MASTER OF PUBLIC POLICY CAPSTONE PROJECT

The Future of Energy in Alberta:
Embracing Environmental, Social and Governance Principles

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Executive Summary

Alberta's oil sands have become a common target for ongoing activism due to its impact on carbon emissions. Fossil fuel energy will continue to play an important role in the global economy for decades to come, however, we are in an era of energy transition. A path forward needs to recognize that creating long-term value increasingly requires that both the government and private sector understand the impact of their strategies on key stakeholders and the communities in which they operate.

This study examines Alberta's ability to manage environmental, social and governance (ESG) risks as it transitions to a low carbon economy. Through an extensive review of academic and grey literature, and interviews with ESG and sustainability experts in Alberta's energy ecosystem, this project sets out to find how policymakers can embrace ESG principles to help attract investment to Alberta while aligning the province with the Paris Agreement.

The results of this study suggest that Alberta can achieve net-zero emissions by 2050 if policymakers work with the private sector to establish best practices and implement policy recommendations including adopting international frameworks, attaining policy clarity on energy transition, investing in technology and innovation, and creating a compelling story for investment.

Introduction

There is growing recognition that corporations should deliver value to all stakeholders: customers, employees, suppliers, and communities, as well as shareholders. From decarbonizing the economy, to workforce diversity and sourcing products through ethical supply chains, corporations are under pressure from stakeholders to disclose how they are tackling environmental, social and governance (ESG) issues facing the planet and the communities in which they operate.

International efforts to respond to the ongoing climate crisis are gaining momentum. Governments, regulators and corporations are taking concrete steps to prepare for a net-zero energy future by 2050, as pledged by the 193 signatories of the Paris Agreement (United Nations 2022b). Investors who are concerned about business risks and financial impacts associated with climate change are requesting improved disclosure by businesses with respect to such risks and impacts, and the actions being taken to address them. Corporations are responding by publishing ESG disclosures enabling them to be more transparent about the risks and opportunities they face.

ESG is a framework to support the creation of transparent and fulsome measures of sustainability through the integration of ESG considerations in investment decision-making processes. ESG metrics are non-financial factors that are relevant to stakeholders (CFA Institute 2022). They are complex and require measurable goals, specialized data collection and analysis and strategic planning. ESG is composed of three pillars: The *Environment* pillar often gets the most attention and refers to an organization's approach to managing its impact on the natural world. This segment aims to evaluate how a company manages its carbon footprint, pollution levels, climate risks and so forth. The *Social* pillar outlines how firms engage with their internal and external stakeholders. This includes interactions with employees, shareholders, government divisions and the greater community they serve. Lastly, the *Governance* pillar investigates how organizations are structured and how this structure plays a role in their decision-making. This includes factors like board composition, corporate ethics, diversity and inclusion and tax transparency among many others.

In this paper I examine Alberta's ability to manage ESG risks as it transitions to a low carbon economy. Alberta is in the early stages of defining best practices in measuring sustainability and incorporating these practices into investment decision-making. Decarbonizing oil and gas production is key to supplying markets with low emission fuels while investing in new growth opportunities that can demonstrate the province's leadership across the ESG spectrum. To explore this topic in detail I have conducted an extensive review of academic and grey literature and interviewed seven senior level advisors and executive managers in Alberta's energy industry, public sector and audit and assurance industry who directly support ESG and sustainability related matters in their respective organizations.

Methodology

The objective of the research is to analyze trends in ESG adoption within Alberta's energy ecosystem, specifically the oil and gas sector, the public sector, and the audit and assurance industry. As ESG is very much an evolving concept, not only in terms of how it is defined but in the ways businesses and governments adopt ESG principles, this research is meant to serve as a snapshot in time of the state of these trends. This project is primarily meant to assess the energy ecosystem's response to ESG risks and opportunities, as policymakers grapple with ways to fund a lower carbon economy aligned with the Paris Agreement target limiting global warming to well below 2 °C, preferably 1.5 °C, compared to pre-industrial levels (United Nations 2022a).

Given these goals, in Section I of this project I provide an overview of the Alberta energy ecosystem and outline its response and adoption of ESG principles; conduct a thorough background and literature review of how market trends are evolving in ESG; and describe the regulatory and securities landscape in codifying the measurement of ESG principles.

Section II of this project consists of findings from exploratory, semi-structured, 60-minute-long interviews conducted with individuals with on-the-ground expertise in sustainability and ESG. Seven interviews were conducted remotely between 17 February 2022 and 25 March 2022, with six Canadian energy sector firms, two public sector employees with subject matter expertise and one audit and assurance industry employee specializing in ESG. Interview recruitment efforts involved sending a recruitment email or message on the social media platform LinkedIn. The goal of these interviews was to ground this project's background and theoretical research in the practical realities taking place within the ESG space as it relates to and impacts the Alberta energy ecosystem.

Finally, the summative learnings from Section I and Section II of this project inform some brief conclusions and high-level policy recommendations regarding the state of ESG investing and reporting in Alberta's energy ecosystem, regulatory trends, and how these developments could see opportunities for decarbonization efforts. These will be outlined in Section III of this paper.

Section I: Background and Literature Review:

Climate Change Context

There is little doubt that climate change comes with significant financial consequences. A study by The Economist Intelligence Unit estimated that a 6°C rise in temperatures could wipe US$43 trillion off the value of global financial markets (2015, 41). Increasingly, extreme weather and climate-related events across the globe are contributing to new financial risks for communities, businesses and organizations. Insufficient disclosure of such risks can facilitate poor investment decisions, asset losses and the continuation of inefficient business practices. Moreover, any repricing of assets, such as fossil fuel reserves or the market securities of carbon-intensive firms, can directly affect these institutions' loans and investments, as well as their obligations to their investors and fiduciaries (Peihani 2017, 1). Failure to address ESG concerns could jeopardize the energy industry's ability to access capital, insurance and favorable terms on debt in the future. For this reason, the management of non-financial risks must be a key component of a company's business model and their approach to sustainability and ESG.

Literature Review

There has been considerable academic literature on ESG performance in relation to oil and gas firms. Based on the arguments of prior literature, it is evident that ESG can influence the financial risk of these firms. Oil and gas firms are the major contributors to global warming and responsible for approximately 56 per cent of carbon emissions worldwide (U.S. Energy Information Administration 2019). Investors are scrutinising and assessing the social and environmental responsiveness of oil and gas firms based on ESG performance. Investors penalise the firms that have low ESG scores and high ESG controversies (Shakil 2021, 1). For example, the Government Pension Fund Global of Norway (GPFG) withdrew an investment of 5.7 billion pounds in oil and gas firms as they failed to invest in renewable energy (Fitzpatrick 2019). In addressing climate and environmental challenges in the new world economy, the energy sector of most countries risks being discriminated against resulting in the decrease in stability not only in the energy field, but also in the economies of those countries as a whole (Litvinenko et al. 2022, 3).

Mobus (2012) argues that the focus of ESG for oil and gas firms is to foster self-promotion instead of self-reflection. A large body of literature states that firms operating in controversial industries, for instance, oil and gas, mining and nuclear energy, use ESG as a strategy to meet social expectations and uphold the firm's legitimacy (Curran 2017; Hoffmann and Kristensen 2017). ESG is crucial for firms to maintain market reputation. However, ESG controversy affects the reputation of firms, reduces their market value and increases the stock price volatility due to unethical and controversial activities (Aouadi and Marsat 2018). Based on investors' perspective, incorporating ESG in the firm's business strategy reduces their financial risk due to investors' reaction to the firm's corporate sustainability integration into their business practices. On the other hand, firms who engage in harmful ESG activities and greenwashing are penalized by investors (Shakil 2021, 6). As part of the 2015 Paris Climate Agreement strategy, ESG has been positioned as a tool to activate the decarbonization of the global economy. However, ESG principles as a mechanism acting on behalf of the majority has no (politico-legal) legitimacy (Litvinenko 2022, 4). As such, any action on decarbonization must come about locally. ESG market trends present an opportunity for governments to assist the oil and gas industry in competing for capital to encourage carbon emission improvements. Canadian policymakers have an opportunity to help shape and define a market for sustainable finance that is inclusive of decarbonization efforts in the oil and gas industry (Kelso 2020, 107). This paper builds on existing academic literature to advance knowledge in this field by analyzing trends in ESG adoption within Alberta's energy ecosystem in order to present policy recommendations.

Alberta's Energy Ecosystem

Alberta's energy sector is one of the pillars of the Canadian economy. Energy, particularly, oil and gas present the single largest category of Canadian exports and the most important destination for private investment in the Canadian economy (Canada Energy Regulator 2022). Alberta's energy sector is vast and complex: it includes crude oil, natural gas, oil sands, coal resources and an extensive pipeline network that moves these resources to markets (Alberta Energy Regulator 2022). While we are in an era of energy transition, fossil fuel energy will continue to play an important role in the global economy for decades to come. For a major fossil fuel supplier like Canada, this global demand represents hundreds of billions of dollars of economic opportunity.

Canada is not alone in competing for that opportunity. The United States, Russia, and Middle Eastern suppliers all have strong incentives for maintaining their global market share, particularly in terms of maximizing long-term revenue (Fattouh et al. 2016, 225). Canada is unique in that, among major suppliers, it alone has a significant price on carbon and a reliance on heavy oil production as our core energy asset. The carbon tax is mostly supported by oil and gas companies (Bakx 2019). Large oil companies in Canada attract international investors and that is why they are more likely to favour a carbon tax compared to small- and mid-sized companies (Blatchford 2019).

Canada's climate plan is built off the Pan-Canadian Framework on Clean Growth and Climate Change (PCF) which established a carbon pricing benchmark and federal pricing mechanism

(Government of Canada 2021a). According to this plan, the carbon price will increase to $170 per tonne by 2030 as Canada works towards its Paris climate commitment to reduce its greenhouse gas (GHG) emissions by 30 per cent below 2005 levels by 2030, which is equivalent to reducing 2030 emissions to 511 megatonnes (MT) (Environment and Climate Change Canada 2021, 6). The plan also calls for major emissions reductions from the oil and gas sector by 104 MT. The Federal carbon pricing plan leaves flexibility for provinces and territories to maintain or develop their own carbon pollution pricing system so long it meets the federal standards. As a result of repealing its own carbon levy, Alberta now has the Alberta Carbon Tax, a federally imposed program that puts a price on carbon emissions in Alberta (Government of Canada 2019).

This reality presents two challenges:

1. Remaining competitive with suppliers that are not taking meaningful climate action; and
2. Decarbonizing Canadian oil and gas production to supply markets looking for fuels with lower emissions intensity and attracting private sector investment from those seeking to facilitate a lower-emissions future.

Role of the Public Sector

Governments generally have a smaller role in the ESG ecosystem than investors, companies and ESG standard and data providers. However, governments can influence the ESG system through their legislation, policies and regulatory systems. These government tools can prevent, support and limit the ability for companies operating in a jurisdiction to demonstrate strong ESG performance.

In June 2017, the Task Force on Climate-related Financial Disclosure (TCFD) released its final recommendations, providing a framework for companies and other organizations to develop more effective climate-related financial disclosures through existing reporting practices. The Task Force consists of 31 members from across the G20, representing both preparers and users of financial disclosures (TCFD 2022). The Canadian federal government has sought to strengthen climate-related disclosures by mandating large corporations in 2022 to adopt the TCFD standards or more rigorous, acceptable standards applicable (Government of Canada 2021b, 175).

The Canadian Securities Administrators (CSA) published guidance to help companies understand existing disclosure requirements relating to environmental and climate matters. Securities legislation in Canada requires companies to disclose the material risks affecting their business and, where practicable, the financial impacts of such risks, including climate-related risks (Canadian Securities Administrators 2019). Practically speaking, most Alberta companies will be subject to securities laws in other jurisdictions, so it is efficient to have harmonized rules across the country.

In October 2021, the CSA published CSA Consultation Climate-related Disclosure Update and CSA Notice and Request for Comment Proposed National Instrument 51-107 Disclosure on Climate-related Matter ("NI 51-107"), which would introduce disclosure requirements regarding climate-related matters for reporting issuers (other than investment funds). The proposed requirements address the need for more consistent and comparable information to help inform investment decisions (Alberta Securities Commission, 2021). NI 51-107 would give markets, insurers, policy makers, and the public standardized information about climate-related risks and opportunities and integrate those into existing risk management and disclosure practices.

For its part, the Government of Alberta (GoA) recently developed a provincial ESG strategy and Secretariat. Established in 2020, the GoA's ESG Secretariat has stood up to prevent divestment from the province, as Alberta struggled to attract capital and insurance (Government of Alberta 2022). ESG considerations are a critical part of the investment horizon, especially in energy; and an unavoidable part of the screening process that almost every capital market institution applies to its portfolio. The focus of the GoA's efforts is not limited to the energy industry, but rather support efforts to develop a common ESG framework across government and contribute to the development and promotion of a positive ESG narrative, as will be further discussed in Section II.

Role of Energy Companies

Oil sands have become a common target and increasingly depicted as "undesirable" for lending or investment because of ongoing activism and concerns about the impact of global efforts to reduce carbon emissions. The complexities of the Canadian energy industry's current business environment, combined with heightened awareness and social activism amongst the broader population, have prompted firms to engage non-traditional partners in decision-making activities that were once the sole domain of the firm (Higginson and Vredenburg 2010, 348). Higginson and Vredenburg argue that as corporations continue to be scrutinized by the public for their performance on a diverse array of financial and non-financial issues, close working relationships with stakeholder groups must be the norm (2010, 349). For energy firms, many of these relationships will focus on realigning resource management principles with the sustainability imperative.

Multinationals particularly in natural resource-based industries such as oil and gas, are increasingly under pressure to manage conflicting or difficult to reconcile stakeholder demands (Hall and Vredenburg 2005). Stakeholder management approaches have often been criticized for diverting managers' attention from what has been argued to be their sole duty - creating shareholder wealth. Hall and Vredenburg advocate for a "reach out and touch everyone" approach where companies engage all stakeholders in continuing dialogue to ensure that the company's values and actions are in accord with society and stakeholders' expectations. Companies are prioritizing Indigenous inclusion by exploring opportunities to develop power projects in partnership with Indigenous communities. They are also stressing the importance of attracting a diverse pool of talent across the entire organization to drive better business outcomes.

Furthermore, "growth opportunities'' are in the low emissions business (e.g., hydrogen). By 2050 the market for oil will be constrained, and the investor and insurance community will demand that companies spend their money on assets outside of their oil business. As a result, companies should strategically invest a portion of their capital towards the low emissions business opportunities to de-risk their future business ventures.

Role of Audit and Assurance

There has been an uptick in ESG reporting worldwide, with a recent KPMG study demonstrating that 80 per cent of companies now report on ESG topics (KPMG 2021). High quality ESG disclosure includes the use of a reputable ESG reporting framework, like the Global Reporting Initiative (GRI), the Principles for Responsible Investment (PRI), or the Sustainability

Accounting Standards Board (SASB). These frameworks require management teams to include considerable data and metrics, which are standardized and comparable.

Internal audit can play a critical role in providing objective assurance and advice on ESG reporting and sustainability matters more broadly. To make informed decisions, companies must have reliable assurance on the effectiveness of ESG management, including ESG governance, risk assessment, key performance indicator monitoring and reporting.

An internal auditor is a trained professional employed by companies to provide independent and objective evaluations of financial and operational business activities, including corporate governance (CPA Canada 2022). An internal audit's role includes validating the effectiveness of ESG-related controls and activities to help organizations manage those risks and foster resilience.

ESG Criticism

The skepticism around ESG investing is warranted. ESG is being sold as all things to all people from better portfolio returns to solving social challenges. One of the biggest ESG criticisms is that some companies use it as a marketing ploy to appear forward thinking on a variety of environmental, social and governance issues. This was shown by researchers at Columbia University and London School of Economics when they compared the ESG record of U.S. companies in 147 ESG fund portfolios and that of U.S. companies in 2,428 non-ESG portfolios (Raghunandan and Rajgopal 2022). The researchers found that the companies in the ESG portfolios had worse compliance records for both labour and environmental rules. They also found that companies added to ESG portfolios did not subsequently improve compliance with labour and environmental regulations.

Moreover, while reporting on non-financial disclosures has improved over time, companies can selectively choose which reporting frameworks will make them appear in the strongest light. Some companies are disclosing information for the sake of disclosing and there has not been a lot of accountability in terms of stated goals versus progress towards goals. A fund manager can use looser criteria on which companies it includes in their ESG portfolio. This makes it easier for more companies to qualify, even ones that seem counterintuitive to the overall mission. Companies can choose to embrace a plethora of standards and frameworks, where they selectively cherry pick and highlight their strongest ESG metrics while disregarding other areas that could potentially reveal their weaknesses. Jurisdictional comparisons are also challenged by differing metrics, levels of disclosure, and access to information.

While good progress is being made on trustworthy measurements of GHG emissions, a standard rating for overall sustainability performance of a company is less attainable. A meaningful measure of total environmental, social and governance performance that applies fairly across different business sectors, different sizes of company, in different countries and geographies remains a challenge. At a deeper level, some have questioned the effectiveness of voluntary sustainability investment initiatives as an answer to the threat of climate change, regardless of whether the quality or the rankings can be improved.

To differentiate a company that is talking the talk and is walking the walk means investors need to start tracking companies' achievements of the goals that they are stating in their corporate sustainability reports. That is one of the critical differentiating features when it comes to analyzing companies. While it can be hard to measure whether the company is doing the right thing, moving towards standardized, consistent and reliable data and metrics can define whether a company is an ESG leader. In today's business environment, companies must engage in sustainability practices to make profits, attract talent, and succeed in the capital marketplace.

Section II: Interview Findings:

Between February and March 2022, seven separate interviews were conducted with ESG experts in the energy sector, public sector, and audit and assurance industry. Participants were selected based on the association of their position title and role description to ESG and sustainability. Participants ranged from senior advisors to executive management. Five of the interviews were done with participants from the energy sector, two were done with representatives from government and regulatory bodies, and one was completed with a participant from the audit and assurance industry.

The interviews were conducted with the purpose of: [1] exploring the topics of ESG and sustainability in the energy sector, [2] learning about risks and developments in the ESG investment space including insight into the situational context and challenges companies are working to address, and [3] exploring interview participants' on-the-ground industry experience. The interviews were scheduled for one hour in duration and the interviewer took notes during the conversation.

Interviewees participated on the understanding that their personal, firm and position identities remain anonymous in publication. As such, the tables below outline the proxy names and titles as they are referenced within this project:

Canadian Energy Participants:

Energy Firm:	Interview Participant Position:	General Firm/Department/Role Description:
Energy Company A	Chief Sustainability Officer	Energy Transition Company

Energy Company B	Assistant Treasurer of Risk Management (Sustainability)	Crude Oil and Natural Gas Exploration and Production Company
Energy Company C	Senior Advisor in ESG Performance	Midstream Pipeline Company
Energy Company D	Senior Advisor, Energy & Climate Change	Integrated Energy Company

Canadian Public Sector and Audit and Assurance Industry Participants:

Public Sector or Finance Firm:	**Interview Participant Position:**	**General Firm/Department/Role Description:**
Public Sector Firm A	Executive Manager, ESG	Government
Public Sector Firm B	Senior Advisor, Regulatory Strategy	Energy Regulator
Audit and Assurance Firm	Associate Partner	Auditing and Assurance Services

The interview questions and responses were broadly grouped together and categorized according to conceptual similarities. In this section, I present the interview participants' responses within the context of the questions asked and provide general summaries of the interview findings for each category of responses.

ESG and Sustainability – General Thoughts

Participants either did not distinguish between ESG and Sustainability or see important differences in the two concepts. In the case of the latter, participants generally stated that while ESG is specific and measurable, sustainability was a concept that links together all the things that must happen for something to continue doing what is needed to do in the future. Some participants stated ESG is a handy term in the energy industry because it identifies the pieces that you can pull apart and assess that contributes to sustainability. This was elaborated on by Energy Company D:

> "We tend to think about a "sustainability mindset" in "ESG performance" when talking about the two topics… ESG focuses on the parameters that can be used to measure performance that reflect a sustainability mindset. As a sustainability professional and as part of a group of sustainability professionals at [Energy Company D], I resisted the use of the term ESG because I thought it pulled apart, separated, and isolated the behaviours that contribute to sustainable business practices. But I've since realized that there is utility in doing that. The concept of sustainability is hard to quantify, so pulling apart sustainability into its ESG parameters, allows you to come up with things like metrics around water quality. All of this can be used to show evidence in developing a sustainability mindset or measuring progress towards sustainable outcomes. So ultimately, we want sustainability and a way of measuring it is ESG." - Senior Advisor, Energy & Climate Change, Energy Company D

Audit and Assurance Firm A shared their appreciation for the fact that there is an ESG world from an audit perspective. The Associate Partner made an interesting statement that decision-makers within companies are seeing ESG in different ways. This stresses the importance of having a corporate understanding of what ESG is and why it is important to them. Otherwise, the company risks a ESG strategy that attempts to be all things to all people. The following statement builds on the role of audit and assurance as discussed in Section I and why it is necessary.

> "There is recognition within the assurance space that this is a significant area of growth. Many companies are increasingly looking at external assurance to add trust to their ESG

disclosures. With increased regulations and requirements for mandatory disclosures and financial information… All these things are showing that we expect assurance to increase…Companies are looking to their internal audit shops to act as change agents within their organizations to connect dots because people are seeing ESG in very different ways." - Associate Partner, Audit and Assurance Firm

The Public Sector Firms expanded on what ESG meant to them and spoke of the ESG movement in the energy sector as comprising more than just oil and gas companies, but a larger consortium of stakeholders that recognizes the need for diverse thought and input into the policy making process:

"ESG is an investment strategy where an investor puts a financial value on non-financial risks. For example, how is land valued and treated from an indigenous perspective? How do corporations treat that land?... Society is demanding that these companies prove how they are taking ESG seriously. The industry needs to get better at communicating their performance in this space. The industry includes the entire sector: financial services, oil and gas exploration companies, regulators, policy professionals and government." - Senior Advisor, Regulatory Strategy, Public Sector Firm B

For Public Sector Firm A, ESG became a focus of the provincial government to prevent divestment from the province. This goal is limited and does not support the true spirit of ESG which is to embrace change because it is the right thing to do, a problem that was well recognized by the Executive Manager:

"We saw money moving away from the oil sands and it was hard to attract capital and insurance. They needed a defensive strategy and ESG was the lens to do that. It started as another fight-back strategy for the province. Very early I said it can't be a fight back strategy, [Alberta] cannot weaponize ESG. It's a platform for communicating performance and ambition. It's a lens through which you look at your reality and that should inform the strategic plan for the province. The strategic plan had to go beyond energy and had to use a full spectrum of ESG. The way the government reframed the mandate is to strengthen Alberta's image and reputation through a positive ESG narrative, while ensuring the narrative is backed by actions such that Alberta is never accused of greenwashing. It can't be just about communications, it has to inform policy." – Executive Manager, ESG, Public Sector Firm A

Diversity, Social and Governance Considerations

There has been an increasing focus on governance and social issues, including community relations, health and safety, human rights, and diversity. Voluntary corporate sustainability reporting often includes disclosure relating to a company's environmental, social and economic priorities, performance impacts, governance and implementation of how these priorities are managed by an organization. It has a broad focus on sustainability reporting to a broad group of stakeholders as opposed to a primary focus on investors and financial analysts.

Much attention has been given in recent years to the lack of diversity on corporate boards, which has forced companies to act on that front. Energy Company A shared their approach to social and governance issues and spoke about how companies struggle at the board level in terms of diversity:

"We've worked really hard to have all of the pertinent governance policies in place such as whistleblower protection, code of conduct, diversity policy, and health and safety policy. We’ve worked to ensure that climate was embedded in the role of the board and the CEO. Putting together the role of a proper functioning governance structure was essential…Our company's board members are all independent, diverse, and they all have stellar qualifications.” - Chief Sustainability Officer, Energy Company A

Energy Company A further explained the role Indigenous values and knowledge play in shaping how business perceives environmental and social issues. On a social side, they are focusing on Indigenous inclusion, developing ownership opportunities with Indigenous groups, and spoke about call to action #92 in the Truth and Reconciliation Commission’s 2015 report. Action #92 calls upon the corporate sector in Canada to adopt the United Nations Declaration on the Rights of Indigenous Peoples as a reconciliation framework and to apply its principles, norms, and standards to corporate policy and core operational activities involving Indigenous peoples and their lands and resources (Government of Canada 2022):

> “Action 92 has a business component, our company wants to teach employees about local residential schools and economic opportunity. We got permission from the board to create an Indigenous advisory group that reports to the CEO. We want to engage with communities in the best possible way. It’s an illusion that we’ve been neighbors with Indigenous people for two centuries, our worlds have been very divided, so we are trying to bridge that gap.” – Chief Sustainability Officer, Energy Company A

Energy Company B discussed their approach to social and governance issues and raising the profile of those components in business:

> “Governance under the Government of Canada is generally way better than other countries…Governance drives the E and the S components. Governance is a critical factor.

The social side involves working towards truth and reconciliation. With ESG you can either frame things as a risk or an opportunity and I like to frame things as an opportunity…Social is becoming more important within the last 10 years in the industry. I've spent more time talking about Indigenous relations than ever. Diversity of the workforce is also more important than ever in Canada. There is more work to do to be more inclusive based on the race/gender side." - Assistant Treasurer of Risk Management (Sustainability), Energy Company B

For Energy Company C, their approach to social and governance issues is working through three core pillars: measurement, accountability, and transparency. The Senior Advisor in ESG Performance described measurement as their company's policy guideline on how they approach setting ESG targets; transparency as how their company outlines their ESG performance in their sustainability report and annual ESG tracking sheets; and accountability as tied to employee compensation. This is important because it clearly defines how the company is capturing ESG performance in their reports.

Energy Company D described their approach to social and governance issues as a nested model of sustainability. Since broader society operates in a natural ecosystem, it is important not to make decisions or support policies that sufficiently undermine sustainability and resilience of that society. If the natural ecosystem degrades sufficiently to adversely impact society, then companies fail. To be profitable, energy companies need a stable and resilient society with a healthy ecosystem. It turns out that running a business this way can cause you to make decisions that adversely impact the environment and society for the benefit of economic returns.

> "There are two sustainability models in use today. The most common one is Triple Bottom Line…Triple bottom line says we need to understand the net effect of financial outcomes, environmental outcomes, and social outcomes. Triple Bottom Line has been used for many years now to say we need to make sure we don't create adverse effects on the environment and society as we know it as we come up with our financial profit. So, let's add up the impacts and make sure we come up net positive. This has two problems. It doesn't automatically explain why we need to perform well environmentally and socially and it starts to allow trading between them. If we make enough profit, we can compensate for environmental degradation. But not every environmental or social impact can be monetized or offset by dollars." - Senior Advisor, Energy & Climate Change, Energy Company D

The Associate Partner at the Audit and Assurance Firm discussed where their company is at in terms of the social and governance pillars:

> "E is furthest along because most of the market has cared about the E for a longer period of time but from a social perspective, we have depths and depths of consultants looking at the social aspects of organizations and they spend time on talent management and diversity. On the governance side, most large companies like us already have those skill sets like board governance. Half of our employees sit on boards, we know what boards ask, we are thoughtful of the make-up of the board from a diversity perspective so what's happening is we're shifting folks from within the organization that already have those skills sets and leaning on them in a different capacity." – Associate Partner, Audit and Assurance Firm

Public Sector Firm A discussed the role every ministry in the provincial government has in ESG. While not every ministry has an environmental focus, they do have responsibility around the full spectrum of ESG:

> "I encourage you to make sure it's not all about the environment piece. Everyone always points at Environment and Parks, and Energy ministries and says it's your job. It's not, it's everyone's job…Elected officials are accountable, deputy ministers are accountable..." - Executive Manager, ESG, Public Sector Firm A.

ESG and its Influence on Company Performance

Participants were asked what effect a strong focus on ESG issues has had on their company's performance. Energy Company A stated that the risks that affect their business, in terms of its license to operate, are reduced if they have a strong ESG proposition.

> "Not only do you need to be eligible for current sustainability loans, but in the future you will have to report on ESG-related disclosure, transparency, and performance. You will need a business plan formed that is aligned with 2030 and 2050 targets. You will need to demonstrate that you can achieve in these areas in order to get equity financing and debt financing… Most businesses fail because they can't access capital. And if capital markets won't give you money because you're in a sunset industry that is constrained by carbon, then you're in big trouble." – Chief Sustainability Officer, Energy Company A.

Energy Company B has been reporting on ESG for the last five years. For them, ESG is about risk management, which has helped the company engage with NGOs and the public sector. However, they were skeptical about effects ESG has had on company performance, confirming some of the criticisms discussed in Section I. In terms of ESG's impact on company performance, the company interview participant had this to say:

> "I've not seen as big of a difference. ESG is more of a checkbox exercise for investors who are checking to see if your company can be included or excluded from their investment portfolios. Portfolio managers determine whether you're progressive or not. As long as you're not awful, you will usually make the cut." – Assistant Treasurer of Risk Management (Sustainability), Energy Company B

The Senior Advisor from Energy Company C explained how their company has embedded sustainability into their business to ensure they are on track to becoming an ESG leader. They discussed the processes the company undertook to become more resilient by setting short and long-term ESG targets that were backed by accountability and transparency mechanisms. These measures included tying the company's ESG performance to employee compensation and striking a multidisciplinary ESG committee with active board and C-Suite representation. Disclosure of climate change-related risks provides an opportunity for companies to explain to existing and potential investors how they are adapting their business model to any material risks that they are facing and to address questions regarding the sustainability of their business model.

> "Back in 2019, we issued our first TCFD report and used two scenarios used by the [International Energy Agency] to identify our potential climate-related risks and opportunities. We did stress testing of our core business areas – liquid pipelines and gas transmissions – based on these two scenarios. We analyzed ways to mitigate risk in each of these core business areas. We conducted a lot of tests on each of these business units

> and analyzed environmental risks, conducted emergency response plans, and planned for extreme weather conditions.” – Senior Advisor in ESG Performance, Energy Company C

The Senior Advisor from Energy Company D discussed how having a climate change strategy was tied into the success of the company:

> “[Energy Company D’s] Climate Report talks about our approach, purpose and strength and strategy in six strategic objectives. Our purpose is to provide trusted energy in people’s lives while caring for each other and the earth. This cascades down those six strategic objectives. The things we need to do to become a successful company, to attract investors, to return value to those investors, to be profitable, to grow our business we need to return growth on capital. To grow returns on capital, [Energy Company D] believes it needs to be net-zero by 2050. We know this is where the world is going…The growth opportunities are in low emissions business – power, hydrogen, low liquid fuels. We think there is profit to be had in offering services to our customers.” - Senior Advisor, Energy & Climate Change, Energy Company D

The audit and assurance industry has been impacted with the rise of ESG investing, particularly in the way they conduct audits, as described by the Associate Partner at the Audit and Assurance Firm:

> “Our bread and butter has been auditing financial statements in the past 20 years and it’s changing the subject matter, the risks that our firm ultimately looks at. This changes the way [Audit and Assurance Firm] hires and educates its teams. For example, traditionally we would have had more CPAs on the Climate Change and Sustainability team, but now the team has scientists, engineers, climate experts, risk management experts, health and

safety expertise, etc. that together form an ability to look at ESG information with more informed eyes. So you got a CPA who knows how to audit and you got all these experts who know greenhouse gas, or know health and safety information inside and out so that team is quite powerful. When you have someone who knows how to audit teamed up with someone who knows the subject matter, the two can go out and audit almost anything. It also helps fix the problems for our clients." - Associate Partner, Audit and Assurance Firm

Enhancing Investor confidence

Participants were asked how ESG performance in Alberta should be communicated to enhance investor confidence and attract global investment. Effective communication with investors and the public focused on ESG progress is an important component of a company's ESG strategy. It fills the gap between investor expectations and the sustainability or ESG strategy. However, good communication must originate not only from companies, but from public actors as well, as the Assistant Treasurer of Risk Management (Sustainability) of Energy Company B stated:

"The [Government of Alberta's] war room was disastrous. The provincial government shouldn't help if all it wants to do is create war rooms. Investors understand the energy sector and know that oil sands emit a lot of carbon. The government doesn't need to benchmark emissions, that's for industry to do. Windfall tax is being discussed but in Alberta royalty rates are based on market prices and we are paying more to the government as our oil prices increase. I don't want [elected officials] advocating for the energy sector because we get grouped with oil sands even though we have different

> emissions. Natural gas companies emit less than oil companies. Advocacy should be on a company-to-company basis." - Assistant Treasurer of Risk Management (Sustainability), Energy Company B

Public Sector Firm A is working on an ESG framework that has 16 categories, each with sub-metrics through which others are judging Alberta and through how Alberta should be communicating its performance. The goal is to have this framework succeeded by a global standard. For now, Public Sector Firm A is encouraging Chartered Professional Accountants Canada to take the framework and hopefully expand on it, so it becomes a standard across the country. When asked about creating ESG standards that are specific to the Alberta context, this is what the Executive Manager of Public Sector Firm A had to say:

> "A made in Alberta solution is a pointless effort and we'll lose credibility. It'll look like we're patting our own backs and coming up with our own numbers. We want full transparency and disclosure around this. The worst thing we can do is have a made in Alberta solution. It would be self-aggrandizing, and it would not have any credibility. However, Alberta was the only jurisdiction doing this and there was no globally accepted framework to evaluate a jurisdiction on ESG principles. ESG has always been a lens through which corporations are evaluated. There is not a globally accepted framework for a jurisdiction yet, so we started with the UN Sustainability Development Goals, cut them through an ESG lens, an Alberta lens and a developed country lens because a lot of the UN SDGs mean something different in Bangladesh than it does in Canada in terms of what expectation is in excellence. Then we started to apply SASB and looked at our industry makeup and what they expect out of their industries. So we extracted from SASB, and

from MSCI who was the gold standard at that time, and then the credit agencies also started applying an ESG lens. We work with three out of the four credit rating agencies and ended up coming up with our own framework." – Executive Manager, ESG, Public Sector Firm A

Energy Firm D said any sector will only make money if it satisfies customer demand. Alberta companies and the public sector need to listen to what our customers want, and Alberta has for too long told the story of what it wants to produce, not what people want to buy:

> "The reality is the world needs a lot of oil, our oil business is not at risk of disappearing anytime soon but customers want low carbon choices. They are demanding this, slowly but with increasing volume. If we continue as a province, a society, a jurisdiction that is tone deaf to what the world wants then we are going to seem out of date. So we need to listen to what consumers want. We need to offer an opportunity to be growing in those space while we continue to satisfy the client for what is needed today. To be a leader and attract investment, you have to have a vision where the world is going regardless of where the world is today. We need to articulate the vision of where we're going without giving up on where we are. Again, our oil business is going to continue to produce a lot of oil but that is not where we should be producing the ambition of where the world is going. Global energy demand is forecasted to grow. How can we not be excited to be in the energy sector so let's be smart about where we're going in the energy sector. We don't have to stop producing oil to sell the image of Alberta as a growth friendly opportunity." - Senior Advisor, Energy & Climate Change, Energy Company D

Energy Company C spoke about how their industry is viewed as working in the “dirty oil” business and the hesitancy of investors wanting to push capital into oil and gas project.

> “We are often viewed as “dirty oil”, but our ESG performance is leading the way compared to other companies. Investors are hesitant to invest in the company and political considerations can drive away investment. Transparency and communication will be needed to keep investor confidence. The Alberta government should help facilitate more communication between investors and the energy sector.” - Senior Advisor in ESG Performance, Energy Company C

Constraints on Capital

Participants were asked why there is an increasing number of international insurers ceasing to underwrite oil sands. Participants discussed years of constraints on capital and depressed commodity pricing. Although headwinds such as divestment campaigns, carbon taxes, and market access continue to persist, the companies I spoke with appear to be poised to forge ahead and have plans to succeed in a carbon constrained world.

> “We believe our company’s growth will be in the low-emissions business. If we were making oil, even if we were making it as ethically as possible, the question is would you as an investor want to invest in something the Paris agreement has suggested won’t be needed eventually. As an example, you can make ethically made fax machines and there are still offices that use them but do you want to invest in the fax market? Probably not. Not because of the supply chain of making the fax machine or where they are made, it’s just not really a growth place to be in. Same thing with oil. If we are the best oil producer

and nobody wants oil, it's a bad place to have invested your money." - Senior Advisor, Energy & Climate Change, Energy Company D

"It's a reflection of everything we've talked about which is insurers are taking a stance on something that matters to them and so they feel that they are not going to invest in something that is seen as 'dirty'. But it's unrealistic to assume that they will be able to do this for too long because at the end of the day the energy sector has to exist in order to have an economy. … The insurance industry will have to make decisions on what that means from a risk management perspective and a risk tolerance perspective and change certain things from a business side. It remains to be seen but it's not sustainable for the insurance industry in the long term." - Associate Partner, Audit and Assurance Firm A

Section III: Conclusions and Recommendations:

A path forward needs to recognize that creating long-term value increasingly requires that both the government and private sector understand the impact of their strategies on key stakeholders such as investors, employees, customers, communities, as well as on the natural resources and supply chains on which that industry relies on. ESG will continue to evolve, but it is now well entrenched and will increasingly influence investment decisions globally and in Alberta.

The federal government and Alberta government understand that most Canadians want to be seen as responsible and doing their fair share on all things environmentally prudent. Chief among these items is the ability to say Canada is doing its part to curb emissions globally. At both the federal and provincial levels, not having a coherent environmental plan is no longer an option. Public policy's role in the energy industry is tricky, but businesses and governments can work together to solve ESG challenges. The results of this study suggest that Alberta can achieve net-zero emissions by 2050 if policymakers work with the private sector to establish best practices and implement policy recommendations including adopting international frameworks, attaining policy clarity on energy transition, investing in technology and innovation and creating a compelling story for investment.

Policy Recommendation 1: Adopt of International Frameworks and Harmonization of Rules Governing Climate Change-related Disclosures

The Paris Agreement has created a paradox where a global problem requires domestic solutions. While solutions need to be tailored to the unique circumstances of each region, it is important that standards for measuring ESG outcomes not be regionally developed.

Although no single environmental standard exists, there are several recognised standards that provide market guidance on how to monitor, evaluate and report on environmental-related disclosures. Many organisations reference the frameworks in their ESG reporting. Canada needs to adopt these international frameworks and apply them to its industries. Beyond the frameworks, there also needs to be better and more accurate data as this information is used by policymakers, financial regulators and investors to make business decisions.

In Canada, disclosure of financial information related to climate change remains fragmented and inadequate. The existing weak disclosure regime does not match Canada's international efforts in promoting its image as a world leader in the fight against climate change. From a disclosure standpoint, the energy sector will ultimately have to disclose in alignment with the TCFD framework, which will simplify an investor's scouting process. It will be important to provide data that audit, insurance and investment institutions can use in analysis and scenario planning and will validate Alberta's energy companies as leaders in ESG performance.

Policy Recommendation 2: Attain Policy Clarity on Energy Transition

Policy clarity is a foundational element of energy transition. Energy transition is the future and policy clarity, especially around pricing carbon, is an essential element to deploy needed capital. Regulations need to be developed in-step with innovation and the development of disclosures so as not to be disruptive to investment.

At the provincial level, the government should form an advisory group of independent experts to give advice on how Alberta can achieve its goal of net-zero greenhouse gas emissions by 2050. At the very least, deliverables should include the following:

- a climate plan detailing how Alberta's path towards net-zero emissions by 2050.
- an ESG investment framework.
- a renewable technology roadmap.
- a strategy on intergovernmental advocacy to achieve Alberta's economic goals.
- a common ESG framework across government that contribute to the development and promotion of a positive ESG narrative.
- a recommendation for incentives such as a commitment to cutting the corporate tax rate by 50 per cent for those companies making zero-emissions products.

Policy Recommendation 3: Invest in Technology and Innovation

Non-financial and climate-related disclosures hold great potential to demonstrate how Canadian companies are proactively pursuing opportunities to shift to a low-carbon economy through technological innovation. Alberta's future will be heavily reliant on its willingness to embrace technology to transform Alberta to a low carbon economy. The energy industry has already taken incredible steps towards an imminent net-zero future, as evidenced by the interviews in Section II.

Technology is playing a vital role in transforming Alberta to a low carbon economy. Firms in natural resource-based industries such as energy, which typically provide the backbone for regional development in their production locations, have become leaders in establishing innovative sustainability initiatives that integrate a range of stakeholder interests (Higginson et. al 2010, 334). This is partly due to the fact that heavy resource utilization, their ecological and social practices tend to attract the most intense public scrutiny (Vredenburg and Westley, 1994). Another reason is because Canada and the USA have one of the most open and freely competitive oil and gas industries, providing incentives for innovation (Radnejad and Vredenburg 2015, 78). The oil and gas industry in the early 21st century faced complex resource reservoirs in deep water, sand and shale that required sophisticated technologies to extract. Without new technologies, extracting these resources was not cost-effective, feasible or environmentally acceptable. Thus, the need for technical innovation in the first decade of the 21st century is part of the fabric of Alberta's oil and gas industry rapidly increased (Radnejad and Vredenburg 2015, 78).

Technology and innovation should underline Alberta's approach to the ESG challenge. There is a need to transition Alberta to becoming a technology-driven economy. To ensure that this challenge is met with a credible response, it is important that an annual public report card on Alberta's ESG performance be developed and utilized overtime.

Policy Recommendation 4: Create a Compelling Story for Investment

Alberta needs to create a more compelling argument for investment, by using forward-looking policy goals and ESG performance data to enhance investor confidence and attract investment. This narrative needs to articulate how oil and gas companies fit in a carbon-constrained world and be based on coherent, digestible, and easy to find data, not opinion and politics. Additionally, Alberta may have an opportunity to emerge as a leader in reporting on social and governance issues if it promotes an energy narrative that also incorporates Indigenous, gender and governance practices. There should be space in reporting and disclosures to highlight this. Lastly, it is important that the Alberta government market their eagerness to diversify the economy in a manner that resonates with the workforce of the future. If talent comes to Alberta, investment will follow.

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