves, and do want for the human descendants and all the beings who will follow us. That is where the abstract task of updating our political theories, philosophies, and ethics with what we have learned about the state of the global biosphere connects directly with the day-to-day psychology and efforts of those personally committed to change must maintain.²⁵⁶

There is evidence the CFFD movement did communicate successfully to the financial community — which is now at least aware of the argument that fossil fuels represent stranded assets because we need to keep

²⁵⁰Pope Francis. The earth, our home, is beginning to look more and more like an immense pile of filth. 2015. URL: https://twitter.com/pontifex/status/611518771186929664 (visited on 12/29/2019).

²⁵¹See also: James Bruggers. Five Years After Speaking Out on Climate Change, Pope Francis Sounds an Urgent Alarm. 2020. URL: https://insideclimatenews.org/news/06082020/climate-change-pope-francis (visited on 08/10/2020).

²⁵²In 2018 the *New York Times* also reported that Francis used "the threat of fossil-fuel divestment" "as a stick" when pressuring representatives from major oil companies to transition to low-carbon forms of energy. Elisabetta Povoledo. *Pope Tells Oil Executives to Act on Climate:* 'There Is No Time to Lose'. 2018. URL: https://www.nytimes.com/2018/06/09/world/europe/pope-oil-executives-climate-change.html (visited on 05/14/2021).

 $^{^{253}} Scott$ Baker. BC Rejects Vatican's Call For Divestment. 2020. URL: https://www.bcheights.com/2020/06/25/bc-rejecting-call-from-vatican-to-divest/ (visited on 07/12/2020).

²⁵⁴Conversely, when the Jesuit Creighton University in Nebraska decided to divest from fossil fuels in 2021, president Daniel Hendrickson cited the encyclical as part of the reason. Brian Roewe. Creighton University to Divest Fully from Fossil Fuels Within 10 Years. 2021. URL: https://www.ncronline.org/news/earthbeat/creighton-university-divest-fully-fossil-fuels-within-10-years (visited on 08/15/2022).

²⁵⁵Krishnan Guru-Murthy. 'Buddha Would be Green': Dalai Lama Calls for Urgent Climate Action. 2020. URL: https://www.theguardian.com/world/2020/nov/11/buddha-would-be-green-dalai-lama-calls-for-urgent-climate-action (visited on 05/14/2021).

²⁵⁶On the broad question of reconciling our ethics and political philosophies with the ecological limits of what the Earth can tolerate, see: The long-term view: reconciling our political theories and philosophies with environmental science p. 40

climate change under control — and institutional investors have been provoked into thinking more systematically and seriously about their exposure to climate-related risks. ²⁵⁷, ²⁵⁸, ²⁵⁹, ²⁶⁰, ²⁶¹, ²⁶², ²⁶³, ²⁶⁴, ²⁶⁵, ²⁶⁶, ²⁶⁷, ²⁶⁸
Ayling and Gunningham note how "in recent years many financial intermediaries have rapidly developed new products and services to provide investors with fossil-free investment options." ²⁶⁹, ²⁷⁰, ²⁷¹ That may be an ironic consequence for a movement linked to Klein's anti-corporate perspective, but there has definitely been development in the field of climate-screened assets and investment vehicles. ²⁷² In 2015, Hyewon Kong,

²⁵⁷An August 2020 editorial in *The Globe and Mail* noted that "today the list of those who feel it financially prudent to take up the mantle of oil sands skeptic includes some of the world's biggest money managers, banks, insurers and, yes, even oil companies" and described Shell selling its bitumen sands holdings in 2017; HSBC's 2019 decisions to back away from oil sands funding; BlackRock's exclusion of the bitumen sands from several funds; the Norwegian sovereign wealth fund reducing bitumen sands holdings; the Zurich Insurance Group withdrawing as lead insurer for the Trans Mountain pipeline; Deutsche Bank announcing it will no longer fund new bitumen projects; and Total announcing that it will produce less than expected from the bitumen sands for climate reasons. The Globe and Mail. *Lashing Out at Critics won't Revive Alberta's Oil Sands. What's Needed is Action.* 2020. URL: https://www.theglobeandmail.com/opinion/editorials/article-lashing-out-at-critics-wont-revive-albertas-oil-sands-whats-needed/ (visited on 08/19/2020).

²⁵⁸Belliveau, Rowe, and Dempsey argued: "if the financial argument for divestment does achieve broad acceptance, becoming 'mainstream,' then this is not a sign of failure but rather a signal that the movement has served its purpose: it would mean that fossil fuels are now regarded as a bad investment, which would in turn mean that the energy transition has advanced considerably." Belliveau, Rowe, and Dempsey, Fossil Fuel Divestment, Non-reformist Reforms, and Anti-capitalist Strategy, p. 471.

²⁵⁹See also: Rod Nickel. Trans Mountain Moves to Protect Insurers as Environmental Groups Urge Them to Drop Coverage. 2021. URL: https://www.theglobeandmail.com/business/industry-news/energy-and-resources/article-trans-mountain-moves-to-protect-insurers-as-environmental-groups-urge/ (visited on 08/02/2022).

²⁶⁰In 2020, Alberta Premier Jason Kenney argued that continued access to capital for fossil fuel development will depend on action on climate change. Michelle Bellefontaine. Alberta Premier Says Resource Project Financing Depends on Climate Progress. 2020. URL: https://www.cbc.ca/news/canada/edmonton/kenney-climate-oil-and-gas-united-conservative-party-agm-1.5766852 (visited on 10/21/2020).

²⁶¹At the same time, it must be remembered that "the investments being contemplated fall drastically short of what is needed to keep temperatures within 2 °C of pre-industrial levels, let alone the 1.5 °C required to limit the environmental, economic and political turmoil of climate change." The Economist. *Power in the 21st Century.* 2020. URL: https://www.economist.com/leaders/2020/09/17/is-it-the-end-of-the-oil-age (visited on 10/13/2020).

²⁶²In 2020, Reuters compiled a list of banks and insurers which have stated that they will not invest in Canada's bitumen sands: Reuters. Banks and Insurers Shun Canada's Oil Sands. 2020. URL: https://www.reuters.com/article/global-oil-canada-environment-idUSL1N2GQ19K (visited on 10/19/2020).

²⁶³In 2018, the NGO ClientEarth bought €30 worth of shares in Enea, a Polish power company, and won a lawsuit alleging that the firm's proposed Ostroleka C coal plant would become an unprofitable stranded asset because of decarbonization of the energy sector. The Economist. *Green Investors are Embracing Litigation*. 2020. URL: https://www.economist.com/finance-and-economics/2020/11/21/green-investors-are-embracing-litigation (visited on 12/14/2020).

²⁶⁴See also: The Economist. *Making Sense of Banks' Climate Targets*. 2020. URL: https://www.economist.com/finance-and-economics/2020/12/12/making-sense-of-banks-climate-targets (visited on 01/09/2021).

²⁶⁵Inayat Singh and Alice Hopton. Movement to Keep Fossil Fuels in the Ground Gaining Momentum in Canada and Abroad. 2021. URL: https://www.cbc.ca/news/science/fossil-fuels-cop26-extraction-1.6238403 (visited on 11/10/2021).

²⁶⁶In a June 2022 survey of exploration and production firms by the Federal Reserve Bank of Dallas, a respondent commented: "Investors are still not coming back to the well, so to speak. Private investors like endowments and foundations are structurally gone for good, and it is actually different this time. Pension plans are also hesitant to commit capital despite high prices. Public equity investors are still demanding too much, which has caused firms to go public via a special-purpose acquisition company and reverse merger transactions, indicating the discount demanded by traditional initial public offering investors is too high to stomach. The administration may be getting blamed, but it is the investors' fault." Federal Reserve Bank of Dallas. *Dallas Fed Energy Survey*. 2022. URL: https://www.dallasfed.org/research/surveys/des/2022/2202.aspx (visited on 08/02/2022).

²⁶⁷Bill McKibben. Making Momentum Matter! 2022. URL: https://billmckibben.substack.com/p/making-momentum-matter (visited on 08/02/2022).

²⁶⁸Anecdotally, it was also interesting to note that "The World in 2021" — the latest edition of an annual series from *The Economist* — included an advertisement on p. 66 for LetkoBrosseau Global Investment Management which lists "Fossil Fuel Free Equity" under "Investment Options."

²⁶⁹These include Australian pension funds, London's FTSE group, and BlackRock. Ayling and Gunningham, "Non-state Governance and Climate Policy: The Fossil Fuel Divestment Movement", p. 5, 7.

²⁷⁰Joshua Humphreys. *Institutional Pathways to Fossil-Free Investing: Endowment Management in a Warming World.* 2013. URL: https://gofossilfree.org/se/wp-content/uploads/sites/13/2014/07/Rapport-Institutional-Pathways-to-Fossil-Free-Investing.pdf (visited on 01/09/2020).

²⁷¹State Street Global Advisors. SPDR S&P 500 Fossil Fuel Reserves Free ETF. 2021. URL: https://www.ssga.com/library-content/products/factsheets/etfs/us/factsheet-us-en-spyx.pdf (visited on 08/29/2021).

²⁷²My research is about the university divestment aspect of what 350.org and other eNGOs proliferated, but they also coordinated efforts to divest private foundations, municipalities, labour unions, pension funds, and other institutional investments.

vice-president and portfolio manager at Toronto-based AGF Investments, stated: "If there is a divestment movement today, it is thanks to the student movement and the work of 350.org. These people were the first to talk about this issue and draw attention to it in the media and among investors."273 Kong noted: "[t]here's now a financial risk to investing in fossil fuels" — referring to how "fossil fuels already on companies' balance sheets may become stranded assets in a carbon constrained world."²⁷⁴ In addition to a keynote address from Dr. James Orbinski (who accepted the Nobel Peace Prize for Médecins Sans Frontières) at their general council — where he called climate change "the biggest health threat of our time" — the Canadian Medical Association completed the divestment of its organizational funds in 2016.²⁷⁵ In 2018, Ireland's Parliament passed a bill to divest their sovereign wealth fund from the fossil fuel sector.²⁷⁶ In 2019, the European Investment Bank pledged to end financing for coal, oil, and gas projects after 2021.²⁷⁷ In 2020, BlackRock said it expects to see business plans from companies compatible with the Paris Agreement goal; Goldman Sachs committed to not funding coal mines, coal power plants, or Arctic drilling; and BNP Paribas announced that it would no longer fund fracking and bitumen sands projects.^{278,279} New York State's pension fund also committed to drop many fossil fuel investments from its \$226 billion portfolio.²⁸⁰ Deutsche Bank announced that it would no longer invest in bitumen sands or coal projects.²⁸¹ The Royal Bank of Canada announced that it would not fund oil and gas development in the US Arctic National Wildlife Refuge (AN-WAR). 282 Britain's national pension plan, representing nine million members, chose to "ban investments in any companies involved in coal mining, oil from tar sands and arctic drilling."283,284 When the Nordic hedge fund Storebrand sold \$90 billion of holdings in fossil fuel and mining firms, Jan Erik Saugestad, the chief executive, said corporate lobbying intended to undermine action on "the greatest risks facing humanity" is "simply unacceptable." ^{285,286} In August 2020, *The Economist* noted that Goldman Sachs, JPMorgan Chase, Wells Fargo, UBS, and Deutsche Bank had all "stepped back" from investing in Arctic oil development under

 $^{^{273}}$ Canadian Association of University Teachers, Canada's Campuses Emerge as Latest Battleground in Fast-growing Divestment Movement.

²⁷⁴Canadian Association of University Teachers, Canada's Campuses Emerge as Latest Battleground in Fast-growing Divestment Movement.

²⁷⁵Courtney Howard. Canadian Medical Association Completes Divestment from Fossil Fuels. 2016. URL: https://www.nationalobserver.com/2016/08/29/news/canadian-medical-association-completes-divestment-fossil-fuels (visited on 06/25/2022).

^{2&}lt;sup>76</sup>Nina Chestney. Ireland Commits to Divesting Public Funds from Fossil Fuel Companies. 2018. URL: https://www.reuters.com/article/us-ireland-fossilfuels-divestment-idUSKBN1K22AA (visited on 06/25/2022).

²⁷⁷Ambrose and Henley, European Investment Bank to Phase Out Fossil Fuel Financing.

²⁷⁸Bill McKibben, Alec Connon, and Elana Sulakshana. *The Climate Crisis is Reshaping the World of Finance*. 2020. URL: https://www.seattletimes.com/opinion/the-climate-crisis-is-reshaping-the-world-of-finance/ (visited on 03/30/2020).

^{2&}lt;sup>†9</sup>Joanna Patridge. World's Biggest Fund Manager Vows to Divest from Thermal Coal. 2020. URL: https://www.theguardian.com/business/2020/jan/14/blackrock-says-climate-crisis-will-now-guide-its-investments (visited on 06/25/2022).

²⁸⁰Anne Barnard. New York's \$226 Billion Pension Fund is Dropping Fossil Fuel Stocks. 2020. URL: https://www.nytimes.com/2020/12/09/nyregion/new-york-pension-fossil-fuels.html (visited on 08/31/2021).

²⁸¹Canadian Press. Deutsche Bank Says it Won't Back Any New Oilsands or Coal Projects. 2020. URL: https://www.cbc.ca/news/canada/calgary/deutsche-bank-coal-oilsands-invest-carbon-energy-fracking-1.5664632 (visited on 07/30/2020).

²⁸²Julien Gignac. RBC Becomes First Major Canadian Bank to Refuse to Fund Oil Drilling in Arctic Refuge. 2020. URL: https://thenarwhal.ca/rbc-oil-drilling-arctic-national-wildlife-refuge/ (visited on 10/06/2020).

²⁸³Patrick Collinson and Jillian Ambrose. *UK's Biggest Pension Fund Begins Fossil Fuels Divestment*. 2020. URL: https://www.theguardian.com/environment/2020/jul/29/national-employment-savings-trust-uks-biggest-pension-fund-divests-from-fossil-fuels (visited on 07/30/2020).

²⁸⁴National Employment Savings Trust. *Nest's Climate Change Policy*. 2020. URL: https://www.nestpensions.org.uk/schemeweb/dam/nestlibrary/climate-change-policy.pdf (visited on 07/30/2020).

²⁸⁵ Jillian Ambrose. Major Investment Firm Dumps Exxon, Chevron and Rio Tinto Stock. 2020. URL: https://www.theguardian.com/environment/2020/aug/24/major-investment-firm-dumps-exxon-chevron-and-rio-tinto-stock (visited on 08/28/2020).

²⁸⁶Rosie Frost. Norwegian Investors Divest from Fossil Fuels, Saying Oil Companies Should Not 'Rest Easy'. 2020. URL: https://www.euronews.com/living/2020/08/28/norwegian-investors-divest-from-fossil-fuels-saying-oil-companies-should-not-rest-easy (visited on 08/30/2020).

public pressure.²⁸⁷ In November 2020, the Toronto-based TD bank announced they would not finance Arctic oil and gas projects.²⁸⁸ Timothy Youmans, director of Hermes EOS, argued that mainstream investors now see climate risk as "a core component of long-term value."²⁸⁹ Bank of America CEO Brian Moynihan stated: "Only the private sector can mobilise the trillions of dollars of capital needed to drive the transition toward a low-carbon sustainable future and meet net zero targets."²⁹⁰ Consulting firm Verisk Maplecroft argued in a 2021 report that:

Our data underscores that it is clear there is no longer any realistic chance of an orderly transition. Companies and investors across all asset classes must prepare for at best a disorderly transition and at worst a whiplash from a succession of rapid shifts in policy across a host of vulnerable sectors. ²⁹¹

Thus, the concept of the carbon bubble which arose from the Carbon Tracker Initiative and provided part of the impetus for starting the CFFD movement has been popularized among those making decisions on energy infrastructure and financing, as well as discussed in the popular and specialist press about politics, current events, finance, economics, and business.

In contrast to the emergence of fossil free investment vehicles for individuals and organizations that want to divest from the sector, the Canadian Crude Index ETF managed by Auspice Capital Advisors closed in 2020 "due to lack of investor interest and continued uncertainty around the Canadian oil sector." Tim Pickering, founder of the firm, described the effectiveness of delegitimization efforts against the fossil fuel industry: "With the negative sentiment around energy, oil and Canada, we couldn't get a commensurate interest in the product." It is perhaps especially notable that even an instrument which establishes the maximum possible distance between investor and investment target, in terms of both legal liability and public relations, was discontinued for lack of willing investors, closing with \$5.3 million in assets after falling nearly 55% in value over the previous three years. In May 2020, The Economist demonstrated the degree to which the fossil fuel industry is now being challenged by calls for climate change action with an article with the sub-headline: "Supermajors claim their prospects are not as bleak as they seem" which noted that the energy sector had the worst returns in the S&P 500 in four of the past six years. ²⁹³ In July 2020, the French energy firm Total declared that its investments in the Fort Hills and Surmont bitumen sands projects were now stranded assets, and also announced that it would leave CAPP, the industry body that represents

²⁸⁷The Economist. Drilling in Alaska's National Wildlife Refuge Makes No Sense. 2020. URL: https://www.economist.com/united-states/2020/08/19/drilling-in-alaskas-national-wildlife-refuge-makes-no-sense (visited on 08/28/2020).

²⁸⁸Nichola Saminather. TD says it won't Finance Arctic Oil and Gas Projects. 2020. URL: https://www.theglobeandmail.com/business/industry-news/energy-and-resources/article-td-says-it-wont-finance-arctic-oil-and-gas-projects/(visited on 11/09/2020).

²⁸⁹The Economist. ExxonMobil Loses a Proxy Fight With Green Investors. 2021. URL: https://www.economist.com/business/2021/05/23/what-a-proxy-fight-at-exxonmobil-says-about-big-oil-and-climate-change (visited on 06/16/2021).

²⁹⁰Fiona Harvey. Prince Charles Urges Businesses to Help Lead way on Climate. 2021. URL: https://www.theguardian.com/environment/2021/jun/10/prince-charles-urges-businesses-to-help-lead-way-on-climate (visited on 06/20/2021). ²⁹¹Verisk Maplecroft. Environmental Risk Outlook 2021. 2021. URL: https://www.maplecroft.com/insights/analysis/g20-disorderly-transition-all-but-inevitable-even-climate-leading-uk-at-risk (visited on 06/20/2021), p. 18.

²⁹²Geoffrey Morgan. Investor Apathy Knocks Out Oilpatch's Only Western Canadian Select-linked ETF. 2020. URL: https://business.financialpost.com/commodities/energy/investor-apathy-knocks-out-oilpatchs-only-western-canadian-select-linked-etf (visited on 06/19/2020).

²⁹³The Economist. How Big Oil is Trying to Win Back Investors. 2020. URL: https://www.economist.com/business/2020/05/28/how-big-oil-is-trying-to-win-back-investors (visited on 07/11/2020).

bitumen sands producers. 294,295,296,297

Financial regulators have also increasingly accepted that the firms they regulate face climate-related risks. The US Securities and Exchange Commission (SEC) has established a climate czar and task force on ESG issues — with a particular focus on climate-related disclosures.²⁹⁸ In 2015, the Financial Stability Board (an international body that makes recommendations on the global financial system) established a Task Force on Climate-Related Financial Disclosures which seeks to apply scenario analysis to assess how firms' strategies would work in potential futures, including a world experiencing more intense climate change or in which governments have enacted more strenuous carbon pricing.^{299,300} In 2016, France made climate risk disclosures mandatory for asset managers including insurers and pension funds. A subsequent study by its central bank found that firms which had to disclose held 40% fewer securities in fossil fuel firms.³⁰¹

These developments are synergistic with the strategy of delaying and raising the perception of risk around new fossil fuel projects, such as pipelines.³⁰² Kate Aronoff argued:

The impact of successful fights against fossil fuel infrastructure—often led by the Indigenous communities in its path—reverberates beyond the projects they're fighting, shifting the way other pipeline and fossil infrastructure projects are seen as well, and raising the political if not direct financial cost of natural gas investments.³⁰³

Strikingly, the degree of industry concern about new pipeline construction is so great that governments have felt compelled to provide loan guarantees and even buy pipelines themselves, as the Trudeau government did controversially with Kinder Morgan's Trans Mountain in 2018.³⁰⁴ In 2020, Jason Kenney's government in Alberta invested \$1.5 billion and provided a \$6 billion loan guarantee for the much-resisted and much-delayed Keystone XL pipeline.^{305,306} Alberta's public pension fund also bought a stake in the Coastal GasLink

 $^{^{294}} Bloomberg$ News. Total Takes \$7-billion Writedown on Oilsands Projects, Labels Fort Hills, Surmont as 'Stranded' Assets. 2020. URL: https://o.canada.com/commodities/energy/total-takes-8-1-billion-writedown-as-pandemic-devalues-oil-gas/wcm/0a67e7fb-9f94-4ea5-8017-06287f1e290b (visited on 07/30/2020).

²⁹⁵Canadian Press. Total Writes off \$9.3B in Oilsands Assets, Cancels Canadian Oil Lobby Membership. 2020. URL: https://www.cbc.ca/news/canada/calgary/suncor-total-fort-hills-conocophillips-tim-mcmillan-1.5668095 (visited on 07/30/2020).

²⁹⁶ Joel Dryden. Canadian Companies May Double Down on Oilsands After Total Writes Off \$9.3B in Assets: Analysts. 2020. URL: https://www.cbc.ca/news/canada/calgary/total-fort-hills-richard-masson-kevin-birn-shell-exxon-1.5671376 (visited on 08/01/2020).

²⁹⁷ Sara Hastings-Simon. On Oilsands, Alberta is Still Trying to fix Yesterday's Problems. 2020. URL: https://www.cbc.ca/news/canada/calgary/alberta-oilsands-total-writedown-1.5674357 (visited on 08/06/2020).

²⁹⁸U.S. Securities and Exchange Commission. *SEC Announces Enforcement Task Force Focused on Climate and ESG Issues*. 2021. URL: https://www.sec.gov/news/press-release/2021-42 (visited on 08/03/2022).

²⁹⁹The Economist. Regulators Want Firms to Own Up to Climate Risks. 2021. URL: https://www.economist.com/business/2021/03/13/regulators-want-firms-to-own-up-to-climate-risks (visited on 08/27/2021).

³⁰⁰ Task Force on Climate-related Financial Disclosures. About the Task Force. 2017. URL: https://www.fsb-tcfd.org/about/(visited on 07/20/2020).

³⁰¹The Economist, Regulators Want Firms to Own Up to Climate Risks.

³⁰²In a July 2020 conference call with the investment community, Suncor CEO Mark Little acknowledged the political risk impeding the Keystone XL pipeline. Kyle Bakx. Suncor CEO Encouraged by Trans Mountain Pipeline, Less Sure of Keystone XL's Completion. 2020. URL: https://www.cbc.ca/news/business/suncor-kxl-tmx-1.5660366 (visited on 07/25/2020).

³⁰³ Kate Aronoff. How Anti-Pipeline Protesters Made the Fossil Fuel Industry Face Economic Reality. 2020. URL: https://newrepublic.com/article/158369/anti-pipeline-protesters-made-fossil-fuel-industry-face-economic-reality (visited on 07/12/2020).

³⁰⁴Steven Chase, Kelly Cryderman, and Jeff Lewis. *Trudeau Government to Buy Kinder Morgan's Trans Mountain for \$4.5-billion*. 2018. URL: https://www.theglobeandmail.com/politics/article-trudeau-government-to-buy-kinder-morgans-trans-mountain-pipeline/ (visited on 07/12/2020).

³⁰⁵CBC News. After Investing Billions in Project, Kenney Marks Start of Keystone XL Construction in Alberta. 2020. URL: https://www.cbc.ca/news/canada/calgary/keystone-xl-construction-pipeline-starts-alberta-1.5636449 (visited on 07/12/2020).

³⁰⁶ The Globe and Mail. Why Jason Kenney's \$7.5-billion Oil Pipeline Investment is a Risky Bet. 2020. URL: https://www.theglobeandmail.com/opinion/editorials/article-why-jason-kenneys-75-billion-oil-pipeline-investment-is-a-risky-bet/ (visited on 07/12/2020).

pipeline which has been peacefully but vigorously resisted by Indigenous land defenders.³⁰⁷ Conceivably, in the future these pro-fossil decisions may be seen as government prudently stepping in to create certainty on projects that would otherwise have been scuppered by investor nervousness, but it is also quite possible that the need for these governmental guarantees demonstrates the emergence of a long-term unwillingness of investors to fund carbon-intensive projects which are likely to experience activist resistance and legal challenges, and which may have questionable profitability if governments continue to move toward strong carbon regulations. This could all serve McKibben's theory of change as corporations are driven to view fossil fuel projects as riskier, a growing group of wealth-holders chooses to divest from the industry, and non-fossil energy sources continue to grow in competitiveness.

The insurance industry can also play a vital role in constraining the seriousness of climate change, and some recent developments suggest they may. The IPCC reports and other projections of climate impacts demonstrate the staggering potential losses in scenarios where climate change worsens unchecked. Just sea level rise is enough to cause insurers and reinsurers considerable concern given how many people, how much economically productive infrastructure, and how much of the common heritage of humankind has been built beside the oceans. Worldwide losses from climate change impacts could exceed the ability of the insurance and reinsurance industries to pay out on policies. Long-term that risk could drive the insurance industry to act to avert high-temperature, high-damage, fossil-fuel-intensive outcomes by choosing to refuse insurance coverage to fossil fuel projects, to re-direct their own enormous financial holdings, and potentially to pressure other elements of the financial system to stop funding fossil fuel expansion. Refusing to insure individuals and firms for climate-related risks could also encourage them to support policy solutions. In 2017, The Guardian reported that about £15 billion had been divested over the last two years by 15 mostly European insurance companies, representing about 13% of the assets managed by the global insurance industry. 308,309,310 The same year, Zurich, the world's seventh-largest insurer, stated that they would: "stop providing insurance or risk management services for new thermal coal mines or for potential new clients that derive more than half their revenue from mining thermal coal, and also for utility companies that generate more than half of their energy from coal."311 British insurer Aviva stated: "Left unchecked... climate change will render significant portions of the economy uninsurable, shrinking our addressable market."312 In December 2019, insurer The Hartford said it would stop insuring or investing in bitumen sands projects. 313 By 2019, 17 firms had moved to restrict the coverage they provide to companies building and operating coal plants.³¹⁴ By then, 35 insurers which collectively held 37% of the insurance industry's assets had begun withdrawing investment

³⁰⁷ Zoe Yunker. Alberta and South Korea's Pensions Just Bought the Coastal GasLink Pipeline: 8 Things you Need to Know. 2020. URL: https://thenarwhal.ca/alberta-and-south-koreas-pensions-just-bought-the-coastal-gaslink-pipeline-8-things-you-need-to-know/ (visited on 06/20/2020).

³⁰⁸ Jonathan Watts. Growing Number of Global Insurance Firms Divesting from Fossil Fuels. 2017. URL: https://www.theguardian.com/environment/2017/nov/15/growing-number-of-global-insurance-firms-divesting-from-fossil-fuels (visited on 02/04/2020).

³⁰⁹ Casey Harrell and Peter Bosshard. Insuring Coal No More: An Insurance Scorecard on Coal and Climate Change. 2017. URL: http://www.sindark.com/phd/thesis/sources/UnfriendCoal2017.pdf (visited on 02/04/2020).

³¹⁰This is similar to the *ad hoc* committee at U of T's recommendation that one criterion for divestment should be: "Firms that derive more than 10% of their revenue from coal extraction for power generation or Canadian and American power generation firms that derive more than 10% of their revenue from coal-fired plants." Karney et al., *Report of the President's Advisory Committee on Divestment from Fossil Fuels*, p. 4.

 $^{^{311} \}rm Zurich.$ Insurers Can Facilitate the Transition to a Low-carbon Future. 2017. URL: https://www.zurich.com/sustainability/news/insurers-can-facilitate-the-transition-to-a-low-carbon-future (visited on 02/04/2020).

³¹²Watts, Growing Number of Global Insurance Firms Divesting from Fossil Fuels.

³¹³ Christopher Flavelle. Global Financial Giants Swear Off Funding an Especially Dirty Fuel. 2020. URL: https://www.nytimes.com/2020/02/12/climate/blackrock-oil-sands-alberta-financing.html (visited on 08/28/2020).

 $^{^{314}}$ Julia Kollewe. Coal Power Becoming 'Uninsurable' as Firms Refuse Cover. 2020. URL: https://www.theguardian.com/environment/2019/dec/02/coal-power-becoming-uninsurable-as-firms-refuse-cover (visited on 02/04/2020).

from coal.³¹⁵ In 2020, the Australian insurer Suncorp announced that it would expand its existing 2019 ban on financing and insuring thermal coal projects to include an end to underwriting oil and gas projects by 2025 and to stop investing in the coal and gas sector by 2040.³¹⁶ In 2021 — when the New York State Common Retirement Fund decided to divest US\$7 million from Imperial Oil, Canadian Natural Resources, MEG Energy, Athabasca Oil, Japan Petroleum Exploration, and Cenovus Energy — comptroller Thomas DiNapoli explained:

We have carefully reviewed companies in the oilsands industry and are restricting investments in those that do not have viable plans to adapt to the low-carbon future... Companies responsible for large greenhouse gas emissions like those in this industry, pose significant risks for investors.³¹⁷

 $Coal firms have become uninsurable, and the TMX pipeline has struggled to secure insurance coverage. {}^{318,319,320,321}$

In addition to their financial clout and linkages within the finance sector, the insurance industry could act as a trusted source to some audiences who are skeptical of environmentalists or other activists with an explicit normative agenda. Governments — as Lemphers and others have documented in detail — are susceptible to lobbying from corporations and often more concerned about financial risks than about injustice or suffering which their pollution causes. With its reputation for being cautious and non-alarmist, the insurance industry may be able to help disrupt the mechanisms through which fossil fuel advocates sustain climate change denial and the determination of governments to keep enlarging fossil fuel production.

These trends toward the financial industry taking climate change seriously as a financial and legal liability could be reinforced if governments altered laws and regulations on investment to allow investors to consider climate change impacts as well as investment returns, or at least to broaden the concept of what fiduciary duty requires to allow anticipatory action where expected future regulation may constrain returns. Richardson likely goes too far in saying that divestment activists might accomplish more by seeking better government regulation of the financial economy than by changing governments' climate and energy policies, but there is no reason to think that both could not happen together or that more limited regulatory changes could not help build a constituency in government and society for more transformative decarbonization action. Divestment and action by the finance industry are not an either-or choice, of course. This is why the argument to not divest because it is not the single most important climate change strategy is so unconvincing. Universities can choose both to divest their assets and to push the financial industry to create low- and zero-carbon investment products. Grady-Benson and Sarathy described how Prescott College announced that it would divest over a three year period in February 2014 while continuing to engage with investment managers to push for the creation of more fossil free products.³²²

 $^{^{315}\}mathrm{Kollewe},\ Coal\ Power\ Becoming\ 'Uninsurable'$ as Firms Refuse Cover.

³¹⁶Graham Readfearn. Insurance Giant Suncorp to End Coverage and Finance for Oil and Gas Industry. 2020. URL: https://www.theguardian.com/environment/2020/aug/21/insurance-giant-suncorp-to-end-coverage-and-finance-for-oil-and-gas-industry (visited on 08/21/2020).

³¹⁷ Nia Williams. New York State Pension Fund Restricts Investments in Canadian Oilsands Companies. 2021. URL: https://financialpost.com/commodities/energy/oil-gas/new-york-state-pension-fund-restricts-investments-in-canadian-oilsands-companies (visited on 04/12/2021).

³¹⁸On coal: Kollewe, Coal Power Becoming 'Uninsurable' as Firms Refuse Cover.

³¹⁹Harrell and Bosshard, Insuring Coal No More: An Insurance Scorecard on Coal and Climate Change.

³²⁰ On TMX: Mary Lovell. 15 Insurers Drop Trans Mountain Pipeline After Grassroots Pressure. 2021. URL: https://truthout.org/articles/15-insurers-drop-trans-mountain-pipeline-after-grassroots-pressure/ (visited on 06/20/2022).
321 Natasha Bulowski. Trans Mountain Pipeline Insurers Dropping like Flies. 2022. URL: https://www.nationalobserver.com/2022/04/25/news/trans-mountain-pipeline-insurers-dropping-flies (visited on 06/20/2022).

³²²Grady-Benson and Sarathy, "Fossil Fuel Divestment in US Higher Education: Student-led Organising for Climate Justice", p. 10.

5.9 Climate change framed as CO₂-energy or climate justice

There are many understandable reasons why movements skeptical about inequality, globalization, and capitalism have influenced the political analysis and agenda of climate change activists. There is undeniably some hope for success in that direction, as demonstrated by the degree to which intersectional climate justice narratives have motivated CFFD activists and some in the broader community. For those committed to the idea that environmental degradation has a capitalistic root cause, it is indeed inescapable that action on one must be tied to the other. That said, a credible case can be made that fossil fuel use is not specially linked to capitalism; the value and usefulness of petrochemicals transcends ideological divides. Fossil fuels will be attractive under any form of political and economic organization, and a world in which inequalities of wealth and discrimination are lessened may nonetheless suffer from climatic disruption. Similarly, there is cause to hope that the behaviour of firms under capitalism could be altered in favour of decarbonization through government regulation, achieving emission reductions with more speed and less controversy than through overt efforts to change citizens' lifestyles, which have consistently failed to meaningfully curb climate change. All this is simply to support the claim that non-progressive coalitions against fossil fuels can exist and help aid the transition to other forms of energy.

One joule is about the energy it takes to lift a newspaper from the ground, and represents about one three millionth of the energy expended by a person in a day (3 x 10⁶ J). Every month, the US produces about 1 x 10^{16} J of electricity. If we take yearly global energy use to be in the realm of 576 EJ (5.8 x 10²⁰ J), and world electricity consumption to be about 63 EJ (6.3 x 10¹⁹ J), we can readily begin thinking about solutions on the scale of the problem. A 1,000 MW power station operating at 100% capacity for a year produces 3 x 10¹⁶ J. Roughly, then, we would need 20,000 times that to replicate the current energy use of global civilization, including fossil fuels used for electricity, material production, and agriculture. We will actually need more for several reasons: to permit the continuing increase in living standards and per capita energy use in the developing world, replace fossil-powered technologies like heating and transport with electric options, and deal with intermittency as a much larger share of generation comes from wind and solar. 323,324,325 Mackay noted that the average energy use from affluent people globally is about 195 kWh per day, while the average American uses 250 kWh per day. He proposes 125 kWh per person per day (the European average consumption of primary energy) as a fair level for everyone on Earth to have a high quality lifestyle. At the current global population of about 7.7 billion people, that translates into 962.5 billion kWh per day $(3.5 \times 10^{18} \text{ J})$, or $351.3 \text{ trillion kWh per year } (1.3 \times 10^{21} \text{ J})$. That's equivalent to about 45,000 of the1,000 MW power stations just mentioned. As a global civilizational project — to allow some to achieve the high quality lifestyles which they understandably aspire to, and allow others to keep theirs going — rapidly building some tens of thousands of large power stations seems comparatively undemanding, and in fact much

³²³Rhodes notes that in 2016 US nuclear power plants produced 20% of the country's electricity while operating at a capacity factor of 92.1%. In comparison, hydroelectric facilities had a capacity factor of 38%, wind turbines 34.7%, solar photovoltaic 27.2%, and coal and natural gas about 50%. Rhodes, *Energy: A Human History*, p. 331.

³²⁴Gates notes that 860 million people in sub-Saharan Africa don't have electricity. He argues: "Although heavy emitters like me should use less energy, the world overall should be using *more* of the goods and services that energy provides. There is nothing wrong with using more energy as long as it's carbon-free. The key to addressing climate change is to make clean energy just as cheap and reliable as what we get from fossil fuels." (italics in original) He elaborates: "It would be immoral and impractical to try to stop people who are lower down on the economic ladder from climbing up. We can't expect poor people to stay poor because rich countries emitted too many greenhouse gases, and even if we wanted to, there would be no way to accomplish it." Bill Gates. How to Avoid a Climate Disaster: The Solutions We Have and the Breakthroughs We Need. New York: Random House, 2021, p. 5, 15, 41.

³²⁵In 2022, the IEA identified that Canada will need to increase electricity production to meet net zero targets through fuel switching to electrification. David Thurton. Canada Will Need More Electricity to Hit Net-zero: IEA Report. 2022. URL: https://www.cbc.ca/news/politics/iea-report-canada-net-zero-1.6313190 (visited on 01/14/2022).

like what we would be doing in a business-as-usual scenario where fossil-driven technologies nonetheless need to be replaced when physical capital wears out. In comparison with a project like eradicating capitalism or colonialism, the idea of repowering the world benefits from potentially lesser political contentiousness and resistance. It's also linked to specific time, atmospheric ${\rm CO_2}$, and temperature problems which drive the pace of action, in contrast to other projects like controlling infectious disease which don't face specific make-or-break points.

Why has this dissertation been worth reading? What contribution did it make? For those who care about environmental politics and activism, the chief answer to why this is interesting and important concerns the internal contention of environmental activism, with competing framings and worldviews that interpret severe global problems in very different and mutually incompatible ways, and thus prescribe courses of action which are incompatible and contradictory. Their disagreements with each other are important to everyone because we, as humanity, need a solution to the crisis that climate change is creating. Redundancy in the face of cataclysm would suggest we should have multiple solutions. Contention in the climate activist movement points to important unresolved problems in both CJ and CO₂-e views. The questions these activists grappled with about how to advance their cause and make change happen will be relevant to growing numbers as they try to disrupt the relationships between the fossil fuel agency and the institutions of power including government and finance. Humanity's future depends on us finding a way to defuse the fossil fuel bomb mid-explosion; the consequences for ourselves and our descendants if we carry on to burn most of the fossil fuels have an enormity beyond imagination, and thus we must expend our every strength and avenue in fighting for a survivable future.

The climate justice movement and CJ framing of the climate change problem embrace issue linkage, and take many forms of injustice (including economic, racial, and sexual) to arise from systemic global forms of oppression which must be dismantled to break down the mutually protective relationship between status quo governments, financial institutions, and the fossil fuel industry. This perspective arises in part from past social movements like the anti-globalization movement, with some CFFD mobilizing structures and forms of organization and decision-making influenced by the Occupy movement. At its root are often harsh critiques of capitalism as a system of societal organization and economic allocation. As discussed in the political opportunity and repertoires chapters, capitalist impulses and practices (like legal protection for those who invest in and facilitate illegal or environmentally destructive business activities) certainly deepen and perpetuate humanity's dependence on fossil fuel energy for electricity production, buildings, transport, agriculture, along with other activities indispensable to the functioning of society. In the specific case of CFFD movements, this anti-capitalist perspective was self-consciously promoted and encouraged by the proliferator organizations with a documented effect on the political thinking, priorities, and subsequent worldview of the students and allies who have undertaken the CFFD movement at the places and times described here. The short answer to what effect participation in the CFFD movement had on its organizers is that it predominantly socialized them toward a CJ framing of climate change and related global injustices.

At the same time, the CFFD movement reveals limitations and shortcomings of the CJ view. While the climate justice perspective has clearly spoken to and mobilized a large number of the most active and visible organizers in the CFFD movement, CFFD campaigns experienced internal disagreements about the desirable or necessary degree of issue linkage to accept: how proximately and explicably linked another social justice issue ought to be with the actual issue of how the Earth is radiating energy into space in order for reflexive allyship or solidarity to be a successful or morally prescribed strategy for those committed to controlling climate change.³²⁶ Particularly among those with an emphasis on government policy making and regulation, there is an impulse to consider and discuss climate change in terms of the set of activities producing GHGs and corresponding to the sectors which would need to be overhauled to function with nonfossil energy. This is where the Canadian federal government's persistent "gapology" problem arose — as their computer models of interactions between climate models, the economy, and emissions revealed a multidecadal shortfall between targets the government was pledged to and the projected deviation from 'business as usual' from the GHG-influencing policy measures which the government was proposing to implement so far. The reluctance of many industries and communities to shut down fossil fuel facilities is understandable, regardless of the broader public interest concerns. Likewise, the argument that over-regulating Canada compared to competitors will just drive business abroad is commonly used as a shorthand explanation for why no action is feasible. In fact, the outlines of a satisfactory response may be emerging as blocs of major trading partners begin considering import tariffs on the projected GHG inputs for products entering their carbon-trading market, encouraging a bloc-by-bloc deployment of economy-wide carbon pricing in all the major economies without relying directly on the stalled multilateral efforts of the UNFCCC COP process.^{327,328,329}

While the CFFD movement does have a dominant theory of change, inherited from proliferator organizations via the campaign in a box, there is disagreement among intersectional organizers about how to implement it and there is a sub-set of divestment organizers who feel hope for success through the CO₂-energy framing. It is telling, perhaps, that some of the accounts of climate justice in the CFFD movement describe it as an uprising and challenge against orthodoxy within environmental activism, despite how the proliferators who initiated the movement were, in their own description, trying to do the same thing. That can be interpreted as a demonstration of the conflict between principle and pragmatism which morally-motivated movements for change always experience, but it also demonstrates a degree or confusion or incoherence within the climate activist movement itself, with intersectional progressives on one side hoping and believing that they can bring everybody influential into their camp through sufficient agitation and CO₂-energy advocates, who fundamentally question that assessment, remaining open to potential allies on the bounded issue of where our energy comes from, and remain skeptical about the idea that climate change can only be addressed alongside or after other social justice issues. The CFFD movement may have deepened this split, as those most convinced respectively by each argument are drawn into movements of like-minded people, which can have the knock-on effect of misleading them about how widely held their views are in the mass public, entrenching polarization and a static theory of change.

McAdam's *Freedom Summer* encouraged scholars and activists to consider how the most important effect of a social movement can be on the organizers rather than the target. He called it "the intersection of history and biography." Attending to the question of how the CFFD movement developed activists helps reveal

³²⁶For an argument on why issue linkage could help build support for climate action, see: Parrish Bergquist, Matto Mildenberger, and Leah C. Stokes. "Combining Climate, Economic, and Social Policy Builds Public Support for Climate Action in the US". in: *Environmental Research Letters* 15.5 (2020), p. 054019. URL: https://iopscience.iop.org/article/10.1088/1748-9326/ab81c1/pdf (visited on 07/21/2022).

³²⁷On the possibility of using border carbon adjustments or carbon tariffs in addition to domestic carbon pricing, see: Don Pittis. Fear of Climate Change Rust Belt has Governments Considering Carbon Border Levy. 2021. URL: https://www.cbc.ca/news/business/carbon-adjustment-column-don-pittis-1.6016074 (visited on 05/13/2021).

³²⁸ Adam Vaughan. EU's Carbon Border Tax Will Test Appetite for Global Climate Action. 2021. URL: https://www.newscientist.com/article/2283978-eus-carbon-border-tax-will-test-appetite-for-global-climate-action/ (visited on 10/12/2022).

³²⁹ George Mörsdorf. "A Simple Fix for Carbon Leakage? Assessing the Environmental Effectiveness of the EU Carbon Border Adjustment". In: *Energy Policy* 161 (2022). URL: https://www.sciencedirect.com/science/article/abs/pii/S0301421521004626 (visited on 10/12/2022).

 $^{^{330}\}mathrm{McAdam},\,Freedom\,\,Summer,\,\mathrm{p.}\,\,233.$

what was most significant about the movement: which ideas it sought to proliferate and cultivate, to who and through what techniques, and with what enduring consequences for climate change and environmental politics? In an effort to overcome the barriers that have prevented sufficient action to control climate change since the issue was widely recognized in the 1980s and 90s, climate justice advocates turned away from the scientific and numerical framing which focuses on global energy sources and the changing composition of the atmosphere and toward the place of climate change in a broad ethical evaluation of global politics, situating it alongside inequities and discrimination and proposing a solution in the form of radical or revolutionary systematic change. This reorientation changed the coalition politics of climate change, shifting away from the technicians who had worked to manage acid rain and ozone depletion, and who then moved on to developing climate change solutions based on carbon pricing and market signals, while shifting toward the global justice movement which had been protesting the inequality and injustice of the world order for decades. This turn was strongly emotionally motivational, promised nearer-term non-climatic benefits from action, and integrated with an emphasis on activists' identities, promising that injustices related to race, sex, class, sexuality, and other considerations can be remedied alongside the deleterious effects of fossil fuels and greenhouse gases.

While CJ proponents hope that their ideals will convince people and become dominant, the CFFD movement shows how their remains a principled opposition that questions their analysis of the origins of climate change and their diagnosis for how it can be kept under control. The CJ and CO₂-e camps found common cause in the political opportunity structure where divestment emerged, as well as in the campaign in a box which provided a concrete approach and the story of self and enemy naming as communication techniques. Both sides saw the same opportunity, but differences emerged and deepened about what to achieve through it. They saw agitating for divestment as a way of advancing their concerns, but were divided over which audience they cared about most and the prioritization of climate change in relation to other social justice issues. This division was often hidden from those outside the movement, both intentionally because both sides saw value in the appearance of unity and unintentionally as a result of informal decision making systems in which the dominant climate justice framing could appear to hold universal or near-universal support among CFFD organizers. The contestation between the two sides became most observable when they tried to decide upon and implement activist repertoires, since it was then that decisions had to be made about who it was most important to persuade and what kinds of tactics would be productive. The CFFD movement has immersed student activists in the practical playing-out of this debate and that experience has developed their networks, influenced their theories for achieving political change, and helped define their future life trajectories as fighters against climate change and global injustice. By providing a textured anatomy of the CFFD movement, this dissertation has helped to illustrate those dynamics at work. This provides a case study and important example for those studying social movements, as well as guidance for those hoping to craft a successful movement against climate change.

In a global situation where support for climate change mitigation across the political spectrum will be needed for success at the necessary scale and with the necessary durability, both the CJ and $\rm CO_2$ -e sides bring value and have plausible paths forward. Since they are not tied to a determination to preserve the *status quo*, CJ activists have the potential to disrupt expectations and relationships which continue to sustain and justify fossil fuel dependence. A big limitation on the CJ side has been a selective and distorted perception of what the public supports, which has made radical activists lose an acute focus on public preferences as a whole and over-estimate the appeal of their own solutions. "Reasonables" on the $\rm CO_2$ -e side maintain more of a focus on and connection to politics outside the activist realm, though that can have the limitation that

they only perceive or pursue opportunities for incremental change. Radicals bring the novel thinking and independence from existing arrangements that make envisioning a radically altered and climatically stable future possible, but do not excel at helping society move from where it is now to a succession of incrementally better positions.

Chapter 6

Conclusion

Now that we have examined the Canadian CFFD movement empirically and analytically using the concepts of political opportunities, mobilizing structures, and repertoires — and have used a discussion of two different framings of the climate change problem to examine the issue normatively — this conclusion will briefly describe the outcomes of these campaigns in driving institutional action via divestment at Canadian universities. It will also provide a short recapitulation and summary of the entire argument.

6.1 Campaign outcomes at Canadian universities

This project has suffered from one of the key drawbacks of scholarly research on ongoing movement and events in the recent past, as circumstances have continued to change through the research and writing up. This is evident from matching up my research timeline with the list of Canadian schools that have committed to act on divestment. I switched to the divestment topic and put together my first draft proposal in January 2017. A month later, l'Université Laval became the first to commit to divestment, after one meeting between campaign organizers and the administration. In August 2017, my research proposal was approved. In November, l'Université du Québec à Montréal (UQAM) became the second to divest. In March 2018, my ethics protocol was approved. Between 2018-06-18 and 2019-07-22 I conducted my main course of interviews, which was supplemented with one with Bill McKibben on 2020-06-12.

Starting in November 2019, there was a run of new divestment commitments:

• Concordia, November 2019⁵

¹Alexandre Shields. L'Université Laval s'Éloigne des Énergies Fossiles. 2017. URL: https://www.ledevoir.com/environnement/491741/l-universite-laval-s-engage-a-retirer-ses-investissements-des-energies-fossiles (visited on 10/09/2022).

²Ethan Cox. Laval Becomes First University in Canada to Divest from Fossil Fuels: 3-month Student Campaign Leads to Public Commitment from Quebec University. 2017. URL: https://ricochet.media/en/1684/laval-becomes-first-university-in-canada-to-divest-from-fossil-fuels (visited on 10/09/2022).

³Patricia Cloutier. *L'UL se Débarrassera de ses Placements Dans le Pétrole*. 2017. URL: https://web.archive.org/web/20170215165013/https://www.lapresse.ca/le-soleil/actualites/education/201702/15/01-5069761-lul-se-debarrassera-de-ses-placements-dans-le-petrole.php (visited on 10/09/2022).

⁴David Grant-Poitras. The Fondation de l'UQAM Quietly Divests from Fossil Fuels. 2019. URL: https://philab.uqam.ca/en/home-blog/la-fondation-de-luqam-se-retire-en-douce-des-energies-fossiles/ (visited on 12/14/2020).

⁵Vannina Maestracci. Concordia University Foundation to Divest and Aim for 100% Sustainable Investments by 2025. 2019. URL: https://www.concordia.ca/news/stories/2019/11/08/concordia-university-foundation-to-divest-and-aim-for-100-percent-sustainable-investments-by-2025.html (visited on 08/15/2020).

- The University of British Columbia (UBC), December 2019⁶
- Guelph, April 2020⁷⁸
- Lakehead, November 2020⁹
- The University of Victoria (UVic), February 2021^{10,11,12,13}
- Waterloo, June 2021^{14,15}
- The University of Toronto (U of T), October 2021¹⁶
- Simon Fraser University (SFU), November 2021^{17,18,19}
- The University of Ottawa, February 2022^{20,21}
- Carleton, March $2022^{22,23}$

⁶Charlie Smith. UBC Board Declares Climate Emergency and Will Examine How to Fully Divest from Fossil Fuel Companies. 2019. URL: https://www.straight.com/news/1334216/ubc-board-declares-climate-emergency-and-will-examine-how-fully-divest-fossil-fuel (visited on 08/15/2020).

⁷Fossil Free Guelph. This afternoon of April 22, 2020, the University of Guelph's Board of Governors voted on a motion to divest from fossil fuels in an online meeting. 2020. URL: https://www.facebook.com/fossilfreeguelph/posts/2600962176825333 (visited on 10/09/2022).

⁸See also: Matt Carty. *University of Guelph Chancellor Resigns over Decision to Divest from Fossil Fuels.* 2020. URL: https://globalnews.ca/news/6902418/guelph-university-chancellor-resigns/ (visited on 05/08/2020).

⁹Lakehead University, Lakehead University's Board of Governors Announces Plan to Divest from Fossil Fuel Holdings.

 $^{10} \mathrm{UVic}$ News. Fossil Fuel Stocks Reduced — new Decarbonization Target for Portfolio. 2021. URL: https://www.uvic.ca/news/topics/2021+fossil-stocks-reduced+media-release (visited on 10/09/2022).

¹¹UVic News. UVic's Working Capital Fund Goes Fossil Fuel Free. 2021. URL: https://www.uvic.ca/news/topics/2021+capital-fund-fossilfree+media-release (visited on 10/16/2021).

¹²James Rowe et al. *UVic Takes a Big Step Towards Fossil Fuel Divestment*. 2021. URL: https://www.nationalobserver.com/2021/02/08/opinion/uvic-takes-big-step-towards-fossil-fuel-divestment (visited on 02/12/2021).

¹³Divest UVic. Important Divestment Decision at UVic, But More Is Still Needed. 2021. URL: https://divestuvic.com/important-divestment-decision-at-uvic-but-more-is-still-needed/ (visited on 12/09/2021).

¹⁴Michelle Angkasa, Petra Duff, and Guy Brodsky. Six Years Later, Fossil Free UW Gains a Major Win. What Now? 2021. URL: https://www.nationalobserver.com/2021/06/29/opinion/fossil-free-university-waterloo-divestment-major-win (visited on 07/03/2021).

¹⁵University of Waterloo Media Relations. *University of Waterloo Commits to Reduce Carbon Footprint of its Pension and Endowment Investments 50 per Cent by 2030, Achieve Net-neutral By 2040.* 2021. URL: https://uwaterloo.ca/news/media/university-waterloo-commits-reduce-carbon-footprint-its (visited on 06/02/2021).

 16 Rahul Kalvapalle. U of T to Divest from Fossil Fuel Investments, Create Climate-positive Campus. 2021. URL: https://www.utoronto.ca/news/u-t-divest-fossil-fuel-investments-create-climate-positive-campus (visited on 10/27/2021).

17Simon Fraser University. SFU Commits to Full Divestment from Fossil Fuels. 2021. URL: https://www.sfu.ca/pres/the-president/statements/2021/sfu-commits-to-full-divestment-from-fossil-fuels.html (visited on 11/01/2021).

18SFU350. SFU Announces Full Divestment After 8 Years of Activism by SFU350 and Allies. 2021. URL: https://drive.google.com/file/d/15EarhA9_epyqWNpkV6fC0gVTPwI9o_em/view (visited on 12/09/2021).

¹⁹All the commitments up to SFU are described in: Stephen Leahy. Small but Growing Number of Canadian Universities Divesting from Fossil Fuels: Only 10 Institutions Have Announced Full or Partial Divestment, Compared to More Than Half of Public Universities in the U.K.. 2021. URL: https://www.universityaffairs.ca/news/news-article/small-but-growing-number-of-canadian-universities-divesting-from-fossil-fuels/ (visited on 12/10/2021).

²⁰University of Ottawa Gazette. The University of Ottawa is Continuing its Efforts to Reduce its Carbon Footprint. 2022. URL: https://www.uottawa.ca/gazette/en/news/university-ottawa-continuing-its-efforts-reduce-its-carbon-footprint (visited on 03/01/2022).

²¹Climate Justice Climatique uOttawa. The University of Ottawa Commits to Fossil Fuel Divestment. 2022. URL: https://docs.google.com/document/d/1HpAVd5mVN2o6x4wwM4kteMNVBQ-tjNywY4w_DQfytF4/edit (visited on 02/18/2022).

²²Steven Reid. New Responsible Investment Policies to Meet the Challenge of Climate Change. 2022. URL: https://newsroom.carleton.ca/2022/new-responsible-investment-policies-to-meet-the-challenge-of-climate-change/(visited on 03/14/2022).

²³Mark Ramzy. Carleton Approves Fossil Fuel Divestment Strategies. 2022. URL: https://charlatan.ca/2022/03/11/breaking-carleton-approves-fossil-fuel-divestment-strategies/ (visited on 10/09/2022).

- l'Université de Montréal, April $2022^{24,25}$

With only 2 of 13 commitments taking place before my interviews, this dissertation has never sought to explain how variation between campaign composition, strategy, and tactics explains variations in university responses. As I emphasized in the discussion of the campaign in a box in the mobilizing structures chapter, CFFD campaigns in Canada, the UK, and US followed common guidance from divestment proliferators and adopted very similar demands and approaches to persuading and lobbying their target administrations. While I explicitly do not have the evidence to say so convincingly, my sense from everything I have observed in the movement is that there is not a strong relationship between variations in campaign strategies and the outcomes at their universities. Campaigns have been broadly similar and have experienced idiosyncratic conditions in circumstances of governance, finances, and staffing at each university. With the importance of peer influence between universities, decisions to act such as at Harvard in September 2021 almost certainly made it easier to follow suit.²⁶ The embrace of the carbon bubble justification for divestment at UBC is also notable. In April 2020, vice-president of finance and operations Peter Smailes sent a memo to the board of governors summarizing conclusions from an outside group of consultants:

Carbon intensive companies will be exposed to climate related financial risk as the world commits to reduce carbon emissions through regulatory, legal, market or technology shifts away from fossil fuels. Rapidly evolving trends – such as greater corporate disclosure of climate risk, commitment to a "Paris Aligned" future, the acceptance of a "carbon budget" — are greatly increasing the risk in holding shares of companies whose value is derived from the continued growth and expansion of global fossil fuel use.²⁷

Perhaps what is most remarkable about this UBC document is how it shows high-ranking UBC administrators making McKibben and CFFD activists' case on the financial argument for divestment, showing that the ideas had made the transition from something which the university might be pressured to accept because of student demands into something important parts of the administration believe themselves.

The commitments which universities have made vary in their details, including exactly which pools of university capital will be divested (working capital, pensions, endowments, etc), the exact scope of fossil fuel corporations to be excluded, and timelines for selling assets. Of note for the theory of change expounded by 350.org and CFFD groups, Canadian universities have been cautious about embracing the 'enemy naming' dimension of divestment, which is in keeping with the desire to avoid criticism in the media from pro-fossil actors and protect relationships with donors and alumni connected to the industry.

Material which could be used for a more detailed multi-generational analysis of Canadian CFFD campaigns is emerging. Around summer 2020, former CFFD campaign organizers in Canada established the Divest Canada Coalition to collaborate on understanding the movement so far and promote the development of institutional knowledge.²⁸ In a related effort, the Divest Podcast conducted interviews with organizers at Canadian campaigns:

²⁴Johanna Pellus. Students End Occupation at Université de Montréal. 2022. URL: https://montrealgazette.com/news/local-news/students-end-occupation-at-universite-de-montreal (visited on 04/04/2022).

 $^{^{25}}$ L'Écothèque. We won! The University has committed to fully investing its fossil sector funding by 2025. 2022. URL: https://www.facebook.com/lecotheque/posts/502810547987514 (visited on 04/04/2022).

²⁶See: Jasper G. Goodman and Kelsey J. Griffin. Harvard Will Move to Divest its Endowment from Fossil Fuels. 2021. URL: https://www.thecrimson.com/article/2021/9/10/divest-declares-victory/ (visited on 09/14/2021).

²⁷Mantle314, Financial Risk of Climate Change in a Transition to a Low-Carbon World: A Deep-dive Into Climate-related Risks, p. 3.

²⁸See: Divest Canada. The Road to Divestment: Lessons Learned. 2022. URL: https://www.youtube.com/watch?v=lE-v7kKd5PY (visited on 03/01/2022).

- Guy Brodsky, Waterloo, September 2021²⁹
- Julia DaSilva, U of T, November 2021³⁰
- Brennan Strandberg-Salmon, SFU, February 2022³¹
- Mary Stuart, University of Ottawa, March 2022³²

There have also been efforts within the CFFD activist community to collaborate in documenting and assessing the movement after major successes.³³ Taking part in these has provided invaluable evidence on the development of the movement in the period after my formal interviews.

6.2 Recapitulation and summary

This dissertation has provided a history and anatomy of the CFFD movement in Canada, including its origins and originators, objectives, and progress to date. In addition, it has provided answers to the core research question of how participation in the CFFD movement affected the political beliefs and behaviour of activists. That is important for the specific and idiosyncratic history of the divestment movement, but more so for what it indicates about the trajectory of climate change politics and social movement influence over policy making.

The emergence and character of the CFFD movement reflect the political opportunity structure which empowered and constrained climate change activists. Numerous structural barriers have prevented the normal operation of national politics and multilateral diplomacy from effectively initiating and sustaining a movement off of fossil fuels in order to prevent dangerous climatic destabilization.³⁴ These barriers operate from the individual to the societal level. Cognitive biases and limitations make it nearly impossible for individuals to grapple with the enormity of the climate change problem, while issues of incentives and coordination impede the emergence of effective solutions at the group level. Activists' awareness of these barriers and the need to counter them helps explain the character and targets of the CFFD movement, which has tried to circumvent the gridlock of conventional politics by attending to private actors (investors) who have a substantial ability to shape humanity's energy future, and by using the mechanism of a social movement and the repertoires of protest to persuade those actors. Three central empowering elements of the political opportunity structure helped CFFD emerge and grow in influence: the increased salience of climate change, the coordinating role of divestment proliferators who provided a 'campaign in a box,' and the comparable openness of universities to the argument that they need to act on climate change.

Much of the scholarship and writing to date about the CFFD movement has emphasized and celebrated its embrace of intersectionality and turn toward "climate justice." One commonplace narrative is that a scientific and numerical framing which lacks emotional salience and much capacity to motivate action has been replaced with a justice framing that emphasizes personal stories and the moral imperative to act.

²⁹The Divest Podcast. Guy Brodsky — Divestment at the University of Waterloo. 2021. URL: https://open.spotify.com/episode/5PAN48MMuM6YrDDPP8wm0M (visited on 09/08/2021).

³⁰The Divest Podcast. Julia DaŚilva — Divestment at the University of Toronto. 2021. URL: https://open.spotify.com/episode/7BywASPhIVeGYFEdONbFxM (visited on 11/11/2021).

³¹The Divest Podcast. Brennan Strandberg-Salmon — Divestment at Simon Fraser University. 2022. URL: https://open.spotify.com/episode/1IXCdXucIw2YtU4Am7CrqG?si=IToGV0N9SIuKuhTz10Zo2w (visited on 02/04/2022).

³²The Divest Podcast. Mary Stuart — Divestment at the University of Ottawa. 2022. URL: https://open.spotify.com/episode/OHB8SFqPYGtci6suqvStM5 (visited on 10/09/2022).

³³For instance, the highly informative presentation given by Climate Justice UBC in March 2021, three months after the university's commitment to divest: Climate Justice UBC, *The UBC Divestment Story*.

³⁴See: Ilnyckyj, Structural Barriers to Avoiding Catastrophic Climate Change.

There is an account of the internal dynamics of the movement that parallels this narrative, with scientific technocrats eclipsed by social justice advocates. I believe that this narrative about the triumph of the climate justice framing misses the enduring presence of substantive disagreement throughout the movement. Progressive climate change activists took lessons about the superiority of informal and non-hierarchical forms of organizing from the Occupy movement and other examples. In turn, the decision to avoid bureaucratic organizational structures and decision making processes — and the reliance on a certain form of consensus as a decision making system — created a misleadingly strong sense of unity within the movement when viewed from outside. In part, this obscuring arose deliberately from the desire on all sides to see the movement as united and powerful, but it also arose accidentally from the ambiguous and often inscrutable means campaigns used to make choices.

The repertoires of contentious action employed by CFFD activists reveal their political analysis of how change can be brought about. Both CJ and CO₂-e activists embraced the central storytelling techniques of "story of self" and "enemy naming" promoted by 350.org and other divestment proliferators. Linking their own biographies to their political demands legitimized the arguments of climate activists, justified why it made sense for them personally to demand changes in behaviour from others, and countered the arguments of university administrations what would have rather left the climate change problem to someone else. Enemy naming similarly challenged the status quo by re-positioning the act of burning fossil fuels and producing CO_2 from fundamentally legitimate and desirable behaviour with an unintended and unwanted side effect to the knowing choice to inflict severe risk and harm on others while continuing to benefit from the unilateral power which the slow unfolding of climate change impacts gives us over those in the future. While they collectively embraced enemy naming and the story of self, CFFD activists could be distinguished into CJ and CO₂-e camps based on which audiences they prioritized and the trade-offs they were willing to make between the multiple objectives of the divestment movement. Across a spectrum of contentiousness from the most cooperative to the most confrontational actions, CO₂-e advocates prioritized the 'inside game' task of persuading decision makers empowered to make investment choices while CJ advocates prioritized the 'outside game' of appealing to the public at large in order to win people over to their objective of radical systematic reform.

Analytically, I concur with the majority of the CFFD literature to date that the most significant effect of the divestment movement has been socializing a majority of participants toward an intersectional climate justice perspective. My normative concern is that this approach may not be well suited to solving the problem of climate change. There are two crucial empirical points of climate science that bear upon this question, and which were substantiated in the discussion of climate science in the political opportunities section. First, the projected severity of unconstrained climate change is so great that it threatens the welfare of humanity overall, risks undermining collective political efforts and achievements that go back to the first permanent human settlements, and imperils the entire living biosphere in ways that are severe and irreversible. To me, this calls into question the suitability of an intersectional approach in which a wide range of objectives are given similar prioritization. Since unconstrained climate change would undermine the prospects for many other worthwhile human undertakings, there is a strong argument that mitigating climate change should be put ahead of other social justice projects, even when intersectional linkages between the projects can be found. Second, the relationship between fossil fuel burning and climatic destabilization is slow and cumulative — what matters is the total fraction of the world's fossil fuels that get burned, not the details of by who or where. That means that even highly successful efforts to replace fossil fuels and mitigate CO₂ emissions over the course of just one government will be meaningless unless sustained by their successors. In turn, that implies that a political strategy based around bringing progressives to power so they can implement an intersectional decarbonization agenda cannot succeed unless the decision to forego the benefits of fossil fuel use is also maintained by the next governments in power. Progressives demonstrate a somewhat evangelical aspiration that just explaining their argument will lead to a large fraction of society substantively agreeing with them, but this has not been reflected in a surge of support for progressive parties in the US, UK, or Canada. With only progressives substantially in support, the climate change activist movement risks operating like a vise with only one jaw: unable to hold on to anything. Because fossil fuel abolition policies will need to remain enforced for decades to avoid catastrophic climate change, the political coalition in support must be broader than just supporters or one party or ideology that is sometimes in power. Avoiding climatic catastrophe requires the progressive left to be supported by flanking coalitions that also prioritize a stable climate and which are willing to forego the near-term benefits of fossil fuels. Some of the alternative coalitions calling for action in the global financial and insurance systems indicate that the CO_2 -e side of the divestment movement may have played a role in starting to foster such non-progressive flanking coalitions for climate change mitigation.

The academic study of climate change is distinguishable from a great deal of scholarly work because it concerns a pressing, unresolved, and potentially existential threat to humanity which our political systems have been thus far unable to resolve. As such, there are three streams of academic interest that originate in the study of the environmental politics of climate change. There is the thick descriptive project of studying climate change politics for its own sake, in order to understand and appreciate the factors driving it and the ways in which it interacts with other issues to shape broad political outcomes. This dissertation is especially useful in that regard because of the large number of interviews conducted and campaigns examined. Then there is climate change as an example where political science theories can be tested: an issue area where analytical claims about the nature of political change can be tested. Finally, there is the academic study of climate change politics as an input to the intellectual and political project of creating a stable global society and averting ecological catastrophe. The contribution of this dissertation has been to provide an anatomy of the CFFD movement, including an explanation of why it emerged, the importance of the CJ and CO₂-e frame for understanding it, and the movement's strengths and weaknesses as a response to climate change. The CFFD case involves several features of interest to social movement scholars: particularly in terms of how internet-enabled transnational movements have found ways to proliferate the concept of a social movement campaign without having to allocate staff or resources to supporting specific local efforts. This is changing the character of activism and the relationship between high-level NGOs and volunteers working on local implementation. On the subject of framing, this dissertation has helped to explain the content and appeal of the climate justice view, though also its limitations. Normatively, I conclude that an all-progressive movement will not be large enough to succeed in implementing and then protecting climate change mitigation policies. As such, a successful global effort at fossil fuel abolition will require support from non-progressive flanking coalitions.

The social movement literature in general focuses on the means necessary — organizational, material, intellectual, strategic — to get the state or another target to act in a way that it otherwise would not. In the case of CFFD narrowly, that has meant getting universities to divest from stock holdings in fossil fuel corporations; in terms of the climate change activist and climate justice movements generally, it has meant delegitimizing the fossil fuel industry and curtailing its ability to win special political treatment. These activist efforts are best understood as persuasion strategies which use the combination of evidence, logic, and an appeal to the interests and values of a target to get them to voluntarily change their conduct. The most

permanent kind of victory is convincing your opponent that they share your aims. Power is not irrelevant to this dynamic, but it is not necessarily decisive either. The process of persuasion is one of driving a target to re-examine their own thinking and position, hopefully encouraging a shift toward one more compatible with the aims of the one doing the influencing. Studying the CFFD movement in Canada provides an example of activists persuading university administrations, in some cases, while at the same time demonstrating the importance for activists of persuading one another. CJ advocates sought to persuade their fellow activists that only broad and systematic social, political, and economic change can avert the danger of catastrophic climate change, while CO₂-e advocates questioned the CJ analysis of climate change's root causes, the political plausibility of their revolutionary project, and their failure to prioritize the deployment of non-fossil fuel energy over other objectives. The campaign of persuasion within the CFFD movement thus operated on two levels, most obviously and directly as campaigns sought to persuade target administrations, but also as activists contended with one another about prioritization and strategy. An account which includes the efforts at persuasion at both levels can better make sense of why the CFFD movement operated the way it did and produced the outcomes it has so far. Activist behaviours which would be hard to understand if their sole aim was persuading target universities do make sense when the contest over framing and intra-mural debate about strategy among activists are also considered.

What can readers take away with them from this analysis? For scholars of social movements, the main items of interest are likely to be the discussions of activist recruitment and development, managing conflict and burnout within activist campaigns, and the benefits and limitations of informal organizing in terms of both democratic participation and the retention of institutional knowledge. Scholars are also challenged to respond to new dimensions of activist organizing in the era of the internet and social media, where it is possible for a proliferator group to distribute the plan for a campaign which is then implemented in a self-directed way. For activists in general, the CFFD experience is illustrative of the challenges and tensions when trying to build a mass movement for large-scale change and also negotiating with power holders over incremental progress. Activists must confront the reality that their objectives can be in tension, and therefore must be prioritized. They should also revisit the extent to which informal and non-hierarchical organizing practices are compatible with their values (because when decisions are made in parallel by a self-selected group it undermines the idea that all participants have an equal say) and whether they are effective for producing the change in the world which activists desire, given how decision makers use delay as a tactic and the need to sustain student campaigns across rounds of graduations and rejections by the administration. For those trying to solve climate change, the experience of CFFD campaigns in Canada carries lessons about the interactions between activism and politics. McKibben and 350.org have shown that it is possible to get big new ideas into the public debate, most importantly the assertion that we can only avoid catastrophic climate change by leaving most of the world's remaining fossil fuels underground. Bringing that position from the outer darkness where a few climate scientists saw its sense into mainstream politics and finance, where the carbon bubble and stranded assets have been extensively discussed, was a major achievement of the organization and movement. At the same time, embracing issue linkage, intersectionality, and solidarity can lead to challenges in prioritization and new conflicts with those who reject the purported linkages and have other judgment about non-environmental matters of social justice. In the end, the main conclusion is simple to express. Moving from a global society that is utterly reliant on fossil fuels to a climate-safe energy system requires a determined multi-decadal project to stop building fossil fuel energy, retire existing infrastructure early, and rapidly build out alternatives. Progressives alone do not have the influence to put such a project in motion, or sustain it against political opponents that see an advantage in rolling back policies to protect the climate. Since people cannot reliably be turned into progressives just through exposure to progressive arguments and messaging, a political coalition to keep climate change in check needs to be broader and needs to be justified to some on the basis of different values and political commitments. Conservatives, in particular, need to reject the fantasist approach to politics where they decide what they believe is happening in the world based on ideology and the policies they have wanted to promote all along. To preserve the basic stability which is a prerequisite to the good life from a conservative perspective, decarbonization is required. And yet, conservative movements in Canada, the US, and UK continue to be dominated by climate change deniers and fossil fuel promoters. For their part, progressives ought to accept that they won't win sufficient support across the population to implement their entire agenda. They should therefore be more willing to pursue cooperation based on strategic compromise and not just moral agreement.

Areas for future work on the CFFD movement and climate change activism similarly follow three streams of academic interest. In increasing order of interest, further academic work on the CFFD movement could help overcome some limitations of the scholarly work to date, including this dissertation. Researchers could build longer-term relationships with interview participants in order to gain a more detailed and nuanced understanding of their views. They could also seek access to sufficient information from across a long enough period of time to characterize individual campaigns in comparison to one another and as they changed over time. Divestment and climate change activism can also contribute to the further development of social movement and contentious politics theories. One fruitful avenue is to consider how activists must balance priorities: for instance, between pushing their target institution to act, delegitimizing their opponents to reduce their influence, and building the strength of the movement through recruitment and activist development. Much of the learning-by-doing that took place in the CFFD movement concerned the emergence of activist development as a strategic objective of the movement, in response to the experience of most campaigns requiring multiple rounds of effort to secure and institutional commitment. Climate change has become a crucial example of a problem where solutions through conventional political avenues are blocked, thus requiring innovation in activism and public policy making. That has a technical and practical dimension in terms of how social movement organizations are now recruiting, training, and retaining supporters. It also has an important ideological or political theory dimension, since climate change challenges the assumptions which underlie many of our political theories and philosophies. As those ideas adapt in response to new empirical information about the state of the world and new moral arguments about what right conduct requires, the efforts of the human species to bring its appetites in line with what the Earth can tolerate will progress. With everybody's personal and societal prospects on the line, this process will determine the future of humanity and the rest of nature.

Appendix A

Glossary of terms, abbreviations, and initialisms

These may appear in the dissertation text or in sources cited.

AGM annual general meeting

BAU business as usual, in the absence of policy change

BECCS bio-energy with carbon capture and storage — a negative emissions technology

where crops are grown to pull CO_2 from their air, burned to produce energy, and

the resulting CO_2 is stored outside the atmosphere

BDS Boycott, Divestment, and Sanctions (in part a divestment campaign opposing

Israeli conduct in occupied Palestine)

BLM Black Lives Matter
BOG or BoG board of governors
BOR or BoR board of regents
BOT or BoT board of trustees

CAMSR | Committee to Advise on Matters of Social Responsibility (McGill)

CAPP Canadian Association of Petroleum Producers

CASA Canadian Alliance of Student Associations — smaller and newer than the CFS

CAUT Canadian Association of University Teachers

CCS carbon capture and storage (sometimes carbon capture and sequestration)

CFFD campus fossil fuel divestment

CFS Canadian Federation of Students — a federation of university student unions
CJ Climate Justice, a framing of the climate change problem that emphasizes inter-

sectionality with other social justice issues and calls for a fundamental restruc-

turing of society

CO₂ carbon dioxide

CO₂e carbon dioxide equivalent — a way to express the global warming potential of

greenhouse gases other than CO_2 as the number of tonnes of CO_2 which would

produce the same amount of warming over a particular timescale

| CO_2 -e | CO_2 -energy, a framing of the climate change problem that emphasizes sources of |
|-----------|--|
| | energy and GHGs |

COP or CoP Conference of the Parties to the UNFCCC

CYCC Canadian Youth Climate Coalition

CYD Canadian Youth Delegation — a civil society delegation of youth the CYCC sent

to successive UNFCCC COPs

DAC direct air capture — a negative emissions technology based around separating

CO₂ from ambient air

EIA U.S. Energy Information Administration

ESG environmental, social, and governance factors — means of screening investments

FPIC Free, Prior, and Informed Consent from Indigenous communities

GDP gross domestic product

GHG greenhouse gas(es) — trace gases in the Earth's atmosphere accumulating as

pollution and causing anthropogenic climate change $^{123\ 4}$

Gt gigatonne — one billion tonnes (usually of CO₂) ^{5 6}

IEA International Energy Agency

IPCC Intergovernmental Panel on Climate Change

kcal kilocalories — 4.2 kJLNG liquefied natural gas

MUN Memorial University of Newfoundland

NEB National Energy Board

NGO non-governmental organization⁷
NRCan Natural Resources Canada
non-violent direct action

OPEC Organization of the Petroleum Exporting Countries

 $^{^1}$ "Water vapor and other gases such as CO_2 that have absorption spectra in the infrared... Earth's atmosphere collects some of the outgoing infrared radiation and reradiates it back downwards, increasing the temperature of the absorbing material — in this case Earth's surface." Jaffe and Taylor, *The Physics of Energy*, p. 683–4.

 $^{^2}$ The trapping of energy from sunlight within the atmosphere by GHGs is quantified in terms of radiative forcing, a measure of the change in downward radiation flux from the heat-trapping properties of the gases. Measured in W/m^2 , the radiative forcing from rising GHG concentrations can be compared with other influences on the climate including changes in solar irradiance. G. Myhre et al. "Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change". In: Anthropogenic and Natural Radiative Forcing. Ed. by T.F. Stocker et al. Cambridge: Cambridge University Press, 2013. URL: https://www.ipcc.ch/site/assets/uploads/2018/02/WG1AR5_Chapter08_FINAL.pdf (visited on 08/10/2020), p. 697.

 $^{^3}$ A technical definition is: "The change in net (down minus up) irradiance (solar + longwave; in W/ m^2) at the tropopause and after allowing for stratospheric temperatures to readjust to radiative equilibrium, but with surface and tropospheric temperatures and state held fixed at unperturbed values." Jaffe and Taylor, The Physics of Energy, p. 691.

⁴In everyday terms, this is equivalent to adding or subtracting watts from a notional light bulb illuminating one square metre of the Earth's surface.

 $^{^5}$ Note that sources are sometimes ambiguous about metric tonnes (1,000 kilograms — kg) versus short tons (907.2 kg) versus long tons (1015 kg).

 $^{^6\}mathrm{Sources}$ are sometimes unclear about tonnes of CO_2 versus tonnes of carbon versus tonnes of CO_2 equivalent (CO₂e). Since a CO₂ molecule consists of one carbon atom (12 grams per mole — g/mol) and two oxygen atoms (together 32 g/mol), 1 tonne of carbon equals 3.66 tonnes of CO₂. Tonnes of CO₂ equivalent refers to the amount of any greenhouse gas (GHG) or combination of GHGs with a warming effect equivalent to one tonne of CO₂ over a selected period of time. For example, one tonne of methane (CH₄) is equivalent to about 25 tonnes of CO₂ over a 100 year period.

⁷Wapner defines NGOs as "groups that form on a voluntary basis with the aim of addressing a given problem in the world or advancing a particular cause" while eNGOs "are distinguished insofar as they arise to protect some dimension of the non-human world. Their members share a sense of concern about the degradation of air, land, water and diversity of species across the earth, and interaction between human beings and the natural environment." He further notes: "NGOs act mostly as pressure groups trying to get states, corporations and other actors to adopt more environmentally friendly programs and policies." Wapner, "Horizontal Politics: Transnational Environmental Activism and Global Cultural Change", p. 39–40.

PIRG Public Interest Research Group

ppm parts per million

QBACC Queen's Backing Action on Climate Change

S&P 500 Standard & Poor's index of 500 large companies on U.S. stock exchanges

SJHR social justice and human rights
SRI socially responsible investment

TOC or ToC Theory of change

TRC Truth and Reconciliation Commission

UNDRIP United Nations Declaration on the Rights of Indigenous Peoples
UNFCCC United Nations Framework Convention on Climate Change

WHO World Health Organization

XR Extinction Rebellion

Table A.1: Glossary

Appendix B

Systeme Internationale (SI)

Units

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energy one joule 1 J
power one watt 1 W
```

1 joule = 1 Watt per second

Prefixes for large numbers

| Prefix | Symbol | Factor |
|--------------|--------------|---|
| kilo | k | $10^3 \text{ or } 1,000$ |
| mega | \mathbf{M} | $10^6 \text{ or } 1,000,000$ |
| $_{ m giga}$ | G | $10^9 \text{ or } 1,000,000,000$ |
| tera | ${ m T}$ | $10^{12} \text{ or } 1,000,000,000,000$ |
| peta | P | $10^{15} \text{ or } 1,000,000,000,000,000$ |
| exa | \mathbf{E} | $10^{18} \text{ or } 1,000,000,000,000,000,000$ |

As Bill Gates put it: "Whenever you hear 'kilowatt' think 'house.' 'Gigawatt' think 'city.' A hundred or more gigawatts, think 'big country." Garwin and Charpak explained: "Since Americans use electrical energy at a rate of some 1.3 kW per head (13 hundred-watt light-bulbs), each nominal 1-Gwe power plant will supply a population of 800,000 using energy at the rate typical of Americans." 2

¹Gates, How to Avoid a Climate Disaster: The Solutions We Have and the Breakthroughs We Need, p. 57.

²Richard L. Garwin and Georges Charpak. *Megawatts and Megatons: The Future of Nuclear Power and Nuclear Weapons*. Chicago: University of Chicago Press, 2002, p. xvi.

Appendix C

Standard units of energy and comparisons

```
\equivdefinition

\approxapproximately

\simactual value varies
```

Examples of energy use in joules

| 1 joule (J) | Picking up a newspaper from the ground, or energy produced by a human being |
|--------------------------------|--|
| | at rest in 1/100th of a second (s) |
| $10^3 \mathrm{~J}$ | Talking on a cell phone for 10 minutes, or one match |
| $3 \times 10^6 \text{ J}$ | Eight hours of hard manual labour |
| 10^7 J | Daily human food intake (2400 kilocalories (kcal), equivalent to 10 MJ / day) |
| $10^9 \; { m J}$ | Average American daily energy consumption (300 times more than eight hours of |
| | hard labour) |
| $1.1 \times 10^{10} \text{ J}$ | Energy to accelerate a Boeing 777-300ER aircraft to cruising speed (equivalent |
| | to the daily food energy intake of 1,000 people) |
| $4.1 \times 10^{10} \text{ J}$ | Energy to raise a 777-300ER to cruising altitude |

Conversions between common energy measures

- 1 watt (W unit of power) = 1 joule (J unit of energy) / second (s unit of time)
- 1 kilowatt-hour (kWh) \equiv 3.6 megajoules (MJ)
- 1 kWh / day \approx 40 W
- \bullet 200 W/m² Typical incident solar energy for a mid-latitude location, averaged over a 24 hour cycle
- 1 horsepower (electric) \equiv 746 W
- 1 m³ of natural gas ~ 36 MJ

- 1 barrel of oil equivalent ≈ 6.118 gigajoules (GJ)
- 1 ton of coal equivalent $\equiv 29.3076$ GJ
- Energy to refine 1 barrel of oil $\approx 1.2 \text{ GJ}$
- Energy from complete fission of 1 kg $^{235}\mathrm{U}\approx\!77~\mathrm{TJ}$

Energy use in aggregate

- Daily U.S. net imported crude oil (2011-12) 6 x 10^{16} J
- Monthly U.S. electricity generation 10^{18} J
- Yearly global energy use (2014) \approx 576 EJ

World energy use by type

- World electricity consumption \approx 63 EJ
- World oil consumption ≈196 EJ
- World coal consumption ≈ 156 EJ
- World dry natural gas consumption ≈ 134 EJ
- World net nuclear energy generation $\approx 8.7 \text{ EJ}$
- World hydroelectricity production ≈13.89 EJ
- World wind electricity production $\approx 2.57 \text{ EJ}$
- World biomass and waste electricity production $\approx 1.75 \text{ EJ}$
- World geothermal electricity production ≈ 0.27 EJ
- World solar electricity production ≈ 0.72 EJ

Energy potential of renewables

- Total rate of wave energy hitting all the world's shores ≈ 3 TW
- Average global power use $\approx 17 \text{ TW}$
- Total Earth geothermal power output \approx 45 TW
- Solar power incident on earth ≈ 174 petawatts (PW 10^{15} W)

Appendix D

Table of interview participants

Participants listed by name selected to have quotations attributed from the confidentiality menu which I offered, following Fujii's recommendation.¹ Those who chose to take part anonymously are listed as an interview date only. Some people were both organizers in specific campaigns and later staff at divestment proliferator organizations. They are sorted in the order their involvement in fossil fuel divestment activism became known to me, and thus when I could reach out to them about a potential interview.

In evaluating the representativeness of what interview participants told me, self-selection must be borne in mind. The 63 interviews that took place were out of 142 potential participants who I tried contacting repeatedly (44% of those I contacted were interviewed). A significant number of my interview participants also took part in interviews for other scholarly work on the CFFD movement. I did not interview but did work with all of Belliveau's interview participants at U of T.² Among interview participants who did not request anonymity from either of us, we both interviewed some of the same participants in the UBC and Dalhousie, as well as two of the same staffers from 350.org and the CYCC. All of Belliveau's participants who I did not interview are people who I contacted repeatedly about taking part in this project. One of Aidid's eight non-pseudonymous research participants also took part in an interview with me.³ Researchers are drawing from the pool of people who are most possible to reach and most interested in taking part, which are both factors that probably skew their perspective from the mean in their organization and the movement as a whole. This reinforces how the set of CFFD organizers who can be identified and who are open to interviews is small and likely not representative of the mean movement participant. In interpreting their statements, therefore, we need to be careful to represent them as the information provided by a subgroup unlikely to be representative rather than a sample of the views typical within campaigns or the movement.

As noted in my ethics protocol, I did not seek interview participants from the University of Toronto campaign.⁴ This was because I had taken part in that campaign as an activist rather than a scholar, and because my involvement in the U of T campaign helped me develop my research proposal and ethics protocol, particularly from the perspective of protecting participants.

While the central group of intended interview participants were CFFD organizers in Canada, I spoke

¹The options are listed in my ethics protocol Milan Ilnyckyj. Ethics Review Application Form For Supervised and Sponsored Researchers: Canadian Campus Fossil Fuel Divestment Campaigns and the Development of Activists. 2018. URL: https://www.sindark.com/phd/thesis/ethics/CFFD-ethics-4-0.pdf (visited on 05/23/2019), p. 18-9.

²Belliveau, "Climate Justice in the Fossil Fuel Divestment Movement: Critical Reflections on Youth Environmental Organizing in Canada", p. 114.

³Aidid, "From Divestment to Climate Justice: Perspectives from University Fossil Fuel Divestment Campaigns", p. 56.

⁴Ilnyckyj, Ethics Review Application Form For Supervised and Sponsored Researchers: Canadian Campus Fossil Fuel Divestment Campaigns and the Development of Activists, p. 4–5.

with some in the US and UK also. I spoke with Chiara Rose from the Western Washington University campaign on 2018-09-16. It was only during the interview that I realized that she was not involved in the campaign at Western University in London, Ontario. The similarity between that conversation — as well as informal discussions with organizers at other US and UK schools — demonstrates the transnational nature of the CFFD movement and the consistency in objectives and organizing styles between countries. Also, the behaviour of peer schools is the most important norm used by universities in assessing their own conduct. The statements and choices of American Ivy League schools have been highly relevant to the deliberations of Canadian administrations, and cited in the rationales for their actions. For context on the international movement, I also spoke with Leif Taranta of Middlebury College (2019-03-08) and Henry Penrose of Wadham College, Oxford (2019-06-28).

D.1 Participants from Canadian campus fossil fuel divestment campaigns

Unless otherwise identified, participants were student campaign organizers.

Some anonymous participants are not included in any list below, in order to protect all anonymous participants from identification.

| University | Name | Interview date |
|--------------------------------------|----------------------------------|----------------|
| University of British Columbia (UBC) | Michelle Marcus | 2018-09-24 |
| UBC | Catherine Hodgson | 2018-09-24 |
| UBC | Alexander Hemmingway | 2018-10-10 |
| UBC | Stephanie Glanzmann | 2018-09-23 |
| UBC | Arielle Garsson | 2018-09-23 |
| UBC | Anonymous participant A, faculty | 2019-01-31 |
| UBC | Erica Frank, faculty | 2018-09-24 |
| UBC | Anonymous participant B | 2018-10-31 |
| University of Calgary | Ann Silbernagel | 2018-10-09 |
| Calgary | Matt Hammer | 2018-10-03 |
| Carleton University | Clay Steell | 2018-10-09 |
| Carleton | Anonymous participant C | 2019-01-17 |
| Concordia University | Anonymous participant D | 2019-01-10 |
| Concordia | Anonymous participant E | 2018-10-29 |
| Dalhousie University | Katie Rae Perfitt | 2018-07-12 |
| Dalhousie | Kiki Wood | 2018-09-16 |
| Dalhousie | Simon Greenland-Smith | 2018-07-26 |
| Dalhousie | Emilia Belliveau | 2018-08-26 |
| Dalhousie | Kathleen Olds | 2018-09-21 |
| Dalhousie | Joanna Brenchley | 2018-09-25 |
| Dalhousie | Laura Cutmore | 2018-11-02 |
| University of Guelph | Spencer McGregor | 2018-10-29 |
| Guelph | Atiya Jaffar | 2019-01-11 |
| | | |

| Lakehead University | Paul Berger, faculty | 2018-08-24 |
|---|--|------------|
| Université Laval | Alice-Anne Simard | 2018-10-25 |
| McGill University | Bronwen Tucker | 2018-10-08 |
| McGill | Anonymous participant F, faculty | 2018-09-26 |
| McGill | Jed Lenetsky | 2018-11-09 |
| Memorial University of Newfoundland (MUN) | Robin Whitaker, faculty | 2018-09-04 |
| MUN | John Curtis, faculty | 2018-10-26 |
| MUN | Conor Curtis | 2018-10-24 |
| MUN | Anonymous participant G | 2019-07-10 |
| Mount Allison University (MTA) | Tina Oh | 2018-10-06 |
| MTA | Naomi Goldberg | 2018-10-11 |
| MTA | Clay Steell | 2018-10-09 |
| MTA | Zoe Luba | 2019-01-27 |
| MTA | Brad Walters, faculty | 2018-10-25 |
| MTA | Anonymous participant H, administrator | 2018-10-25 |
| Université de Sherbrooke | Alex Cool-Fergus | 2018-10-29 |
| Simon Fraser University (SFU) | Anonymous participant I, faculty | 2019-07-22 |
| Queen's University | Sean Price | 2018-08-01 |
| Queen's | Mac Fitzgerald | 2018-08-28 |
| Queen's | Nicholas Lorraway | 2018-08-29 |
| Queen's | Diana Yoon | 2018-06-18 |
| Queen's | Leah Kelly | 2018-09-12 |
| Queen's | Sam Green | 2018-11-01 |
| Queen's | Anonymous participant J | 2018-10-25 |
| Queen's | Warren Mabee, faculty | 2018-11-01 |
| University of Toronto (U of T) | Miriam Wilson | 2019-01-10 |
| University of Victoria (UVic) | Emilia Belliveau | 2018-08-26 |
| UVic | Malkolm Boothroyd | 2018-10-03 |
| UVic | Matt Hammer | 2018-10-03 |
| UVic | Peter Gibbs | 2018-10-29 |
| UVic | Anonymous participant K | 2018-11-02 |
| University of Waterloo | Truzaar Dordi | 2018-09-03 |
| Waterloo | Anonymous participant L | 2018-09-21 |
| Waterloo | Élisabeth Bruins | 2018-09-19 |
| Waterloo | Anonymous participant M, faculty | 2019-01-17 |
| University of Winnipeg | Anonymous participant N | 2019-01-13 |
| Winnipeg | Anonymous participant O | 2018-10-04 |
| Winnipeg | Avery Letkemann | 2019-01-25 |

Table D.1: Participants from Canadian campus fossil fuel divestment campaigns

| Organization | Name | Date |
|--|-------------------|------------|
| 350.org | Bill McKibben | 2020-06-12 |
| Canadian staff of 350.org, using "350 Canada" branding | Katie Rae Perfitt | 2019-01-13 |
| 350 Canada | Atiya Jaffar | 2019-01-11 |
| Canadian Youth Climate Coalition (CYCC) | Kiki Wood | 2018-09-16 |

Table D.2: Participants from divestment proliferator organizations

D.2 Participants from divestment proliferator organizations

Participants were staff members in eNGOs which proliferated fossil fuel divestment.

Appendix E

International campus fossil fuel divestment efforts

While I was consistently urged to only study and discuss Canadian campaigns, I felt that would be misleading given how the CFFD movement operated transnationally. The CFFD movement can be most productively studied as a transnational effort where volunteer groups coordinated their actions and messaging with help from 350.org and other eNGOs. The similarity of messaging across the transnational CFFD movement is evident in Canada, the US, UK, and beyond. 1234567891011121314 Searching the internet for images using "divestment" or "fossil free" and the name of various universities with CFFD campaigns quickly reveals the commonalities in tactics and messaging.

Repertoires from the movement have also been applied outside the university context. The Swarthmore campaign's sit-in in their college's Investments and Finance Office in 2015 used a near-identical template to

¹For Canadian examples, see: Milan Ilnyckyj. *Divest from Fossil Fuels: Invest in out Future.* 2014. URL: https://secure.flickr.com/photos/sindark/15590174408/ (visited on 04/04/2022).

²YU Fossil Free. Hey yorkuniversity... we won't rest until you publicly divest from fossil fuels and invest in a climate-resilient future! 2021. URL: https://twitter.com/YUfossilfree/status/1459212083959054337 (visited on 04/04/2022).

³Divest UVic. Photos from the Divest UVic campaign. 2020. URL: https://www.sindark.com/phd/thesis/sources/UVic-2020-01-28.jpg (visited on 04/04/2022).

 $^{^4} UBCC350.\ Photo\ of\ UBCC350\ using\ 350.org\ divestment\ branding.\ 2015.\ URL:\ https://www.sindark.com/phd/thesis/sources/UBC-2015-02-13.jpg\ (visited\ on\ 04/04/2022).$

⁵Divest MTA. Divest MTA Instagram post showing shared divestment branding. 2020. URL: https://www.sindark.com/phd/thesis/sources/MTA-2020-02-26.PNG (visited on 04/04/2022).

⁶For the UK and Ireland see: Alex. Divest London. 2015. URL: https://flickr.com/photos/alexwhite/16511416326/ (visited on 04/04/2022).

⁷Friends of the Earth Scotland. Friends of the Earth - Glasgow 146. 2021. URL: https://flickr.com/photos/friendsoftheearthscotland/51674538534/ (visited on 04/04/2022).

⁸Emil Varga. *Divest 2015*, *Dublin*, *Ireland*. 2015. URL: https://flickr.com/photos/emil2/15929220533/ (visited on 04/04/2022).

⁹Muncie, "Investing in Climate Solutions? An Exploration of the Discursive Power and Materiality of Fossil Fuel Divestment Campaigns in Scotland".

 $^{^{10} \}mbox{For the US see:}~350.\mbox{org}.~Harvard~Heat~Week~Faith~Day~4-16-15}.~2015.~\mbox{URL: https://www.flickr.com/photos/350org/16980469690/~(visited~on~04/04/2022)}.$

¹¹The Pollination Project. Chloe Maxmin — Divest Harvard. 2014. URL: https://www.flickr.com/photos/thepollinationproject/14814405960/(visited on 04/04/2022).

¹²Matt Kirstoffersen. FAS Senate Discusses Divestment. 2020. URL: https://yaledailynews.com/blog/2020/02/21/fas-senate-discusses-divestment/ (visited on 04/04/2022).

 $^{^{13}} Fossil$ Free Stanford. 20151119-20151119 Untitled DSC 9145. 2015. URL: https://www.flickr.com/photos/fossilfreestanford/23149181055/ (visited on 04/04/2022).

 $^{^{14}350.\}mathrm{org}.$ Swarthmore Mountain Justice Sit-In. 2015. URL: https://www.flickr.com/photos/350org/16659594697/ (visited on 04/04/2022).

the occupation of former Canadian finance minister Joe Oliver's constituency office led by U of T divestment organizers in the same year. 1516

Curnow and Gross' methodology also reflects their view of the CFFD movement as essentially transnational. They looked at Canadian and US campaigns side by side and argued that the "series of actions used to put pressure on campus targets and engage the campaign's base of support... is the standard for U.S. and Canadian fossil fuel divestment campaigns." ¹⁷

Lakanen argued that the climate justice movement overall was "constituted by interrelated, multi-scalar processes as well as actors that contest and co-create global narratives that generate and respond to locally-specific conditions" and that among interview participants "activists had networks that crisscrossed the country and did not conform to regional boundaries or associations." These activists "place these [local and global] levels in conversation with one another as they produce multi-scalar realities and relations." She does caution, however, that Canada's post-colonial and Indigenous context makes it erroneous to directly apply US theories to Canada. ¹⁸

 $^{^{15}} Swarthmore Mountain Justice. Swarthmore Sit-In for Divestment. 2015. URL: https://www.flickr.com/photos/132033165@N07/albums/72157651379196906 (visited on <math display="inline">04/04/2022$).

 $^{^{16} \}rm Milan\ Ilnyckyj.$ Sit-in at Joe Oliver's Office. 2015. URL: https://secure.flickr.com/photos/sindark/sets/72157653081413173/ (visited on 04/04/2022).

¹⁷Curnow and Gross, "Injustice Is Not an Investment: Student Activism, Climate Justice, and the Fossil Fuel Divestment Campaign", p. 371, 374.

¹⁸Lakanen, "'A Battle for the Soul of the Climate Movement': The Expansion of the Intersectional Climate Justice Frame Among Young Activists in Canada", p. iii, 29, 144, 70, 128, 188.

Appendix F

Conventions in the text

In cases where a citation is highly technical, such as a paper from a scientific journal, I have tried to cite a more accessible journalistic source which describes the findings as well. I have also tried to represent public-facing climate activist groups like CFFD campaigns by their own public communications online.

For simplicity and to focus on the main task I will refer to decarbonization and fossil fuel abolition equivalently, meaning the replacement of all activities presently dependent on fossil fuels with versions reliant on climate-safe forms of energy.

Spelling and punctuation have not been standardized within quotations.

The bibliography included in the print and PDF versions of the dissertation includes only sources cited in the text. A bibliography which includes all sources consulted is available online.¹

 $^{^1 \}mbox{Milan Ilnyckyj. } \mbox{\it Campus Fossil Fuel Divestment (CFFD) Bibliography. 2022. } \mbox{\it URL: https://www.academia.edu/50959508/Campus_Fossil_Fuel_Divestment_CFFD_Bibliography (visited on <math>12/11/2022$).}

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