Profitable, Ethical, Sustainable: Investigating Corporate Responses to Climate Change

by

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B.A., University of Victoria, 2009

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ABSTRACT

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Climate change is one of the most critical problems of our time. I use content analysis and network analysis to critically examine corporate responses to climate change as they are outlined on the websites of three of Canada's largest corporations: Suncor Energy, Royal Bank of Canada and Bell Canada. I consider the data in light of two theoretical perspectives: ecological modernization and eco-socialism. The primary research question is: is private environmental governance effectively addressing climate change? To answer this question I first consider two more rudimentary research questions. (1) How are Canadian corporations responding to climate change? (2) What kinds of private environmental governance are Canadian corporations engaging with? None of the private environmental governance initiatives in this study appear to be directly leading corporations to reduce GHG emissions. The three corporations are responding to climate change in ways determined by corporate needs, rather than what is necessary to mitigate climate change.

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Perhaps the most important words in this thesis are “thank you”. When I began graduate studies my daughter was still a baby, and when I finish she will be three, and my son will be two. It has been a busy few years, and I am tremendously grateful to the people who have helped me along the way.

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To my parents, for always being there when I need you,
and for helping me to be the person I am today.

CHAPTER ONE: Introduction and Literature Review

Climate change is one of the most critical problems of our time. There is consensus among the scientific community that the earth's climate is changing. Much of the change is anthropogenic, caused mainly by emissions of greenhouse gases (GHGs) due to use of fossil fuels (Intergovernmental Panel on Climate Change (IPCC) 2007). Already, some areas of the earth are becoming inhospitable; species and ecosystems are under threat of extinction; growing conditions in many places are deteriorating, and extreme weather and drought are increasingly taking their toll with great human and ecological costs. The potential damage associated with climate change is dependent on both the magnitude of the change, and the possibility of multiple positive feedback loops accelerating global warming, and making some impacts irreversible (Solomon et al. 2009). This is often referred to as "runaway" climate change, which will be set in motion when the climate reaches an approximate tipping point. Hansen et al. (2008) define this tipping point as 350 parts per million (ppm) carbon dioxide (CO_2) in the earth's atmosphere. Recently, concentrations of CO_2 in the atmosphere reached 400 ppm – the first time this has happened in several million years, since a time when sea levels were up to 40 meters higher than they are now, and the Arctic was free of ice (Carrington 2013). If CO_2 levels are not brought back below 350 ppm soon the results may be catastrophic and irreversible (Hansen et al. 2008). To mitigate climate change global GHG emissions need to be reduced, which will require moving away from the use of fossil fuels, and research and development of alternative, renewable and non-polluting sources of energy.

Climate change is an issue that touches people in a diversity of ways. Conversations about climate change are taking place across the globe: in community groups, boardrooms, government offices, and around the dinner table. Farmers are trying to understand changes in

climate and weather patterns, and how to adapt their crops; state leaders are – hopefully – considering how they will power their economies and meet the needs of their populations without relying heavily on fossil fuels; corporate executives are looking for ways to reduce GHG emissions, while planning for how future regulations and changes in technology may affect their businesses, and citizens are trying to understand the many issues related to climate change and how their lives will be impacted.

In Canada, proposals and policies for climate change mitigation tend to be controversial. The controversy is mainly associated with what various groups argue can and cannot be done in consideration of a plethora of other social and economic issues. Climate change mitigation may negatively affect some; lack of mitigation affects others; and there are numerous immediate issues that demand attention and resources. Many people's struggle to meet day-to-day needs leaves no energy to spare for non-immediate problems such as climate change. For those who can afford the time to consider climate change, the problem competes with many others for attention – there is always another story to break, and another crisis to capture people's attention. Even for those who are engaged with the issue and are concerned about climate change, it is such a complex and large-scale problem it can be overwhelming and lead to feelings of frustration and helplessness. Climate change is generally accepted to be a systemic issue, which cannot be solved by individual actions. Systemic solutions are needed. This narrows the field with regard to which actors are best placed to address climate change to those that are able to create change on a large scale, across networks of actors. With this in mind, I investigate corporate responses to climate change, and the effectiveness of private environmental governance for addressing the problem. I focus on Canada because it is

one of the world's major emitters (World Bank 2013).[1] It is also home to the Alberta tar sands. According to scientist James Hansen (2012), if the enormous quantity of bitumen in the Alberta tar sands is fully mined: "it will be game over for the climate".[2]

During the last 30 years there has been an ongoing process of neoliberalization in Canada, involving a shift away from public environmental regulation towards market-based mechanisms and private environmental governance (McBride and McNutt 2007). At the same time, Canadian corporations have been embracing corporate social responsibility (CSR), and promoting their own efforts to reduce GHG emissions and contribute to climate change solutions. In addition to self-regulation, Canadian corporations are engaging with a number of initiatives and organizations that are either directly or indirectly involved in environmental governance, including: codes of conduct, international reporting frameworks, certification schemes, sustainability indexes, consultancies, industry associations, non-governmental organizations (NGOs) and coalition groups. I critically examine how Canadian corporations are responding to climate change, focusing in particular on their relationships with initiatives and organizations related to private environmental governance.

Overview of the Research Project

My primary research question is: is private environmental governance effectively addressing climate change? To answer this question I first consider two more rudimentary research questions. (1) How are Canadian corporations responding to climate change? (2) What kinds of private environmental governance are Canadian corporations engaging with?

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[1] Based on 2009 data, Canada is eighth in the world in terms of overall GHG emissions (World Bank 2013).
[2] Different groups use different terminology to describe the tar sands. "Tar sands" tends to be used by environmental organizations and groups critical of the tar sands; "oil sands" is more commonly used by industry and government (Nikiforuk 2008). The two phrases are understood to describe exactly the same thing, while portraying them in different ways. In this paper I use "tar sands" (revealing my own affinity), unless I am referring to a passage in which the author uses "oil sands".

Involvement with private environmental governance is one form of corporate response to climate change. Examination of what kinds of private environmental governance each case study corporation is engaged with, in light of what concrete action each corporation is taking to address climate change, provides an indication of how effectively private environmental governance is addressing climate change.

To answer the three research questions, I critically examine corporate responses to climate change as they are outlined on the websites of three of the largest corporations in Canada: Suncor Energy, Royal Bank of Canada and Bell Canada (Forbes 2012). Henceforth, I refer to these companies as Suncor, Royal Bank and Bell. I begin by using content analysis to investigate how the corporations are responding to climate change, as reflected in their communications on their websites. I then use social network analysis to illustrate how the three focal corporations are part of a broad organizational "field" of environmental governance. In institutional theory a "field" is generally understood to refer to a network of actors and the relationships between them, connected by a central issue such as environmental governance (Hoffman 2001). Djelic and Sahlin-Andersson (2006) conceptualize fields as incorporating three overarching dimensions: spatial, relational and meaning. Further discussion of fields, and the merits of social network analysis for examination of environmental governance, will be provided in Chapter Two. The network analysis reveals relationships between the case-study corporations and various organizations and initiatives related to environmental governance. Throughout the thesis, I draw on the theoretical perspectives of ecological modernization and eco-socialism to highlight various interpretations of the data.

This thesis is organized as follows. In Chapter One, I provide a brief overview of the current political and economic context in Canada as it relates to environmental governance and corporate responses to climate change. This involves defining some of the key tenets of neoliberalism, its history in Canada, and how it is apparent in the changing nature of environmental governance and increases in CSR. I conclude Chapter One by introducing the theoretical perspectives of ecological modernization and eco-socialism.

Chapter Two provides an overview of some of the key choices made in the design and undertaking of this project, including discussion of the case studies and explanation of the methods used for data collection and analysis. Chapter Three addresses the first research question: how are Canadian corporations responding to climate change? It draws from the content analysis and the network analysis to summarize three key types of corporate responses to climate change: (1) communication about climate change, (2) involvement in climate change decision-making and governance, and (3) concrete action. Chapter Four addresses the second research question: what kinds of private environmental governance are Canadian corporations engaging with? This chapter draws primarily on the network analysis to identify the different kinds of private environmental governance the case-study corporations are engaging with, and how they are involved with them. It includes critical analysis of some of the main types of initiative that the corporations are directly and indirectly involved with. Finally, Chapter Five draws on the preceding two chapters to answer the main research question: is private environmental governance effectively addressing climate change?

Neoliberalism

The current political and economic system in Canada, and how environmental governance is situated within it, is in large part the result of an ongoing process of

neoliberalization that has been occurring since the 1980s (McBride 2005). For this reason, I start with a brief overview of the importance of neoliberalism – globally and in Canada. I focus on key elements and understandings that are most relevant for study of environmental governance. Discussion of neoliberalism is important to contextualize recent shifts in environmental governance away from public regulation, towards market-based solutions, self-regulation and voluntary initiatives.

There is no simple definition of neoliberalism, or of the process of neoliberalization. This is highlighted by McCarthy and Prudham (2004: 276), who describe neoliberalism as "a complex assemblage of ideological commitments, discursive representations, and institutional practices". David Harvey (2006: 145) offers a good starting point for a broad definition:

> Neoliberalism is in the first instance a theory of political economic practices which proposes that human well-being can best be advanced by the maximization of entrepreneurial freedoms within an institutional framework characterized by private property rights, individual liberty, free markets and free trade. The role of the state is to create and preserve an institutional framework appropriate for such practices.

Harvey reveals the foundations of the theory, from which there are multiple directions in which the literature on neoliberalism has embarked. Neoliberalism draws fundamentally upon the ideals of classic liberalism, in particular its faith in what Karl Polyani (1944) referred to as "the self-regulating market" as a governance mechanism (McCarthy and Prudham 2004). Neil Brenner and Nik Theodore (2005: 102-103) outline some key aspects of neoliberalism that have been developed in recent literature; I summarize five of them here to highlight the broad scope of current understandings of neoliberalism:

(1) Neoliberalism is a process, not a fixed condition.

(2) There is no single, "pure" form of neoliberalism; "institutional transformation and ideological rearticulation" are historically and geographically specific.

(3) Neoliberalism transforms state-economy relations, actively mobilizing state

institutions to promote regulatory arrangements that are market-based.

(4) The outcomes of neoliberalism will vary according to each context in which it is imposed.

(5) The project of neoliberalism is continually evolving, reinventing itself "politically, organizationally and spatially".

Neoliberalism is the ideological and political project that followed the Keynesian, post-war era (Palley 2005).[3] Harvey (2006: 145) describes neoliberalization as having "swept across the world like a vast tidal wave of institutional reform and discursive adjustment". Focusing on North America and Western Europe, Peck and Tickell (2002: 384) explain neoliberalism in terms of two distinct processes: "roll-back" and "rollout" neoliberalism. "Roll-back" refers to the initial stage of "deregulation and dismantlement" of the Keynesian welfare state, which happened in the 1980s. In the 1990s, Peck and Tickell argue that a second phase emerged: the active "roll-out" of neoliberalism, characterized by regulatory reform and the development of new state forms and modes of governance.

In practice, neoliberalism has involved deep cuts to the role of the state in providing protection from the destructive effects of capitalist production, both socially and environmentally. It has been actualized in a "global set of rules" established through the World Trade Organization (WTO) and the International Monetary Fund (IMF) – organizations that require member states to incorporate these rules into their own political and economic systems, or pay severe penalties (Harvey 2006: 145). State functions are rolled back in the name of economic competitiveness, and re-structured in various ways (Peck and Tickell

[3] Keynesianism was the dominant economic policy in developed Western nations in the twenty-five years following World War II (1945-1980). It was characterized by government involvement in management of interest rates, spending and taxation with the aim of stabilizing aggregate demand in the state economy and bringing about full employment (Palley 2005).

2002). The result is less binding regulations and increased dependence on voluntary, private regulation, public-private initiatives, and self-regulation (McCarthy and Prudham 2004: 275).

In Canada, neoliberalization has been occurring since 1984, when Brian Mulroney's Progressive Conservative party was elected (McBride 2005). Under Mulroney, social programs were incrementally cut and amended (McBride and McNutt 2007). Beginning in 1993, when the Chretien/Martin Liberals came to power, the process accelerated (McBride 2005).[4] Recently, the clearest example of neoliberal shifts in environmental governance in Canada are the changes made to the federal environmental assessment (EA) process contained in the Canadian Environmental Assessment Act 2012 (CEAA 2012), which was introduced as part of the federal government's omnibus budget bill C-38. CEAA 2012 reflects a withdrawal of the commitment of public resources for environmental protection. Compared to the earlier CEAA, it is less efficient and less fair: it restricts public involvement, narrows the scope of EAs, shifts responsibility to provinces and municipalities (another way that neoliberalism shifts responsibility from the state), reduces the total number of EAs, and starts them in later stages of project development so that information gained is not available early enough to inform decisions about whether a project is the best option ecologically and for society (Doelle 2012). The rolling back of state involvement in EAs highlights the creation of a gap in oversight that may in some cases be filled by more localized government bodies. In other cases, it may be left to one or more private actors to step in, or to corporations themselves

[4] Naomi Klein (2007) argues that 1993 was an important year for the progression of neoliberalization in Canada. It was then that a number of major rollbacks of Canada's welfare state were made, justified by a debt crisis attributed to overspending on social programs. It was later discovered that this debt crisis was manufactured by a small number of think tanks funded by the largest corporations and banks in Canada. In reality, the debt was a problem – but not a crisis, and it was related mainly to high interest rates. Due to the large amount of false information in the media, Vincent Truglia, the senior analyst at Moody's in charge of issuing Canada's credit rating at the time, published a special report to clarify that Canada's spending was "not out of control" and the debt crisis had been exaggerated in a number of reports (cited in Klein 2007: 310). As Klein argues, by the time this report was released, severe budget cuts had already been made.

conducting their own assessments as a form of self-regulation. This raises a number of issues relating to authority, legitimacy and the dynamics of establishing private forms of environmental governance and regulation. I attempt to address some of these issues in the next section.

The Shift Towards Private Environmental Governance

Literature on the shift towards private authority and governance does not always explicitly refer to neoliberalism; however, this shift is central to the process of neoliberalization. In this section I draw in part on literature regarding global governance, applying arguments regarding global governance to environmental governance – an important dimension of the broader governance structure. There is an extensive body of literature dedicated to the rise of private authority and governance. Cutler et al. (1999) argue that private actors are increasingly involved in establishing and participating in transnational rule systems. This is in contrast to prior forms of political influence by private actors, which tended to be more focused on agenda setting and lobbying (Pattberg 2005). The private authority of corporations is particularly dominant in the current global political system (Cutler et al. 1999). Since the 1980s, when neoliberalization began in various states – most notably Britain and the United States – environmental governance has generally been moving away from state regulation, towards private authority and corporate self-regulation (McCarthy and Prudham 2004).

Cutler et al. (1999: 5) define authority as existing "when an individual or organization has decision-making power over a particular issue area and is regarded as exercising that power legitimately". Government institutions are the most obvious type of organization with which this type of authority is associated. Corporations also have authority, with their

legitimacy provided by government support, by the historical role of business and by corporate expertise (Cutler et al. 1999: 4). Authority is both shifting and expanding. It is no longer focused in national governments, but is increasingly wielded by global corporations, as well as other private actors and networks of actors, both private and public (Cutler et al. 1999; Pattberg 2005; Vogel 2010). As the authority of non-state actors increases, non-state approaches to climate change are becoming institutionalized, including market-based mechanisms and reporting frameworks (Pattberg 2010).

There is some disagreement with regard to whether private governance is replacing public governance, expanding beyond it, or changing its nature. Falkner (2003: 76) argues that in most cases, rather than a "pure" form of private governance taking over, what is becoming more prevalent is "mixed" regimes. These are hybrid forms of private-public governance that involve either cooperation between private and public in development of reporting frameworks and codes, or development by private actors, then adoption by states or by intergovernmental organizations. He argues that these governance systems are not created by states, but are strengthened and legitimized by them with official recognition or incorporation into law (Falkner 2003: 76).

The change in the nature of global governance is usually attributed primarily to the advancement of neoliberalism and the related structural imbalance created by the growth in size and power of corporations. The growing power imbalance between corporations and states has left some governments unable to hold corporations accountable; in other cases, governments are unwilling to do so (Vogel 2010: 73). Corporations and business associations have also contributed to shifts in the nature of governance by defining discourse around the role of the state (Bieling 2007), and of corporations.

If private environmental governance is supplanting public governance, an important question is whether this is due to lack of capacity on the part of state governments. There are three key points relating to this question. First, it is more likely that state capacity is an issue in developing nations than in countries in the industrialized world (Falkner 2003), such as Canada. Second, as Falkner (2003) notes, there may be cases where states prefer that industry regulate itself, thus avoiding the cost and complexity of implementing public regulation. Finally, states may leave regulation to industry if strict environmental regulation is economically costly for the state – not in terms of implementing regulation, but in terms of income from royalties and economic growth associated with extraction of natural resources that might not go ahead if subjected to stricter environmental regulation and protection.[5] This may well be the case in Canada considering its current dependence on resource extraction for economic growth. Strict environmental regulations could also be politically costly when federal and provincial governments are under pressure from various labour groups involved in resource extraction.[6]

The balance of power between public and private is not as clear as it may appear at first glance, and as Bieling (2007) argues, it should not be oversimplified.[7] The increasing authority of corporations does not necessarily indicate that states are relinquishing fundamental power; they may be giving up power when it suits them. Furthermore, the state may not be weaker because of globalization and shifts in governance, rather the nature of statehood is transforming to a more business-oriented version (Bieling 2007). Thus, there is a

[5] This type of decision-making by the state about extraction of natural resources is often accompanied by considerable pressure from corporations interested in participating in the project.
[6] This does not necessarily mean less total jobs if a particular project does not go ahead, only that this is perceived to be the case by some. Canada's focus on extraction and export of its natural resources has complex impacts in multiple dimensions, including environmentally, economically, and in terms of job losses in other sectors (Clarke et al. 2013).
[7] This is highlighted in discussions of the "revolving door" between government and corporate boardrooms.

shift not just in authority, but also in ideology, as the market-oriented, business-friendly governance of neoliberalism is becoming more prevalent. Falkner (2003) refers to this as the "privatization" of global environmental politics, a process that he sees as undermining the democratic accountability of public authority, as well as a more holistic and ecology-oriented understanding of humanity's relationship with nature.

While the exact nature of global governance today is of some debate, it is generally agreed that there is increasing cooperation and partnership between corporations, governments and civil society (Pattberg 2005). The increased participation of private actors has been accompanied by an increase in voluntary codes of conduct and international reporting frameworks (Sadler and Lloyd 2009; Shamir 2011; Wright and Rwabizambuga 2006; Vogel 2010). These kinds of initiatives have become an integral part of the reframing of corporations from profit driven entities to corporate citizens, engaging in socially responsible activities (Wright and Rwabizambuga 2006). The following section summarizes some common insights regarding CSR, and how it relates to corporate responses to climate change and engagement with environmental governance.

Corporate Social Responsibility

In this thesis, a "corporation" is used to refer to: "a large company or group of companies authorized to act as a single entity and recognized as such in law" (Oxford Dictionaries 2013). Corporate responses to climate change can be understood as one of the most recent areas of focus for CSR. At a time when state involvement in environmental governance is decreasing, many corporations are actively responding to public concern and criticism by including environmental responsibility in their business plans. Generally, this is done through use of the concept of "sustainability", which in corporate representations usually

encompasses three areas: economics, the environment and social concerns. This is referred to as the "triple bottom line". Climate change is one of the key environmental aspects of the broader concept of sustainability – an important aspect of CSR that will be explored throughout this thesis.

Corporate responses to climate change are a relatively new phenomenon, with corporations only beginning to appreciate the importance of climate change in the last ten years. CSR goes back much further. Garriga and Mele (2004) locate the beginning of discourse on CSR in 1953, with the seminal book *Social Responsibilities of the Businessman* by Howard R. Bowen. Since then, terminology has shifted to CSR, which has become a popular focus for academics, consultants and the staff of corporations (Garriga and Mele 2004; Luning 2012). As with neoliberalism, there is no set definition of CSR. There are various theories and perspectives, with roots in disciplines as diverse as business studies, political science, sociology and ethics. Garriga and Mele (2004: 52-53) classify these theories into four broadly defined groups:

(1) Instrumental theories: only economics are considered; corporations are solely responsible for wealth creation and thus CSR is understood only in terms of its ability to create profit.

(2) Political theories: emphasize the social power of corporations; corporations accept responsibility in the political arena, social duties and rights.

(3) Integrative theories: generally argue that business depends on society, thus it ought to integrate social demands.

(4) Ethical theories: social responsibilities are understood to be an ethical obligation for corporations, more so than any other consideration.

Garriga and Mele conclude that these four types of theories are interconnected more than is represented in the literature. They argue that the contributions and limitations of each type should be considered in terms of how they connect with each other, with a view to developing a deeper and more comprehensive theory of CSR. As important as this insight is, it is beyond the scope of this project. I focus on political theories of CSR as they relate directly to environmental governance.

As Kolk and van Tulder (2010) highlight, the modern era of globalization – characterized by a lack of widespread state regulation of social and environmental issues – leaves managers of multinational corporations (and arguably also large national corporations) on their own when it comes to a variety of complex decisions. Kolk and van Tulder (2010: 120) refer to business management as a "balancing act", simultaneously taking into consideration economic, legal, social, environmental and ethical issues. This range of considerations must be applied not only to core business operations, but also upstream, downstream, and to subsidiary relationships. Kolk and van Tulder (2010) note that there is still considerable debate regarding whether CSR is in most cases actively pursued, or whether it is still largely an exercise in public relations. Regardless, they argue that corporations are becoming more strategic regarding CSR, which in some cases results in its integration into core business activities.

Corporations tend to adopt similar CSR strategies and practices to other firms in their industry (Vogel 2010). At the same time, each corporation's decision-making regarding CSR is influenced by a number of factors, including location, stakeholder issues and firm-specific factors (Kolk and van Tulder 2010: 120). With regard to climate change mitigation, for every corporation there are specific steps that can be taken to reduce GHG emissions. For some

corporations initial reductions may be quite simple, achievable with a little re-organization and investment in things like teleconferencing and e-billing that have relatively low costs in comparison to other business expenditures. For other corporations – particularly those involved directly in extraction of fossil fuels, or in fossil fuel dependent industries such as transportation – reductions may be much more difficult and costly, perhaps even impossible with available technology. For all corporations, consideration of GHG emissions and climate change adds another dimension to business operations, accounting and planning.

In environmental sociology, CSR takes on different meaning in light of different theoretical perspectives. The following sections introduce the theories of ecological modernization and eco-socialism, representing very different perspectives in the spectrum of environmental sociology. These two theoretical perspectives draw attention to the fundamentally different ways that private environmental governance and CSR can be interpreted and understood.[8]

Ecological Modernization

Ecological modernization is one of the most prominent theories in environmental sociology (Buttel 2000; Foster 2012; Mol 2002). It was first developed in Germany, in the early 1980s (Janicke 2008); with German sociologist Joseph Huber acknowledged as its founder (Mol and Sonnenfeld 2000). In its early development, ecological modernization theory emphasized technological innovation as the main driver of environmental reform. While technological innovation remains central in the theory, later stage developments of ecological modernization have focused on it less (Mol and Sonnenfeld 2000). More recently,

[8] Ideally, additional theories would be included to broaden the theoretical understanding of this research project. In particular, Ulrich Beck's (1992) risk society theory and Bruno Latour's (2005) actor-network theory would add interesting contributions to examination of environmental governance. However, considering more than two theoretical perspectives is beyond the scope of this project.

ecological modernization theory has expanded to incorporate market dynamics; political modernization; the role of private actors such as corporations and social movement organizations, and new forms of environmental governance (Mol 2002).

Of central importance in ecological modernization is its conception of change (Warner 2010). Warner (2010: 542-543) summarizes three main ways that change is theorized within ecological modernization theory: (1) in incremental stages via reform of the current system; (2) processes are more important than structures as drivers of change, and (3) processes of change occur through consensus arrangements more so than as the result of political or social conflict. The incremental nature of change is explored by Williamson and Lynch-Wood (2012), who conceptualize ecological modernization as a range of possible interventions – from "weak" to "strong" – which can be implemented slowly or quickly. Weak interventions are typically incremental changes to existing technologies. Strong interventions involve more radical change, such as the replacement of coal-fired power plants with renewable energy. Williamson and Lynch-Wood argue that the most effective interventions for ecological modernization are strong and quick to diffuse, resulting in radical, rapid change.

The role of regulation in either forcing, or steering actors and systems towards change persists as a key debate within ecological modernization theory. Williamson and Lynch-Wood (2012) point to two broad perspectives. One argument is that direct regulation by specialized government agencies – enforcing standards and applying sanctions – is too rigid and homogeneous to be effective, and does not adequately reflect the needs of individual corporations. Corporations are argued to be better placed to determine how to change their own behaviour, with direct regulation impeding their flexibility and ability to innovate and adapt at their own pace according to specific needs. Soft regulation such as voluntary

initiatives is seen as preferable to direct regulation (Williamson and Lynch-Wood 2012). In contrast, others argue that direct regulation with a focus on outcomes can play an important role in stimulating innovation that might take much longer if otherwise left alone. Janicke and Lindemann (2010) argue that state involvement in environmental governance is necessary to compensate for market failures, such as new processes and products that are ecologically desirable but lacking immediate reward through the market, and internal obstacles such as lack of investment capital or knowledge.

According to Williamson and Lynch-Wood (2012), where there is some consensus regarding regulation and ecological modernization is on the need for "smart regulation", as conceptualized by Janicke and Lindemann (2010). Janicke and Lindemann argue that environmental regulation should prioritize the ecological *effectiveness* of technological advances, moving beyond a simplistic focus on innovation to its end results. With this focus in mind, they propose the most effective environmental policy as a combination of instruments, including a "regulatory core" complemented by market-based "trend steering" (Janicke and Lindemann 2010: 135). They argue that this kind of hybrid system of environmental governance is most effective when combined with supporting instruments such as eco-labels and green consumerism.

Green consumerism and market mechanisms are understood to work well within ecological modernization in part based on an understanding of corporations as having an inherent compulsion for innovation and increased efficiency, which is a driver towards more environmentally responsible behaviour. In general, businesses that are environmentally sustainable are argued to have a competitive advantage over businesses that do not (Jose and Lee 2007; Knoepfel 2001). The advantage is largely due to long-term value created by the

efficiencies of technological advances, managing environmental, social and economic risks, and better public and political reputations (Jose and Lee 2007; Lopez et al. 2007; Milne et al. 2009). However, Williamson and Lynch-Wood (2012) argue that differences between firms such as firm size and capabilities for responding to environmental issues affect their responses to regulation and other policy instruments, and thus also impact whether environmentally responsible behaviour will be advantageous. Ecologically responsible behaviour is more desirable, and more attainable for some businesses than for others. To account for this, there is a need for more than just a "one-size-fits-all" approach to ecological modernization (Williamson and Lynch-Wood 2012: 957).

These are but a few of the many understandings of ecological modernization.[9] To provide a solid point of reference for the remainder of the thesis, I summarize one of the most often cited overviews of the theory by Mol and Sonnenfeld (2000). They define ecological modernization in terms of five types of social and ecological transformation. First, they outline a change in the use of science and technology to be more preventative, incorporating ecological considerations from the design stage of innovations instead of dealing with negative externalities after they occur (2000: 6). Second, they point to the increasing role for economic actors – for example producers and consumers – as well as market forces as "carriers of ecological restructuring and reform" (2000: 6). Third, they refer to a change in the nature of environmental governance towards decentralization, less top-down state regulation and more involvement by non-state actors coupled with the emergence of supranational institutions that undermine the role of the nation-state in environmental governance (2000: 6-7). Fourth, Mol and Sonnenfeld (2000: 7) refer to a two-fold change in the nature of social movements in which they are becoming more involved in environmental

[9] Buttel (2000) outlines four types of use of the concept of ecological modernization.

decision-making at an institutional level, while simultaneously moving away from de-modernization towards reform ideologies. Finally, they note that it is no longer acceptable to neglect the environment, or to position it in fundamental opposition to the economy. Mol and Sonnenfeld (2000) conclude that ecological modernization is not only used theoretically, but is also useful as a practical guide for environmental policy and decision-making.

Ecological modernization is a popular theory and an expression of "hope" (Buttel 2000: 64). Bailey et al. (2011) argue that the optimism of ecological modernization has contributed to it becoming politically viable for a number of governments to adopt ambitious targets for reductions in GHGs. However, at the same time, processes of neoliberalism have led to a reduction in the ability of many states to intervene in the economy to achieve these GHG reductions (Bailey et al. 2011). Of particular interest in this thesis is the emphasis within ecological modernization on reductions in the role of the state and the increased participation of non-state actors in governance roles (Mol and Sonnenfeld 2000); these are key elements of the "roll back" and "roll out" processes of neoliberalism, respectively (Peck and Tickell 2002). Many people understand ecological modernization to be making important progress in developing solutions to global environmental problems like climate change without requiring radical political and economic change. However, others argue that ecological modernization is dangerously flawed and unrealistic (Foster 2012). This kind of criticism is often included in discussions of eco-socialism, which is introduced in the next section.

Eco-socialism

Eco-socialism is provided here as an alternative theoretical perspective to ecological modernization. A number of eco-socialist theories have developed in the last 30 years. These theories generally attempt to combine some of the basic ideas of Marxism with critical

ecology (Lowy 2005: 18). Central to eco-socialist theory is the idea that capitalism is destroying its productive base, which includes the environment and labour power (O'Connor cited in Awekawa 2012: 32). James O'Connor (1998) advances the notion of adding to Marx's first contradiction of capitalism (that between the forces of production and the relations of production) a second contradiction: that between the forces of production and the conditions of production, which include the environment, labour power and urban space (Lowy 2005: 16). Eco-socialist theory understands capitalism's logic of limitless production and accumulation to be directly leading to global ecological crisis.

Within eco-socialist theory, the profit logic of the market, and its growth imperative, are understood to be incompatible with climate change solutions and environmental protection. Partial reforms of the current system are seen as inadequate. Instead, it is generally argued that what is needed is a total change of system (Foster 2012; Lowy 2005; Madgoff and Foster 2010; Pepper 2010). According to Lowy (2005: 19), an eco-socialist society would see "the replacement of the micro-rationality of profit by a social and ecological macro-rationality". Lowy (2005) posits the need for technological change, replacing current reliance on fossil fuels with renewable energy sources. On this issue ecological modernization and eco-socialism are not so far apart; both see technological change as key. The difference is in how this change is to be brought about. Within ecological modernization theory, technological change is generated by the capitalist system's drive towards modernization (Mol and Sonnenfeld 2000). Eco-socialists argue that what is required is a change in control over the means of production; decisions on investment, research and development must be removed from profit-driven economic actors to enable direction towards ecological rationality and the common good (Lowy 2005). Lowy (2005) argues that in an eco-socialist system, the

public would decide which energy options should be pursued and what changes need to be made to repair the environmental damage caused by capitalism. Decision-making would be democratic, occurring at regional, national and eventually international levels (Lowy 2005; Magdoff and Foster 2010).

Social justice is of particular importance for eco-socialism, which sees the roots of the global North-South divide in its history of colonialism, still apparent in the exploitative relationships of large corporations that have ventured south to extract natural resources via cheap labour (Parks and Roberts 2006). Eco-socialist critiques of the current global capitalist system point to its dependence on the continuation of inequality of consumption between the global North and South, as movement of the South towards levels of consumption anywhere close to those of the North would dramatically increase the rate of resource exhaustion and the prospect of ecological collapse (Lowy 2005: 18). This same logic applies to GHG emissions. It is in large part the rapid development of the global North that has led to the current level of climate change, yet the negative effects are felt most strongly by the poorer, less developed nations of the global South (Parks and Roberts 2006). Thus, eco-socialism places the onus on the highly developed countries of the North to rein in the GHG emissions that have come with their development and modernization. A new, eco-socialist system would be designed to be beneficial not just for the highly developed countries of the North, but also for the poor in the global South, for whom the technological solutions of ecological modernization tend to be out of reach.

To summarize, according to eco-socialism it is the global capitalist system that has fueled overconsumption and increasing inequality at the expense of workers, the natural environment and the surrounding climate. Eco-socialist theory generally advocates

democratic decision-making and the rational planning of production and re-distribution according to environmental needs and the public good. While eco-socialism does not rule out state involvement, in general it argues for control to be more localized (Pepper 2010). Eco-socialists tend to be strongly committed to the need for an alternative system to capitalism. However, some eco-socialists, such as Lowy (2005: 20) argue that recognizing the limits of "ecologizing" capitalism should not deter people from joining in efforts for immediate reforms.

Summary

The above introduction and literature review draws together concepts and theories that are important for understanding corporate responses to climate change, and for critical analysis of the effectiveness of private environmental governance for compelling corporations to reduce their GHG emissions to sustainable levels. Neoliberalism is a powerful force in Canada, explaining the shift towards private environmental governance that has happened in the last 30 years. In the absence of strong state environmental regulation, Canadian corporations are embracing CSR and engaging with a variety of forms of private environmental governance. I consider the data I collected in light of the two theoretical perspectives of ecological modernization and eco-socialism, as a way of "bracketing" my own beliefs and looking at the data through different lenses. After progressing through the three research questions outlined above, I draw some final conclusions regarding the effectiveness of private environmental governance for addressing climate change. Before I begin to outline the various corporate responses to climate change in Chapter Three, Chapter Two provides an overview of the research design and methods.

CHAPTER TWO: Research Design and Methodology

In this chapter I first provide an overview of the research design of the project, including the rationale behind key decisions, such as why I chose to study corporate websites. I then outline the selection criteria for the case studies, followed by an overview of the two main methodologies used: content analysis and network analysis.

I use a combination of content analysis and network analysis to examine the websites of three Canadian corporations: Suncor, Royal Bank and Bell. I focus on text directly related to each corporation's responses to climate change, as well as more broadly related to CSR and environmental responsibility. In addition to website content, I also included documents available to download from the company websites that are most related to climate change and environmental responsibility, such as company codes of conduct and reports. Most other studies of corporate environmental responsibility focus on sustainability reports (Jose and Lee 2006; Shinkle and Spencer 2012), while some others rely on survey data, such as that available from the Carbon Disclosure Project (Kolk and Pinkse 2007). This study includes significantly more data for each company than one report, making it necessary for me to focus on a limited number of corporations.

The decision to use data available on the whole of each of the corporate websites was based on the assumption that more data, and data presented in various formats – web pages, reports, hyperlinks, news stories published on the websites – will give a more complete picture of a corporation's practices. For example, there are links from various pages of each website to external organizations and initiatives.[10] These links represent a relationship between the case study corporation and an external organization/initiative. A few of these

[10] By "link" I mean inclusion on the website of the name of an external organization, often accompanied by its logo, which – when clicked on – generally will open up a new web page for the external organization.

links were included in the corporations' sustainability reports, however the vast majority of the links to external organizations and initiatives were found on the websites and were not included in the reports or codes of conduct. Thus, examination of corporate websites provides a much more comprehensive picture of corporations' connections to other organizations/initiatives, than examination of only corporate responsibility reports or codes of conduct would reveal.[11] Websites are one of the primary means of CSR communication used by corporations (Fieseler et al. 2010), and as this study shows, they include links to a number of other forms of communication that corporations use to share their messages, including sustainability reports, social media, YouTube, and the websites of industry associations. Sklair (2010: 31) argues that corporate websites "serve as both windows… for their wares and platforms for their business practices". They are useful in that they encompass a broad range of a corporation's activities and communications.

While websites are useful as a focal representation of a corporation, there are also pitfalls associated with using a corporation's website as a source of data. Websites are a corporate representation of information with public relations in mind, and the information presented is not easily checked for accuracy. A weakness of this study is that I examine what corporations publish on their websites about their responses to climate change, as opposed to their actual responses, which would be preferable but difficult to discern. However, I believe it is reasonable to assume at least a moderate relationship exists between the way that corporate activities are represented on their websites, and their actual activities; this is enough for the data in this study to be a useful focus for the analysis I undertake. As long as these

[11] To reduce the risk of missing connections between each corporation and external organizations/initiatives, I investigated possible links between any of the major external organizations/initiatives and all three case study corporations, looking for connections to any of the three corporations that did not include a link on their website. This further investigation revealed four connections that were not advertised on the corporate websites, which I added to the network analysis.

limitations are kept in mind, they do not present a significant problem for the project. As noted by Kolk and Pinkse (2007), data availability in studies of corporate behaviour is a common barrier. Despite its limitations, this research will add to knowledge regarding corporate responses to climate change, as well as providing some indication of the effectiveness of private environmental governance for addressing climate change.

During data collection, what I looked for primarily was text that reveals what each of the case study corporations is doing to respond to climate change. The content analysis is the primary source of data for investigation of communications about climate change. The network analysis reveals relationships between the case study corporations and various external organizations/initiatives, which indicates the case study corporations' engagement with environmental decision-making and governance. I supplemented the network analysis with visits to the websites of the external organizations and initiatives included in the study in order to determine the nature and objectives of each one. Finally, information about concrete action to reduce GHG emissions I collected mainly from corporate responsibility reports and environmental reports available to download from the websites of each of the corporations.

Selection Criteria for the Case Study Corporations

Suncor, Royal Bank and Bell represent three of the major business sectors in Canada: natural resources, the financial industry and communications, respectively. Suncor is involved in all stages of the oil and gas industry, from resource extraction, to refining and retail (Suncor 2012f). It is of particular interest with regard to climate change due to its involvement in development of the tar sands. Royal Bank is "one of North America's leading diversified financial services companies," providing personal and commercial banking, wealth management services, corporate and investment banking, and insurance (Royal Bank 2013).

According to its website, Royal Bank is one of the largest banks in the world, with offices in fifty-one countries including Canada (Royal Bank 2013). Large banks are central in capitalist economies, wielding particular power due to their control over capital and decision-making about which corporations, and what kinds of development they will fund (Mintz and Schwartz 1986). This adds another dimension to Royal Bank, much of which goes beyond the scope of examination in this thesis. However, it does draw attention to the importance of how Royal Bank defines and understands the problem of climate change, and how it perceives its role in climate change mitigation. Bell is Canada's largest communications and media company, and is a subsidiary of Bell Canada Enterprises (BCE).[12] In addition to its power as a large corporation, Bell also occupies an important position in the Canadian political and economic system, as well as the social and cultural system, through its role in providing the infrastructure for communication – including Internet, phone services and television.

Besides selection by sector, the companies were chosen primarily for their large size – all three were one of the top ten largest corporations in Canada in 2010 (Forbes 2010). Large corporations tend to make public the ways in which they address issues of social and environmental responsibility more so than smaller companies (Morhardt 2009), in part because they are more likely to come under scrutiny from stakeholders and NGOs (Gallo and Christensen 2011). They have greater structural power in terms of influencing policy makers due to their discursive power as well as their large networks (Bieling 2007). Also, large corporations have greater resources – both financially and in terms of human resources – to

[12] Bell's website used for this project is "www.bce.ca". On this website, the main headings in reference to the company are "BCE". However, the content of each page below the BCE heading discusses "Bell" and is quite clearly referring to Bell Canada, which is the company that BCE is most commonly associated with. BCE is a holding company, with direct control over no physical operations per se, thus discussion of BCE's corporate responsibility and other aspects of the company are facilitated through reference to Bell. In other words, while somewhat ambiguous, "Bell" on the website appears to refer to both BCE and Bell.

respond to stakeholders, to research and devote attention to environmental issues, and to actively engage with policy makers both nationally and internationally (Gallo and Christensen 2011). The three case study companies are well known, with potential for large numbers of Canadians to access their websites.

While large corporations may have similar tendencies, they vary with regard to their individual needs, strengths, and incentives to act. Some corporations are more susceptible to negative attention by NGOs and the media (Tienhaara et al. 2012) – Suncor for example, given its involvement in the tar sands. Some corporations are better able to reduce environmental impacts without significant cost – both Royal Bank and Bell are service providers in sectors where it is relatively easy to reduce emissions. Disclosure of environmental performance is said to be more common among companies in environmentally sensitive industries (Jose and Lee 2006). In this study, all three of the focal corporations include detailed annual reports of their environmental impacts and GHG emissions.

Representation of different sectors is the most important selection criterion for the three case studies. In terms of its relationship to climate change, Suncor is fundamentally different from the other two corporations. Suncor's primary operations are extraction of bitumen from the Alberta tar sands. The tar sands are reputed to be the dirtiest oil on the planet. Suncor has a lot at stake when it comes to environmental regulation and decision-making. Royal Bank is also involved in the tar sands – albeit less directly – through its funding of tar sands corporations, including Suncor. Royal Bank's overall contribution to climate change is more complex than its direct emissions if one considers the variety of businesses and activities that Royal Bank has made possible through financing. Consideration of this kind of extended, indirect impact related to the financing of corporations with

significant GHG emission is arguably important enough to be worth its own study, and is beyond the scope of this project. While it is possible that Royal Bank is indirectly contributing to climate change at par with Suncor, it is fundamentally a different type of corporation because Royal Bank could choose to invest in ecologically sustainable businesses – it does this presently, but only for a portion of its total investments. It is difficult, if not impossible, for Suncor to reduce its GHG emissions within its current business model. If companies like Suncor continue developing the tar sands, and increasing their emissions, it will be very difficult, perhaps impossible, to bring global levels of CO_2 in the atmosphere back down to below 350 ppm.

Content Analysis

Content analysis has been used in numerous other studies of CSR, including Jose and Lee (2007), Shinkle and Spencer (2012) and Kolk and Pinkse (2007). Holsti defines content analysis as a "technique for making inferences by objectively and systematically identifying specified characteristics of messages" (cited in Jose and Lee 2007: 311). Jose and Lee studied environmental disclosures available on corporate websites using conceptual content analysis, choosing particular concepts for examination and then tallying their presence. In this study, I focus on themes and responses to climate change – this will be further explained after discussion of the data collection process.

My first step in data collection was to make myself familiar with the websites of each of the corporations. I then began to collect data by systematically going through Suncor's website. I took a screenshot of each page of the website that included information relevant to the research project, such as reference to environmental protection, sustainability or a link to

an environmental organization or initiative.[13] Each web page was logged to record the web address, the section of the website it came from, and the date it was collected. In addition to the three main corporate websites, I also followed any hyperlinks to websites for other external organizations related to environmental governance. I took a screenshot of the home page of each of these websites and included them in the data for use in the network analysis.[14] Data for each website were collected during the following time periods: Suncor from October 15th to 23rd, 2012; Royal Bank from November 9th to 12th, 2012, and Bell from November 16th to 19th, 2012. After collecting the data from Suncor's website I did some initial coding and analysis to get a sense of the data, before I went on to collect the data from the other two websites.

Screenshots from the three case study websites, as well as external websites that they linked to, were imported into the qualitative data analysis software ATLAS.ti. ATLAS.ti includes advanced coding functions as well as network analysis, meaning that the same data and coding could be used for both the content analysis and the network analysis. I did not approach the data with a preconceived code list. However, my coding drew from the literature review, as well as my own knowledge based on previous research and engagement with social science literature focused on climate change and other environmental issues. I looked for themes related to CSR, environmental responsibility and climate change. I also looked for

[13] When a page was too big to be captured by one screenshot, I took multiple screenshots to capture the whole page.

[14] The possibility of using a web crawler to trace the links between each case study corporation's website and other websites was considered for this project. However, considering the narrow focus of information that I wanted to collect compared to the numerous links that there are from each website, I decided that it would be too time consuming to try to extract the information that I wanted from the data collected from the web crawler. While I looked at "all" the data from each website, "all" in the context of this study refers to data related to CSR and environmental issues. Each of the corporations includes numerous links on their website that are unrelated to the needs of this study, and that are too diverse to easily eliminate from a crawl. It is possible that some links may have been missed if they were buried in a website, and the data collection was time consuming. However, looking through the websites and logging them manually allowed me to achieve a familiarity with the data that I would not have gained if I had used a web crawler.

references to the ways that the corporations are responding to climate change. Apart from logos representing particular organizations or initiatives, images were not included in the analysis. Images are powerful tools in environmental communications (Corbett 2006), however their interpretation was deemed to be too subjective for the purposes of this study.

In the coding process, *themes* were identified as more passive than *responses* to climate change. Themes include references to different subjects and use of particular words and phrases within a corporation's online communications. Examples of themes are "climate change", "responsible development" and "corporate responsibility". Responses are conceptualized as action-oriented, representing various types of behaviour engaged in by each corporation. Examples of responses are "reporting", "research" and "use of social media". Themes and responses are not constructed to be mutually exclusive as it makes sense to consider some codes as both: "community engagement" is one example as it is both a theme within the corporate communication on its website, and a response that the corporation adopts.[15] Themes and responses were further divided into "major" and "minor" groups according to their prominence in the data. Major groups included at least ten references, on at least two of the three corporate websites. Any codes with less than ten references across all three websites, or only referred to on one website, I considered to be minor.

I used an iterative coding process, going though the data repeatedly until I felt that I had coded all relevant text on the websites, and the code list was a manageable size while still representing the data well. The process involved three general stages. In the initial stage, I

[15] The division between *themes* and *responses* is subjective. Someone else looking at these codes might separate them differently, and arguably, most of the themes could be considered as responses, and vice versa. I divided the codes in this way in an effort to make the data more manageable, and because it made sense to me in terms of how I thought about the data. In terms of the broader project and the analysis, I do not think that the separation of themes and responses is particularly important. What is important is that they both represent the direction of focus of the corporations' communications about climate change and CSR.

coded Suncor's website, continually refining codes, considering their plausibility and how they fit with overall patterns in the data. I then coded the other two websites using the Suncor codes, adding new codes when new themes or responses to climate change occurred. After the initial stage of coding all three websites I had an extensive list of codes, some of which were overlapping or slightly different versions of the same theme or response, coded on different websites. I went through these codes to condense and refine them, which usually involved combining two or more codes that referred to essentially the same thing, and re-coding them as one. I tried to keep the codes as close as possible to the text on each website that they were associated with. When there was no significant overlap or duplication remaining within the codes, I divided them into four groups: themes and responses to climate change, each divided into major and minor groups. I went through all the data four more times, each time using one of the four groups of codes to ensure that nothing had been missed. When interpreting the data I considered both the frequency of themes and responses, as well as their relationships to each other and to broader theories.

While the number of times that a code occurs is considered as an indication of its importance, I recognize that websites are complex and the way text is presented means that the re-occurrence of a theme or strategy may not directly represent a corporation's emphasis or commitment. For example, the style of website may affect the number of times a code occurs. Suncor's website is made up of a few main sections, each devoted to a major theme, such as "Responsible Development". These sections then include a number of sub-pages covering issues related to the overarching theme. In contrast, Bell's website is made up of

fewer pages and the pages are more densely packed with information.[16] As such, the code count for Suncor is higher than for Bell, but that may not actually mean that a particular theme or strategy is more important for Suncor. For this reason, the summary of the content analysis focuses more on whether themes and strategies are major or minor, according to the above definitions, rather than on frequencies. I do report frequencies in Tables 2 and 3. These are included in large part to indicate which corporations included particular themes and responses on their websites. The frequencies give only a general indication of the importance of each theme or response. Methodologically, this is relatively unimportant, as my analysis of corporate responses seeks only to get a general idea of the kinds of activities the case studies are engaging in, and what they are prioritizing.

Network Analysis

Social network analysis is broadly used for investigating social systems in which the focus is on relational data, considered in light of individual actor characteristics to understand social phenomena (Otte and Rousseau 2002). There is a developing field of analysis of hyperlinks that connect one website to another, which uses the tools of social network analysis (Fieseler et al. 2010). I use this type of analysis to identify relationships between the case-study corporations and external organizations and initiatives involved with environmental governance and decision-making at various levels, from community consultations to federal regulation and transnational, private forms of governance. Network analysis positions the corporations within a diversity of networks defined by different characteristics, including geography, industry, and type of organization. The corporations, the external organizations and initiatives they are linked to, and the various networks they are a

[16] Bell's website may be bigger overall due to the amount of direct interaction it has with its customers as a more customer service-oriented business than Suncor; it is smaller than Suncor's in terms of pages devoted to providing information about the company such as commitments, values and CSR.

part of can all be identified as part of a larger network, understood as an organizational "field" of environmental governance. As outlined earlier, a "field" is generally understood to refer to a network of actors and the relationships between them, connected by a central issue (Djelic and Sahlin-Andersson 2006; Hoffman 2001). As Hoffman (2001: 135) states, fields are complex and amorphous, incorporating social, political and economic environments.

Djelic and Sahlin-Andersson (2006) explore the usefulness of field theory for examination of transnational governance, which they argue is characterized by an increase in regulatory activities and governance, consisting largely of soft laws such as norms, standards and guidelines. Theorizing organizational fields can capture the multiple levels, dimensions and dynamics of transnational environmental governance (Djelic and Sahlin-Andersson 2006). Bartley and Smith (2008) also apply field theory to transnational governance, focusing on environmental governance and drawing some initial conclusions about an increasingly coherent field of certification organizations and other forms of private governance. As a final example, Andrew Hoffman (2001) uses field theory to explore how institutional pressures and cultural understandings of environmental practice influence corporate environmental practice. He argues that corporate environmental protection has changed from being an aspect of CSR and in some circumstances associated with regulatory compliance, to becoming part of a corporation's strategic business management.

Research on the relationships between corporations, and between corporations and other organizations is extensive, with organizational field theory only one perspective. Another focal area using network analysis is the study of corporate power investigated in terms of the relationships between corporations through interlocking directorships (Carroll and Sapinski 2011; Scott 1991). Examination of the boards of directors of the case studies in

this study would likely reveal a different organizational field the corporations are part of, highlighting other ways that they may potentially influence decision-making and governance regarding climate change mitigation.[17] For this thesis, conceptualizing the networks of external organizations the focal corporations are linked to as an organizational field of environmental governance made most sense as it facilitates a broad, multi-level understanding that most closely represents the reality of the relationships.

The network analysis serves the primary purpose of illuminating the variety of forms of environmental governance, and related organizations that the case-study corporations are linked to. In addition to providing information about the individual networks of each corporation, it highlights some of the main types of organization that are participating in environmental decision-making and governance at different levels. Bartley and Smith (2008) find that in environmental certification, some types of organization are more common than others, and particular organizations occupy a central role in the field of environmental governance. They also draw attention to environmental governance occurring at a level above particular sectors. These types of findings are observable in my research through the frequencies of particular types of organizations, and in terms of initiatives and organizations that are linked to more than one of the focal firms.

During the coding process I recorded links between the case-study corporations and any external organizations related to CSR or environmental governance. The links were represented either through a hyperlink, or by reference to an external organization with no

[17] There is a direct link between Suncor and Royal Bank through Suncor's former president and chief executive officer (CEO) Richard George, who joined Royal Bank's board of directors in 2012, while he was still president and CEO of Suncor.

hyperlink.[18] The relationships between the case study corporations and external organizations/initiatives include partnerships for particular projects, listing on a sustainability index or consultancy ranking, ongoing participation in organizations through membership or funding, commitment to reporting and environmental standards, commitment to codes of conduct, and other more ambiguous associations. I used ATLAS.ti to create a "network view" for each corporation, including any external organizations/initiatives that it links to. I categorized the external organizations/initiatives according to their primary function and make-up, creating a ten-part typology of organizations/initiatives. This typology, including elaboration about what distinguishes each type (where necessary), is provided in Table 1. In Appendix A, I include a complete list of all of the organizations/initiatives, separated according to type and including information about geographic scope (regional, national or international) as well as which corporations link to them.

[18] I use different codes for hyperlinks to external organizations/initiatives, and references without an active link to a different website. Considering the ease of searching and finding an organization using a search engine if a direct link is not provided, it is questionable how important a hyperlink is. However, the two forms of connection were made clear in the data in case a relevant difference between the two arises.

Table 1: Typology of Organizations/Initiatives

Carbon Offsets/Trading Scheme (3)*	
Certification/Reporting (3)	more demanding in terms of reporting and monitoring compared to codes of conduct, which tend to be more ambiguous and less verifiable.
Coalition Group (11)	involves most or all of the main sectors of society: industry, NGOs, stakeholders, scientists/academia and government.
Code of Conduct (3)	includes reporting frameworks that are not demanding in terms of monitoring and consequences for compliance failures.
Consultancy (7)	offers services to help corporations become more sustainable by adopting best practices, innovating, and increasing efficiency. Most are corporations; three are not for profit.
Consultancy with Ranking (7)	as above, except they include their own ranking – or multiple rankings – of corporations, many of which are not made public but are sold to investors.
Government (3)	includes inter-governmental organizations.
Index (5)	focuses on one or more issues, including sustainability, social and environmental issues and financial risk.
Industry Association (25)	generally focuses on participating in development of public policy and/or developing new technologies and approaches to dealing with industry-specific issues.
NGO (8)	non-governmental organization

*Numbers in brackets represent the number of organizations/initiatives in each category.

CHAPTER THREE: Corporate Responses to Climate Change

This chapter addresses the first research question: How are Canadian corporations responding to climate change? I identify three types of corporate response to climate change: (1) communication about climate change and related commitments, (2) participation in climate change decision-making and governance, and (3) concrete action to reduce emissions and contribute to climate change solutions. I begin with an overview of the website for each of the case study corporations, including a visual representation of the network of external organizations and initiatives connected to it. These overviews are followed by discussion of what the websites reveal about the three types of corporate response to climate change, including interpretations according to the theoretical perspectives of ecological modernization and eco-socialism. In the following two chapters I provide a more in-depth analysis of the types of private environmental governance that the case studies are engaged with, and the effectiveness of private environmental governance for addressing climate change.

Suncor Overview

When I took the screen shots of Suncor's website, there were twenty-two pages on the website that included reference to environmental responsibility or CSR, that I included in the data for analysis. In addition, Suncor's annual "Report on Sustainability" is included in the data; this can be downloaded or accessed directly on Suncor's website. Suncor is a company that extracts natural resources at great environmental cost, which influences the various ways that it responds to climate change. Compared to the other two companies, Suncor has more information on its website related to its direct impacts on the environment. Suncor also refers to taking an active role in developing climate change solutions, accepting this responsibility

as a large energy company. Otherwise, Suncor adopts relatively similar CSR strategies to Royal Bank and Bell.

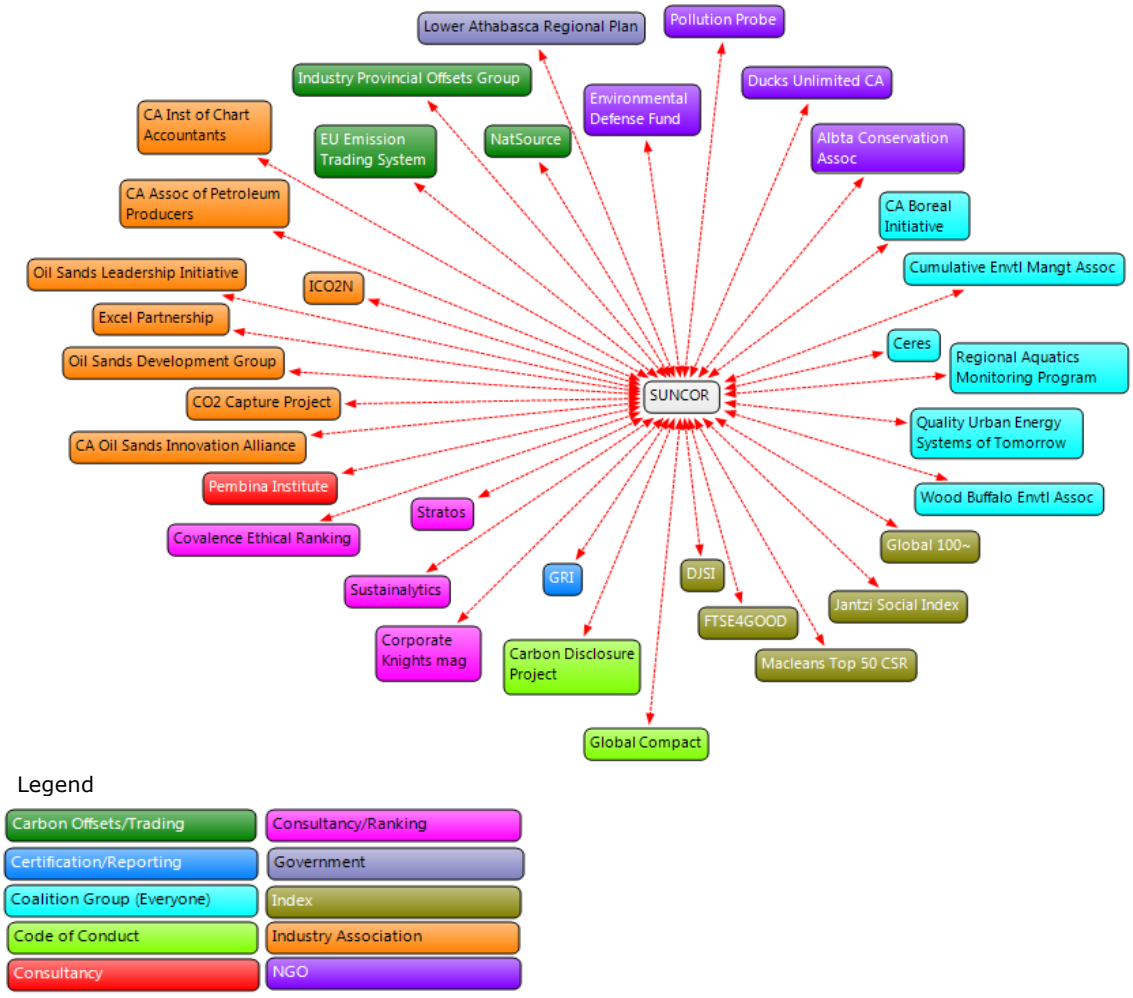
With regard to its environmental conduct, Suncor focuses in particular on land reclamation and improving its technology. Its website includes a number of large pictures of pristine natural environments: green trees, clear water, green grass and blue skies. It also includes a number of images of different people: employees, community members, children, and First Nations people. A much larger proportion of Suncor's website is devoted to these pictures than on the websites of either of the other two corporations.[19]

Overall, one of the key themes on Suncor's website is sustainability. "Sustainability" is a concept that is pushed and pulled in a variety of directions according to the needs, abilities and priorities of the defining actor. On the case study websites and the websites of many of the external organizations and initiatives, sustainability is defined as incorporating the triple bottom line of economic, social and environmental concerns. Suncor refers to its "Report on Sustainability" on many of its web pages. However, in the details, Suncor generally talks about "sustainable communities" in the areas around its operations, giving the impression that it considers its employees as one of the primary audiences for its website. Sustainability as a more general concern, and as an ecological objective, is not prevalent on the website beyond the constant reference to its report. Within its 2012 Report on Sustainability, Suncor focuses on its investments in renewable energy, reduction of environmental impacts – particularly in the form of tailings ponds, investment in communities and its contribution to sustainable energy solutions for the future.

[19] While images were not coded or included in the data, the prevalence of photographs of nature and of people is obvious, and is mentioned as one element of Suncor's communications regarding climate change.

Suncor links to thirty-four organization/initiatives from its website, including at least one of each type in the ten-part typology. Figure 1 provides a visual representation of the various organizations and initiatives that Suncor includes linkages to from its website. Each node represents one organization or initiative. The nodes are colour coded according to the ten-part typology of organizations and initiatives.

Figure 1: Suncor Network



Suncor links most frequently to industry associations, with six of the eight it is linked to directly related to the oil and gas industry in Alberta and in Canada. After industry associations, coalition groups are most prevalent in Suncor's network, with five of the six groups directly associated with the environmental impacts of the tar sands on the surrounding

environment and communities. Other organizations/initiatives with four or more included in Suncor's network are indexes, environmental NGOs, and consultancies that produce their own rankings. Less frequent linkages are displayed in Figure 1, and are also listed in Table 4.

Royal Bank Overview

Royal Bank's website is extensive, with more information on its website relating to environmental responsibility than it was possible to include in this project. What are included are thirty-five pages from the website, as well as Royal Bank's (2011b) "2011 Environmental Blueprint" and the Environment section of its "2011 Corporate Responsibility Report and Public Accountability Statement" (2011a).[20] Of the three corporations, Royal Bank has the most CSR and environmental responsibility related information on its website. Royal Bank and Suncor have a similar frequency of major themes. In terms of minor themes, Royal Bank exceeds Suncor significantly. Royal Bank touches on a wide variety of possible environmental issues, making clear its commitment to the environment and to CSR.

Royal Bank links to thirty-seven organizations and initiatives from its website (see Figure 2). This is a similar number of organizations/initiatives to Suncor, however Royal Bank's associations are quite varied, whereas many of Suncor's connections are specific to the oil and gas industry in Alberta. Royal Bank links with all but one type of organization/initiative in the ten-part typology. It does not connect to a carbon offsets/trading scheme, however it does refer to using offsets in its strategy to reduce GHG emissions.

As with Suncor, industry associations are linked to most frequently by Royal Bank. However, reflecting its broader focus, only three of the nine industry associations linked to

[20] What are excluded are approximately ten documents available to download from the website that cover a variety of things from a public education document entitled "Corporate Responsibility 101 for Students", to a copy of Royal Bank's Carbon Disclosure Statement – part of the Carbon Disclosure Project. Also, some of the web pages associated with Royal Bank's water initiatives were left out because they did not add any additional information to the project.

Royal Bank are specific to banking or the financial sector. In terms of the other organizations/initiatives Royal Bank links to most frequently, there is an even split, with five links each to NGOs, indexes, consultancies, and coalition groups. Looking at its website, Royal Bank appears to be a model corporate citizen, actively engaging in CSR, taking action on climate change, and adopting water as a social, economic and environmental cause to champion. In terms of its environmental responsibility and CSR, Royal Bank presents itself as having all the bases covered, and covered well.

Figure 2: Royal Bank Network

Royal Bank is involved in a variety of different financial activities, including a strong focus on retail banking, marketing its services directly to the public as well as to a variety of other investors. It is likely that part of Royal Bank's representation of its commitment to CSR and environmental responsibility is influenced by recognition that the kinds of investments that it makes may become the focus of critical scrutiny, in particular by activist NGOs. For example, as previously mentioned, Royal Bank is indirectly involved in the tar sands through funding of tar sands corporations, including Suncor.

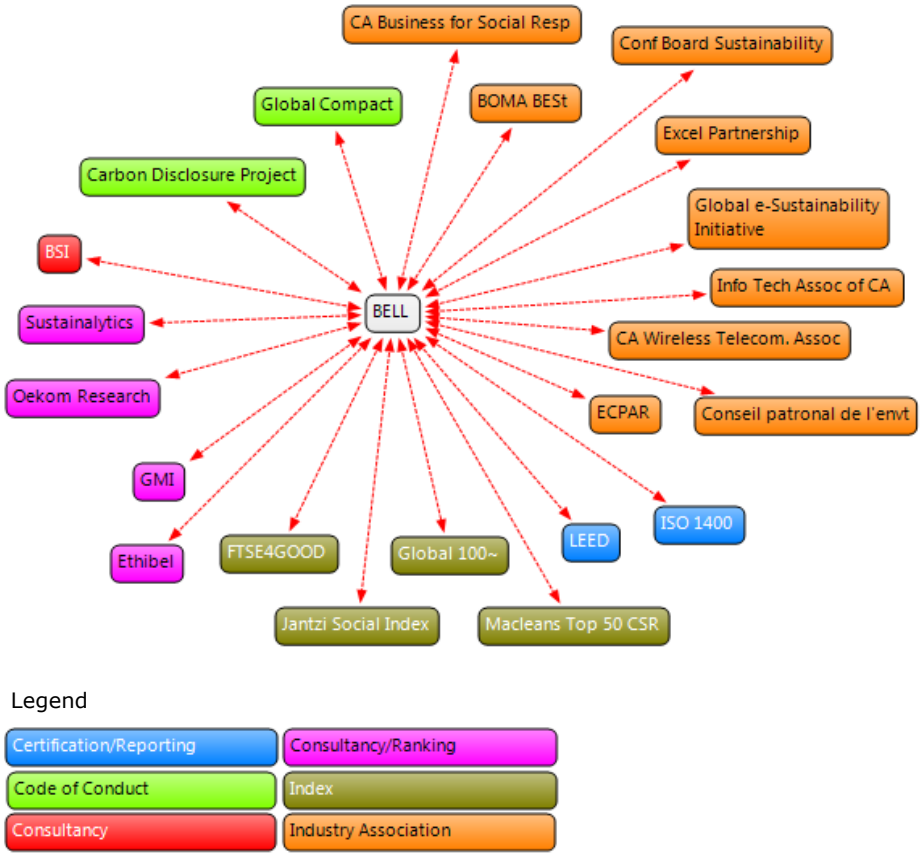
Bell Overview

Fourteen pages on Bell's website were included in the study. I also included the Sustainability and Environment sections of Bell's "2011 Bell Canada Corporate Responsibility Report" (Bell 2011b), as well as a report entitled "Sustainability Approach and Management" (Bell 2012e). In both documents the emphasis is on social responsibility, with less attention given to environmental responsibility. In Bell's "Corporate Responsibility Report" approximately one quarter is devoted to environmental responsibility, with climate change included as one of its key issues. The "Sustainability Approach and Management" document includes very little with regard to environmental issues, focusing instead on social issues, provision of service and community involvement.

Apart from the two aforementioned downloadable documents, on Bell's website references to CSR and to environmental responsibility are limited in comparison to Suncor and Royal Bank. Bell's website includes roughly one quarter of the references to CSR and environmental responsibility that Suncor and Royal Bank include. Bell dedicates a fairly large section of its website to "corporate responsibility", and a smaller section to "community involvement". Bell has adopted mental health as a cause that it champions, opting to focus on

a social issue rather than an environmental one. Overall, Bell's website – including the part dedicated to information about the company – is primarily concerned with providing information for customers regarding Bell's products and services. CSR is a minor theme on the website, and environmental responsibility is even less significant.

Figure 3: Bell Network



With regard to linkages to external organization, Bell has an even stronger focus on industry associations than the other two corporations, with industry associations accounting for nine of its twenty-one associated organizations/initiatives. Of the industry associations that Bell is linked to, five are directly related to the communications industry. Other organizations/initiatives that Bell links to are not specific to the communications industry. Bell links to four indexes and four consultancies that produce their own rankings, and

includes minimal additional linkages to other organizations and initiatives, as indicated in Figure 3 and Table 4.

Communications about Climate Change, Sustainability and Other Themes

One of the most observable corporate responses to climate change is its inclusion in public statements about a corporation's operations and business plan. The three case-study corporations all include some discussion of climate change either on their websites, or in their corporate responsibility reports. Generally, each corporation recognizes the problem, defines it – including what needs to be done to address it, and explains the types of action they are taking. Corporate communications about climate change are important in terms of the information they relay to the public – for example, if I want to invest money in a corporation and I am concerned about climate change, I can look on a corporation's website to find out about how it is responding to climate change. On a more theoretical level, corporations are contributing to the public discourse about climate change, in terms of how they define the problem, and the possible approaches to mitigating the problem they propose.

The content analysis provides a general indication of how the corporations are communicating about CSR and their responses to climate change. Overall, the proportion of Bell's website dedicated to communication of CSR, including reference to environmental responsibility and sustainability, is considerably less than that of Suncor and Royal Bank. I coded forty-six references to themes related to CSR and environmental responsibility on Bell's website, compared to 179 on Suncor's and 197 on Royal Bank's website. Bell also includes fewer links to external organizations and initiatives. Suncor and Royal Bank include similar frequencies of reference to CSR, although each focuses on different themes and strategies. Tables 2 and 3 show frequencies for themes most directly related to climate change

and sustainability, and corporate responses to climate change, for each corporation. As I mentioned in Chapter Two, the frequencies are only a general indication of the importance of particular themes or responses for the case studies.

In the content analysis I focus on explicit references by corporations to climate change, as well as various themes and responses that are indirectly related to climate change mitigation. Royal Bank and Suncor both include references to climate change on their websites; Bell does not mention climate change on its website, but it does include it as one of its key issues in its 2011 Corporate Responsibility Report (Bell 2011b). Suncor has one page of its website devoted to climate change, and produces a climate change report as part of its "Report on Sustainability" (Suncor 2010a). It refers to climate change in minor ways a couple of other times on its website. Climate change is referred to seven times on Royal Bank's website, with half of these references including some text related to climate change, and the other half simply an inclusion of the term. According to Royal Bank's website, climate change is one of the company's three priority environmental issues, along with biodiversity and water (Royal Bank 2012a).

Both Suncor and Royal Bank include many more references to "sustainability" on their websites than references to "climate change". Suncor devotes one page of its website to sustainability, and includes sustainability as one of the main sub-sections of its "Responsible Development" section. According to Suncor's annual "Report on Sustainability": "Suncor pursues a triple bottom line vision of sustainable development – energy development should occur in a way that provides economic prosperity, promotes social well-being and preserves a healthy environment" (Suncor 2012a). "Sustainability" is one of three rotating headers on its home page, along with "Energy for the future" and "Stronger Together: Helping Communities

See the Possibilities" (Suncor 2012b). This suggests that sustainability is one of Suncor's three priorities, along with providing future energy solutions, and community involvement.

While Suncor pairs "sustainability" with "responsible development", Royal Bank pairs it with "community", titling one of its major themes on its website "Community and Sustainability" (Royal Bank 2012a). Whereas Suncor's conception of sustainable communities refers to the communities where it has operations, Royal Bank appears to be more interested in linking sustainability with the concept of community as understood in a more general sense. Royal Bank includes the most references to sustainability compared to the other two corporations. Its Chief Executive Officer, Gordon Nixon, summarizes Royal Bank's approach to sustainability as follows:

> Banks have a significant impact on people, communities and countries. Our first priority is doing our jobs as bankers well, and serving our clients with integrity, every day. At RBC, we also take our responsibilities in the community, marketplace, workplace and to the planet seriously (Royal Bank 2012f).

In this statement Royal Bank clearly prioritizes its business obligations as a bank, with social and environmental responsibility secondary to corporate duties. Royal Bank devotes one web page to "Promoting Environmental Sustainability"; on this page it refers to itself as "Taking a Leadership Role" and includes a number of links to other organizations and initiatives.

Bell also includes reference to "sustainability" on its website, devoting one page to it, and including it within its "Corporate Responsibility" section (Bell 2012a). Sustainability is emphasized in Bell's 2011 Corporate Responsibility Report, and is the focus of a separate document: "Sustainability Approach and Management" (Bell 2012e). Bell's "sustainability vision" is: "To contribute to the well-being of society by enabling responsible economic growth, connecting communities and safeguarding the environment" (Bell 2012b). Bell's vision is the three-pronged definition of sustainability typical of business, encompassing

economic, social and environmental sustainability. Bell does not explicitly prioritize one area, however it is implicit in Bell's website communications that its first priority is its business performance and success.

The case study corporations all include more focus on sustainability than on climate change. Climate change is referred to largely as an issue that needs to be dealt with and incorporated into business operations, mostly by reducing GHG emissions. Sustainability is a more holistic concept, giving insight into a corporation's overall values and priorities when it comes to its triple bottom line. Royal Bank is the most explicit in its explanation of its priorities: "Our first priority is doing our jobs as bankers well" (Royal Bank 2012f). Neither Suncor nor Bell is as explicit. However, both refer to the economy first in their three-part descriptions of their corporate responsibilities, followed by community and then the environment. One could take this ordering as random and non-conclusive. However, the hierarchical ranking of corporate priorities, with financial concerns at the top, social issues in the middle, and the environment at the bottom, is reflected in the other content on the individual websites, and is similar on all three websites. Furthermore, the statements of commitment on the websites of the majority of the consultancies and sustainability indexes to which the three corporations link reveal similar priorities. This comes as no surprise, given that corporations are by nature profit-driven entities. Realistically, if a corporation were to state that it prioritized social and environmental issues over its own profits, it would likely see a rapid exodus of its investors. I will explore what this means in light of ecological modernization, and eco-socialism in the next section.

In addition to direct reference to climate change and sustainability, the three corporate websites also include the following major themes (referred to more than ten times across all

three websites) that are related to climate change: corporate responsibility, responsible development, environmentally responsible products and services, and reducing emissions (see Table 2). Beyond these major themes, there was limited reference across all three websites to a few other environmental themes. All three corporations referred once or twice to biodiversity. Royal Bank and Bell both referred to protecting the environment. Suncor and Royal Bank also referred to environmental stewardship.

Table 2: Themes Related to Climate Change and Sustainability

	Suncor	Royal Bank	Bell	Total
MAJOR THEMES				
climate change	3	7	0	10
corporate responsibility	0	8	3	11
environmentally responsible products	0	6	4	10
innovation	13	7	1	21
reducing emmissions	4	5	3	12
responsible development	5	4	1	10
sustainability	15	19	4	31
SUB-TOTALS	40	56	16	105
MINOR THEMES				
biodiversity	2	2	1	5
protecting environment	0	2	3	5
environmental stewardship	2	3	0	5
SUB-TOTALS	4	7	4	15
TOTALS	44	63	20	120

The content analysis reveals two major corporate responses to climate change that the corporations are publicly communicating: development and sales of environmentally responsible products and services, and reduction of GHG emissions. A few other types of response were also referred to less frequently by one or more of the case study corporations: recycling, use of renewable energy, carbon trading, energy efficiency, green architecture, protecting the environment, socially responsible investment, and carbon offsets (see Table 3).

Not much can be conclusively said about the inclusion of these types of response to climate change on the corporate websites as they do not reveal to what degree the corporations are engaged in these activities. However, when reporting their environmental impacts, Royal Bank and Bell do make reference to these activities as contributing to their reductions in GHG emissions. At the very least, inclusion of these responses on the case study websites indicates the types of responses to climate change the corporations consider to be worth discussing.

Table 3: Corporate Responses to Climate Change

	Suncor	Royal Bank	Bell	Total
MAJOR RESPONSES				
environmentally responsible products	0	6	4	10
reducing emmissions	4	5	3	12
SUB-TOTALS	4	11	7	22
MINOR RESPONSES				
carbon offsets	2	0	0	2
carbon trading	0	4	0	4
energy efficiency	2	1	2	5
green architecture	0	6	0	6
protecting environment	0	2	3	5
recycling	0	1	3	4
renewable energy	4	4	0	8
socially responsible investment	0	8	0	8
SUB-TOTALS	8	26	8	42
TOTALS	12	37	15	64

The websites of the case study corporations all include themes associated with ecological modernization, reflecting its use as a practical approach to solving environmental problems. In terms of major themes, “innovation” is emphasized in particular by Suncor, but is mentioned by all three companies. With regard to major responses to climate change, all three corporations include references to either “environmentally responsible products and services” (Royal Bank and Bell) or “responsible development” (Suncor); these two concepts

are similar if one considers that Suncor does not offer products or services direct to the public, but rather develops a product farther up the commodity chain. All three corporations explicitly talk about reducing emissions, and all three corporations demonstrate commitment to the triple-bottom-line conception of sustainability that reflects some of the key principles of ecological modernization.

Minor themes and responses to climate change related to ecological modernization that are present on the case study websites include: energy efficiency, renewable energy, green architecture and recycling (see Table 2). The major and minor responses to climate change and themes associated with ecological modernization are all recognizable as contributing to climate change mitigation. More generally, all three corporations explicitly define themselves as "corporate citizens" actively engaged in CSR and responding to climate change as well as to other environmental problems.

Analysis of the communications of the three focal corporations reveals that in practice, they are embracing several aspects of ecological modernization. They are pro-actively seeking out a particular but limited range of technological innovation and increased efficiencies, in addition to other strategies, to try to make their operations more sustainable in development stages rather than dealing with environmental harms as an after effect of their operations. The voluntary adoption of these kinds of responsible business practices can be interpreted as indicating that corporations see value in this type of activity. Voluntary adoption of CSR is also a way for corporations to demonstrate that there is no need for government regulation, as they are taking it upon themselves to self-regulate, and participate in private governance mechanisms such as codes of conduct and reporting frameworks (Shamir 2011). As Fuchs and Lederer (2007) argue, CSR is one way that corporations can establish their legitimacy as

political actors. This is particularly important for ecological modernization given the increased role for corporations in environmental governance.

The prioritization of financial and business needs over social and environmental concerns is highlighted by the content analysis. This is unsurprising, but important nonetheless. Within ecological modernization theory, the prioritization of business needs should not be an insurmountable problem; in the right political and economic system environmentally responsible behaviour is understood to be good for business because of increases in efficiency and market advantages, among other considerations. These are some of the most obvious interpretations of corporate communications about climate change, in light of ecological modernization theory; further insights will be discussed in later sections.

From the eco-socialist perspective, the corporations' communications about climate change and other aspects of CSR take on different meaning. An eco-socialist analysis of corporate communications about climate change emphasizes the power of corporate discourses in maintaining neoliberal hegemony and legitimizing the capitalist system. Fuchs (2007) argues that the strategic framing of particular issues and debates by corporations can both influence policy, and shape the norms and values of the general population.[21] Large corporations and their associations have successfully influenced a variety of public discourses in the past few decades (Beiling 2007; Fuchs and Lederer 2007; Springett 2003). For example, business groups such as the World Business Council for Sustainable Development (WBCSD) (which includes Suncor as a member) have re-defined the concept of sustainability to represent social, environmental and economic commitments that corporations can

[21] Some of the literature I refer to in this and other sections discussing the eco-socialist perspective does not explicitly refer to eco-socialism. I include these works because they expand on and add depth to eco-socialist critiques of the capitalist system. This literature does not always extend to suggest eco-socialism as an alternative system, however its critiques of the capitalist system are clearly in line with eco-socialism.

accommodate without diverging significantly from business as usual practices, and which can be used to sell their brands (Springett 2003). This triple bottom-line understanding of sustainability is apparent on the websites of all three of the case-study corporations.

The inclusion of economics as a consideration in business understandings of sustainability is understandable. It can be interpreted as an attempt by business to integrate and synthesize its diverse responsibilities within one concept. However, the dominance of this business understanding can be seen as overshadowing more holistic, ecology oriented understandings that eco-socialism argues are necessary to address global environmental problems such as climate change. From the eco-socialist perspective, it is evident in the case study corporations' communications about sustainability and climate change that solutions must be acceptable to industry; for these corporations the profitability of climate change solutions is just as important, if not more so, as environmental and social concerns. By owning the language of debate, corporations, and their associations, are able to silence, neutralize, or counter alternative proposals and worldviews (Springett 2003: 73).

To summarize, according to ecological modernization theory, CSR and environmental responsibility indicate that corporations, and indirectly their customers and society in general, are moving in the right direction in terms of solving climate change. Eco-socialist perspectives tend to identify CSR more as part of the process of neoliberalization, legitimizing de-regulation and the shift to private authority, corporate self-regulation, and voluntary governance initiatives (Raman 2010; Sadler and Lloyd 2009).

One type of corporate communication I have not yet discussed in this chapter is the inclusion on the case study websites of reference and links to external organizations and initiatives related to environmental governance. The next section draws upon the network

analysis to explore the organizational field of environmental governance the corporations are a part of. I begin with an overview of the network analysis.

Network Analysis: Overview

One of the most challenging aspects of this project was researching the variety of organizations and initiatives that each of the case-study corporations is linked to. They are so diverse that an initial attempt at separating them according to membership, profit versus not-for-profit, and function generated approximately twenty types, from a total of seventy-five organizations/initiatives. I was able to condense some types to arrive at a ten-part typology of organizations/initiatives that the three corporations link to from their websites. This typology is provided in Table 1.[22] Table 4 lists the ten types and their frequencies by corporation. Figure 4 shows the network map of the three corporations and all the organizations and initiatives to which they connect.[23]

I provide a brief overview of the findings from the network analysis here, and add more in depth analysis of some of the organizations and initiatives in the next chapter. The results of the network analysis can be understood as representing an organizational field of environmental governance connected to the three focal firms. Industry associations make up one third of the organizations and initiatives in the field. It is common for the industry associations to refer to themselves as "the voice" of a particular industry. They highlight a number of goals, including networking, sharing ideas, contributing to the development of public policy, and developing new technologies and approaches to dealing with industry-specific issues, including sustainability and climate change. Many of the industry associations

[22] The ten-part typology attempts to balance a highly detailed account of the different types of organization with a straightforward categorization.

[23] The majority of links from a corporate website to an outside organization are hyperlinks (fifty-six), meaning that clicking on the image or reference to an organization opens up a new webpage belonging to the associated organization. The remaining nineteen links are inactive images or references to organizations or initiatives.

are environmentally focused, or focus on CSR. Some industry associations include members from one particular industry – for example the "Environmental Bankers Association"; others include members from a wide variety of industries, such as the Conference Board of Canada's "Business Council for Sustainability". While the industry associations included in this study are diverse in terms of their activities and focus, their primary objective is clear across the board: to protect the interests of their members.

Table 4: Frequencies by Corporation

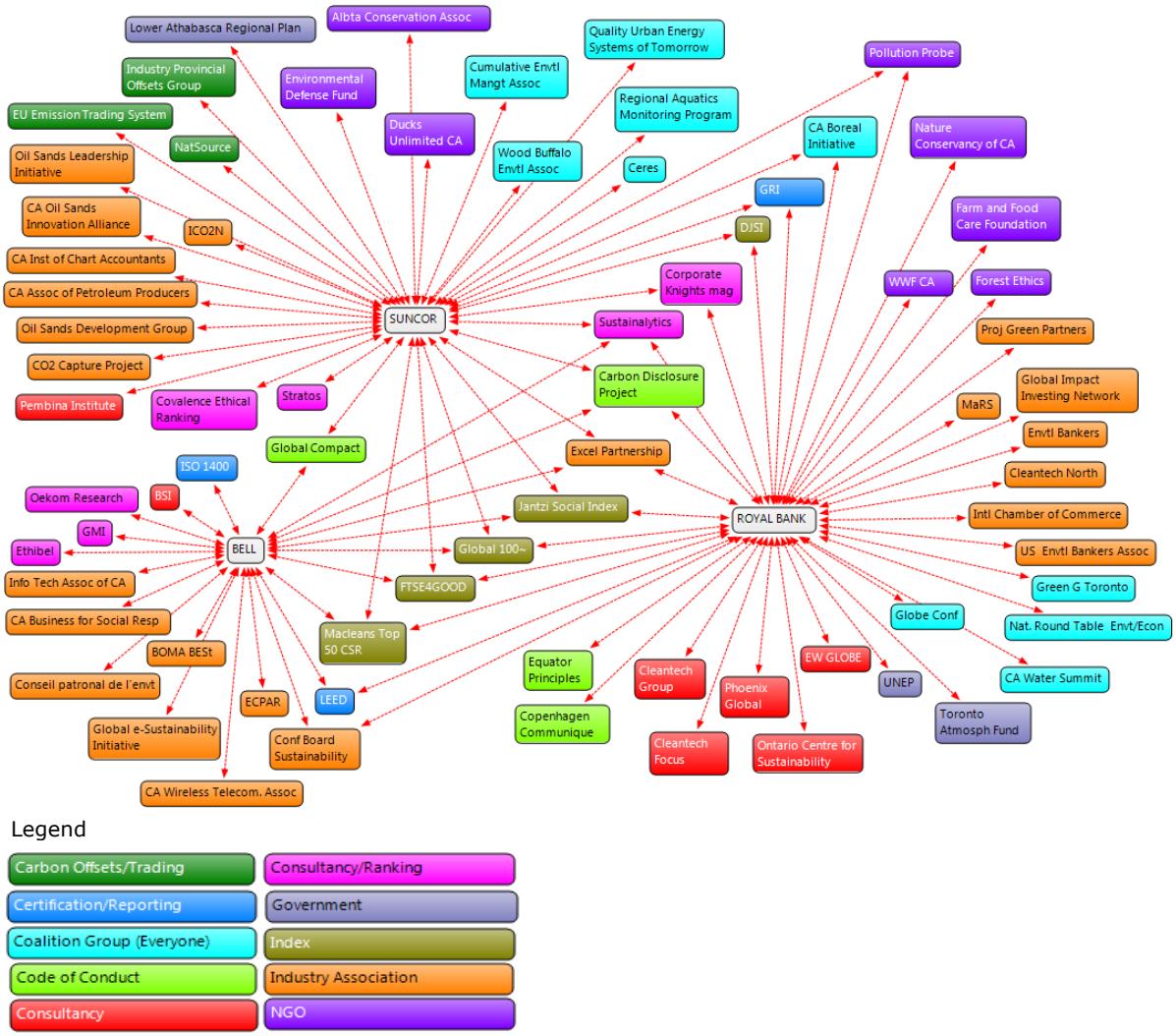
Type of Organization/Initiative	Suncor	Royal Bank	Bell	Total*
carbon offsets/trading scheme	3			3
certification/reporting framework	1	2	2	3
coalition group	6	5		11
code of conduct	2	2	2	3
consultancy	1	5	1	7
consultancy with ranking	4	2	4	7
government	1	2		3
index	5	5	4	5
industry association	8	9	9	25
NGO	3	5		8
Total Links	34	37	22	75

* Total are not the sum of the previous columns if more than one corporation links to an organization.

After industry associations, the most common organizations in the field of environmental governance are consultancies (both with and without rankings) and coalition groups. The case-study corporations linked to a total of fourteen consultancies, half of which have their own ranking systems. Consultancies have professionalized the incorporation of CSR and sustainability into business operations, and offer their expertise to corporations looking to improve their operations. They also offer information about the social and environmental risks associated with various industries and individual corporations in the form

of rankings and reports. The consultancies either publish their lists and reports, or more often, they sell them to investors.

Figure 4: Network of Organizations



There are eleven coalition groups, all of which are linked to either Suncor or Royal Bank. Coalition groups are made up of various sectors of society: industry, government, NGOs, academia, and other stakeholders. The majority of the coalition groups are public-private partnerships (PPPs). Most of them explicitly refer to involvement with policy development as a primary focus – they tend not to specify "public" policy, but often refer to

relationships with government departments and officials. In addition to policy development, there are a variety of objectives for these organizations, including environmental protection and monitoring, environmental advocacy, and co-operative development of ways to address large-scale problems like climate change as well as regional social and environmental issues.

The corporations associate with the remaining types of organizations and initiatives to a lesser degree. Private environmental governance initiatives that have not yet been mentioned are: indexes, codes of conduct, certification schemes and reporting frameworks. The case study corporations make direct links to four (inter)governmental organizations, if the European Union Emission Trading System (EU ETS) is included (this is classified as a carbon/offsets trading system in the ten-part typology, but it is arguably also an intergovernmental organization). There are three links to carbon/offsets trading systems, including the EU ETS. Finally, Royal Bank and Suncor both publicize relationships they have with particular NGOs.

Of the seventy-five external organizations/initiatives included in this study, seven are linked to all three of the focal corporations: *Maclean's* Top 50 Socially Responsible Corporations, the Jantzi Social Index, the Global 100, the FTSE4Good, Sustainalytics, the Carbon Disclosure Project, and the Excel Partnership.[24] The first four of these organizations/initiatives are indexes and the next three respectively are a consultancy (with rankings), a code of conduct, and an industry association. Of the seven organizations/initiatives linked to two of the case study corporations, five were linked to both Suncor and Royal Bank: the DJSI, Corporate Knights magazine, the Global Reporting

[24] *Maclean's* listing of Canada's Top 50 Most Socially Responsible Corporations is categorized as an index in the typology of organizations as this was the closest category that it fit with. It is developed by Sustainalytics, which is already included in the advisory corporations/ranking category, but it is promoted on the company websites as its own initiative and it seems to have similar weight to that of an index.

Initiative (GRI), the Canadian Boreal Initiative, and Pollution Probe. There are two organizations linked to both Royal Bank and Bell: the Canadian Conference Board Business Council for Sustainability and LEED. At first glance, what is most obvious is that of the five indexes included in the organizational field of environmental governance, four are linked to all three case-study corporations, and the remaining index is linked to two of the three. Thus, indexes are best positioned to act as a central focus and point of reference within the field.

The case study corporations are engaging with environmental governance – both public and private – in a variety of ways. The network analysis reveals examples of environmental governance that appear to be fully private: indexes and consultancy rankings.[25] It also reveals corporate participation in regimes characterized by cooperation between private and public actors, such as the UN Global Compact and PPPs involved with environmental protection and monitoring. As noted in the introduction, the division between public and private governance is not well defined. With this in mind, the next section outlines some of the ways that the case studies are engaging with the state, and public policy development.

Engagement with Public Environmental Governance

Considering my stated focus on private environmental governance, one might ask at this stage why I would enter into a discussion of the relationship between corporations and the state. I do this for two reasons. First, as I discuss in Chapter One, governance cannot be neatly divided into public and private. Instead, there are numerous variations of governance that emphasize public and private authority and input to varying degrees. Furthermore, understood within the context of neoliberalization, changes in the nature of environmental governance are

[25] While these organizations and initiatives appear to be totally private, it is possible that there is government involvement that is not immediately obvious.

generally initiated by the state. Thus, in light of the state's continued importance, I provide some discussion of how corporations may engage with the state.

The second reason for this discussion of the relationship between corporations and the state is that it may lead to insight into the relationship between corporations and private actors involved in environmental governance. Corporations engage with the state in large part because of its authority over corporate operations, and policy decisions that may affect corporations. If this authority is shifting towards private actors, it makes sense that corporations may transfer some of their attention to those actors, and they may do so using similar methods that they use to connect with public policymakers. Thus, consideration of how corporations engage with the state may facilitate a greater understanding of how corporations are engaging with private actors that also have some influence on corporate operations, either directly or through involvement in decision-making that affects them.

To interpret the data regarding the relationship between the case study corporations and the state, I draw on the taxonomy of corporate political action developed by Hillman and Hitt (1999). Hillman and Hitt identify three general political strategies used by business: financial incentive, information, and constituency building. The later two strategies are most relevant for this research project.[26] The information strategy focuses on providing political decision makers with the information they need to make decisions (Hillman and Hitt 1999). This strategy is particularly relevant for climate change decision-making as the science of climate change is new, and there are myriad possible strategies and technologies for reducing GHG emissions. Corporations can use their expertise to make available to political decision makers research results and information about energy technologies and other approaches for

[26] The financial incentive strategy involves providing financial incentive to political decision makers such as contributions to political parties (Hillman and Hitt 1999). Investigation of the financial incentive strategy is beyond the scope of this project.

dealing with climate change and reducing emissions. Furthermore, large corporations have the capital to fund research and development of solutions to climate change. The information strategy complements the second strategy considered in this study: constituency building.

Constituency building indirectly targets decision makers by gaining public support for the policies preferred by a corporation. Constituent support is critical for politicians as it influences polls, may impact funding for a particular agency and will ultimately determine their re-election (Hillman and Hitt 1999). Gaining broad public support for corporations' preferred policies is also important considering shifts in environmental governance; corporations are not only interested in influencing government, they are also interested in influencing a variety of other private actors that are involved in environmental decision-making (Kolk and Pinkse 2007). Particular strategies associated with building constituent support include public relations strategies, "grassroots mobilization of employees, customers… or other individuals" connected to a corporation, and advertising about a particular issue (Hillman and Hitt 1999: 834).

I use Hillman and Hitt's (1999) information strategy and their constituency building strategy as the basis for analysis of information and activities made public on the websites of the case study corporations. I consider first what the data reveal about some of the ways that the case study corporations appear to be providing information to policymakers.

Suncor and Royal Bank explicitly refer to commissioning research, and to participating in public policy development. It seems likely that they are drawing on the research they commission to inform their advice for policymakers. As previously mentioned, all three corporations have a strong focus on membership of industry associations, through which they have direct access to government officials and policy makers – this type of direct

engagement with public policy makers is explicitly referred to on several of the industry association websites (for example, ICO_2N; The Canadian Association of Petroleum Producers (CAPP), and The EXCEL Partnership (EXCEL)). EXCEL is the one industry association with all three focal corporations as members. A member of the WBCSD's Regional Network, EXCEL defines itself as "Canada's Business and Sustainability Partnership". As EXCEL (2013) notes on its website, it strives to "interact with high-level federal government officials and ministers to promote public policy in recognition of corporate environmental excellence". The industry associations are quite clear about their involvement with a variety of levels of government, with the explicit aim of informing and influencing the development of public policy and state regulations. Industry associations provide a strong, united voice for business.

Industry associations are not the only link between business and government. Royal Bank and Suncor include on their websites links to government organizations that they work with directly, and they are also involved with coalition groups that are PPPs, including other corporations, government, NGOs and other stakeholders. Most of these coalition groups also include involvement with public policy development in their mission statements. I provide a short overview of the coalition groups that the case study corporations are involved with here.

Royal Bank is involved in one regional group and two national groups: Greening Greater Toronto, the Canadian Boreal Initiative, and the National Round Table on Environment and the Economy, respectively.[27] It is also involved in two annual conferences that involve participants from NGOs, industry and government: the Canadian Water Summit is national, and the Globe Conference is international. Suncor is a member of three regional, three national, and one international coalition organization. The regional organizations are

[27] The National Round Table on Environment and the Economy is a government initiative; it is included in the coalition category as it involves a variety of groups – NGOs, industry, academia and more – and is therefore an opportunity for private actors to participate in public policy development as much as it is a government initiative.

involved with environmental impacts monitoring in the region that Suncor operates in, and the national organizations/initiatives are related to finding ways to reduce and manage carbon emissions, as well as protect the Boreal forest within which the tar sands are located. Notably (and drawing only from data available on its website), Bell is a member of a number of industry associations, but does not indicate that it is a member of any coalition groups, nor does its website include any links to NGOs, or government organizations.

In addition to providing information directly to policymakers, corporations may influence decision-making indirectly, through building public support, and contributing to the climate change debate. Hillman and Hitt (1999) argue that building constituent support is a key type of political action engaged in by corporations. All three companies engaged in the following types of activities that may build constituent support: community investment; a focus on company employees; listening to citizens; reporting positive news about the corporation, and supporting non-profit organizations through investment and employee volunteering. Also, all of the corporations emphasize connections with various other organizations and stakeholders, developing a network of connected groups that may broaden general public support.

The corporations studied all explicitly refer to engaging with stakeholders and/or the public, as well as making it clear on their websites that they are listening to stakeholders. They engage with the public in various ways. In addition to their websites, all three corporations have Facebook pages, Twitter accounts, and their own YouTube channels. Suncor and Royal Bank include prominent links to these social media outlets on their websites. Bell does not actively link to social media, but does actively use it.

Another form of CSR that may add to constituent support is the promotion of company specific initiatives. Royal Bank focuses on water and facilitates water-focused events, initiatives and research. Royal Bank presented the "Evolve Sustainable Design Competition" in 2012, which challenged architecture and engineering students to "design a net-zero energy and water-wise bank branch" that demonstrates how sustainable building practices can be incorporated into everyday life (Evolve 2012). Royal Bank is a partner in the annual Canadian Water Summit, (Royal Bank 2012d). It is a founding partner of "Imagine H20", a competition to encourage breakthroughs in efficiency for water (Royal Bank 2012c). Royal Bank is also a founding partner of the "Blue Economy Initiative", a two-year venture with the stated goal of generating support for sustainable water management in Canada by providing information to key decision makers and the public (Royal Bank 2012c). In its own words, the above initiatives "enable business, government and others to build a common understanding of the broad economic and environmental impacts of water, in an effort to create a shared agenda for water sustainability" (Royal Bank 2012d). Through funding and promotion of these initiatives, Royal Bank is involved in shaping public perceptions of water issues and possible solutions.

Suncor focuses its efforts on initiatives that involve reclamation of land and environmental clean up and protection close to its operations. Suncor refers to two primary initiatives on its website. The "Wapisiw Lookout Reclamation" involves reclaiming an oil sands tailings pond into forest and wetland (Suncor 2012c). The Boreal Forest Conservation Initiative is a partnership with the NGO Alberta Conservation Association to conserve areas of the Boreal Forest. Suncor is also a partner in the Canadian Boreal Initiative: a conservation coalition made up of conservation NGOs, industry and First Nations (Canadian Boreal

Initiative 2012). Bell is engaged in one company specific initiative related to the environment, which focuses on recycling used cell phones.

These company specific initiatives are associated with another strategy common to all three companies: aligning with a particular environmental issue. Each company aligns with one or more environmental issues. Suncor and Bell focus on issues directly related to their own environmental impacts. Royal Bank is strongly aligned with the broader issue of sustainable water use, with a large portion of its website devoted to its various initiatives and to public education about water issues. While Royal Bank's operations do have some impact on water, it would not be considered to be a major part of its environmental impact and is not framed as such by Royal Bank. Rather, Royal Bank takes on the issue of water due to its associated economic risks faced by their clients – shortage of supply, for example.

All three of the case study corporations are engaging with public environmental governance through their memberships in industry associations, most of which are involved in the development of public policy. Suncor and Royal Bank are further involved through coalition groups and direct links to government organizations. All three corporations appear to be engaging in building constituent support for corporate responses to climate change through various CSR related activities, although again it seems that Suncor and Royal Bank are more engaged in these activities than Bell is. As the next section reveals, the strength of Bell's engagement with *private* forms of environmental governance is much more in line with the levels of engagement of the other two corporations. One logical conclusion from this is that Bell prioritizes engagement with private forms of environmental governance over engagement with public policy makers.

Ecological modernization theory conceptualizes corporations as organizations that will use their resources to solve environmental problems in large part because within the capitalist system they are constantly driven to compete with other corporations with regard to increasing efficiency and technological innovation. Corporations are viewed as key actors in the development of new institutions and forms of governance. From this perspective, corporate political action and involvement with public policy-making can be understood as part of a process of collaboration between the state and private actors to determine the best way to move forward. Corporations are a source of valuable information and resources that can be drawn upon to inform decision-making regarding climate change mitigation.

Eco-socialism offers a more critical interpretation of corporate power, and the relationship between corporations and the state. It understands corporations as contributing to environmental problems though the constant externalizing of the environmental costs associated with their activities. From the perspective of eco-socialism, if corporations are providing information to the state for decision-making and development of governance mechanisms, that information is likely working to the advantage of the corporations directly, and indirectly in terms of supporting the continuation of the capitalist system. Along the same lines, corporate engagement in constituency building activities, as described in the previous section, is understood by eco-socialism to be corporations focusing attention on CSR that works for the corporation, rather than activities connected to what is most critically needed by society. CSR activities such as financial support for community projects, and employee volunteerism, are in essence a kind of trickle down of positive things happening for the public good after corporate needs are satisfied. An eco-socialist system would prioritize ecological concerns and the public good, instead of offering them as sideline corporate activities.

Consideration of Royal Bank's water initiatives provides some additional insight into eco-socialist understandings of CSR. Royal Bank appears to be making a number of positive contributions to water sustainability in Canada. Eco-socialism may recognize Royal Bank's positive contributions, while at the same time being wary of Royal Bank's involvement in shaping understandings of water sustainability. Royal Bank's conception of water sustainability may detract from more holistic, social and ecological understandings by bringing corporate needs and concerns into the discussion.

Engagement with Private Environmental Governance

The prevalence of private authority in environmental governance is reflected on the websites of the case-study corporations, and in the network analysis. The corporations all demonstrate commitment to self-regulation and engagement with national and international private environmental governance initiatives. In terms of self-regulation, all three corporations adopt some form of individual code of conduct, and produce one or more reports relating to their environmental impact and CSR. Externally, the case-study corporations are directly participating in private initiatives that are part of the organizational field of environmental governance: codes of conduct, certification schemes, reporting frameworks, CSR and sustainability indexes, and consultancy rankings. They are indirectly engaging with private environmental governance and decision-making through membership in industry associations and coalition groups, collaboration with NGOs, and through their involvement with consultancies. The next chapter is devoted to a more in-depth analysis of the corporations' engagement with private environmental governance. Before moving on, I outline where corporations appear to be focusing their attention geographically, and then include a final section on the corporations' reported activities to reduce GHG emissions.

The Geography of Environmental Governance

In their explanation of ecological modernization, Mol and Sonnenfeld (2000) identify a reduction in the top down role of the nation-state in environmental governance and the emergence of supranational institutions. Some eco-socialist perspectives also suggest a move away from state regulation, however they generally point in the opposite direction, towards democratic decision making that is more participatory and controlled at a more localized level (Magdoff and Foster 2010). I draw on the network analysis to examine where corporations are focusing their attention with regard to environmental governance: regionally, nationally or internationally? Tables 5 and 6 include frequencies according to geographic scope.

Table 5: Frequencies and Geographic Scope

Organization/Initiative Type	Regional	National	International	Total
carbon offsets/trading scheme		1	2	3
certification/reporting			3	3
coalition group	4	5	2	11
code of conduct			3	3
consultancy	1	3	3	7
consultancy with ranking		2	5	7
government	2		1	3
index		2	3	5
industry association	5	13	7	25
NGO	2	4	2	8
Total	14	30	31	75

In the organizational field connected to the three corporations, there are thirty-one international, thirty national and fourteen regional organizations/initiatives. The majority of the industry associations, NGOs and coalition groups are national or regional. All of the codes of conduct and certification/reporting frameworks are international. Of the remaining types of organization/initiative, most are relatively balanced between national and international, except for consultancies that produce their own rankings, which are more often international.

Examination of the geographic scope of each type of organization/initiative reveals that nationally the case study corporations appear to focus their attention on engaging with public policy development and decision-making through participation in industry associations and coalition groups. Through participation in coalition groups they are also working with NGOs, stakeholders and government.

Table 6: Frequencies by Corporation and Geographic Scope*

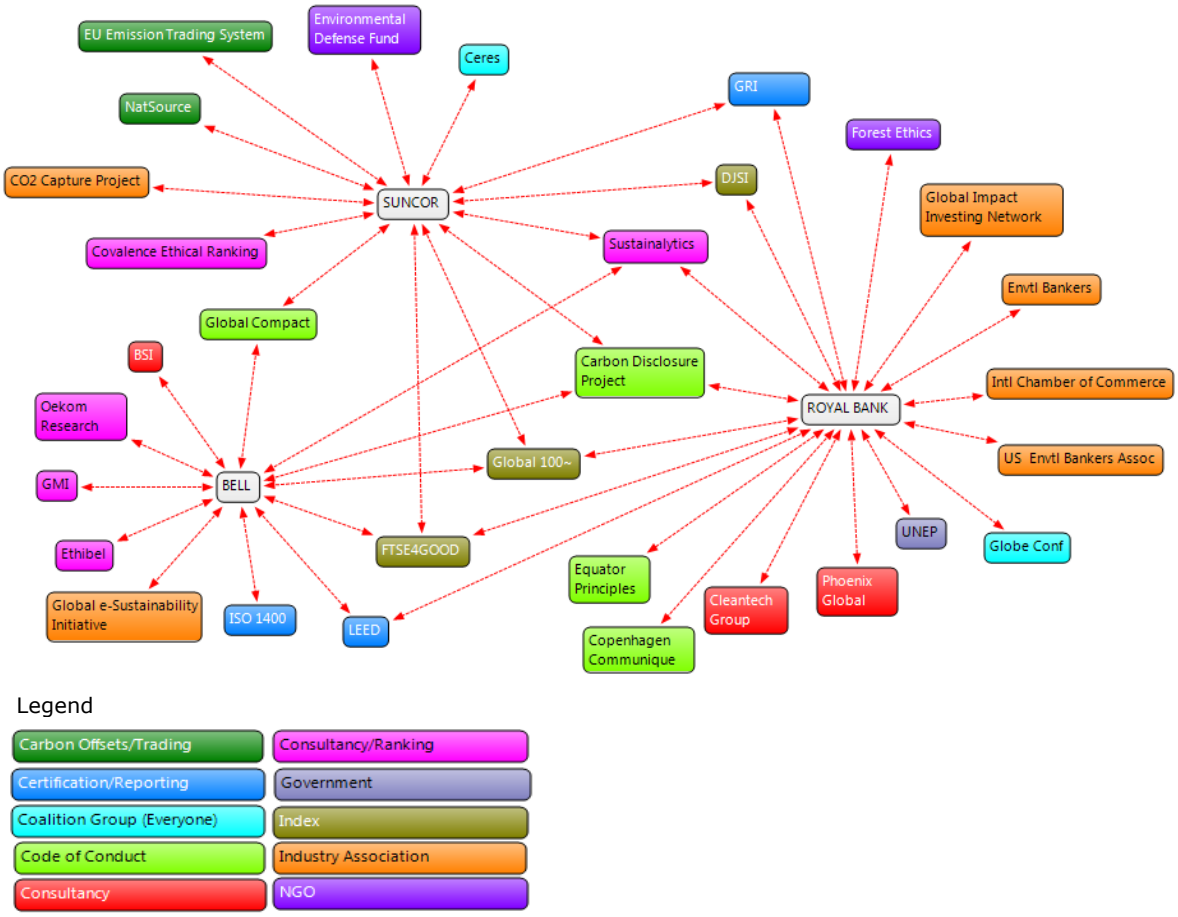
	Suncor			Royal Bank			Bell		
Organization/Initiative Type	Nat.	Intl.	Total	Nat.	Intl.	Total	Nat.	Intl.	Total
carbon offsets/trading scheme	1	2	3						
certification/reporting		1	1		2	2		2	2
coalition group	3	1	6	3	1	5			
code of conduct		2	2		2	2		2	2
consultancy	1		1	2	2	5		1	1
consultancy with ranking	2	2	4	1	1	2		4	4
government			1		1	2			
index	2	3	5	2	3	5	2	2	4
industry association	5	1	8	3	5	9	6	1	9
NGO	1	1	3	3	1	5			
Total Links	15	13	34	14	18	37	8	12	22

*Difference between National, International and Total = Regional, which is not shown due to space limitations Suncor includes links to 7 regional organizations/initiatives, Royal Bank links to 5, and Bell links to 2.

Royal Bank and Bell include links to more international organizational networks than national ones. Suncor focuses more of its attention nationally. The corporations include links to a similar number of international organizations/initiatives, with Royal Bank linking to a few more than Bell and Suncor. Bell links to less than half of the number of national organizations/initiatives that Suncor and Royal Bank link to. Of the organizations/initiatives associated with all three corporations, four are international and three are national (see Figures 5 and 6). For organizations/initiatives linked to two corporations, three are international and four are national. At the regional level there are no organizations/initiatives

linked to more than one of the case study corporations – this is unsurprising given that each corporation is headquartered in a different province.[28]

Figure 5: Network of International Organizations

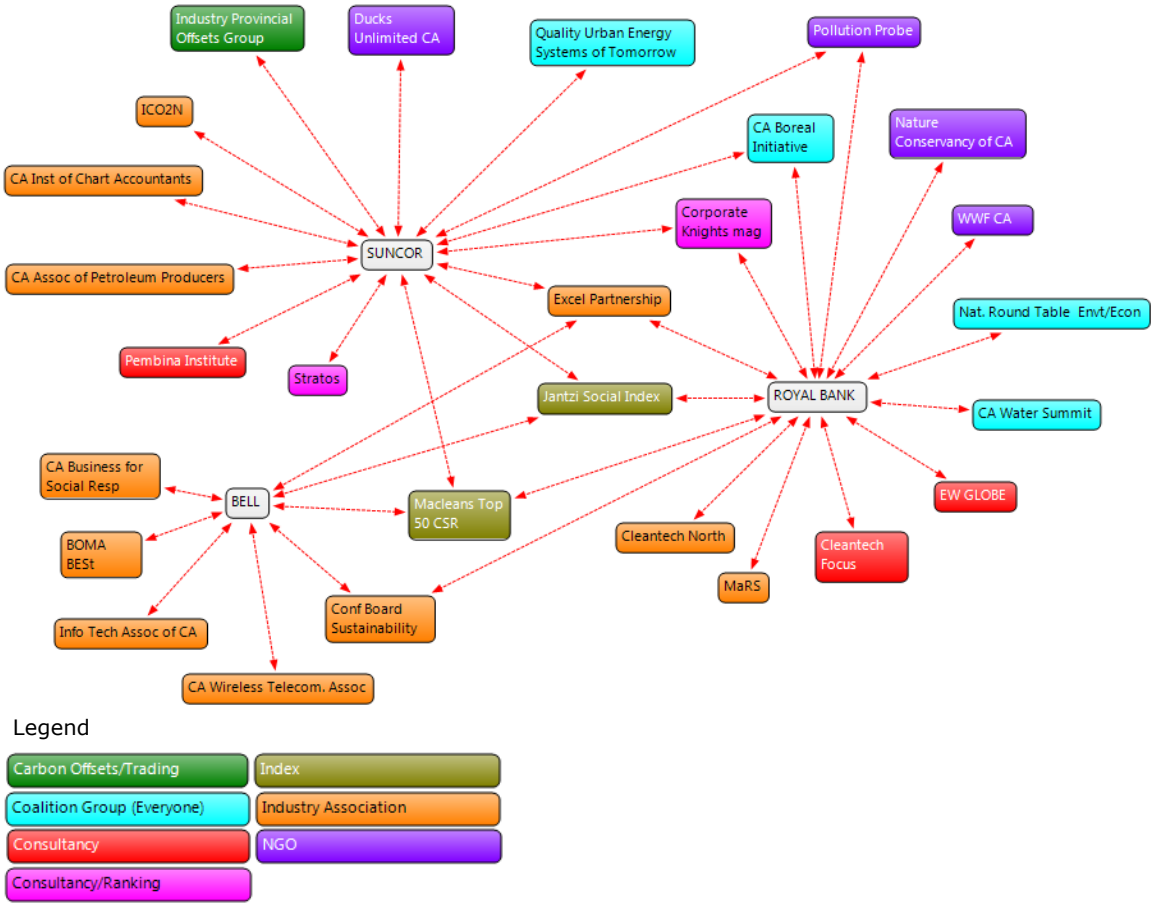


Internationally, the case-study corporations are engaging more directly with private environmental governance initiatives such as codes of conduct, reporting frameworks, indexes, and corporate ranking and management systems. Their involvement with these initiatives appears to be largely passive in that they are fulfilling the requirements set out by international regimes. This is opposed to the corporations' involvement with governance at the national level, which appears to be more active in terms of influencing how policy is developed. There are likely a number of reasons for these two different relationships. Most

[28] Suncor's headquarters are in Alberta, Royal Bank's are in Ontario, and Bell is based in Quebec.

obvious is that it is easier for corporations to engage with policy development in their home country where they are a big fish in a small pond, so to speak, as compared to in an international setting, where they may still be big fish, but the number of other big fish has increased dramatically, and the entire political context has changed.[29]

Figure 6: Network of National Organizations

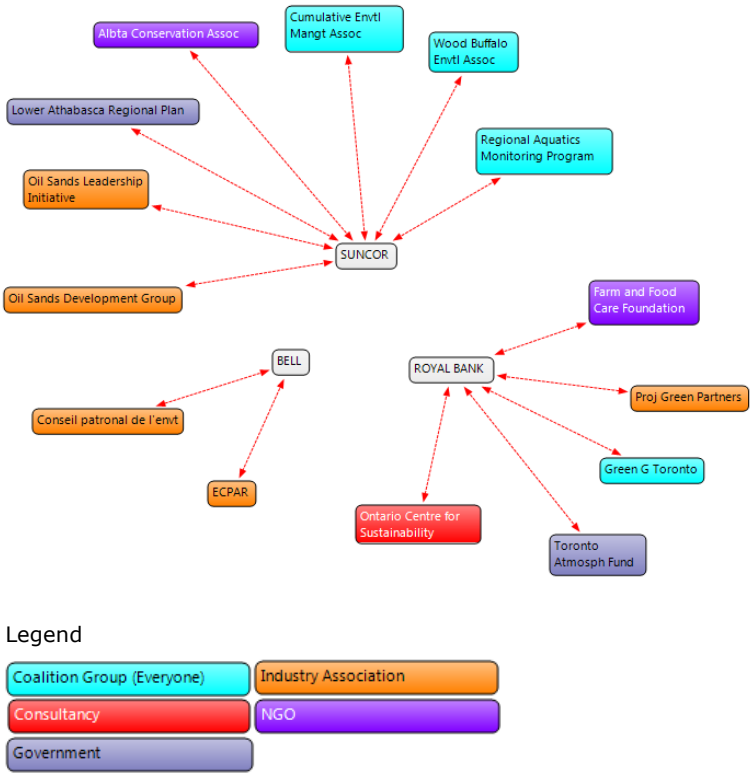


Most of the private environmental governance initiatives are international, which distances them spatially from the case study corporations. These kinds of transnational regimes are a component of ecological modernization's conceptions of new forms of environmental governance. In contrast, eco-socialist perspectives are generally wary of trends towards international environmental governance and "one size fits all" mechanisms, arguing

[29] Understanding these forces is beyond the scope of this paper.

that these kinds of mechanisms usually favour the developed nations of the North, and contribute to global and regional inequality. Eco-socialists generally argue for economic decision-making to be localized and democratic, putting power in the hands of the public instead of the corporate elite, and enabling a shift away from decisions that are driven by the need for capital accumulation and growth (Magdoff and Foster 2010; Pepper 2010). This is particularly important for addressing the specific environmental and social needs of different regions. In light of eco-socialism, current transnational forms of private environmental governance such as those included in this study are too far distanced from the locales they affect in terms of their leadership structures, they are undemocratic with regard to development and maintenance of governance mechanisms, and they include a strong focus on capital accumulation in line with the needs of the capitalist economy. I will include further discussion on these last two concerns in Chapter Four.

Figure 7: Network of Regional Organizations



Concrete Action and Reductions in Emissions

In this final section of Chapter Three, I outline some of the activities of the individual corporations that appear to have had a direct impact on reducing GHG emissions, such as buying energy from renewable sources or reducing employee travel. My definition of "concrete action" does not include ideas, commitments, or commendations – it is results-oriented. It is difficult to assess exactly what a corporation has done to reduce emissions and contributions to climate change. I make an attempt here based on information each corporation publishes on its website, including actions taken to reduce emissions, and GHG emissions included in annual reports. It is possible that some actions may not be identified on a corporation's website. However, considering the high value of environmental responsibility it seems unlikely that a corporation would not advertise its own good deeds regarding climate change.

Royal Bank summarizes its environmental commitment in its "Environmental Blueprint" report. It includes the reduction of its operational footprint, which it has done in part by investing in energy efficient buildings such as those that are LEED certified. Royal Bank (2011c: 2) reports a nine percent reduction in its total GHG emissions from 2009 to 2012. It has done this by: buying renewable energy, encouraging alternatives to employee travel such as teleconferencing and working from home; e-billing, and buying carbon offsets (many people do not consider offsets to be a true reduction of GHG emissions).

Bell's overall GHG emissions rose by two percent from 2010 to 2011, however, according to Bell this is commendable as there was rapid expansion in the Bell network that required additional power and fuel for vehicles. Bell is aiming to reduce its GHG emissions to fifty percent of its 2003 level by the end of 2020, and at this point it has achieved a thirty-one

percent reduction (Bell 2011). Bell has adopted similar strategies to Royal Bank (listed above). They also use electric vehicles and energy conservation strategies such as green roofs.

It is difficult to see how one can consider any part of Suncor's activities as actively reducing GHG emissions considering that the majority of its business involves development of the tar sands. Suncor admits that due to its growth strategy, its emissions will increase in the foreseeable future. However, on its website Suncor states that it is "committed to operational improvements to reduce the emissions intensity and environmental impact of its operations" (Suncor 2012e).[30] Suncor does invest in renewable energy, operating six wind projects (Suncor 2012a). However, the benefits from these operations are outweighed by Suncor's activities in the tar sands.

The three case study corporations appear to have had different degrees of success or failure in reducing GHG emissions.[31] Royal Bank reports reductions in its emissions since 2009, however it relies on carbon offsets to do this. Without relying on offsets, it is unclear if Royal Bank would still have reduced its emissions. Despite a small increase between 2010 and 2011, Bell does appear to have achieved an overall decrease in its emissions in the last ten years. Notably, in terms of reduction in emissions Bell appears to have accomplished the most, yet Bell makes no reference to climate change on its website and has less of a focus on CSR and environmental responsibility than the other two companies. Finally, Suncor is steadily increasing its emissions, with no change in this trend in sight. Obviously the nature of

[30] The commonly accepted definition of GHG "emissions intensity" in the oil and gas industry in Alberta is that used by Alberta Environment and Sustainable Resource Development: "total annual emissions per unit of production" (Alberta Government 2012: 9). GHG emissions intensity is regulated for each individual facility (Alberta Government 2012). Focus on emissions intensity rather than overall emissions means that corporations can reduce the intensity of their emissions (and publicize this reduction), while simultaneously increasing their overall GHG emissions as their total production levels increase.

[31] Focus here is on reduction of GHG emissions, as opposed to volume of emissions. Considering differences in the size and operations of each company, and the complexity of measurement and other factors, it is not realistic to compare the companies according to their emissions. It is more realistic to compare their actions in terms of reduction of individual emissions.

each company affects its ability to reduce emissions. Bell and Royal Bank generate emissions not from their primary products and services, but as negative externalities from their general operations. In contrast, Suncor generates emissions from its operations in nearly every aspect of what it does, including the extraction and sale of its product.

CHAPTER FOUR: Private Environmental Governance in Canada

In this chapter I address the second research question: What kinds of private environmental governance are Canadian corporations engaging with? The network analysis reveals two primary ways that corporations are engaging with private environmental governance. First, they are directly participating in initiatives established by private actors or groups of actors: codes of conduct, certification schemes, reporting frameworks, CSR and sustainability indexes, and consultancy rankings. Second, they are indirectly involved with private environmental governance – mainly in an advisory capacity – through their membership in industry associations and coalition groups, through collaboration with NGOs, and through their involvement with consultancies. In this chapter I begin with a discussion of the ways the case-study corporations are indirectly influencing private environmental governance, including a critical examination of the Regional Aquatics Monitoring Program (RAMP) – a PPP coalition with a governance function. I then discuss the various initiatives the corporations are directly participating in, using an in depth examination of the Dow Jones Sustainability Index (DJSI) to illustrate some of the key issues associated with private governance initiatives. Before beginning analysis of the corporations' engagement with private environmental governance, I further contextualize private environmental governance in Canada by expanding on the overview of the Canadian political and economic context provided in Chapter One to include some discussion of the province of Alberta.

Political and Economic Context of Alberta

Since 2006, when it came to power in a minority government, the federal Conservative Government of Canada has demonstrated that its priorities are a strong economy based on extraction and export of Canada's wealth of natural resources, including the oil in Alberta's tar

sands. This is nothing new for Canada. As Watkins (2007: 220) argues, the "Canadian variant of capitalism" is biased towards resource exploitation. As discussed in the opening chapter, environmental protection and regulation in Canada have been subject to the process of neoliberalization, shifting towards less state involvement.

The Government of Canada clearly has an important role in decision-making regarding climate change mitigation. However, the Progressive Conservative government of Alberta is also a key player because Alberta is the location of the tar sands.[32] Alberta accounts for approximately ninety-eight percent of Canada's oil reserves, with ninety-nine percent of that oil located in the tar sands (Alberta Energy 2013). The province of Alberta owns approximately eighty-one percent of the tar sands (Alberta Energy 2013),[33] and controls the management and development of the tar sands, as well as environmental regulation and commercial aspects of tar sands operations (Alberta Energy 2013). In the fiscal year ending in 2012, the Alberta government collected roughly $4.5 billion in royalties from the tar sands (Alberta Energy 2013). It is argued that as Alberta becomes more heavily dependent on resource rents from oil than on taxes, accountability is shifting from citizens to corporations (Carter 2010; Watkins 2007). Globally, the oil and gas industry of Alberta has driven perception of Canada's dollar as one of the world's petrocurrencies (Watkins 2007).

The provincial government in Alberta has proven to be particularly responsive to the demands of the oil and gas industry (Carter 2010). Carter (2010: 2-3) sums up the political

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[32] Alberta's tar sands are located under approximately 140,200 square kilometers of boreal forest in Northern Alberta (Alberta Energy 2011) – an area more than two and a half times the size of Vancouver Island. The tar sands contain vast quantities of crude bitumen, which must go through a complex and energy intensive refining process to be turned into crude oil (Suncor 2010b). In August 2010, there were approximately ninety-one active operations (Alberta Energy 2011), and development of the tar sands has only just begun. Approximately 1.3 million barrels per day were extracted in 2009 (Canadian Association of Petroleum Producers cited in Carter 2010: 5). By 2019 output is predicted to be approximately 3.2 million barrels per day (Alberta Energy 2011).

[33] The remainder of the tar sands is owned by a variety of groups, including the Federal Government within Aboriginal reserves, successors to the Hudson's Bay Company, railway companies and descendents of original homesteaders (Alberta Energy 2013).

economy of Alberta and its links to the tar sands industry as follows:

> The provincial (and also federal) government ensures the continuation of the industry via funding or subsidies, by actively defending and promoting the industry at home and abroad, by being reluctant to dig deeper into the environmental questions raised, and by not intervening to protect the environment where regulatory authority exists. Then the tar sands industry reinforces these governmental approaches via coordinated lobbying efforts, political financing, and media and community public relations campaigns.

According to Carter (2010), the regulatory system in Alberta has been molded to support tar sands development, and environmental regulation has been pushed to the wayside. Brownsey (2005: 23) makes a similar argument that the business-friendly governing of Alberta, and its reliance on oil and gas revenues, has left the Province's political system "hollowed out" and unable to deal with economic, social and environmental problems.

While the Alberta government has created a regulatory environment that facilitates rapid and extensive tar sands development, it has simultaneously neglected monitoring and restraint of environmental impacts (Carter 2010). Ecologist Kevin Timmons examined 6,600 tar sands-related environmental incident reports filed with Alberta Environment over the last dozen years, and could find no record of any action taken by the government against the companies involved (Parkland Institute 2010: 35). During the $200 billion investment boom in the tar sands in recent years, Alberta Environment's monitoring, compliance and enforcement budget fell by twenty-six percent, while its budget for public relations increased fifty-four percent (Parkland Institute 2010: 35).

Considering the current neoliberal political and economic contexts of Alberta and Canada it seems likely that in the coming years they will be characterized by a continuation of the trend towards increasing reliance on private environmental governance. It is clear that the effectiveness of private environmental governance for addressing climate change is an important focus for study. The atmosphere of seemingly unquestioning support of tar sands

development highlights some of the challenges to be overcome if Canada is to have any hope of reducing its total GHG emissions enough to do its part in reducing CO_2 in the Earth's atmosphere back to below 350 ppm.

Indirect Engagement with Private Environmental Governance

Suncor, Royal Bank and Bell are indirectly engaged with private environmental governance through a variety of activities and relationships. The network analysis highlights the importance of industry associations. The prevalence of links to industry associations indicates a strong network of cooperation between the case-study corporations and other businesses. As stated in the previous chapter, most of the industry associations explicitly refer to influencing public policy. They tend not to include much reference to engagement with private forms of governance. However, it is clear that industry associations exist to provide a united voice for industry. As shifts in environmental governance move away from public authority, and corporations themselves are focusing on private forms of governance – as demonstrated by this research – it seems likely that industry associations are also engaging in discussions with various actors and organizations involved in developing and maintaining private forms of environmental governance.

Consultancies

After industry associations, the most common organizations to which the three focal firms are linked are consultancies. Sadler and Lloyd (2009) argue that consultancies are a form of private governance, and are actively involved in shaping the various ways that corporations engage in CSR. Consultancies have professionalized the incorporation of CSR and sustainability into business operations, and offer their expertise to corporations looking to

improve their operations. They also provide information to investors about the social and environmental risks associated with various industries and individual corporations.

Of the fourteen consultancies in this study, half maintain lists of corporations ranked according to their own measures, which focus mainly on environmental, social and governance factors. In association with the rankings, the consultancies also produce reports that provide in depth analysis of particular industries and corporations. The consultancies either publish their lists and reports, or more often, they sell them to investors. At first glance the rankings generally measure the CSR and environmental sustainability of different corporations. On closer examination, the inclusion of environmental and social issues in the rankings and reports is part of each consultancy's assessment of corporations' financial risk for investors. Sustainalytics (2013), a consultancy that is linked to all three focal corporations, explains its reports as follows:

> Sustainalytics' Industry Reports provide a concise yet comprehensive overview of the trends and challenges facing companies within their sectors. Clients will gain insights into the industry-specific environmental, social and governance (ESG) issues that may pose material risks and opportunities to companies and their shareholders. These reports identify industry leaders and laggards and outline best practices surrounding key performance indicators. Investors develop an understanding of the linkages between core business drivers, such as access to resources or regulatory environment, and key ESG issues such as community relations or climate change.

There are two different directions in which corporate rankings and reports related to CSR and environmental sustainability could work. If their primary aim is to determine which corporations are most socially and environmentally responsible, the focus should be on how a corporation's operations impact the environment and the public. In contrast, if the primary aim of a corporate ranking and/or report is to provide investors with information regarding the financial risk of investment in various corporations, the focus is on how environmental and social issues will impact a corporation. While the rankings and reports produced by the

consultancies in this study likely include some elements of the first type, they are clearly identifiable as the later type that focus on risks *to* the corporation, not those created by the corporation, as is highlighted by the above passage from Sustainalytics' website.

Initially, I interpreted the case study corporations' references to consultancies as primarily demonstrating their CSR and commitment to sustainability. Upon closer inspection, while this may be the case, these appear to be minor considerations. What the consultancies focus on is how CSR and environmental issues relate to a corporations' fiscal responsibility and risk management. Making public their involvement with consultancies is a way for corporations to indicate that they are paying attention to the risk management aspects of social and environmental issues. In light of ecological modernization theory, the consultancies rankings and reports can be understood as encouraging businesses to be environmentally responsible by facilitating market mechanisms of the kind proposed by ecological modernization. Corporations are in essence marketing their CSR and sustainability as part of the incentive for investors to buy their shares, and consultancies assist them in doing this by compiling information about CSR.

From an eco-socialist perspective, sustainability consultancies are one of the most obvious examples of the privatization of environmental governance (Sadler and Lloyd 2009). Sadler and Lloyd (2009) refer to the growing industry of CSR and sustainability consultancies as the neoliberalization of CSR. Shamir (2011: 332) argues that CSR illustrates "the remarkable ability of corporations (and their affiliates) to transform social critiques into commercial assets". Consultancies – most of which are for profit corporations – are competing to produce the best measures of sustainability, while simultaneously framing and defining climate change and its solutions to be in line with the process of neoliberalization,

and the needs of the capitalist economy (Sadler and Lloyd 2009).

From an eco-socialist perspective, the consultancies in this study are another example of how even the public good – in this case, information about CSR and sustainability – is being packaged and sold for profit, disconnecting it from what is actually in the best interest of the public. When a corporation highlights its work with a consultancy it indicates that it is professionally incorporating CSR and sustainability into its operations. The assumption that this is for the public good is an easy one to make based on a quick survey of the public image of a consultancy. More in depth examination reveals that in reality, social issues are not a major focus of consultancies' rankings, but appears to be more of a bi-product. This reflects a previously mentioned eco-socialist critique of CSR: that it reduces social and ecological considerations to secondary concerns, after primary business needs are addressed. For example, a corporation may receive a lower score on a ranking if it is at risk of public and consumer backlash associated with environmentally destructive or polluting behaviour. Thus, the corporation is compelled to clean up its act, but *this is only the case if there is a threat of public exposure*. If the consideration is simply the environmental impact, there is no motivation for the corporation to change its behaviour – at least not based on concern regarding its placement on various rankings and indexes.

Coalition Groups

Coalition groups are included in the networks of both Suncor and Royal Bank. They include various sectors of society, and many can be classified as public-private partnerships (PPPs). Similar to industry associations, the emphasis on the websites of these groups tends to be on involvement with public policy development. Some of the organizations are indirectly involved with private environmental governance through their various efforts to promote

sustainability and CSR. Ceres is one example of this type of advocacy group. Ceres is one of two international coalition groups included in this study (the others were national or regional). According to its website, Ceres is an "advocate for sustainability leadership" that connects a network of investors, companies and public interest groups (Ceres 2013a). Ceres promotes sustainability by encouraging "companies, policy makers and other market players" to include environmental and social factors in their decision-making (Ceres 2013b). It does this by using its network to connect different organizations, as well as by producing a number of reports that, according to its website: "highlight key sustainability risks in the global economy and define new standards and corporate/investor best practices for responding" (Ceres 2013b). Ceres was directly involved in private environmental governance through its development of the Global Reporting Initiative (GRI), discussed earlier, which both Suncor and Royal Bank are members of.

Some of the coalition groups included in this project do work that directly addresses climate change. For example, Carbon Management Canada (CMC) funds research and connects academic researchers, fossil fuel corporations, government and NGOs that have the primary objective of developing ways to reduce carbon emissions. It seems likely that CMC is involved in discussions of both public and private environmental governance. Others groups target different environmental areas that are indirectly related to addressing climate change, such as the "Canadian Boreal Initiative" and "Greening Greater Toronto". Most of the coalition groups and initiatives (conferences, for the most part) are focused on advocacy and policy development. The clearest example of a coalition group that directly fulfills a governance function is the Regional Aquatics Monitoring Program (RAMP) in Alberta. RAMP is an organization that does not fit neatly into the direct (in terms of corporate

participation in) and indirect conceptions of involvement with private environmental governance. The next section provides and overview and critical analysis of RAMP in order to explore some of the potential issues related to private environmental governance by public-private coalition groups.

The Regional Aquatics Monitoring Program (RAMP)

RAMP is a PPP that Suncor works with as a member of its steering committee and in terms of providing funding. On its website, RAMP defines itself as "a science-based and results-focused environmental monitoring program that is designed to fulfill the aquatic monitoring needs of all RAMP stakeholders" (RAMP 2010). It is a multi-stakeholder initiative that began in 1997, and is industry-funded (RAMP 2013). According to Nikiforuk (2008: 71), Alberta Environment cites RAMP frequently in support of its statements that tar sands development has had "no significant impacts" on the Athabasca River (which flows through the tar sands) or the ecosystems surrounding the tar sands.

The release of results of an independent study of water quality in the Athabasca River basin done by Dr. David Schindler – a highly respected scientist – and Erin Kelly call into question continuous reports by RAMP and the Alberta Government that there are no significant impacts on the Athabasca River and surrounding environment from the tar sands. As a result of the controversy generated from Dr. Schindler's reports, the Alberta Government ordered a review of two of Dr. Schindler's reports, one from Alberta Environment, and one from RAMP. The review was conducted by Peter Dillon and colleagues, with the results released March 11, 2011. According to Dillon et al. (2011: iii) RAMP "is spending large amounts of time and resources on obtaining water quality data that are difficult to interpret… their sampling frequencies are too low and the sampling locations are not adequate". RAMP

has refused to make its data available to interested persons, which has harmed its credibility, and "its current structure is totally unacceptable" (Dillon et al. 2011: 41). Dillon et al. conclude that RAMP's data analysis has many limitations, and the Water Quality Index employed by RAMP "is not scientifically rigorous and may foster superficial interpretations and summaries".[34] The review conducted by Dillon et al. confirmed criticisms of RAMP by Dr. Schindler, and others.

In the context of this study, it is of interest that a "science-based and results-focused environmental monitoring program" funded by the oil industry has for years been providing unreliable evidence to support false representations by industry and the Alberta government that the tar sands are not damaging local water systems and ecosystems. This example does not mean other similar organizations behave in a similar way. However, it does provide an example of how over a period of several years an organization can give the impression that it is fulfilling a need for environmental monitoring without actually doing so effectively. Ecological modernization highlights the obvious need for reform of organizations such as RAMP without necessarily disputing its fundamental ability to effectively monitor the environmental impacts of the tar sands. Hypothetically, this type of organization could provide accurate and reliable environmental information. In particular, it could be argued that the companies most involved in development of the area have important knowledge regarding how possible impacts need to be monitored, supporting their involvement in the organization.

From the eco-socialist perspective, a better understanding of the politics of knowledge means that there is no easy resort to 'science' to settle environmental debate. It could be argued that RAMP's failures raise serious questions about what influence the corporations

[34] Dillon et al. (2011: 11) found no indication of error due to methods in the Schindler Reports. The Alberta Environment report was based on incorrect or inappropriate statistical procedures (Dillon et al. 2001: 19).

funding RAMP have in determining how it operates. The failures of RAMP give the impression that they are attributable to more than just scientific mistakes. As a "science-based" organization, it seems unlikely that RAMP's problems were unknown within the organization. RAMP is another example of an organization that prioritizes corporate needs and economic growth over social considerations and environmental protection. This is reflected in RAMP's contribution to the continued perception that the tar sands are not significantly damaging the surrounding environment, and causing associated health problems in communities living in the region.

NGOs

NGOs are the final type of external organization indirectly involved in private environmental governance. Royal Bank and Suncor both publicize relationships they have with particular NGOs. Suncor links to three NGOs. It partners with the Alberta Conservation Association in an initiative to protect parts of the Boreal Forest. It does not explain its relationship with the other two NGOs: the Environmental Defense Fund and Ducks Unlimited Canada. Royal Bank (2012g) includes links to six NGOs, explaining its relationship with them as follows: "We are in regular contact with a number of …NGOs to discuss environmental issues related to policy development, transaction review, portfolio management, operational impacts and business development opportunities". There appears to be no official relationship between Royal Bank and these NGOs beyond them being in periodic discussion with each other.

NGOs are argued to be significant actors in the promotion and development of private environmental governance, putting pressure on particular corporations, and sectors to change their behaviour and comply with various voluntary environmental standards (Falkner 2003).

By engaging with corporations, NGOs lend the corporations legitimacy as socially responsible actors. However, the NGOs may simultaneously lose some of their own legitimacy by partnering with corporations (Falkner 2003; Sadler and Lloyd 2009). What NGOs may gain through relationships with corporations are resources and access to technology, as well as some influence on corporate behaviour.[35]

The literature on relationships between NGOs and corporations indicates that NGOs are constantly trying to achieve the right balance in their involvement with corporations to achieve some gains in CSR while not losing too much in terms of their own legitimacy as independent actors (Falkner 2003; Pattberg 2005; Sadler and Lloyd 2009 and Sakarya et al. 2012). Corporations are likely also trying to find this balance. Corporate involvement with an NGO does not guarantee a positive public perception of the relationship. For example, workers dependent on the oil and gas industry for employment generally will not look favourably on NGOs that are publically opposed to the construction of new oil pipelines. The lack of any kind of explicit statement on the corporations' websites regarding the relationship between the NGOs (except ACA) and the case-study corporations may indicate an attempt by the corporations and the NGOs to maintain this kind of balance, establishing a link between themselves, but only a tenuous and ambiguous one.

Direct Participation in Private Environmental Governance Initiatives

The corporations studied are directly participating in a number of voluntary private initiatives within the field of environmental governance. These can be divided into two types. First, there are initiatives that involve commitment by a corporation to act in accordance with

[35] There is discussion in some areas of environmental sociology of the complex nature of relationships between corporations and NGOs, including critiques of the legitimacy of NGOs that are complicit with particular corporations (see for example Falkner 2003; Pattberg 2005; Sadler and Lloyd 2009, and Sakarya et al. 2012). In depth discussion of this literature is beyond the scope of this project.

a set of principles and/or guidelines; these include external codes of conduct, certification schemes and reporting frameworks. Second are initiatives that involve ranking corporations according to a variety of measures associated with CSR and sustainability: I include sustainability indexes and consultancy produced rankings in this category. I discuss these two types of initiatives in the next sections.

Codes of Conduct, Certification Schemes and Reporting Frameworks

There are numerous types of external commitments that a corporation can voluntarily make regarding CSR and sustainability, including codes of conduct, certification schemes and international reporting frameworks. Their strength can range from vague, aspirational codes to more specific certification schemes – ISO 14001 for example – in which particular actions are outlined and sanctions for non-compliance are included (Wright and Rwabizambuga 2006: 93). Engagement with and commitment to these initiatives has considerable potential to shape environmental governance both nationally and globally. When a large corporation commits to a voluntary initiative, and fulfills the necessary requirements, it contributes to the legitimacy of that initiative. In many cases, as more corporations sign up to an initiative, the more powerful the initiative becomes. However, this can work in the opposite way, particularly if the requirements of an initiative are so weak that most corporations can join, in which case, it becomes relatively meaningless.

Codes of conduct are developed by various actors, including corporations, industry associations, coalition groups, NGOs and various collaborative efforts (Brown et al. 2010). External codes of conduct are adopted by all three of the focal corporations. The UN Global Compact is the largest private business code, with more than 3,500 corporate signatories (Vogel 2010: 72), including Suncor and Bell. The Carbon Disclosure Project is defined as a

code of conduct for the purposes of this study, because it is understood to carry similar weight to a code of conduct – and not as much weight as certification schemes such as LEED, or reporting frameworks such as the GRI. I also define the Copenhagen Communique on Climate Change (2009) as a code of conduct in that it is a general statement of intention and priorities with no "compliance" issues.

Codes of conduct generally involve little or no monitoring of corporate behaviour to ensure it is in line with the requirements of the code. Industry codes can provide a benchmark, enabling a corporation to differentiate its behaviour and status from other corporations (Wright and Rwabizambuga 2006). International codes and framework agreements can establish a baseline for standards across nations and industries. In a more concrete sense, codes of conduct may help firms to measure and manage the environmental footprint of their organization (Wright and Rwabizambuga 2006).

A variation to codes of conduct with more teeth is the certification scheme. Certification schemes tend to be more narrowly aimed at a particular aspect of CSR, and may include monitoring of compliance. However, the quality and extent of the monitoring varies and does not usually involve the state (Brown et al. 2010). On their websites, the focal corporations do not refer to many certification schemes. Bell is ISO 14001 (International Standards Organization) certified for its environmental management system (Bell 2012d), and both Bell and Royal Bank are LEED certified for some of their office buildings (Bell 2012d; Royal Bank 2012e).

In the ten-part typology of organizations/initiatives I combine certification schemes and reporting frameworks in the same category due to their similarities in terms of requiring some degree of reporting, and representing a more verified commitment to CSR than codes of

conduct. The GRI is the only reporting framework included in this study. Both Royal Bank and Suncor report as part of the GRI, which is one of the most widely recognized international reporting frameworks (Searcy 2012), including requirements for reporting about economic, environmental, social and governance performance (GRI 2013). The GRI is active only in standard setting and keeping a record of companies that have adopted its standards; it is not involved in monitoring, verification or certification (Koenig-Archibugi 2004).

Corporate Rankings

Corporate rankings are the second type of private environmental governance initiative, including: sustainability indexes and the rankings produced by consultancies. Ecological modernization theory conceptualizes these kinds of initiatives as a form of market mechanism as they provide information to investors about the CSR and associated environmental risks for a corporation. Through these types of rankings corporations compete with each other on the basis of a variety of measures related to governance, social and environmental risks. Ecological modernization points to these mechanisms as driving corporations to improve their behaviours in a variety of areas, including environmental protection and responsibility, in order to stay competitive. I have already included some discussion of consultancy rankings of corporations in the above section on consultancies. To further explore some of the issues related to corporate rankings I focus on sustainability indexes.

Sustainability Indexes

Sustainability indexes are the subject of a number of studies and appear to be more influential than consultancy ratings in terms of having a larger number of the case-study corporations included in their measurements. Only two of the seven consultancies that have rankings are linked to more than one of the case-study corporations, whereas all of the

indexes were linked to at least two corporations, with most linked to all three. It is likely that consultancy rankings are constructed in similar ways to sustainability indexes. The primary difference is that consultancies generally require investors to purchase their rankings, whereas sustainability indexes make many of their results public. As consultancy rankings and sustainability indexes collect and provide essentially the same kind of data about corporations, primarily targeting investors as their readers/buyers, it is reasonable to assume that some of the following analysis of sustainability indexes is also applicable to consultancy rankings.

Sustainability indexes tabulate the most socially responsible or most sustainable companies according to various criteria (Pillarisetti and van den Bergh 2008). They measure a variety of indicators of corporate environmental and social performance, including: environmental impact (emissions, energy use), regulatory compliance, and organizational processes (environmental accounting, reporting and management) (Delmas and Blass 2010: 246-247). Different indexes consider different combinations, and give weight to different indicators (Porter and Kramer 2006; Chatterji and Levine 2005). Sustainability indexes are gaining attention as more companies seek to demonstrate their commitment to sustainability (Fowler and Hope 2007: 250). According to the Social Investment Forum (as cited in Delmas and Blas 2010: 246), an estimated eleven percent of professionally managed assets in the United States – approximately $2.71 trillion – are invested according to consideration of CSR. Examples of sustainability indexes include: the Dow Jones Sustainability Index (DJSI), the FTSE4Good, and the Domini Social Index (Lopez et al. 2007: 289).

Sustainability indexes fulfill a few different functions, varying according to the corporate characteristics that are measured. According to business studies literature, one of the most important aspects of inclusion on a sustainability index is demonstration that a

company is managing environmental, social and economic risks that is verified by an outside source – this is seen as critical for long-term business success (Lopez et al. 2007; Porter and Kramer 2006). The most well known indexes – the DJSI, for example – lend credibility to investment in corporations that include sustainability practices (Lopez et al. 2007).

A key difference between indexes is whether they use positive or negative screening methodologies. Positive screening selects companies that are the best in their industry, whereas negative screening excludes companies that perform poorly (Delmas and Blass 2010: 247). Focusing on positive screening can result in the selection of companies that are poor performers on some measures. Negative screening fails to identify companies that are the best performers. Thus, Delmas and Blass (2010) argue that combining both positive and negative indicators in essential. However many indexes focus on only one or the other (Delmas and Blass 2010).

Along similar lines, the assumptions behind selection of indicators and methodologies used are important. Fowler and Hope (2007) argue that differences in indicators, and the way they are measured, mean that indexes may rate companies in very different ways. A company may rank very highly in one index, and poorly in another, depending on what indicators are emphasized. Chatterji and Levine (2005) analyze three major sustainability indexes – the DJSI, KLD's Domini 400, and the FTSE4Good – and find considerable difference between the measurement systems, assumptions, selection and ranking of companies.

Sustainability indexes are imperfect measures. As Pillarisetti and Van den Bergh (2008) argue, indexes rely on measurement in single units, such as money or energy, whereas many aspects of sustainability, such as ecosystem functioning or impacts on neighbouring communities, are multidimensional and thus not easily defined. Indexes also rely on available

measures, leaving some aspects of sustainability unaccounted for, and many others accounted for only in superficial ways (Porter and Kramer 2006). Thus, a company may look good on paper because negative externalities are difficult to monitor (Chatterji and Levine 2005: 5). Furthermore, many of the weights assigned to different indicators within indexes are arbitrary, with no systematic assessment of critical assumptions or basis in natural or social sciences (Pillarisetti and van den Bergh 2008: 51).

The scientific rules that are commonly understood in development of indexes to guarantee meaningfulness and consistency are often not taken into account by sustainability indexes (Bohringer and Jochem, 2007). These indexes usually rely on surveys with response rates that are statistically dubious; and on data that is self-reported by the company and not adequately verified by external bodies (Porter and Kramer 2006: 4). Finally, Chatterji and Levine (2005) highlight that externalities related to suppliers and supply chains are not adequately accounted for by any of the sustainability indexes. This means that a company can sell off the most polluting aspects of its business to suppliers and present itself as "clean" when in fact emissions and social issues may be worse when the operations of the supplier are based in a developing country with more lenient regulations (Chatterji and Levine 2005: 5).

Lopez et al. (2007) argue that sustainability indexes do not have the reliability and validity that have been attributed to them through uncritical media coverage, and promotion by the companies themselves. Most well known indexes put little weight on environmental issues. The DJSI gives the most weight of all the indexes to the environment (Lopez et al. 2007: 289), yet typically ascribes less than ten percent of its points to environmental issues (Fowler and Hope 2007: 248). Authors who have critically analyzed various sustainability indexes have concluded that they are fundamentally flawed (Porter and Kramer 2006), and

misleading (Bohringer and Jochem 2007). According to Porter and Kramer (2006: 4), the rankings allow "almost any company to boast that it meets some measure of social responsibility – and most do". This study provides evidence in support of this argument, with all three corporations meeting the criteria for almost all of the indexes included.

The Dow Jones Sustainability Index

To illustrate the above overview and critical analysis of sustainability indexes, I provide a brief examination of the DJSI. The DJSI was launched in 1999; it is one of the longest established and most well-known sustainability indexes (SAM 2010a). According to the DJSI website, it is "the first global index tracking the financial performance of the leading sustainability-driven companies worldwide" (SAM 2010a). The idea for the DJSI was developed by Sustainable Asset Management (SAM), a Zurich-based fund management firm that now manages the index (SAM 2010b). According to the SAM website:

> The combination of the know-how of the world's leading index provider Dow Jones & Company with SAM's many years of sustainability expertise has resulted in a family of indexes that provides a growing number of asset managers with objective and professional benchmarks for sustainability investments. The indexes are based on SAM's corporate sustainability assessment, which identifies global sustainability leaders on the basis of economic, environmental and social criteria (SAM, 2010b).

Fowler and Hope (2007: 246) argue that the motivation behind creation of the DJSI was to establish SAM and Dow Jones as leaders in the new business space of sustainability. SAM and the DJSI clearly identify sustainability as being a business strategy to manage risks and take advantage of the opportunities provided by sustainability issues (SAM 2010a, 2010b).

The DJSI includes criteria from three areas: economic, social and environmental (SAM 2010c). Using positive screening, the criteria are used to identify the leading companies in each industry (Lopez et al. 2007). To be considered for the global DJSI a company must be one of the largest ten percent of companies on the Dow Jones Global Total

Stock Market Index in terms of economic, environmental and social criteria (SAM 2010c). As noted by Fowler and Hope (2007), this requirement, as well as other factors, means the DJSI favours large companies. According to Fowler and Hope (2007: 248), thirty-one percent of the DJSI's weighting goes to economic factors, and nine percent goes to environmental factors. The present division of weight is not currently available on the website; rather, a complicated breakdown of different methods dependent on industry is provided, which is uninterpretable to a lay-reader. Assuming the weighting of environmental factors is still relatively low, this calls into question the emphasis on environmental sustainability of the DJSI and SAM. While SAM emphasizes the triple-bottom-line conception of sustainability, environmental and social sustainability are represented as foundational in their conception, and the environment in particular is prevalent in its online marketing (SAM 2010b).

Within academic research, there are a number of authors who use the DJSI uncritically as an assessment tool. For example, Lopez et al. (2007) use data from the Dow Jones Sustainability Index and the Dow Jones Global Index to measure whether companies that implement sustainability measures in line with the requirements of the DJSI are more profitable than those that do not. There is no consideration in their analysis of whether companies are actually more sustainable, or more socially responsible. Rather, analysis is based purely on the placement of companies on the DJSI. The DJSI has been criticized for using poorly designed measures with low validity (Chatterji and Levine 2005). For example, as an indication of community involvement it uses the size of a corporate board, even though the two may be unrelated (Porter and Kramer 2006: 4). The emphasis on large corporations is also criticized: Fowler and Hope (2007) argue that awarding environmental and social factors as much sway as a company size would likely lead to very different results. Finally, as

outlined earlier, focus on positive screening may mean that some companies that are highly ranked are poor performers on particular criteria.

Ecological modernization's focus on development of new market-based mechanisms of environmental governance may be applied to corporate sustainability indexes as having potential to influence corporations to act more responsibly, as well as encouraging investors to invest in responsible, sustainable businesses (Porter and Kramer 2006). In contrast, from an eco-socialist perspective, the development and maintenance of sustainability indexes can be understood as being shaped by the interests of the corporate elite, as are the data that are collected by corporations and reported to the indexes. Sustainability indexes deal primarily with criteria set by western business models and the priorities of investors, defining environmental and social issues within a framework of business advantage. The industry language used and various criteria outlined in sustainability indexes legitimize and validate corporate claims of "sustainability" that are based primarily on economic considerations, with social and environmental concerns secondary.

In light of eco-socialism, sustainability indexes are a way for business to defuse criticisms by environmentalists and community groups by building on the notion of sustainable development while at the same time redefining it. They are a validation of the efforts being made by corporations to be environmentally sustainable and socially responsible (Springett 2003), and thus contribute to the argument by the business elite that soft forms of regulation are all that are necessary for corporations to do their part to be sustainable. In sum, eco-socialist arguments emphasize that sustainability indexes prioritize business interests and profit maximization, with environmental and social concerns only accommodated when they make good business sense, including corporate concerns for public relations.

CHAPTER FIVE: Discussion

Processes of neoliberalization are reflected in the case-study corporations' responses to climate change – particularly their engagement with private forms of environmental governance. The primary research question for this project is: is private environmental governance effectively addressing climate change? To answer this question, I have considered two additional research questions. In Chapter Three I provided an overview of how the case study corporations are responding to climate change. In Chapter Four, I examined the kinds of private environmental governance Canadian corporations are engaging with, including how they address climate change. Private environmental governance is one of ecological modernization's primary mechanisms for solving environmental problems; therefore its effectiveness is critical for ecological modernization. If private environmental governance is not effectively addressing climate change, it strengthens the argument by eco-socialists that an alternative type of political and economic system is needed – one that does not rely on private environmental governance to solve climate change and other global environmental problems.

Is Private Environmental Governance Effectively Addressing Climate Change?

How does one determine if private environmental governance is effectively addressing climate change? It is a complex question. I do not offer a conclusive answer, however elements of this project do provide some compelling evidence. I use a simple three-step process for determining the effectiveness of private environmental governance, which I will explain here and apply to the case study corporations and the initiatives/organizations that they are engaging with. This is what is possible based on the data collected in this project, to provide an indication of the effectiveness of private environmental governance for addressing climate change. At the end of this section I provide a summary of the process.

Climate change is a complex problem, but in one way it is also simple: to mitigate climate change, global GHG emissions need to be reduced. With this in mind, I use reduction in GHG emissions – historically, in current practice, and in planning and commitments – as a measure of whether a corporation is moving in the right direction in terms of addressing climate change. I add to this consideration of whether a corporation is engaged in core activities that allow for GHG emissions to be reduced, or whether it is involved in an industry like fossil fuel extraction, in which activities are inextricably linked to unsustainable GHG emissions.

Based on the corporations studied in this project, I create two categories: "clean companies" and "dirty companies". "Clean companies" (for lack of a better term, recognizing that they are not necessarily clean, but are "cleaner" than the companies in the second group) are those with core operations that are not intrinsically linked to unsustainable GHG emissions, that have recently reduced their emissions, and that are publicly committed to further reductions. Royal Bank and Bell are clean companies. "Dirty companies" (an overly simplistic term, but one that makes the essential difference clear) are corporations that have core operations that are inextricably linked to unsustainable GHG emissions, that have not reduced emissions in recent years, and that are publically committed to increasing emissions for the foreseeable future. In this study, Suncor is a dirty company.

To determine if a particular private environmental governance initiative or organization is effectively addressing climate change, I first consider what kinds of corporations – dirty or clean – are committed to, listed on, or similarly engaged with the organization/initiative. Inclusion of dirty companies is understood to indicate that an organization/initiative is not effectively addressing climate change in terms of requiring or

influencing corporations to reduce emissions, or refusing membership to dirty companies.

The first step to take is to look at which initiatives in this study include Suncor – a dirty company. While any initiative in which Suncor is included may well be effectively measuring and/or influencing *something* – transparency, reporting standards, economic outlook, or other elements related to environmental sustainability and climate change mitigation – it seems safe to say that such an initiative is *not* effectively moving member corporations towards reductions in overall GHG emissions. The only way that one could argue this would be to qualify the argument by noting that a dirty company – Suncor – was included in error, which also points to the ineffectiveness of such a measure.

The following initiatives include Suncor: the GRI, RAMP, the Carbon Disclosure Project, the United Nations (UN) Global Compact, Corporate Knights magazine, Covalence ethical ranking, Stratos, Sustainalytics, *Maclean's* list of Canada's 50 Most Socially Responsible Corporations, the DJSI, the FTSE4GOOD, the Global 100, and the Jantzi Social Index. To be clear, these organizations/initiatives are not necessarily failing to do what they say they do. I argue that inclusion of Suncor indicates that they do not require participating corporations to reduce, or even attempt to reduce, GHG emissions to sustainable levels.

To evaluate the effectiveness of the private environmental governance present in the organizational field revealed by the network analysis – not just individual organizations/initiatives, the next question is: what private environmental governance initiatives/organizations, of the ones included in this study, are left? Which ones are connected only to clean companies? The governance initiatives/organizations that include either Bell or Royal Bank, and do not include Suncor are: ISO 1400, LEED, the Copenhagen Communique on Climate Change (2009), Ethibel, GMI Ratings and Oekom Research. I

examine these organizations and initiatives to determine if any of them appear to be directly involved with corporations' GHG emissions.

The Copenhagen Communique on Climate Change (2009) is a declaration by some 950 corporations around the globe that a global agreement on climate change is necessary to develop a long-term pathway to reductions in emissions. It has no power over its signatory corporations. Some may argue that it is more of a general statement than a code of conduct, so perhaps should not be included as a form of governance. This may be the case; I include it here as an example of one of the initiatives that has broad reach and is directly related to climate change and corporate GHG emissions. In terms of its effectiveness for addressing climate change, even if it were considered a form of governance, it is not directly connected to corporations' GHG emissions in any way more than a general statement of intent.

Ethibel, GMI Ratings, and Oekom Research – classified in the 10-part typology as consultancies – are all multinational companies that use their own metrics to provide company-specific information to investors. Their services include advising corporations about how to integrate social and environmental responsibility into their operations and reporting. All three consider environmental factors, although Oekom and Ethibel appear more focused on social and environmental issues, whereas GMI Ratings emphasizes risk assessment from an economic perspective. None of these corporations make their rankings available to the public – they are a product to be sold to investors to inform their investment decisions. Oekom does, however, publish a detailed Corporate Responsibility Review, which includes information on CSR in particular countries, highlighting results for a few corporations. None of these three corporations appear to have any kind or requirement or standard for reduction of GHG emissions.

The remaining two initiatives are international certification schemes: ISO 14001 and LEED. LEED does not include any kind of requirements when it comes to GHG emissions for buildings, however it is developing tools for addressing climate change, such as the GREEN UP program that facilitates measuring a variety of environmental impacts, including carbon footprints, and comparing them with the performance of other buildings (Canada Green Building Council 2013). LEED is specific to the design, construction and operation of buildings, so it has limited application in terms of total corporate GHG emissions.

ISO 14001 "maps out a framework that a company or organization can follow to set up an effective environmental management system" – it does not define requirements for environmental performance (ISO 2013). However, ISO is actively pursuing research and development of a range of tools that help corporations modify and measure their carbon footprints. In terms of overall efforts to measure and set standards for GHG emissions, the ISO appears to be the only governance organization that is both recognizing climate change as a global social and environmental issue, as opposed to an investment risk, as well as taking action to develop a range of governance tools to address the problem. (LEED may fit this description, but it is limited in scope to only building and construction.) In terms of its current effectiveness for addressing climate change, ISO 14001 is not explicitly connected to corporate reductions in GHG emissions, and thus, in terms of the above three-step process, it is not effectively addressing climate change.

In sum, proportionately, of the twenty-one initiatives that are identified as being directly involved in environmental governance, two-thirds include Suncor, and are therefore not determined to be effectively requiring corporations to reduce their levels of GHG emissions. Examination of the remaining institutions reveals that only two of them – LEED

and ISO 14001 – include any significant relationship with corporate GHG emissions. Neither one can be considered to be currently fulfilling a governance role that is leading corporations to reduce emissions, although they do exhibit potential to do so in the future. Thus, based on the data and analysis of this research project, private environmental governance does not appear to be effectively addressing climate change, in that it is not directly leading to corporate reductions in GHG emissions.

Three-Step Process for Evaluating the Effectiveness of Private Environmental Governance

Step 1: differentiate between "dirty companies" and "clean companies".

Step 2: eliminate any organization/initiative that includes a dirty company.

Step 3: examine the remaining organizations/initiatives to see if they are explicitly connected to corporate reductions in GHG emissions.

This process is a simple way of measuring the effectiveness of private environmental governance for addressing climate change. It does not consider a number of other complex issues relating to climate change. In particular, by focusing only on GHG emissions it neglects the variety of ways that a corporation's responses to climate change may be indirectly addressing (or exacerbating) the problem. Furthermore, clean corporations do appear to be reducing GHG emissions, and involvement with some of the organizations and initiatives included in this study may be contributing to that progress, even though they are not explicitly linked to reductions in emissions. While the three-step process is limited and not conclusive, it does highlight the need for stronger governance of GHG emissions.

This study only considers organizations and initiatives explicitly connected to the case-study corporations. This means any conclusions about the effectiveness of private environmental governance for addressing climate change cannot be assumed to be applicable

to Canada as a whole. Application of the three-step process explained above to more corporations, and expanding the field of environmental governance considered, would be a way of testing how relevant the results of this study are to the rest of Canada. In particular, applying this kind of analysis to smaller corporations, especially those that include strong reference to environmental responsibility on their websites, may lead to different results.

Ecological Modernization: Final Thoughts

Throughout this thesis I have analyzed the data using the theoretical lenses of ecological modernization and eco-socialism. Generally, ecological modernization perspectives of corporate responses to climate change, and trends in private environmental governance, see them in a more positive light. This is possibly because these options seem more do-able in the current political economic context, and is unsurprising given that many aspects of ecological modernization as an approach are observable in the data. Examining the data from the theoretical perspective of ecological modernization is a bit like looking at itself in the mirror, so it makes sense that it likes what it sees. While I do bracket my own beliefs as much as possible, I admit to a degree of skepticism about the motives of corporations and whether they will voluntarily make the kind of changes necessary to prevent runaway climate change. I find that ecological modernization is useful as a reminder of some of the positive things that corporations may bring to the table to contribute to climate change solutions.

Ecological modernization does not appear to adequately deal with the complexity of issues related to extraction of natural resources and the way that fossil fuels are embedded in almost every aspect of daily life in Canada. However, instead of rejecting the theory, perhaps there is room for ecological modernization in varying degrees, in some parts of the political and economic system. For example, in the communications industry it might prove effective.

Whether the principles of ecological modernization – a theory that incorporates the entire political and economic system – could be applied within particular parts of a larger system would be one of the first questions needing to be addressed.

As Buttell (2000: 64) argues, ecological modernization is an expression of "hope". At a time when it is easy to be overwhelmed by the magnitude of the problem of climate change, and what needs to be done to solve the problem, hope is not something we should discard lightly. Ecological modernization is relatively easy to understand and accept as a potential solution to climate change because of its reformist nature. This is particularly important considering the number of people still totally disengaged from discussions of climate change, and those whose daily lives are dominated by more pressing, short-term problems.

Eco-socialism: Final Thoughts

Eco-socialism leads to a more critical interpretation of the data collected in this study. This is not surprising: within environmental sociology eco-socialism is the revolutionary in the room. From an eco-socialist point of view, CSR may lead to positive change in terms of some aspects of the large-scale environmental destruction of capitalism, and some issues relating to the welfare of workers. However, it is apparent that for most corporations CSR does not fundamentally change the nature of their actions, primarily because it does not affect the prioritization of business needs, most importantly profits (Vogel 2010: 79). CSR commitments tend to remain on the periphery of corporate business strategies (Vogel 2010: 81). One could argue that this is the case with the company-specific CSR initiatives, such as Royal Bank's focus on water issues, or Suncor's focus on cleaning up its tailings ponds.

An eco-socialist critique of the rise of private environmental governance understands it is an extension of corporate power – and the power of the elite – over the means of

production. Falkner (2003) argues that having been developed in large part by corporations, it seems likely that private environmental governance works to their benefit. Much of the data in this study support this argument. The corporations make clear their prioritization of financial and business interests over social and ecological concerns. Most of the private environmental governance initiatives and organizations also reflect the dominance of corporate interests – particularly concerns regarding the various social and environmental risks that corporations must manage. Ecological sustainability and the public good are present within the field of environmental governance included in this study. However, as highlighted by eco-socialist perspectives of CSR, they are secondary issues that garner attention as they relate to business concerns, and they are generally acted upon after business needs are taken care of. This is particularly apparent in the way that corporations have altered the meaning of "sustainability" from the original, ecologically and socially focused conception of the Brundtland report, to the "triple bottom line" definition that prioritizes profitability and financial risk management – effectively, sustainable *accumulation.*[36]

Throughout this thesis I have used eco-socialism to highlight some of the potential understandings and implications of corporate responses to climate change, and the effectiveness of private environmental governance for addressing the problem. I have given little attention to an important dimension of eco-socialism: its proposed alternative to the capitalist system and the various ways that an eco-socialist society might provide solutions to the current ecological crises faced by the planet. I outline a few examples here.

[36] The first volume of the Brundtland Commission's report *Our Common Future* was published in 1987, and included the most commonly cited modern definition of "sustainable development" as "development that meets the needs of the present, without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development 1987: 46).

Magdoff and Foster (2010) argue that there is a fracture between the economy and the environment that must be healed. They point to a need for a new social, economic and political system, which must include changes to how and where people live, how food is grown, transportation, and manufacturing. For example, GHG emissions could be reduced, and public engagement increased if people lived closer to where they work, in energy efficient houses, in communities that emphasize public spaces and support public participation in decision-making. In terms of food production, Magdoff and Foster (2010) note the benefits of family farms and cooperatives where farmers are reunited with the land in ways that have been lost in large-scale industrial production. This style of agriculture has been proven to be as productive as industrial operations, while also benefiting the local environment and communities as opposed to the negative impacts of industrial agriculture (Miguel A. Altieri cited in Magdoff and Foster 2010). In terms of daily life, Michael Lowy (2002; 2005) proposes the reduction of work time to alleviate unemployment and shift the priority in society from the accumulation of goods, to the enjoyment of free time.

Magdoff and Foster (2010) argue that in a genuine socialist system the power – particularly over production – must reside with the people, with steps taken to keep bureaucracy in check. Lowy (2005: 19-20) argues that democratic planning should decide which products are subsidized; what energy options should be pursued (even those not initially the most profitable); how transportation systems should be organized, and what overall measures should be taken to repair the environmental damage that has resulted from capitalism. Both Lowy (2005) and Magdoff and Foster (2010) highlight existing social movements, particularly those in the global South, fighting the capitalist exploitation of the poor and of the environment. Radical political ecology exemplified by eco-socialism, Lowy

(2005: 24) argues, "has become one of the most important ingredients of the vast movement against capitalist neoliberal globalization". Drawing on its Marxist roots, eco-socialism sees much of the potential for change as residing with the poor and working class, who suffer the most in the current system, both as a result of labour exploitation and in terms of the already powerful effects of climate change and other types of ecological impacts that disproportionately affect the poor. For the global South, many of the proposed solutions of ecological modernization are out of reach due to lack of technology and resources. Thus, for environmental problems like climate change, they have no choice but to look to other types of solution, such as eco-socialism. Eco-socialism offers some things ecological modernization does not, such as more localized, democratic power over decision-making, and most importantly regarding climate change mitigation: prioritization of social and ecological needs.

Concluding Comments

The corporations studied in this thesis all recognize climate change as a problem that requires them to adjust their own operations to try to reduce their GHG emissions. They have plans and commitments to reduce emissions and they report their emissions annually.[37] The fact that corporations are making voluntary commitments to tackle climate change is positive. However, the eco-socialist perspective reveals that corporate responses to climate change are undertaken within the parameters of what works for the corporation, rather than what is necessary to mitigate climate change. When a corporation reduces its GHG emissions it does so voluntarily, and presumably according to what it can afford without cutting into its profit margins too much. What corporations are doing is making minor changes in line with ecological modernization. Realistically, it is difficult for corporations to do more as their

[37] For Suncor, GHG "reductions" involve an overall increase, but some mitigation as compared to the full potential without steps taken to reduce emissions.

behaviour is shaped and constrained by the capitalist system they are a part of. Corporations like Suncor that operate in the tar sands are working within a political and economic system that supports this kind of development. If Suncor were to shut down tomorrow, it is likely that another corporation would come along to take its place. Corporations involved in resource extraction do have some responsibility for their actions and their consequences, however they are part of a larger system that facilitates their behaviour.

Examination of the external initiatives and organizations the case-study corporations connect to reveals little in the way of concrete action or solutions to climate change. Rather, the emphasis is on discussion, commitment to codes of conduct and reporting frameworks, and participation in groups that inform public policy makers. There is a lot of talk about climate change, and there is some action being taken, but not enough to realistically mitigate climate change and bring GHG emissions down to sustainable levels. Somehow, corporations must be compelled to reduce their GHG emissions. According to the data in this study, private environmental governance is not effectively doing this. This leads to different conclusions depending on one's theoretical perspective.

Ecological modernization points to a need for continued institutional reforms, better market mechanisms, and development of more effective forms of private environmental governance that are more directly connected to corporate GHG emissions. As Warner (2010: 553) notes: "The pace of global environmental change is out of sync with the pace of institutional reform advocated by ecological modernization". The overarching question for ecological modernization is whether sufficient reforms can ever be quick enough to keep up with complex and dynamic problems like climate change?

For eco-socialism, the failure of private environmental governance to effectively

address climate change is another nail in the coffin for ecological modernization. If private environmental governance at present does not effectively lead corporations towards emissions reductions, what – in terms of how it is developed and implemented – is going to change this in the future? This is a question that has important implications for future decision-making regarding what types of governance may be most effective to address climate change. This research project has paid little attention to the failures of public environmental governance, which should not be forgotten. At the same time, public environmental governance is defined in part by the political and economic system it exists within. Thus, an alternative system to capitalism, such as eco-socialism, would not necessarily be characterized by the same failures in public environmental governance as have occurred to date.

It seems the window of time to prevent runaway climate change, and mitigate some of its most destructive consequences, may be rapidly closing. This thesis indicates that large Canadian corporations are not responding to climate change in a way that is meaningfully connected to what is needed to reduce GHG emissions to sustainable levels. Furthermore, it indicates that the private environmental governance initiatives the focal corporations are engaged with are not effectively addressing climate change in terms of compelling corporations to reduce their GHG emissions. This raises important questions with regard to how both public and private forms of environmental governance in Canada can address climate change more effectively. Can this be achieved through reforms of the current political and economic system? Or are the capitalist system and the corporate activities it encourages fundamentally incompatible with sustainable levels of GHG emissions? This thesis points more towards the need for a complete change of system. However, there are many questions left that still need to be answered.

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Appendix A: Organizations/Initiatives by Type

	Scope	Corporation
Carbon Offsets/Trading Schemes		
EU Emission Trading System (EU ETS)	international	S
Industry Provincial Offsets Group	national	S
NatSource (carbon offsets)	international	S
Certification/Reporting		
Global Reporting Initiative (GRI)	international	S/R
ISO 1400	international	B
LEED	international	R/B
Coalition (industry/government/NGOs/others)		
Canadian Boreal Initiative	national	S/R
Canadian Water Summit	national	R
Carbon Management Canada (CMC)	national	S
Ceres	international	S
Cumulative Envirnmntl Management Assoc. (CEMA)	regional	S
Globe Conference	international	R
Greening Greater Toronto	regional	R
National Round Table on Environment and the Economy	national	R
Quality Urban Energy Solutions of Tomorrow (QUEST)	national	S
Regional Aquatics Monitoring Program (RAMP)	regional	S
Wood Buffalo Envtl Assoc (WEBA)	regional	S
Code of Conduct		
Carbon Disclosure Project	international	S/R/B
Copenhagen Communique on Climate Change (2009)	international	R
United Nations (UN) Global Compact	international	S/B
Consultancy		
BSI Group	international	B
Cleantech Group	international	R
GLOBE	national	R
Ontario Centre for Sustainability (BLOOM)	regional	R
Pembina Institute	national	S
Phoenix Global	international	R
SDTC Cleantech Focus	national	R
Consultancy with Ranking		
Corporate Knights mag and more	national	S/R
Covalence ethical ranking	international	S
Ethibel	international	B

GMI Ratings	international	B
Oekom Research	international	B
Stratos	national	S
Sustainalytics (Jantzi)	international	S/R/B
Government		
Lower Athabasca Regional Plan	regional	S
Toronto Atmospheric Fund	regional	R
UN Environment Programme	international	R
Index		
Canada's 50 Most Socially Responsible Corporations	national	S/R/B
Dow Jones Sustainability Index (DJSI)	international	S/R
FTSE4GOOD	international	S/R/B
Global 100 (Corporate Knights)	international	S/R/B
Jantzi Social Index	national	S/R/B
Industry Association		
Building Owners and Managers Association (BOMA)	national	B
CA Business for Social Responsibility (CBSR)	national	B
Canadian Association of Petroleum Producers (CAPP)	national	S
Canadian Institute of Chartered Accountants	national	S
Canadian Oil Sands Innovation Alliance	national	S
Canadian Renewable Fuels Association	national	S
Canadian Wireless Telecommunications Association (CWTA)	national	B
Cleantech North	national	R
CO2 Capture Project (CCP)	international	S
Conference Board (CA) Business Council for Sustainability	national	R/B
Conseil Patronal de l'environnement du Quebec (CPEQ)	regional	B
Environmental Bankers Association	international	R
Equator Principles	international	R
Espace quebecois de concertation sur les... (ECPAR)*	regional	B
Excel Partnership	national	S/R/B
Global e-Sustainability Initiative (GeSI)	international	B
Global Impact Investing Network (GIIN)	international	R
Information Technology Association of Canada (ITAC)	national	B
Integrated CO_2 Network (ICO2N)	national	S
International Chamber of Commerce (ICC)	international	R
MaRS	national	R
Oil Sands Development Group (OSDG)	regional	S
Oil Sands Leadership Initiative (OSLI)	regional	S
Project Green Partners	regional	R
US Environmental Bankers Association	international	R

NGO		
Alberta Conservation Association	regional	S
Ducks Unlimited Canada (DUC)	national	S
Environmental Defense Fund (EDF)	international	S
Farm and Food Care Foundation	regional	R
Forest Ethics (Canada/USA)	international	R
Nature Conservancy of Canada	national	R
Pollution Probe	national	R
World Wildlife Federation (WWF) Canada	national	R

* Espace quebecois de concertation sur les pratiques d'approvisionnement responsible (ECPAR)