

Emission Ambition: The Roles Institutional Investors Are Playing To Mitigate Climate Change

by

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Abstract

Reporting can be a decision-making tool for institutional investors around the issue of climate change. Reporting can demonstrate how organizations tie capital allocation to environmental impacts, climate change risks, and sustainability, thereby providing information that could include or exclude organizations from investment portfolios. This research uses qualitative methods to examine how decision making, risks, and influences may support and challenge the effectiveness of reporting strategies and how institutional investors have impacted reporting. Findings, specific to Alberta and the oil and gas sector, demonstrate the direct and indirect influences institutional investors have on reporting as well as their meaningful contributions towards reporting standards and frameworks. Favourable research results could improve climate action.

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1.0 Introduction

Reducing GHG emissions to mitigate the effects of climate change is one of the biggest and complex imperatives of our time. Limiting the increase of the Earth's surface temperature and reducing GHG emissions is going to take a multifaceted approach. Dale (2001, p. 70) argued that businesses "exert powerful influences on our values, goals, priorities and policies" and there are increasing expectations on behalf of consumers, investors and regulators as to the role businesses should play in mitigating climate change (Kwon, 2018). That is why their leadership moving forward is crucial to reducing GHG emissions.

One-way companies communicate or disclose their environmental impacts and progress towards those impacts is to prepare and release Corporate and Social Responsibility (CSR) reports. These reports, common in the 1990's and early 2000's, have evolved and expanded their scope so that today they are often referred to as sustainability reports. The demand by the public and investors for company reporting and disclosure concerning environmental impacts grew significantly following the 1989 Exxon Valdez oil spill in Alaska's Prince William Sound that caused an ecological disaster, the impacts of which are still being felt today.

Releasing reports that inform interested parties about the impacts organizations have on the environment, although voluntary, has become mainstream and is used as a tool for decision making, especially for institutional investors.¹ For instance, investors are encouraging companies to use integrated reporting (IR), a form of reporting that shows how organizational corporate

¹ Institutional investor, investor and investment community will be used interchangeably.

behavior is aligned with their capital allocations (IIRC, 2021). These enhanced² reports are voluntary and take more effort to complete however they demonstrate a greater commitment to transparency related to sustainability issues, as they align an organizations financial performance metrics, to sustainability metrics. This in turn helps investors decide which companies to include in their portfolios, based on relevant sustainability goals which should correspond with their financial goals (Kwon, 2018). For example, one investment CEO is requiring businesses they invest in to provide their GHG reduction strategies and plans to foster a net-zero economy (Fink, 2021). Merging environmental and economic considerations in decision making is not a new concept (Brundtland Commission, 1987). Integrated reporting builds on this strategy and companies choosing to use these frameworks “are more likely to treat sustainability information as material to investment decisions” (Kwon, 2018, p. 5).

As stated above, sustainability reporting is a relatively recent activity by organizations, prompted by the public’s demand for increased transparency and the need for corporations to take responsibility for their impacts (GRI, 2021). Since reporting in this area has expanded, evolved and normalized over the last couple of decades, several reporting frameworks and standards have emerged. Standards collect and inform on best practices, while frameworks are designed to guide how information should be structured. This helped to improve, the comparability of metrics within an industry, the reliability of detail, and the type of content that would be most relevant and material to decision makers such as shareholders, stakeholders,

² Integrated and enhanced reporting will be used interchangeably.

investors and any other interested parties. Two of the most common standards and frameworks used for reporting today include the Sustainability Accounting Standards Board (SASB), founded in 2011 to develop a common language about the financial implications of sustainability, and the Task Force on Climate Related Financial Disclosure (TCFD) founded in 2015 by the Financial Stability Board³ to develop recommendations that support financial institutions to assess risks related to climate change.

As reporting becomes more detailed, two factors are at interplay. First, companies need to decide what material information they need to share in order for their audiences to understand both the nature of their business and the impacts their corporate operations cause, in order to make a profit. Second, institutional investors need to understand the climate related impacts that can pose a financial risk if they include these businesses in their portfolio. The relationship between institutional investors, businesses and climate change is becoming more and more relevant, yet simultaneously more complicated. In 2020, when Larry Fink, CEO of BlackRock⁴ wrote about reshaping finance he explained that “investors are increasingly . . . recognizing that climate risk is investment risk” (Fink, 2020, para. 5). To understand this risk, BlackRock, on behalf of their clients asked the companies they invest in to “disclose in line with industry-

³ The Financial Stability Board (FSB) is an international body that monitors and makes recommendations about the global financial system (FSB, 2020). They were created by the G20 after the 2008 financial crisis to help implement new financial regulatory rules (FSB, 2020).

⁴ BlackRock is an international investment, advisory and risk management solutions firm with trillions of dollars in assets under management (BlackRock, 2023).

specific SASB guidelines or disclose a similar set of data and disclose climate-related risks in line with the TCFD's recommendations" (Fink, 2020, para. 18). BlackRock also requested companies to include a "plan for operating under a scenario where the Paris Agreement's goal of limiting global warming to less than two degrees is fully realized" (Fink, 2020, para. 18).

Statements and initiatives from the investment community like the one quoted above from BlackRock's CEO may be the tipping point. To understand the role institutional investors are having on organizations this research asks the question:

What effect are institutional investors having on organizations to improve reporting and performance related to GHG emission reductions?

Therefore, do these types of actions and statements help reduce greenhouse gas emissions, or are they merely hyperbole? How effective can they be from an organizational perspective? Do they impact decision making related to the information shared in sustainability reports or disclosures? Do they have influence on divestment activities? What do companies in the upstream oil and gas sector, one of the largest contributors to rising temperatures, think of these approaches? In Alberta and by extension Canada, which is the geographic area of focus for this research, the oil and gas sector is a key player in this complicated relationship. In Canada, the oil and gas sector accounted for 27 percent of Canada's total greenhouse gas (GHG) emissions in 2020, with Alberta contributing the most at approximately 38 percent of this total (Government of Canada, 2022, May).

To answer these questions, interviews with oil and gas representatives were conducted by participants under anonymity to understand, from an organizational perspective, what role

institutional investors play and how effective can these actors be in mobilizing meaningful climate action among corporations? Dale argues that we ought “[n]ever underestimate the influence of key actors, in any given sector there are external influencers that have more weight and individual leadership” (A. Dale, personal communication, January 30, 2021).

The research aims to answer the central research question and several supporting questions according to the following organizational structure. Section 2 will provide context, history, and the current situation on the topic. Section 3 will describe the research methodology, chosen sector for study, and participant sample set. Section 4 provides a description and explanation of results. Section 5 offers an analysis and discussion of research results coupled with research context, while Section 6 draws several conclusions with recommendations and questions that further research might usefully explore.

2.0 Research Context

Research identified four key variables that taken together, co-determine the role institutional investors play in driving climate mitigation efforts. These include: influences, background and history of reporting, decision making, and risks.

2.1 Influences

Institutional investors are “financial institutions that accept funds from third parties for investment in their own name but on such parties’ behalf” (Young & Gates, 2013, p. 5). They are large organizations that make investments in publicly traded companies. They include banks, pension funds, insurance companies and investment consulting firms such as BlackRock, Zurich

Insurance Group, HSBC or Goldman Sachs and “because institutional investors are the dominant and largest shareholders of stocks, beneficiaries of these shares, often the general public, may prefer that these funds be invested in a socially responsible way” (Young & Gates, 2013, p. 5). Therefore, as explained by Kirschner (2021), “because of their size and influence, institutional investors greatly impact financial markets and the companies they invest in” (“Risks and Challenges,” para. 1).

Influence can take many forms, but at its core influence is a form of communication driven by the need of the influencer to affect a desired result. Institutional investors can influence organizations in their portfolios or within their assets under management to effect environmental performance in a number of ways. Influence can be demonstrated by using a voice and actively participating either by “writing letters, dialoguing directly with the board of directors, making inquiries during the open session at general shareholders meetings, possibly presenting official proposals to be voted on in the shareholders summits,” or selling shares which is called divestment (Fasan, 2016, p. 142).

Using a voice was demonstrated by BlackRock’s CEO Larry Fink who penned to shareholders that he expects organizations and their assets under management (AUM) with BlackRock to disclose “[plans] for operating under a scenario where the Paris Agreements’ goal of limiting global warming to less than two degrees is fully realized, as expressed by the TCFD guidelines” (Fink, 2020, para. 18). This statement has two variables at play. One is appealing to social norms by making a reference to the Paris agreement and that plans should align with this goal. The second is BlackRock stating their alignment with the TCFD. This statement,

positioned them ahead of the Canadian Securities Administrators announcement, which followed the U.S. Securities Exchange Commission announcement to propose mandating climate-related disclosure requirements in line with the TCFD as early as 2024. This means, as investors are being asked to include the TCFD requirements in their reporting, investors need to ask the companies in their portfolios to report on these requirements as well. This makes it easier for investors to aggregate the required information and report out on, especially for the Principles of Responsible Investment (PRI) signatories.

PRI is an independent organization supported by the UN. In 2006 the United Nations (UN) Environment Programme Finance Initiative and the UN Global Compact bodies led a group of international investors to develop the Principles of Responsible Investment. The PRI's role is guided by six principles based on the belief that "environmental, social and corporate governance (ESG) issues can affect the [financial] performance of investment portfolios" (PRI, 2022). Members who sign on to the PRI have compulsory reporting (principle six) that demonstrates activities and progress toward implementing appropriate disclosure on ESG issues (PRI, 2022). Failure to report and demonstrate commitment to the principles will result in being delisted from the group (PRI, 2022). Since inception, the number of signatories have grown substantially, starting with 63 signatories and \$6.5 trillion in AUM, it has grown to a membership of over 3,800 and \$121.3 trillion in AUM in 2021. This collective engagement and growth in investor organizations is evidence that investors and their organizations have a voice (Dyck, Lins, Roth & Wagner, 2019).

Being a PRI signatory requires that investors (as part owners of the organizations they invest in) commit to actively engage with organizations to improve their environmental and social (E&S) commitments, and support collaborative initiatives. Institutional investors collaborating formally and aligning their outcomes can put pressure on organizations. Dyck et al., (2019) explained that institutional investors can influence E&S performance using a form of social pressure such as beliefs, values, and norms of a group or society on a range of economic outcomes to achieve conformity. Garcia-Sanchez, Aibar-Guzman, Nunez-Torrado and Aibar Guzman, (2022) argued as cited by DiMaggio and Powell (1983) that:

within the context of institutional theory, industries can be considered organizational fields, so the fact that a firm belongs to a certain industry affects the institutional pressures to which it is exposed, leading to the adoption of similar patterns of behavior. Indeed, firms operating in the same industry are subject to similar regulations and policies and face similar stakeholder pressures which cause mimetic isomorphism⁵ (p. 1103).

Another way to influence is through legitimacy. Using PRI as an example, its relationship with the TCFD allows its members to use this reporting framework when submitting their PRI reports as both group's indicators align. Reporting on the TCFD scenarios is not mandatory, but

⁵ In organizational theory, mimetic isomorphism is the act of “imitating the behaviour and practices of successful counterparts within the same industry” (Masocha & Fatoki, 2018, p. 1266). This occurs in situations where organizations are faced with uncertainties and want to maintain competitiveness while avoiding or minimizing adverse and unexpected outcomes (Masocha & Fatoki, 2018, p. 1266).

having this framework used for mandatory reporting demonstrates its legitimacy and legitimacy can be used to influence or put pressure on organizations to use and report in a preferred way. Organizations, including institutional investors, are members of society and as such are expected to conform to acceptable societal norms. An entity's actions can demonstrate legitimacy when it follows socially constructed norms and values. As argued by Kouloukoui et al., (2018), the theory of legitimacy may "explain the voluntary disclosure of environmental information" and therefore, "an organization's survival might be threatened if society perceives that it is not acting at an acceptable or legitimate level to continue with its operations" (p. 1253).

Institutional investors may use their influence to maintain an organization's portfolio and even promote further investment if they make sustainability issues and disclosure a stated priority. Organizations unwilling to adhere to societal norms may experience negative consequences such as divestment. Firms enjoy a lower cost of capital if they can make themselves attractive to a greater pool of shareholders. Thus, "investors can use the threat of exit, or the threat of selecting only firms with specific E&S policies, to indirectly influence firms' choices" (Dyck et al., 2019, p. 702). This, as Dyck et al., (2019) reasoned, is an example of using the voice that comes with their shareholding. However, threatening divestment is risky and may backfire. Fasan, (2016) explained that "since [institutional investors] usually own an amount of shares so significant that their share's price will decrease once they start selling, the exit option is often not recommended ... this makes the choice of engaging with corporate management a more appealing possibility" (p. 142).

Throughout this evolution in reporting and transparency, reporting non-financial information in this manner has remained voluntary but the role influence plays may shift as decision making could get help from regulators. In October 2021, the Canadian Securities Administrators (CSA) proposed new rules that could make disclosure of climate related information mandatory and consistent with the TCFD recommendations (CSA, 2021). CSA Chair, Louis Morisset (CSA, 2021), argued that “some issuers already share certain climate-related information [and] with global momentum building on sustainability-related disclosures ... these proposals reflect our vision and expectations for reporting issuers as we move towards a global baseline for such disclosures.”

2.2 Background and History of Reporting

Since 1994, the international community through the United Nations Framework Convention on Climate Change (UNFCCC) has been sharing science, strategy, and member country commitments to reduce greenhouse gas (GHG) emissions. The Convention’s objective is “to stabilize greenhouse gas concentrations at a level that would prevent dangerous anthropogenic interference with the climate system” (UNFCCC, 1992, p. 4). Fast forward twenty-eight years and rising sea levels, decreased snow cover, extreme weather events, shifts in seasonal timing, and a warming ocean continue to be the visible impacts of climate change (Intergovernmental Panel on Climate Change [IPCC], 2022). These impacts from an excessive accumulation of anthropogenic GHG emissions in the atmosphere are increasing the frequency of severe weather events affecting millions of people globally and causing socio-economic consequences (IPCC, 2022). Insurance companies, whose role is to provide financial

compensation to parties in the event of loss and damage, are reacting to these extreme weather events by evaluating and analyzing the movement of people from climate change impacts. For instance, Zurich Insurance Group (Zurich) through their self titled magazine, shares news and media from the United Nations High Commissioner on Refugees to describe how desertification, shoreline erosion and coastal flooding have given rise to climate migrants and refugees who seek temporary and permanent relief when access to clean water, food supplies, stable infrastructure and homes are destroyed (McAllistor, 2022). Progress on mitigating climate change has been slow to date because of many issues, one being that progress is not measured in a nation's gross domestic product (Dale, 2001) which is directly related in large part to the financial returns of corporations.

Current international commitments made through the UNFCCC are not just talking about reducing emissions from a baseline year as with the 1997 Kyoto Protocol, wherein, “industrialized countries and the European Community . . . committed to reducing their emissions by an average of five percent against 1990 levels” between 2008-2012 (UNFCCC, 2011. p.1). Instead, commitments are looking to achieve a long-term global average temperature goal to limit global warming to well below 2 degrees Celsius, and preferably 1.5 degrees Celsius, compared to pre-industrial levels (UNFCCCb, n.d.). In Canada, emissions have maintained a steady upward trend since the Kyoto Protocol came into effect, starting in 1994 at 628 megatonnes and rising to 672 megatonnes in 2020, with a peak of 740 megatonnes in 2018 (Government of Canada, 2022, May).

Sustainability reporting, or as it was referred to earlier, environmental reporting, emerged after the events of the Exxon Valdez oil spill in 1989 when shareholders, NGOs, investors, and the community started to demand information concerning company practices and operations related to environmental impacts. Gokten, Ozerhan and Gokten, (2020) explain how the oil tanker incident demonstrated “that the environmental impact of business activities can have significant financial consequences, especially for investors” (p. 109). In the beginning, reporting found inspiration in accounting practices. Environmental accounting and reporting focused on the environmental impacts of business operations” (Gokten et al., 2020, p. 108). Gokten et al., (2020) also note at the time of the Exxon Valdez spill, legal frameworks and social movements were gaining traction and “this positively influenced the demand for information on the impacts of entities’ operations on the environment” (p. 109).

The events of the Exxon spill in 1989 also brought together a group of environmentalists and investors who established the Coalition for Environmentally Responsible Economies known as Ceres (Ceres, n.d.). Ceres established and popularized the term “climate risk” and encouraged this line of thinking for investment concepts (Ceres, n.d.). The next concept to add to this movement is the Triple Bottom Line (TBL), introduced by Elkington (1994) after the United Nations established the Commission on Sustainable Development. The TBL approach brings to light the importance of considering three key variables when undertaking cost benefit analyses: people, planet and profit. These need to be considered as one perspective in order to measure sustainable development which is more commonly referred to as social, environmental and economic, respectively (Gokten et al., 2020 & Latapi Agudelo et al., 2019). These organizations

normalized the need for business reporting information to include environmental impacts related to operations, since at that time only a measurement of earnings, captured in financial reports was mandatory.

Measuring and reporting environmental impacts needed a framework and in 1997 Ceres, along with the Tellus Institute and support from United Nations Environment Programme, established the Global Reporting Initiative (GRI) (Gokten et al., 2020). By 2001 the GRI was an independent, non-profit institution dedicated to sustainability reporting, and by 2010 the “United Nations recognized the GRI guidelines as the standard for sustainability reporting” (Gokten et al., 2020, p. 112). This recent history demonstrates that sustainability reporting established its roots with institutional investor oversight and participation. The GRI is continuously improving the reporting process to “respond to emerging information demands from stakeholders and regulators” (GRI, 2022, “Continuous Improvement,” para. 1), but the foundation of reporting using the GRI framework is for organizations to identify and be transparent about impacts by using standards related to sectors such as Utilities or Mining or topical standards that are more specific such as GHG Emissions or Water and Effluents to guide disclosure on impacts. Around the same time as the GRI was being established other initiatives to manage and measure environmental performance were being launched. Of significance was the Carbon Disclosure Project (CDP) in 2000, it was founded to “gather information on companies’ environmental performance metrics [using an annual survey that] allows investors to compare company performance using the same metrics” (Kwon, 2020, p. 17).

Currently, there are a number of reporting standards designed for different audiences and purposes. One key standard includes the Sustainability Accounting Standards Board (SASB) established in 2011 “to help business and investors develop a common language about the financial impacts of sustainability” (SASB, 2022). The International Integrated Reporting Council (IIRC) developed another framework known as the Integrated Reporting (IR) Framework that focuses on providing the kind of information needed by capital providers (investors) as opposed to stakeholders which is the approach of GRI. IR requires companies to assess the relevance of the issues to the providers of financial capital, rather than to the wider array of stakeholders and unlike the familiar pattern of sustainability reporting and much like traditional financial reporting, the focus is not on past performance. IR has a future orientation in which organizations should identify the organizations’ ability to create value in the short, medium and long term in order to assess how business capital is being used to impact the environment and what effects that may have (Mio, 2016). Where sustainability reporting and other corporate reports are siloed, IR addresses all values together to focus on the whole performance of the company (Mio, 2016).

It is important to note that there is a difference between reporting and disclosing. Reporting is a snapshot or moment in time that reflects past activities. This can include a balance sheet, income statement or a record of GHGs emitted over a past period of time. Disclosure involves providing information related to performance and the goal is to provide transparency about an organization’s prospects. As annual reports supply more triple bottom line-like information and stand-alone sustainability reports gain momentum, the information being

provided was similar but hard to compare and not consistent between different sectors. (Kwon, 2018). To overcome these inconsistencies more standards and frameworks were established to improve data consistency and comparability. For example, the International Petroleum Industry Environmental Conservation Association (IPIECA) has its own industry specific framework that provides guidance to disclosure on topics and metrics that are most relevant to its industry. The United Nations Sustainable Development Goals (SDG) use indicators to help monitor progress against targets and is acquiring space in sustainability and mainstream reporting (Kwon, 2020). The reporting frameworks and standards mentioned thus far continue to gain traction and aim to improve the consistency and quality of reporting, but sustainability reporting, although mainstream is still voluntary. Many organizations use their own templates and frameworks, or a combination of third-party frameworks and standards identified to produce sustainability reports.

With many templates to choose from, the evolution of reporting has had its challenges. Efforts to provide stakeholders and investors with information have received several criticisms. These include: reports having too much irrelevant or overly siloed information that are treated like nothing more than an exercise in box-ticking; reporting fatigue by organizations who have an increased level of information to provide as the number of reports also increase; investor frustration with the lack of transparency, comparability and inconsistency between reports and reports that are “rarely read by analysts, and generally dismissed as irrelevant” (Raiborn, Butler, and Massoud, 2011, p. 426). The complexity of reports and subsequent frustrations resulted in the designers of leading frameworks and their organizations to collaborate and make

improvements. In November 2021, it was announced at COP26 in Glasgow that “CDP, CDSB⁶, GRI, IIRC and SASB [would share a] vision for a comprehensive, corporate reporting system that includes both financial accounting and sustainability disclosure, connected via integrated reporting” (SASB, 2023, para. 5). The collaboration of these standards and frameworks would now be one collective called the International Sustainability Standards Board (ISSB) and housed under the roof of the long standing International Financial Reporting Standards (IFRS) group, an accounting standard-setting organization (SASB, 2023). With the harmonization of reporting standards, investors are able to promote sustainable development in the capital markets using a globally comparable baseline for sustainability disclosures. In turn, organizations can help build trust and credibility with investors by using the harmonized standards to provide comparable details about their sustainability practices and their long term performance.

These reporting establishments, mergers and collaborations aimed to improve transparency and accountability, simplify disclosure, and ensure organizations are creating value and demonstrating that value to investors. However, in tandem with the evolution of reporting standards for businesses, organizations, and the users of capital, there were other initiatives that focused solely on the investors and suppliers of capital and the impact they can have. For all the information that investors were reviewing, climate related risks were not being addressed to the level they needed to be in order to have an impact on the market. There was a recognition that

⁶ Climate Disclosure Sustainability Board (CDSB) is a UK founded consortium that designed a reporting framework to align environmental impacts with corporate reporting that has the same rigor as financial information (CDSB, 2022).

global efforts to move to a low carbon intensive society needed rapid investment in support of international climate goals. Mark Carney, former Governor of the Banks of both England and Canada, argued in 2015 that “most financial actors were in fact ignoring climate change risks, for a mix of reasons including the lack of transparency as to exactly who was holding risky assets” (Ameli, 2020 p. 566). These concerns garnered attention and prompted the Group of 20 (G20) Finance Ministers and Central Bank Governors, in April 2015, to ask the Financial Stability Board (FSB) to review how the financial sector can take account of climate-related issues. By December 2015 the FSB responded with the creation of the Task Force on Climate Related Financial Disclosures (TCFD) to design recommendations for “consistent disclosures that will help financial market participants understand their climate-related risks” (TCFD, 2017, p. 2). The TCFD’s core elements or recommendations for disclosure are governance, strategy, risk management, and metrics and targets. What this means is that organizations and their investors now speak the same language and have a set of core elements and metrics to disclose. Furthermore, organizations at that time, already reporting climate-related information under other frameworks such as the GRI and SASB may be able to disclose under this framework (TCFD, 2017). This improves the level of transparency in reporting because this framework was designed with disclosures focusing on “the resilience of an organization’s strategy...[under] different climate-related scenarios, including a 2 degrees Celsius or lower scenario” this means companies need to identify how their capital will be tied to their performance related to reducing GHG emissions (TCFD, 2017, p. v).

The constant evolution of reporting has grown with the rise of GHG emissions and climate-related concerns. With the development and collaboration of various standards and frameworks the transparency and comparability of information has fine-tuned and the act of reporting this information has normalized.

2.3 Decision-making

The role of reporting, whether mandatory or voluntary, is concerned with providing information for decision making. Traditionally however, investors tended to make decisions about their AUM or publicly traded companies on the stock exchange, by focusing on past financial performance. Ameli, Drummond, Bisaro, Grubb, and Chenet (2020) explained that “investors focus on recent past performance as a proxy for future performance that ultimately may lead to suboptimal investment decisions” (p. 569). In a warming world already dealing with the impacts of climate change, disclosure has evolved to include more non-financial information related to ESG and more specifically, GHG emissions. The evolution of sustainability reporting and their frameworks complements the need for better information to make informed decisions. Since this information is used for investment decision-making Raiborn et al., (2011) reasoned that “information presented in environmental reporting should be subject to the same hierarchy of qualitative characteristics demanded of accounting information” (p. 429). Investors are legally responsible for reporting earnings, usually on a quarterly basis, so that clients know how a company is performing financially. This means that organizations must also report their finances quarterly so that institutional investors can aggregate their data for reporting. Arnold (2021) explained that “publicly traded companies are legally required to disclose information on their

financial performance. These disclosures ensure that investors, lenders, and insurers have the clear and consistent information needed to make decisions” (“What is climate,” para. 1). This means that environmental impacts are just as material to decision making as financial impacts and provide insights into whether investors decide to buy or sell.

Reporting has evolved because the information needed to make decisions has evolved and become more complicated. Therefore, as non-financial climate related information is needed to improve for better decision making, investors are actively involved in the evolving reporting frameworks, standards, and principles (as described in section 2.2) because this information can steer capital toward companies that are aligned with global climate goals, and away from those that are not” (Arnold, 2021, para. 4). For example, institutional investors are the main audience for the non-financial information that IR presents. Fasan (2016) pointed out that “IR aims at providing material information crucial for investors to understand the future ability of a corporation to generate value” (p. 140) and the PRI’s main aim is to “to understand the implication of sustainability for investors and support them to incorporate these issues into their investment decision making” (Young & Gates, 2013 p. 90). This is a feedback loop, “disclosing material information on climate-related risks . . . contributes to the development of best practices in climate change risk management” thereby continually improving meaningful decision-making (Broeders & Schlooz, 2021 p. 127).

Reporting has evolved to provide better information, and the feedback loop of disclosing material information on climate-related risks contributes to the development of best practices in climate change risk management because decision are being made with better information.

2.4 Risks

Neglecting to report on climate-related threats from an organizational perspective is a risk. In 2015, then Governor of the Bank of England Mark Carney gave a speech that highlighted three major climate related risks to the stability of the financial system: physical risks, transition risks, and liability risks (Carney, 2015). Carattini, Hertwich, Melkadze and Shrader, (2022) summerized these risks clearly:

Physical risks are the risks that arise from damage to physical assets resulting from sea level rise or more extreme weather events, including droughts and storms, or other consequences of climate change. Liability risks are the risks to companies and insurers from litigation for compensatory damages by parties that suffer damage because of climate change. . . . Transition risks are the risks to the value of existing assets from a transition away from fossil fuels.

Pfeifer et al., (2008) reasoned that not including climate change issues (such as how GHG emissions will be reduced) when making investment decisions has practical consequences on investment returns and financial impacts. For example “tighter regulations, litigation, damage to brand reputation, or changing patterns of consumer behavior” (p. 249). Jaggi, Allini, Macchioni and Zampella, (2017) highlighted that voluntary reporting may slow the pace or even avoid additional regulations for mandatory disclosures. Organizations may also experience difficulty in maintaining their competitiveness to attract financing. Ameli et al. (2020) flagged a lack of high-quality climate related strategies in a company’s reporting as a barrier to low carbon investing. This speaks to an organization’s inability to attract investors or banks who can offer “favorable

financing conditions for green investment” (Broeders & Schlooz, 2021 p. 122). Carbon disclosure helps investors reduce information asymmetry and this “helps investors in evaluating firms’ risk” and adapt to changes in technology or products (Jaggi et al., 2017, p. 1032).

Limiting the amount of material information may be a strategic decision by organizations. For instance, Pfeifer and Sullivan (2008) argued that the lack of climate related investment information is due to the difficulty of fully understanding and quantifying the financial implications. Organizations do not want to be tied to this kind of uncertainty since saying anything can also be a risk, especially if at a later date they will have to explain or be unable to explain previously reported statements related to strategies or performance. This can also lead to stranded assets as companies are not prepared to transition to lower emitting equipment or carbon neutral assets, or even worse as described by Broeders and Schlooz (2021), investors realize that climate change is a bigger risk than originally prepared for, “triggering a fire sale of assets that are negatively exposed to climate change” (p. 123). Finally, government policy is a risk when organizations must internalize the true cost of goods and services by addressing the impact that goods and services have on climate change; carbon pricing is one example (Pfeifer et al., 2008). The science of climate change is not the issue, it is the uncertainty and unknown variables of the interactions that climate change causes between climate and socioeconomic systems. (Broeders & Schlooz, 2021).

In reviewing a sample of the literature to date organizations use reporting to inform investors of their environmental activities and impacts. In turn investors use the reports as part of their decision making process to assess the value and potential for long term positive gains. As

social norms related to the threat of climate change have increased and expanded over the last few decades, investors use their influence and associated climate related risk factors to improve the quality and detail of reporting by playing a key role in developing frameworks and standards for publicly traded companies to use.

3.0 Methodology

This research uses qualitative methods to provide a deeper analysis of the research question. This involves an in-depth exploration of the subject matter (the evolution of sustainability reporting and disclosure) and interviews with stakeholders to describe and interpret the research question. As Sandelowski (2000) described, the qualitative work will most represent a qualitative descriptive method where information gathered will focus on words and events. This exploration will also have overtones of grounded theory, as data and information are used to gather knowledge about the relationship between social structures, i.e., the organizations who produce the reports and the institutional investors and stakeholders who read and use the reports as a tool for decision making.

The qualitative approach, as indicated earlier, included primary research in the form of interviews to assess first-hand knowledge and experience with the subject matter. A sample of select interviewees was used to help ensure that experienced subject matter experts and individuals knowledgeable about the research themes participated, as advised by O’Leary & Hunt (2017). Interviews were semi-structured with open-ended questions allowing flexibility and flow for conversation and opinions which can be collectively categorized, themed, and analyzed (O’Leary & Hunt, 2017). An ethical review was performed by the Research Ethics Board at

Royal Roads University to ensure any potential risks were minimized for participants and the researcher.

3.1 Methods

3.1.1 Desktop Analysis. The research began with an in-depth assessment of primary and peer reviewed journal articles to gather as much information on the subject matter as possible. By first performing a literature review, using the thesis statement and subsequent questions as guidance, the selected articles were pulled from electronic databases. Specifically, the review provided information to understand the topic related to assessing the most used traditional reporting frameworks and how they have evolved and are applied over time, as well as comparing traditional reporting frameworks with enhanced reporting. The research in this area also provided depth and coverage into the thesis question and gave background and relevance to the topic and key players involved in the research. Specifically, sustainability reporting and institutional investors. The review was also used to help identify the benefits and risks to traditional reporting and enhanced reporting by organizations. Finally, the literature review helped to highlight deficiencies and address potential biases in the research that can either be included or noted for further study.

Research also included secondary sources with a desktop review. This included a selection of sustainability reports by six Canadian oil and gas companies, (the same companies who were interviewed), who are included on the TSX, have offices in Calgary and have prepared sustainability reports or embedded sustainability information in other types of reports for a minimum of 5 years. Assessing and evaluating these reports over time, offered additional, yet

specific qualitative information pertaining to an organization's reporting frameworks, GHG emissions reduction targets and policies, as well as their values related to sustainability and reducing GHG emissions.

3.1.2 Interviews. To complement the literature research and desktop review, primary research in the form of semi-structured, open-ended interviews were conducted to bring expertise and real-life experience to the research. This approach is appropriate because sustainability reporting is voluntary, expected but still not required and, for that reason, the design needs to be flexible and conversational to allow a natural flow and the ability to gather unexpected information from those closest to the subject matter (O'Leary & Hunt, 2017). Interviewees included six participants from large oil and gas companies. These participants were selected based on their years and/or the level of experience (i.e. the roles and responsibilities they have within their organizations) directly related to the topic. Four participants were Directors having over 10 years and up to 20 years of experience related to a combination of sustainability reporting, emissions management and investor relations. Two participants were at the management and senior advisor levels with again over 10 years of experience and specialization in their field and having key roles and responsibilities in sustainability reporting, and investor relations and reporting respectively. Selecting participants based on their relevant knowledge and length of experience related to the topic provides credibility, as their opinions and contributions to this research are based on direct involvement, valuable insights, a deep understanding of the topic, and their role to influence and make decisions in this space for their organization. Selecting successful participants involved reaching out to my network with the selection criteria

and explaining my research. In turn, my network reached out to their network and appropriate connections were made. Next, informal emails and phone calls were exchanged to provide more detail on the research topic and an assessment of the participants knowledge, experience and willingness to participate could be ascertained.

This sector was chosen because they have the largest GHG emission impact and are heavily scrutinized in Alberta. Therefore, in addition to participants needing to have relevant knowledge and experience, the organizations the participant's work for needed to have key business operations and offices in Alberta, and participants needed to live and work in Alberta as well. All the participant organizations are multinationals, listed on the Toronto Stock Exchange with multiple oil and gas or energy business lines from energy infrastructure (natural gas and oil pipelines), energy storage, and power generation to exploration and refinery. This means that not all participant organizations have business lines in exploration for example but they do however all move product (oil and/or natural gas) through pipelines.

Following ethical practices and an ethical review, all information gathered from the interviews was anonymized. Participants and the information provided was not associated with identifiable organizations. Interviews followed a set of open-ended questions (Appendix A) focusing on subjects' experiences and intent with reporting, why they report and how important it is to report performance and/or strategies. To help ensure the interviews were successful, my approach considered the techniques and recommended steps outlined by O'Leary and Hunt (2017). These techniques include, but are not limited to:

- planning the interview process from piloting the questions to performing a dry run to receiving feedback for improvement;
- ensuring questions are open-ended, have a logical order and participants are eased into the interview by building rapport and explaining the interview process and schedule;
- ensuring participants understand that the interview will be anonymous and can end at any time, and
- deciding in advance, with the participant's knowledge, how to record the information collected.

3.1.3 Surveys. After each interview, the participants were given a two-question survey with a list of 10 categories of potential influences to rank-order. The survey was designed to complement the interview questions and validate the interview responses. The two questions asked were:

1. Who most influences your GHG reduction strategies?
2. What has a bigger impact when making decisions about mitigating climate change?

The survey demonstrated connections between what participants say about a topic and how they rate the topic. This is part of the triangulation process discussed in the methodological approach. The survey was meant to complement the interview and not take up too much time. The survey questions were a fixed format, designed to allow responses to be ranked and/or scaled. The disadvantage of a survey in this research is the small and controlled sample, however, it has the potential to add to the triangulation approach by mutually validating the qualitative information from the interviews.

3.2 Data Analysis

A thematic and iterative approach was used to analyze the qualitative data and information collected for this research. A large number of secondary sources were examined as part of the document analysis, supplemented by primary data collected from interviews and surveys. This provides a useful and reflective investigation of the situation and events. O’Leary and Hunt (2017) describe this process as organic in nature, where overlapping cycles of organizing, coding, and searching for meaning can help influence, and stay on top of, the key perspectives. To describe the information, it was collected and sorted into categories that could be themed and interpreted. Interpretation led to re-sorting, and where needed, re-categorizing or generating new themes for review and interpretation. This process cycled repeatedly as new information was added during the collection phase and interpretations were themed and categorized until conclusions could be drawn. Sandelowski (2000) describes this analysis as “reflexive and interactive as researchers continuously modify their treatment of data to accommodate new data and new insights about those data.”

During the reflective process of collecting and categorizing information into themes, an iterative practice emerged where inductive and deductive reasoning was the basis of exploration. Inductive reasoning or discovered information, also known as grounded theory, is exploring the data without a predetermined theme (O’Leary & Hunt, 2017). This is a creative endeavor, as information is gathered and constantly compared, allowing themes to be originated from the content and categorized based on what makes sense from the data. This can also be considered categorical coding in that observations can be assigned to categories (Flick, 2007).

Deductive reasoning or uncovered information allows the researcher to “mine data for predetermined categories” (O’Leary & Hunt, 2017). This practice was useful because it allowed for exploring the researcher’s experiences and documenting any predetermined theories. For example, some of the document analysis involved identifying themes and categories in advance related to measuring performance and improved reporting. This helped to identify and compare trends and make connections between the categories which can be put into themes, known as axial coding which can be applied to the desktop analysis and interviews (Flick, 2007).

When analyzing data, it can be difficult to identify biases. Having predetermined themes can help consciously to start recognizing and documenting any biases. Potential biases related to analyzing this research involves recording information that fits predetermined themes, called confirmation bias (de Vries, 2017), which can be limited in the analysis by cycling through the iterative practice to analyze and create new themes from the research. Another way to help minimize bias, is to note impressions about the information collected and to take notes on how the data may elicit feelings or draw the mind to specific topics (O’Leary & Hunt, 2017). Also, the secondary research from journal articles may not have been produced with the same purpose as this research, therefore it is crucial not to take other’s research out of context.

Analyzing the quantitative data and information from the surveys, primary in nature, involved a discrete approach, where meaningful observations were assigned a numerical value. In more detail, the data type was ordinal; “a measurement scale that orders categories in some meaningful way” as described by O’Leary and Hunt, (2017).

The advantage to this approach was in triangulating which can be described as the shared validation that linking two approaches can have on each other (Flick, 2007). Using the data explored and discovered from the desktop analysis (secondary research) and linking it to the knowledge gathered from interviews and surveys (primary research), the expectation was to discover shared validations. The disadvantage is the bias that can creep in through the readings and preliminary analysis, prior to the interviews. The interview questions needed to be carefully scrutinized to avoid language that might encourage participants to categorize their answers to the categories prepared and documented (prior to the interview) for analysis. Another bias could occur in forming shared validations where there are none. Recording these biases and keeping them top of mind during the analysis helped limit their effect.

To help keep all the data and information organized for analysis, an excel spreadsheet was used to record, categorize and separate themes and ideas with participant findings and background research.

4.0 Research Results

All participants contributed to an interview and completed a two-question survey. All interviews took place between May and September of 2022 and lasted between 52 and 75 minutes. All participants agreed to speak in confidence under anonymity and agreed to their interviews being recorded. There were 6 participants in total and conceptual saturation was reached. Conceptual saturation can be defined as a point in research or data collection where no new or limited information is discovered (Guest, Namey, & Chen, 2020). Guest et al. (2020) demonstrated research cited by Guest, Bunce, and Johnson (2006) and Morgan, Fischhoff,

Bostrom, and Atman (2002) that between 5 and 6 interviews were enough to note that no new or very similar information was being gathered by responses and essentially all concepts and themes were identified. Participants and the organizations they represent will remain anonymous and identified using the letters of the alphabet from A to F. The letters themselves along with the order of letters has no significance or meaning. As per the research boundaries, all participants are from the upstream oil and gas sector, working in fields where there is a combination of exploration and production, energy transportation and distribution, and energy storage. All participants have extensive experience related to the topic either in regard to sustainability reporting and disclosure, managing environmental activities, or directing energy transition and strategies.

To begin with, all organizations included in the research use a combination of reporting frameworks and standards to disclose and report their environmental impacts and GHG reduction targets. They do so either in sustainability reports or as part of their sustainability reporting cycle, which may include standalone accompaniments like data sheets or the results of standardized questionnaires such as CDP. Every organization has been releasing sustainability reports since 2010 except for one and there are some who have released earlier versions of sustainability reports as far back as the early 2000s under other names such as Corporate Social Responsibility, Health, Safety and Environment or Carbon Disclosure. There are many similarities in the reports released over the last couple of years. All organizations use a combination of, or alignment with various reporting frameworks and standards, most common being TCFD, SASB and GRI. Half of the company's participants completed the CDP

questionnaire and released responses on their website. All participants, except for one identify where they align with UNSDG goals and all companies discuss their efforts to reduce GHG emissions, protect the environment and operate in a socially responsible manner by declaring or committing to GHG emission reduction targets. Targets are expressed in the near to mid-term such as 2030 and 2035 and long-term targets are related to achieving net zero by 2050. That said, only one organization has released a 2050 net zero commitment.

Table 1

List of Reporting Frameworks and Standards used by Participants

Participant	SASB	TCFD	GRI	IPIECA	CDP	UNSDG
A	√	√	√			√
B	√	√	√		√	√
C	√	√	√		√	√
D	√	√		√		
E	√	√	√			√
F	√	√	√		√	√

Note. All frameworks and standards in Table 1 use their commonly accepted acronym. For clarity, the acronyms stand for: Sustainability Accounting Standards Board (SASB), Task Force on Climate Related Financial Disclosure (TCFD), Global Reporting Initiative (GRI), International Petroleum Industry Environmental Conservation Association (IPIECA), Carbon Disclosure Project (CDP), and United Nations Sustainability Development Goals (UNSDG).

4.1 Interviews

To understand how effective institutional investors are at influencing organizations to reduce GHG emissions, a set of open-ended interview questions were designed to introduce the topic and scope of research (Appendix A).

Overall perspectives. The first group of questions were chosen to reveal the organizations's overall perspective on emissions. Interviewees were asked if reducing GHG emissions is important to their organization, if there are programs and activities in place to reduce GHG emissions, and if GHG emissions pose a risk, can they be discussed and described?

All participants agreed that reducing GHG emissions is one of their most pressing issues and not reducing GHG emissions is a risk for their organization. As stated by Participant C, “[reducing emissions] is clearly the focus and priority” (Participant C, June 3, 2022). However, responses were pragmatic and stressed that this issue is not an isolated issue. All participants in this discussion state that reducing GHG emissions is a significant challenge for their organizations. They mention a range of factors that contribute to this difficulty, including, economic conditions, policy considerations, the cost of implementing emissions reduction initiatives, and the need to consider multiple performance metrics and stakeholder concerns. Some participants also highlight the complexity of modernizing systems and infrastructure that were not originally designed to address GHG emissions and the challenges of finding reliable and cost-effective solutions to reduce emissions. According to all interviewees, addressing climate change and reducing GHG emissions will require multifaceted approaches and the

cooperation of various stakeholders including governments, businesses, and communities.

Participant A elaborated on this by explaining that:

the more challenging part of it, is how that elimination effects communities, effects affordability and effects reliability ... it is a bit more complicated than just eliminating GHG emissions - because if that was the only factor, the technology exists. If the only thing you were driving towards [was eliminating GHG emissions], it is possible but when you add in the people and affordability it quickly becomes the most difficult issue (Participant A, May 13, 2022).

There is consensus that GHG emissions pose a significant risk to participant organizations. These risks can include physical risks such as the potential for extreme weather events which can damage infrastructure and disrupt operations. There is also a risk of transition to a lower carbon economy, as capital markets may shift towards investing in companies with lower GHG emissions. This could lead to a loss of access to capital for companies with higher GHG emissions as well as reputational risks if customers and employees do not want to be associated with a company that is not addressing climate change. Furthermore, there was discussion of the risk of being left behind if they do not adapt to changing technologies and energy sources, such as increasing renewable energy or investing in batteries in order to be a part of the low carbon future. Considering these risks is an important part of their strategies to mitigate emissions while also taking advantage of the opportunities that may arise as the energy sector transitions to a lower carbon future. Even though the risks are challenging there is agreement that with this challenge there is also opportunity. Participant F emphasize that

“because you are part of the problem you can also be part of the solution” (Participant F, September 28, 2022).

Investor influence: Expectations and reporting. The next group of questions introduced the role of institutional investors, the role reporting plays in the relationship between investors and the participants, how investor expectations and the need for transparency has evolved, as well as how investors influence organizational goals and activities.

All participants agree that investors play a role in how organizations take action on reducing GHG emissions, but the intensity varied from simple agreement that they play a role, to playing a key role or significant role. For example, participants shared that investors take a variety of approaches, some investors are specific and keen to see companies identify Scope 3 emissions, set GHG reducing targets, or have science-based targets. Participants B, E and F described how if it were not for investor pressure (a form of influence) they would have never set targets. Participant F explains that “there would not have been a push from executives ... if it had not been our investors ... [and] our bankers, saying you need to have this (targets) in place for us to provide capital. I would credit our institutional investors for pushing us across the finish line” (Participant F, September 28, 2022). Furthermore, Participant F, stressed that “investors do not just want the target they want the plan to meet the target” (Participant F, September, 28, 2022).

Regardless of any specific focus areas or pinch points for investors, all Participants agree that investors are more interested in engagement and dialogue. Participants A and B explained in similar terms that investors are “asking questions” about their operations and about how they are managing climate risk and opportunity. There is increased engagement and more communication

between an investment firm and an organization’s ESG team and portfolio managers. Several statements by participants echo this, for example: Participant A stated “the dialogue with investors is where there is action” (Participant A, May 13, 2022); Participant D shared that “feedback is important ... they (investors) are much more informed” (Participant D, August 16, 2022); Participant E said “it is a true engagement with them, and we really appreciate that” (Participant E, September 9, 2022), and Participant F acknowledged that “engagement is more prominent and so they are demanding more information” (Participant F, September 28, 2022). However, asking questions may not always drive change. As participant C argued “Investors are asking a lot of questions and to be absolutely blunt about it the investors focus more on and spend a lot of money and time on answering their questions more so than driving change” (Participant C, June 3, 2022).

Some participants volunteered similar perspectives and rationale for the increase in engagement and dialogue, as indicated by Participant B who stressed that investors need to demonstrate how ESG is a part of their investment decisions. For example, larger investors are signing on to initiatives such as the PRI, Ceres and the Institutional Investors Group on Climate Change (IIGCC is a European membership). These organizations were set up to assist investors with collaborating and taking action on climate change or ESG. Collectively these networks have joined the Net Zero Asset Managers Network⁷, established in December 2020.

⁷ Net Zero Asset Managers Network was established by the CDP, PRI, Ceres, Asia Investor Group on Climate Change, Investor Group on Climate Change and the IIGCC. Collectively there are 291 signatories with USD \$66 trillion in assets under management

In summary, these investment firms have signed on to support and work with clients on decarbonization goals, set interim targets for 2030, and create investment products that align with 2050 net zero targets. Specifically, the signed commitments require institutional investors to provide “information and analytics on net zero investing and climate risk and opportunity (and) implement a stewardship and engagement strategy, with a clear escalation and voting policy ... to achieve net zero emissions by 2050 or sooner” (NZAM, 2020).

The influence of investors extends to the reporting frameworks and standards. Participant E explained that “when investors push on a framework companies listen and need to find a way to provide the information they want” (Participant E, September 9, 2022). Table one illustrated that all participants are using many of the same standards and frameworks simultaneously, which correlates to the discussions related to consistency and comparability. Most participants (A, B, E and F) elaborated that they either asked their investors which standards to use or reached out to investors to get their use of a standard validated. Participant F described how an alphabet soup can apply to one’s business and therefore they “have taken the time to understand what investors want, and what our peers [are] reporting to, to make sure that when we report a number it is comparable to our peers, to help that investor audience” (Participant F, Septmeber 28, 2022). To add to this, Participant A explained that without the consistency and transparency “you’re comparing apples to oranges” (Participant A, May 13, 2022). Furthermore, there is consensus between participants, that in Canada, within the next year or two, the Canadian Securities

Administrators (CSA)⁸ will make mandatory, climate-related disclosures in line with the TCFD recommendations to address consistency and comparability of information.

Participants agree that reporting is important because it builds relationships, opens up discussions and provides the transparency required by investors. As Participant C explained, that reporting helps build relationships: “Reporting is a relationship and if users of reports are not understanding the reports, that is on us. Reporting needs to help the reader understand and it should be a process to engage conversation” (Participant C, June 3, 2022). Building on relationships, Participant E argued that when it comes to reporting “it is a competitive advantage to have strong relationships [with investors]” (Participant E, September 9, 2022). That said, Participant F asserted that as much as relationship building and transparency are beneficial, reporting is also a chance to tell your own story in your own way especially when robust conversations are lacking, with entities such as third party rating agencies, “it is up to a company to see ESG reporting as an opportunity to own the narrative” (Participant F, September 28, 2022).

Responses related to transparency, which relates to providing information about performance and prospects, were frequent, but not detailed and tied to discussions related to providing information. There is consensus that there is a demand for transparency, but it is difficult to assess from the participants’ perspectives if the investor’s requirement for

⁸ On October 18, 2021 the CSA released a proposal that would mandate climate related disclosure for all publicly traded companies or publicly held companies.

transparency influenced the quality of information provided. Responses also addressed divestment campaigns as a way to influence what companies do, or do not do. Divestment campaigns are efforts by investors, individuals, or organization to sell off investments or holdings due to environmental or ethical concerns. There is consensus that divestment campaigns are real, they are talked about in the board room and these discussions are not overlooked. However, for all participants, divestment campaigns were not a major concern because key investors are more interested in engagement and dialogue. For example, participants stressed that institutional investors manage their portfolios with a long-term perspective and in that regard, the energy transition and low carbon strategies are the focus since changing their asset mix overnight is not a solution. Participant E expressed that “real influence happens with the investors that choose not to divest but [instead] choose to engage us and press us to diversify, reduce our emissions and enhance our reporting” (Participant E, September 9, 2022). The impact a divestment campaign could make receives minimal attention when the conversation is related to divesting shares or holdings based solely on the business’ sector, such as oil and gas. Campaigns such as these are not unheard of to Participant A, who simply expressed “some companies will not be interested in a company like ours, we cannot please everybody” (Participant A, May 13, 2022). However, conversations around divesting in the company itself, unless certain criteria are met or established, did elevate more consideration as this campaign is more personal and warrants a conversation. It is seen as an opportunity for an investor to learn more about the business. As one participant explained, “an institutional investor that says we are going to divest in oil is different than saying we are going to divest in your company” (Participant E).

Divestment campaigns do influence thinking. There is recognition that some divestment campaigns in the past spurred a lot of conversation. For example, there was considerable debate/discussion when HSBC declared that they were no longer insuring oil sands. Some investors sent letters and made phone calls to the participants organizations, indicating that they would not invest in their industry anymore because of who they are. It is worth pointing out that in this case, the participant's organization never had any holdings by that investor to begin with, or their holdings were low. Participants note that these divestment campaigns are a "distraction" that "create noise" and are "not productive." Participant B stresses "it alienates people into camps and divides the conversation" (Participant May 17, 2022). There is a consensus that the most effective approach for quality information and continued support has been engagement and conversation.

4.2 Surveys

In addition to being interviewed, participants answered a two-question survey. All surveys were completed together directly after the interview except for one, which was sent via email and returned six days later. The surveys listed ten potential influences with the option to add others if desired. Each participant ranked an influence on a scale of 1 to 10; one being the most influential and 10 being the least influential. Only one interviewee added an additional influence, notably, First Nations. Another participant mentioned that media, the general public and socialites have the same amount of influence as employees and considered them all together. Results of the first surveyed question can be seen in Table 2. As only one participant added to the list of influences, the results demonstrated a variance. Therefore, a rank of 11, the least influential, was added to all

the other survey responses in order to keep the pattern of results consistent. This approach did not change the overall results of the survey question.

Table 2

Results to question 1: “Who most influences your GHG reduction strategies?”

Category	Participant A	Participant B	Participant C	Participant D	Participant E	Participant F	Total	Mean
Customers	2	4	8	7	5	3	29	4.8
Climate Change	7	8	9	6	4	6	40	6.7
Regulations	3	2	1	1	6	1	14	2.3
Banks	3	3	4	4	7	7	28	4.7
Incentives	9	5	3	8	9	2	36	6.0
Carbon Market	11	6	7	9	10	5	48	8.0
Insurance Companies	10	7	5	5	8	8	43	7.2
Large Investors	1	9	6	2	1	4	23	3.8
Shareholders	5	1	2	3	2	9	22	3.7
Employees	6	10	10	10	3	10	49	8.2
First Nations	4	11	11	11	11	11	59	9.8

These results demonstrate that regulations have the biggest influence on GHG reduction strategies with a mean of 2.3. Fifty percent of participants ranked regulations number one, and five out of six ranked regulations in the top three. The one outlier ranked large investors as their biggest influencer. Next to regulations, shareholders and investors are (basically) tied with having the biggest influence over GHG reduction strategies, with means of 3.7 and 3.8, respectively. Half of participants identified that investors had the biggest influence by ranking either first or second and when investors and banks are combined, they rank third as having the biggest influence on GHG reduction strategies. Excluding the variance, the categories with the least influence are employees, the carbon market and insurance companies.

Results of the second survey question are shown in Table 3. Similar to the first question there are variances as two participants added categories, First Nations* and Costs** and

Participant B left all rankings after the first three blank because it was important to stress their decision-making priorities after the top three would all have the same level of impact. Using the same approach as above, the blank spaces left behind from the additional categories not being selected by the other participants were filled in with the least impactful rank to keep the pattern

Table 3

Results to question 2: “What has a bigger impact when making decisions about mitigating climate change?”

Category	Participant A	Participant B	Participant C	Participant D	Participant E	Participant F	Total	Mean
Customers	1	3	8	11	5	3	31	5.2
Climate Change	3	8	9	5	4	6	35	5.8
Regulations	7	2	1	4	6	1	21	3.5
Banks	4	4	4	9	7	7	35	5.8
Incentives	5	5	3	2	9	2	26	4.3
Carbon Market	10	6	7	3	10	5	41	6.8
Insurance Companies	11	7	5	10	8	8	49	8.2
Investors	2	9	6	7	1	4	29	4.8
Shareholders	6	1	2	8	2	9	28	4.7
Employees	8	10	10	6	3	10	47	7.8
First Nations*/Cost**	9*	11	11	1**	11	11	54	9.0

of results consistent. Again, overall survey results were not affected. Consistent with question one, regulations have the most impact when making decisions about mitigating climate change or more specifically reducing GHG emissions, followed by shareholders and investors. This same result is due to the fact that three participants, C, E and F indicated their ranking would be the same for their influences and impacts. This means the categories that had the biggest influence also have the biggest impact on decision-making. This also means the categories with the least impact on decision making were the same as the categories with the least amount of influence; these include insurance companies, employees, and the carbon market.

During the survey it was observed that the first three to four answers came with certainty and clarity, but after that, some participants noted that once you go further down the rankings, it is harder to identify the level of material separation between each category. Participant B elaborated on this during their survey selections to explain that regarding impacts and influences, shareholders, regulations (for clarity, this is made up of policy makers and government) and customers make up their trifecta. In more detail, shareholders represent how the company makes a profit, regulations represent how the company meets laws and requirements and customers represent how solutions are delivered now and in the future. These influencers drive decision making and therefore have the biggest influence on everything they do, including how to reduce GHG emissions.

5.0 Discussion

The science around climate change and the negative impacts of accumulated GHG emissions in Earth's atmosphere is rarely, if ever, debated anymore. The conversation has shifted to how climate change will be mitigated and how humans will adapt. Everyone has a role to play but some roles will have more impact and influence than others, such as corporate leaders and institutional investors. Background research makes it clear how interwoven the relationship is between investors and the evolution of reporting and disclosing. Using standards and frameworks in tandem with collective collaborations, there is a global network of investors and investor institutions that have been central to the development and normalization of integrating business capital with environmental impacts to improve transparency. Their influence and work to improve the quality and materiality of information, such that reporting and disclosures include

strategies related to climate risks, is evident. The proposition that investors have an influence on the improvement of reporting environmental activities is supported by this research.

The data from this research directly and indirectly confirms the influence that institutional investors are playing. For example, direct influence is demonstrated through the references and discussions related to the positive level of engagement and dialogue that organizations are having with their investors. This means building and maintaining relationships needs to be a continued focus for institutional investors especially since they have a long-term approach to their portfolios. Similarly, the upstream oil and gas or energy sector's assets, operations and strategies are also long-term. Sudden movements, such as divestments are risky since the impacts can lead to stranded assets and socioeconomic consequences. This is why transparency, a complementary theme to engagement and dialogue, where information provided has context and feedback, is so important. Transparency is related to providing information related to performance and prospects, especially when discussed in relation to the strategies and prospects of meeting GHG reduction targets and energy transitions. Furthermore, all organizations have GHG reduction targets, and targets would be meaningless if not accompanied by the intent to be transparent about the journey to reach those targets. All of this takes time and a commitment to relationship building, otherwise known as engagement and dialogue, a variable credited to investors. Reporting and disclosing are key communication tools used to inform stakeholders and investors of the ongoing activity of organizations. Traditionally, this is mandatory for financial reporting, but now that sustainability reporting, although voluntary, is mainstream and ESG disclosure is gaining momentum, this form of "communication is a crucial element of the

legitimation process, because even if corporate activities reflect social values, legitimacy may be threatened when communication failure happens.” (Kouloukoui, 2017, p. 1252).

The type of standards and frameworks used for reporting also speaks to the influence institutional investors are having. Regardless of the direct feedback from investors on what to use, or a recognition by organizations of the general direction that standards and frameworks are going, it is clear that organizations realize that in order for climate related risks and GHG emissions to be understood there needs to be consistency and comparability of data across their industry. Voluntarily coming to a consensus on the standards that represent them leads to better decision making by investors when making investment decisions. However, these standards and frameworks did not appear overnight. Institutional investors actively developed these chosen standards. Research did not confirm the level of engagement over the last 20 years that institutional investors had with organizations to develop the standards, but the guidance and requirements have been refined over the years to a level that makes these voluntary standards the actual standard and this could not have been achieved without institutional investors contributing meaningfully in the development of these standards. This speaks to an indirect influence.

This also helps lay the foundation to move voluntary standards to mandatory reporting and disclosure. This speaks to the research results that demonstrate that regulations have the biggest influence and impact on decision-making, however this is still an indirect influence from institutional investors. The standards most commonly used for sustainability reporting are broad; they cover all areas of environmental, social, and corporate governance, whereas the TCFD was

established with only climate-related risks in mind and created with help from the investment community.

With widespread support from lenders/banks, investors and insurance companies, the TCFD recommendations are socialized through direct engagement campaigns. This is clearly working, as engagement and dialogue have been the biggest activities building relationships to provide decision-useful information by publicly traded organizations for investors. Now organizations in the energy sector are voluntarily using the TCFD recommendations to provide the transparency (performance and prospects) required to understand and manage climate-related risk by investors. Furthermore, regulators are guiding and making it easier for investors to play a role and affect environmental performance. This seems like a chicken and egg scenario if it were not for the PRI and TCFD gaining traction and decision makers recognizing the urgency of the situation. It seems like the policy is ripe for this mandatory reporting. Influences have reached regulators, such as the US Securities Exchange Commission (SEC) and the Canadian Securities Administrator (CSA). These regulating bodies have both released proposals to make the TCFD recommendations mandatory for publicly traded companies. This is another nod to investors and the investment community influencing, over time, improvements to the performance of reporting and disclosures.

As the research demonstrates, staff in oil and gas corporations see engagement and dialogue as the guiding tools used by institutional investors to influence organizations to set GHG emission reduction targets and improve the performance of reporting for decision making, but regulators have the biggest influence and impact on organizational decision-making related

to climate related risks using standards developed by the investment community. This evidence leads to an affirmation of the hypothesis and it makes sense that climate related disclosure for reporting purposes and regulations will merge. Regulations have legal ramifications and mandatory reporting legitimizes the severity and urgency of addressing climate related risks in the market.

6.0 Conclusion

Energy and utility organizations are being directly and indirectly influenced by institutional investors to reduce GHG emissions. Institutional investors are indirectly influential by playing an instrumental role in the maturity curve of reporting through the developmental and evolution of sustainability reporting standards and climate change disclosures. This is evident as securities regulators in both Canada and the US are making the inclusion of TCFD a requirement, moving voluntary climate change disclosure practices to mandatory deliverables. Institutional investors are directly influential through increased engagement and improved dialogue at the board and senior leadership levels of particular corporations. Interviewees shared how the level of dialogue and engagement on climate change strategies and activities with investors has increased over the last three to five years. Engagement and dialogue are providing a means to collaborate and collaboration is leading to greater accountability and transparency which is critical for change. The importance of dialogue and discussion to normalizing practices such as reporting and disclosing cannot be dismissed as normalizing leads to habitualization and this leads to changing behaviours. Watson and Shove (2022) identified how socialization can

aggregate and integrate ideas and this approach to expanding and extending networks over time has the ability to embed new practices which become normal and lead to change.

Insomuch as there is influence, the effectiveness to make progress on GHG reductions has been slow. GHG emissions continue to rise, and based on current policies in place, global temperatures are projected to reach 2.7 °C above pre-industrial levels by 2030 (CAT, 2023). However, this is where regulations play a role as interviewees identify that regulators have the biggest impact and influence on organizational activities related to reducing GHG emissions. Therefore, data shows that the importance of multiple actors working together using diverse levers is critical when issues are complex. Command and control style regulations may not always be the preferred or first approach by industry when it comes to environmental policies, but when regulations formalize normalized practices from years of engagement and dialogue, the efforts required to understand and potentially comply with new rules may be minimized.

There are other influences, relevant factors and questions that were not explored in this research that could add depth to this topic. For instance, what if institutional investors were only working with regulators on reporting standards and frameworks? Would the pace and impact to reduce GHG emissions occur faster or be more effective? Could this kind of collaborative decision making have an impact when groups with direct interest or special knowledge become involved in management efforts?

The war in Ukraine and energy security was top of mind for all interviewees. How will energy security play a role in reducing GHG emissions and what role will investors play in this scenario, especially if their holdings come into question and they are asked if they are investing

in Russia? Exploring the relationship between investors and ESG rating agencies would also be an interesting angle. Do rating agencies keep investors on their toes, or are their rating approaches only providing the information relevant to their points of view, thereby causing undue harm to organizations from a reversal in investment when ratings are poor?

Finally, Bill S-5, an Act to amend the Canadian Environmental Protection Act (CEPA) passed Senate readings in June, 2022. Section two of the Act now requires the Government of Canada to recognize that every individual in Canada has a right to a healthy environment and acknowledge the need to control and manage pollutants and wastes if their release into the environment cannot be prevented (PoC, 2023). Greenhouse gases are considered a pollutant, so how will this CEPA amendment be used to influence or even enforce organizations and institutional investors to reduce GHG emissions?

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Appendix A

Interview Questions:

- Do you think eliminating GHGs is the most difficult ‘E’ in ESG issue your organization needs to address? (If yes), can you explain/describe why?
- Is climate change (and specifically GHG emissions) a risk to your organization? (If yes), can you describe the risks climate change or GHG emissions have on your company?
- What policies and programs does your organization currently have in place to reduce GHGs? Can you describe some of these policies or strategies?
- What role if any, do you think investors are or could play in reducing GHG emission?
- What kinds of investor decisions have influenced how you approach climate change goals or GHG reduction targets?
- Why do you think sustainability/ESG reporting is important to your company?
- In what ways is integrated reporting important to your company?
- How have institutional investors influenced the frameworks you use to report?
- How have their institutional investors demands/expectations changed overtime?
- Has the demand for transparency from institutional investors influenced how you report?
- What types of investors do you attract and what types do you want to attract?
- In what ways have divestment campaigns influenced company decisions in the short, medium and long-term?
- In what ways are you meeting institutional investor expectations? (Investors can be banks, insurance companies or investment firms).