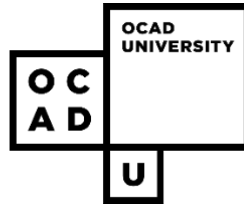

The Futures of Environmental, Social, and Governance (ESG) by 2043 in Canada, and the Potential Implications on Large and Public Companies

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Abstract

It has been almost 20 years since Environmental, Social, and Governance (ESG) was first coined and introduced as a vehicle to incentivize businesses to make tangible contributions to global challenges, such as the ones outlined in the United Nations Sustainable Development Goals. Since then, ESG assets and ESG-driven investment have steadily grown in the capital markets around the world, including Canada. However, there is also mounting criticism of ESG efforts regarding continued greenwashing practices, poor quality data, and lack of transparency, among others.

This Major Research Project considers some of the most relevant dynamics around ESG and explores the current operating system of ESG in Canada to produce a set of possible scenarios for ESG by 2043. Additionally, this report also articulates high-level potential implications for public and large companies in each one of those possible futures.

A combination of primary and secondary research methods has been undertaken to achieve the project's goal, following principles of strategic foresight, design thinking, and systems thinking. Unstructured interviews and participatory design methods were conducted with knowledgeable individuals in relevant areas for this study to collect primary data. Literature review, environmental scan, horizon scan, and other research methods were also undertaken to collect secondary data and inform various frameworks for sensemaking and scenario generation.

The different analyses and scenarios in this report can be used to strengthen and inform future-oriented strategic plans and help build resilience for the challenges ahead. Some key insights in this report include i) a set of systemic archetypes used to identify key patterns in a highly complex, dynamic topic, such as ESG, ii) an updated map of key ESG actors in the Canadian context, iii) a set of relevant trends potentially shaping the future of ESG, and iv) a set of four possible and yet distinctive futures of ESG in Canada, with high-level potential implications for each scenario.

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Glossary of terms

ESG framework: ESG reporting frameworks develop and describe high-level principles around ESG. Therefore, the frameworks usually focus on the bigger questions, such as how to structure the report, and what information should contain (The Corporate Governance Institute, 2023).

ESG standards: ESG standards are usually more technical and provide specific guidance on the requirements that need to be followed for reporting. ESG standards usually portray specific metrics and methods for reporting on each one of the ESG factors (The Corporate Governance Institute, 2023).

Financial Materiality: Financial Materiality was defined by the US Supreme Court as: "*A fact is material if there* is *a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the 'total mix' of information made available* (TSC Industries, Inc. v. Northway, Inc., 426 U.S. 438 [1976]).

However, is important to consider that "financial materiality" is an evolving definition, and there is a significant ongoing debate around it. For instance, there is an ongoing debate around how to interpret the meaning of "*total mix*" or "*reasonable investor,*" just to name a few (Hartvard Law School Forum on Corporate Governance, 2021).

Greenwashing: Portraying products and services as having more environmental benefits than they actually do and promoting false or misleading environmental ads or claims (Competition Bureau of Canada, 2022).

Large companies: According to Statistics Canada, a company or business is considered large when it employs over 500 workers (Statisctic Canada, 2022)

Public companies in Canada: A company whose shares are traded on a stock exchange, has complied with applicable tax regulations, and has been selected or designed by the Minister of National Revenue to operate as a public company (Canada Revenue Agency, 2023).

Sustainable Development Goals ("SDGs"): "*A universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity*". The SDGs are a set of 17 integrated goals. (United Nations Development Programme, 2015).

Systemic Archetypes: The systemic archetypes are common systems structures typically found across different systems and produce characteristics petterns of behavior (Meadows, 2008).

The "E" of ESG: The "E" within the ESG acronym stands for "Environment." Some of the metrics that can be found within an ESG report regarding "Environment" are the energy a company takes in and the waste it discharges, the resources it needs, carbon emissions, and climate change (Henisz, et al., 2019).

The "S" of ESG: The "S" within the ESG acronym stands for "Social." Some of the metrics that can be found within an ESG report regarding "Social" are diversity and inclusion, social equity, representation, work conditions, and labor standards, data privacy, among others (PricewaterhouseCoopers, 2022).

The "G" of ESG: The "G" within the ESG acronym stands for "Government." Some of the metrics that can be found within an ESG report regarding "Governance" are the internal systems, controls, and procedures a company adopts to govern itself, promote transparency in their internal decision process, comply with applicable regulations and policies, and meet the needs of external stakeholders (Henisz, et al., 2019).

Section 1
Introduction and research

a. ESG Background & research process

"***For every complex problem, there's a solution that is simple, neat, and wrong***." H.L. Mencken

The idea that organizations should deliver value beyond their internal borders and into the larger society is not new. Early efforts to promote socially engaged organizations can be traced back to the 19th century, and these efforts have often been fueled by different historical moments (Eccles et al., 2020). In this sense, Environmental Social & Governance (from now on "**ESG**") is a contemporary system to promote, measure, and track the value exchange between organizations and the larger society amid humanity's increasingly complex challenges regarding environmental degradation, social equity, and corporate transparency.

ESG was first coined in a United Nations report named "*Who cares wins*" back in 2005. This report advocated for embedding environmental, social, and governance factors in capital markets to continue doing "good business" while leading into a more sustainable market. Moreover, this report also triggered several joint efforts from different financial institutions, which eventually arrived at what is known today as the United Nations Principles for Responsible Investment (PRI) and a network of major financial institutions joining efforts to uphold ESG efforts. Nowadays, the PRI provides one of the most used ESG frameworks worldwide (Kell, 2018).

In essence, ESG is an evolving set of standards on which organizations disclose operational information considering their environmental impact, social impact, and corporate governance practices. ESG indicators are then graded or considered by stakeholders like potential investors, external firms, or NGOs to assess the company's performance and risk (Tocchini et al., 2022). Companies that are well-graded under ESG standards gain reputational value, achieve a higher level of social license, and attract new investors. Consequently, ESG

theoretically works as a social, financial, and market incentive for organizations to contribute positively to current environmental, social, and governance challenges. (Arvidsson et. al, 2021).

Since ESG entered the scene back in 2005, there has been a growing number of actors from the financial markets, governments, and non-government organizations, promoting, enabling, and coordinating efforts to leverage ESG standards. For instance, coordinated action among institutional investors, asset managers, asset owners, financial institutions, and other market actors has allowed ESG to gain significant momentum and become a driving force in the financial markets. ESG-related assets under management are expected to soar from about US$ 18.4 trillion in 2021 to US$33.9 trillion by 2026, representing over one-fifth of the global financial market (PricewaterhouseCoopers, 2022).

Alongside this financial momentum, there are government policies and regulations decisively pushing for ESG. For instance, the European Union recently adopted the Corporate Sustainability Reporting Directive (CSRD), which, as of 2024, will significantly increase the scope of already mandatory ESG disclosure currently operating in the European Union (European Parliament, 2022). Similarly, starting in 2024, the Canadian federal government will require federally regulated financial institutions to disclose ESG-related information in accordance with the Task Force on Climate-Related Financial Disclosures (TCFD) framework. These are just a couple of examples of similar trends that can be found in other countries and regions.

There are also significant efforts from non-governmental organizations to improve ESG metrics, standards, and the quality of ESG-related data. For instance, the International Sustainability Standards Board (ISSB) has announced the International Financial Reporting Standards Foundation (IFRS), which will come into effect in 2024, and aims to become a "*global baseline*" to standardize financial reporting on ESG-related metrics. In this same sense, different organizations, such as the Sustainability Accounting Standards Board (SASB), continue to develop the concept of materiality, which aims to conduct financial assessments on ESG metrics that are "material" or relevant considering the context of any given organization or industry (Consolandi et al. 2022).

Notwithstanding the foregoing, since ESG entered the scene back in 2005, there has also been significant skepticism and growing concerns around continued greenwashing practices despite ESG efforts. In fact, conclusive evidence proving effective correlations between ESG disclosures and tangible improvement in Environmental, Social, and Governance practices in ESG-compliant companies remains elusive (Giesse et al., 2019). Moreover, recent studies suggest that organizations are likely to employ process-based climate change initiatives, like adopting and disclosing ESG metrics, under a symbolic approach to create positive impressions among stakeholders and protect their legitimacy without improving outcome-based carbon performance (Orazalin et al., 2023). Simply put, recent studies continue to support existing concerns that ESG has been unable to prevent greenwashing practices.

Another common critique against ESG lies in the quality of the data used to measure performance on ESG factors. The growing need for ESG reports and metrics has driven and spurred the creation of an entire ESG industry with literally hundreds of frameworks, indices, standards, and other vendors, such as software providers (Eccles et al., 2020). The overly complex ESG landscape impairs benchmarking, transparency, and consistency of ESG results.

Growing concerns and skepticism have sparked political, financial, and social manifestations against ESG. For instance, Vanguard, the second largest asset manager in the world, recently pulled out from the Net Zero Asset Manager initiative, an initiative promoted by the United Nations. In their rationale for this decision, Vanguard officials openly criticized current ESG practices (Gelles, 2023). Moreover, from a political standpoint, the United States Congress recently repealed a ruling from the Department of Labor allowing retirement funds to consider climate change and other factors as part of their investment decisions. Although President Joe Biden vetoed the repeal a few days after, this case still is a clear example of mounting political opposition against ESG efforts (Keeley, 2023).

In sum, there are significant financial, regulatory, social, and technological forces promoting ESG, but at the same time, there are also similar forces actively criticizing and opposing ESG. As a result, the future of ESG will be a function of the interaction between these

conflicting forces and emerging trends that can disrupt the current state. This reports dives into this topic and harnesses a combination of primary and secondary research methods to create a set of distinct yet possible scenarios in order to explore the potential futures of ESG.

b. Research purpose

i. Research question

The goal of this Major Research Project ("MRP") is to answer the following research question:

What is a set of possible futures scenarios for ESG in Canada by 2043, and what are the potential implications of those scenarios for large and public companies?

The importance of this research question lies in two main considerations: (i) the alignment of ESG standards with the Sustainable Development Goals set by the United Nations (also "SDGs," moving forward) and Canadian efforts aligned with such goals, and (ii) the potential rippling effect and indirect impacts that large and public companies can have on the overall Canadian economy, as well as its unique potential to achieve systemic and positive change towards climate action, social equity, and corporate governance.

On September 25, 2015, the General Assembly of the United Nations issued the 2030 Agenda for Sustainable Development. The goals are defined as a global undertaking to eradicate poverty while healing the planet and achieving a higher level of global prosperity within planetary boundaries. The resolution explicitly outlines businesses and companies as key stakeholders in achieving this effort. Consistently, prominent scholars have highlighted that businesses and companies have become instrumental in facing social challenges, strengthening the economy, and bridging social inequities (Porter, 2022).

Canada has launched several initiatives and pledged to achieve highly complex and ambitious goals in line with these efforts. In this sense, the Canadian federal government

implemented a "*2030 Emissions Reduction Plan*" for every major industry in the country, aiming to reduce 40% of current emissions by 2030 and achieve net-zero emissions by 2050. Similar initiatives for emissions can be found at provincial and local levels of government. In addition, from a social standpoint, the Canadian government is also endorsing a set of programs and policies to reduce social inequities. For instance, the federal government of Canada recently adopted the *Employment Equity Act,* the *Pay Equity Act*; the *Canadian Gender Budgeting Act*; and passed *Bill C-65* to amend the *Canada Labour Code*, incorporating a comprehensive set of new regulations to achieve a higher level of gender equity.

Despite visible efforts from the Canadian government, effective results in these challenges require active engagement from businesses and companies. In such a context, ESG has become ever more relevant. If ESG evolves favorably and overcomes some of its current shortcomings, it could offer a potential path to promote, incentivize, track, and measure effective contributions from industries and businesses into social, economic, and environmental challenges.

As for choosing large and public companies as the exclusive scope of this MRP, large companies are strategically positioned to amplify and propel a widespread use of ESG standards. According to statistics issued by StatsCan in 2021, large companies employed around 7,428,133 workers of the industrial aggregate (excluding unclassified business), representing around 45% of the industrial workforce in Canada. Moreover, continuing with StatsCan, large businesses account for 45.7% of the overall Canadian GDP produced in the business sector. Consequently, large companies have the capacity to drive ESG principles into a whole ecosystem of other related companies or companies that operate within their supply chain, but also to position ESG in the mind of a large force of workers.

Public companies are also typically large companies since they need to meet significant financial thresholds to be eligible for listing. However, public companies have particular interests and incentives in harnessing ESG, as they rely on positive valuations to attract new investors and capture the capital required for operational continuity.

Nevertheless, it is worth mentioning that there are rich and ongoing discussions on how to bring SMEs, entrepreneurs, and individuals to engage in meaningful ways with ESG. Although these discussions are also critical, the dynamics and the incentive structure between public, large, and any other form of smaller companies are significantly different. They would require different research scopes to be adequately approached.

ii. Research scope

This research aims to use a combination of research methods to articulate a set of possible scenarios of ESG in Canada by 2043 and consider some possible implications for large and public companies. In this sense, this research will have the following boundaries:

- This is descriptive and exploratory research. This MRP does not intend to propose solutions or find points of intervention within the ESG system. The goal of this MRP is to describe and articulate a set of different scenarios for possible futures of ESG in Canada by 2043. These scenarios aim to provide valuable insights to different actors in the ESG system and allow them to gain readiness and prepare future-oriented strategies.

- ESG metrics allow financial valuation and performance assessment of companies to assess investment decisions (Giese et al., 2019). In this sense, ESG operates as a system embedded within the larger system of a market economy. However, this research does not intend to analyze the Canadian financial market comprehensively. Specific dynamics, considerations, and actors within the Canadian market can be briefly introduced in this research, only to the extent they are required to understand specific dynamics related to ESG.

- ESG is increasingly becoming a global phenomenon that is being promoted by a growing number of international organizations and different countries worldwide. However, the set of possible scenarios that will be described in this MRP will be limited specifically to the Canadian context. Global dynamics can be briefly

introduced in this research, only to the extent they are required to understand specific dynamics related to ESG in Canada or as signals of change that could potentially influence the Canadian context in the future.

- Efforts to promote socially responsible businesses and companies are not new and are not limited to ESG. There are other efforts that serve as umbrellas to achieve better corporate practices and investments that may be confused or may overlap with ESG. Some of these initiatives are corporate social responsibility programs, responsible investment, and B Corps, among others (Matos, 2020). Nevertheless, the goal of this research is to focus on the futures of ESG.

iii. Intended audience

Based on the research purpose and scope outlined above, this research is primarily intended to address organizations looking to ensure and promote better operational practices in large and public companies through ESG metrics, to achieve effective contributions to current environmental, social, and governance challenges. Among such organizations are:

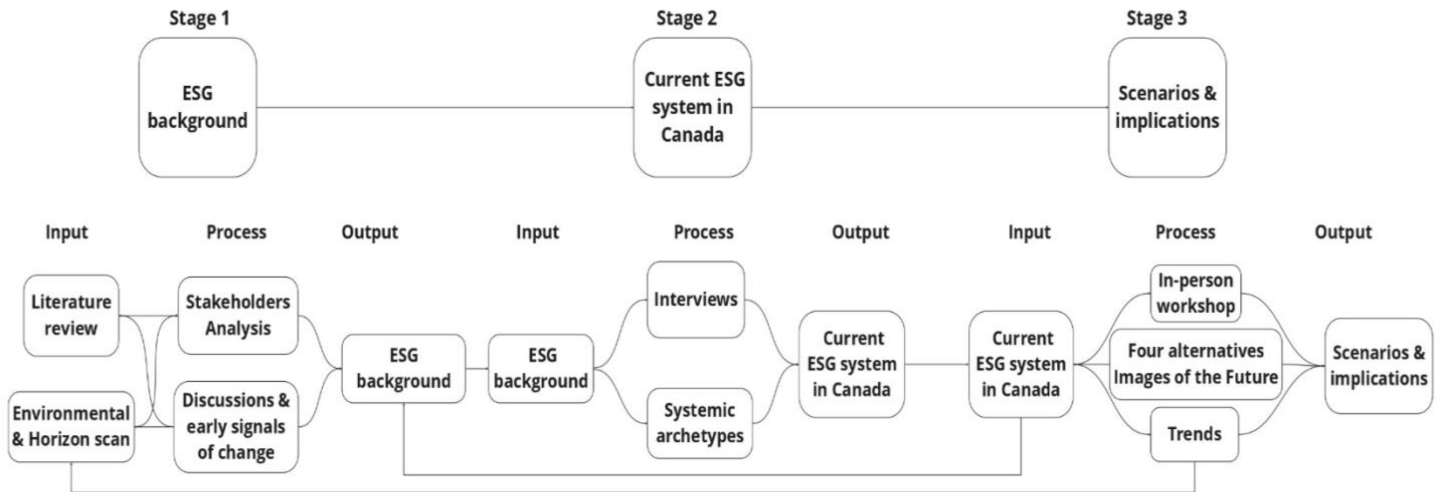
- Large and public companies genuinely committed to ESG standards
- Policymakers and regulatory bodies at different levels of government in Canada
- Social organizations advocating for climate action, social equity, and transparency

The insights resulting from these scenarios can be used by other stakeholders in the ESG space as valuable input to gain readiness and prepare future-oriented strategies based on these inputs. Among other organizations that can also benefit from this research are: i) asset managers; ii) investment & banking institutions; and iii) SMEs operating within the supply chain of large and public companies, among others.

c. Research process

i. Input-Process-Output (IPO) research framework

The outcomes from this research are based on a combination of primary and secondary research methods, frameworks, and tools, guided by principles of design thinking, systems thinking, and strategic foresight. The research was structured in three stages, using the Input-Process-Research-Output method, in which each stage creates an outcome that serves as a base for the following stage (Feldman, 2018). The figure below provides an overview of this research process.



ii. Input-Process-Output (IPO) research framework

Stage 1:

(Input). Several dozens of academic papers, books, reports, and journals were reviewed to understand the current state and the background of ESG. Additionally, periodic and consistent review of non-academic literature such as news, blogs, and podcasts to obtain a deeper understanding of the ongoing discussions, controversies, and opinions around ESG and identify emerging trends and early signs of change. ***(Process)*** (a) Stakeholders analysis: the literature review allowed the analysis and mapping of key ESG stakeholders in the Canadian context. (b) Environmental and Horizon scans: periodical and onogoing scanning was carried out and structured using a customized version of the STEEPV[1] framework, which was called

1 STEEPV stands for Social, Technological, Economical, Environmental, Political, and Social. STEEPV is a framework used to gather and process information.

STEEPV+L,[2] for this research. ***(Output)*** The literature review, the horizon scanning, and the environmental scanning allowed for depicting a clear vision of ESG's background and the key stakeholders within the ESG ecosystem.

Stage 2:

(Input). Built upon the output from the previous stage. ***(Process)*** (a) Interviews: nine online, semi-structured interviews were conducted, following five key focus areas. All the interviewees were knowledgeable individuals on ESG or related areas such as financial markets, ESG reporting, ESG consulting services, ESG compliance, the oil & gas industry, and asset managers. The interviews provided insightful accounts of experience, opinions, attitudes, and perceptions (Martin, 2019). (b) Systemic Archetypes: The knowledge gained from the interviews, environmental scan, and literature review was leveraged to draw some of the common patterns of behavior outlined in the systemic archetypes (Meadows, 2008). ***(Output)*** Stage two provides a deeper understanding of the current state of ESG in Canada and its systemic properties.

Stage 3:

(Input). Built upon the outputs from the two previous stages. ***(Process)*** (a) In-person workshop. The workshop gathered a group of seven knowledgeable participants from different backgrounds to work collaboratively on a participatory design method. All participants were involved in a workshop using the Three Horizons framework as a normative foresight tool (Luc Hoffman Institute, 2019). The Three Horizons framework allowed participants to think coherently about the current ESG system in Canada, a desired future, and what needs to happen in the transition stage to go from the current system to a common desired future. The workshop's goal was to articulate a "desired" future for ESG by 2043 and use that as a reference for possible scenarios. (b) Relevant trends. Using the STEPPV+L framework and, once again, the horizon scan method, seven relevant trends for the future of ESG were identified and used to strengthen the foundations of the possible future scenarios (c) Generic Four Alternatives Images of the Future of the Manoa School: Based on all the research done throughout this project, the Generic Images of the Futures framework was used to articulate a set of four possible scenarios (Dator,

2 A "Legal" lens was added to the original STEEPV framework for the purposes of this research only.

2009). ***(Output)*** A set of four possible scenarios for ESG in Canada by 2043 and its implications for large and public companies.

d. Report structure

This report has three sections:

- **Section 1** briefly introduces a high-level overview of ESG's background, the relation between ESG and SDGs, and introduces the research purpose and process.

- **Section 2** briefly introduces a high-level overview of ESG's Canadian-specific context and provides a simplified, clustered, high-level stakeholder map based on stakeholders' capacity to drive change and how impacted stakeholders are by ESG. Section 2 also delves deeper into a systemic view of ESG in Canada, considering the insights and the inputs gathered through the interviews and other research methods to draw five systemic archetypes.

- **Section 3** Briefly describes seven relevant trends that could potentially influence the futures of ESG and describes a set of four different scenarios for the future of ESG in Canada by 2043. Each scenario considers possible implications for large and public companies.

Section 2
The current operating system of ESG in Canada

a. ESG in Canada

Many of the global dynamics around ESG, already briefly mentioned in this report, are also present in Canada. However, there are also dynamics and challenges specific to the Canadian context and relevant to the purpose of this study. This chapter introduces some of these dynamics and uses them to articulate the local stakeholder's map and the systemic analysis of ESG in Canada.

A shared similarity between Canada and the global context is that Canada is also experiencing a host of investors embracing ESG principles and embedding ESG standards in their financial decisions. According to the Canadian Responsible Investment Association (from now on "RIA"), responsible investment funds, including ESG-specific funds in Canada, grew from 452.9 billion USD in 2006 to 3,161.1 billion USD in 2019. Moreover, a 2020 report from the Global Sustainable Investment Alliance revealed that from 2017 to 2019, Canada was the global leader in sustainable investment (including but not exclusively ESG), with an increase close to 50% in those two years, well above other global leaders like the European Union, Japan, United States or Australia.

Such an impressive drive in the Canadian markets has significantly impacted business leaders and organizations across Canada. According to a 2022 report by KPMG, 61% of Canadian CEOs reported higher demand for increased reporting and transparency around ESG issues, while 71% of Canadian CEOs believe overall scrutiny of ESG performance will increase. (Telem, 2022)

Seemingly, Canadian governments, at federal, provincial, and municipal levels, are also generating a whole set of initiatives to promote and leverage better corporate practices aligned with ESG standards. Such initiatives range from creating guiding principles, creating tax credits, and allocating additional funds for organizations contributing to environmental, social, or governance challenges. In fact, the *Canadian Federal budget for 2023* creates several tax refunds and credits to promote an overall transition to clean energies and sustainable practices, such as a refundable 40% investment tax credit on green hydrogen. The 2023 budget also created a bank with a 20 billion dollar, yearly budget to fund green power and clean infrastructure, among other measures. (Canadian Renewable Energy Association, 2023).

In sum, just as it is happening globally, Canada is also experiencing a growing number of actors in business, government, and society coming together to promote and drive widespread use of ESG standards to meet current environmental, social, and governance challenges.

Nevertheless, there are also global and local challenges regarding ESG that are shaping the Canadian ESG landscape. Such challenges and dynamics need to be considered to fully understand the current operating system and leverage that to build a set of possible scenarios. In order to further break down the Canadian context, the following points will be considered: i) the Regulatory landscape of ESG in Canada; ii) The "E" in Canada; iii) the "S" in Canada; (iv) and the "G" in Canada.

i. *The Regulatory Landscape of ESG in Canada*

According to a global report on legal frameworks commissioned by the United Nations Network Principles for Responsible Investment (PRI) in 2021, and a similar report released by the PRI itself in 2023, investors across Canada are broadly permitted to consider ESG factors in their investment decisions. However, in most cases, any ESG-based decision must be subordinated to the financial objectives of the fund. There is a relatively narrow subset of investors empowered to invest for sustainability impact as a priority over financial objectives, but such cases are exceptional and require explicit consent.

Simply put, the general rule in Canada is that ESG or any other way of sustainable investment is legally allowed to support the financial return of the fund. However, investments that prioritize impact objectives over financial requirements exist as exceptions.

Moreover, from an international standpoint, Canada is regarded as a "*Low-regulation jurisdiction"* which means that Canada mostly relies on voluntary or quasi-mandatory reporting (Williams., 2022). Such dependency on voluntary or quasi-mandatory reporting contributes to the general lack of regulatory clarity about investors' duties and clear strategies to support strong and consistent ESG practices across Canada (2023, PRI).

The voluntary nature of most ESG regulations also allows businesses to choose from many available ESG frameworks, which undermines efforts to compare ESG data and generate accurate ESG ratings, triggering valid questions about ESG transparency and reliability. In fact, a 2023 report by KPMG assessing the ESG reporting maturity of Canada's top 250 publicly traded

companies revealed that 59% of those companies only talk about their positive ESG performance and make no references to negative impacts arising from their operations.

Seemingly, one consistent input received from the primary research gathered for this project reflected that a higher level of laws and regulations around ESG reporting and disclosure obligations are necessary to achieve a higher level of quality data and consistency. Better data quality and consistent reporting will potentially improve the public's trust in ESG efforts resulting in better progress on environmental, social, and governance challenges.

In sum, the regulatory ESG landscape in Canada is predominantly voluntary, subordinated to financial goals, and highly irregular. Although some efforts are being made, such as the incoming TCFD-based mandatory disclosure on federally regulated financial institutions, there are significant challenges remaining from a regulatory standpoint.

ii. *The "E," in Canada*

One input consistently received in the primary research undertaken for this project is that "E" factors overweight social and governance factors. Such a claim also seems consistent with available data. For example, a report released in November 2022 by the Responsible Investment Association (RIA) revealed that the most relevant ESG factors considered for investment decisions in Canada are GHG emissions, assessed in 85% of the cases, and Climate change mitigation evaluated in 84% of the cases. Moreover, the RIA in that same report ranks "Climate Change" as the most relevant driver of growth of any responsible investment umbrella (including ESG) for the next two years in Canada. As per the RIA's report, Other highly relevant environmental metrics currently considered for investment decisions in Canada are: "*Climate change adaptation* (76%)," *Energy efficiency* (73%), and "*Pollution/toxics* (64%).

The dominant drive E is currently experiencing in Canada is also coherent with some of the most recent and ambitious initiatives undertaken by the Canadian Federal Government. Such initiatives arise from the *Paris Agreement*, under which signatory countries are required to submit national greenhouse gas emission reduction targets, called Nationally Determined

Contributions (NDCs), every five years. As previously mentioned, in April 2021, Canada announced its new NDC of achieving a 40 to 45% reduction below 2005 levels by 2030. Additionally, as part of this same effort, Canada is also targeting to reach net zero emissions by 2050 (Statistic Canada, 2023).

However, despite policies, regulations, and other government efforts, significant challenges remain around environmental factors in Canada. Considering the purpose of the research, two main issues call for further consideration. Firstly, the vast differences in the environmental challenges across different places and industries. Secondly, the significant differences between ESG scores and ESG investment.

The environmental challenge that Canada faces today is laborious. Greenhouse gas emissions and other forms of environmental degradation are distributed across various economic sectors, including oil and gas, electricity, buildings, transport, and heavy industry, among others. Furthermore, each province and territory has unique priorities, interests, and political dynamics, which add to the complexity of tackling environmental issues. However, looking at StatsCan data, there appears to be a correlation between the nature or the volume of economic activities and higher levels of greenhouse gas emissions (Statistic Canada, 2023).

For instance, when using greenhouse gas emissions as a parameter for environmental impact, it becomes apparent that provinces that heavily rely on extractive commodities for economic development, such as Alberta and Saskatchewan, are top-tier greenhouse gas emitters in Canada. These provinces are responsible for producing most of Canada's oil, with Alberta accounting for 80% and Saskatchewan for 10%. Additionally, they heavily depend on extractive commodities such as oil, coal, and gas to generate electricity, resulting in high levels of greenhouse gas emissions. According to available information, roughly 90% of the electricity generated in Alberta and 81% in Saskatchewan comes from these sources. Therefore, it seems evident that extractive-based economies with a fossil-based electrical grid are relatively higher polluters (Statistics Canada, 2023).

However, provinces such as Ontario, Quebec, and British Columbia, which have a relatively larger service-based economy and enjoy a significantly cleaner electrical grid (Statistic Canada, 2023), are also among the top-tier greenhouse gas emitters in Canada (Statistic Canada, 2023). Based on these facts, it becomes apparent that provinces, concentrating large populations and industries, also generate relatively high volumes of greenhouse gas emissions.

This fluctuating and irregular landscape means that any actor striving to incorporate or promote better environmental practices within the ESG standards will face a different context, challenges, and opportunities depending on where it is geographically located and to which economic sector it belongs. Nevertheless, addressing the challenges facing all Canadian provinces and promoting sustainable development that accounts for both economic development and environmental sustainability is essential.

Regarding the differences between ESG scores and ESG investment, available data suggest that although E factors are the main driver for ESG investment, they perform relatively worse than S and G factors on ESG ratings. In this sense, a 2020 joint report between the CFA Institute and the PRI revealed that environmental factors are the worst ESG ranked in almost all industries in Canada (CFA Institute, 2020). The CFA report measured median environmental, social, and governance scores for Canadian companies with listed equity in the following sectors: consumer discretionary, consumer staples, energy, financials, healthcare, industrials, materials, technology, and utilities. In all industries but Communications, “E” had the lowest ranking average across all ESG factors.

Such discrepancies between the level of investment and ESG scores raise essential questions about ESG's capacity to drive meaningful change and fuel existing greenwashing concerns.

The "S," in Canada

The previously mentioned report released in November 2022 by the Responsible Investment Association (RIA) ranks the social issues that Canadian investors currently incorporate into their investment analysis as follows: "*Human rights*" and "*Equity, Diversity, and Inclusion*" share the top of the ranking for social metrics, being considered for financial ESG assessments in 79% of the cases; followed closely by "*labour practices"* and *"Health and safet*y "with a 76% and 70% respectively. The fifth and sixth places belong to "*data protection and privacy"* (61%) and "*Indigenous rights and reconciliation*" (60%). Although Indigenous Rights and Reconciliation is ranked 6th, it is the item with the largest percentage increase when compared with RIA's 2020 report. In only two years, the use of that metric to assess financial analysis rose from 44% in 2020 to 60% in 2022.

Many levels of government in Canada are also engaged in supporting some of these efforts in the social arena by introducing policies and regulations to drive progress in sensitive topics like social equity, fair representation, and reconciliation with Indigenous peoples. Moreover, the COVID-19 pandemic has also exposed significant inequities across Canada and has propelled the critical importance of the "S." Consequently, the pressure on businesses to disclose more social-related information and to improve the quality of the data on social-related reporting is expected to increase (Neilan et al., 2020).

However, measuring social factors within ESG has proven to be particularly difficult. There is little consensus around what should be the definition of the social element of ESG. This difficulty is not unique to Canada; it's a problem faced by investors around the world. In fact, a 2019 survey by BNP Paribas found that 46% of surveyed investors struggled the most with the "S" in ESG analysis. Without a clear understanding of how to evaluate social factors, the overall ESG investing effort risks overlooking crucial information and falling short of its potential to effect positive social change.

One of the root causes for this "S" issue in ESG investing lies in the qualitative nature of social metrics. Such a claim can be better understood by re-examining the 2019 BNP Paribas

global survey mentioned in the previous paragraph and referring to the "E." The BNP Paribas survey that places the "S" as the most challenging element to measure (with 46%) also reveals that 30% of the respondents found the "E" to be the most difficult. However, by comparing these figures with the same 2017 BNP Paribas survey, a downward trend in the perceived complexity of the "E" is revealed. From 2017 to 2019, the "E" decreased from 41% to 30%. This significant decrease is attributed to the fact that many metrics on the "E" were changed to quantitative metrics that could be more easily tracked and measured, such as units of carbon released into the atmosphere. This suggests that shifting from qualitative to quantitative data makes reporting and metrics easier to track and for investors to assess (Saul, 2022).

Another root cause of "S" challenges, largely discussed through the primary research of this project, lies in the intrinsic difficulties of limiting the scope of "S." One explanation may lie in the fact that the United Nations proposed ESG as one of the ways to push forward its SDGs. However, The UN's SDGs are primarily designed to track national, population-level, aggregated statistics to advance the UN's agenda of global development by focusing attention on high-priority topics such as over-fishing, poverty reduction, clean water, and sanitation, among others. While these may be important global goals, they are not universally relevant to all companies and all communities (Neilan et al., 2020).

Some of the relevant social metrics for the Canadian context outlined above, such as *Equity, Diversity, and Inclusion*" or "*Indigenous rights and reconciliation,*" make sense in a country that harbors one of the most diverse societies in the world and is undertaking a reconciliation process with indigenous communities. However, different social metrics may be more or less relevant across different countries.

There are ongoing efforts to narrow down the various social metrics to include only the most relevant information for a given industry. One of the most relevant concepts in this regard is *financial materiality*, which the Sustainability Accounting Standards Board (SASB) developed following the definition of legal materiality established under U.S. securities laws. In simple terms, the concept of materiality aims to ensure that the information reported by an organization is relevant or *material* for a potential investor assessing the risk of that organization in a specific

context. However, experts have pointed out that while materiality is a step in the right direction, it may not be enough to connect social practices with financial profitability (Porter et al., 2019).

In sum, ESG and business experts agree that "S" is particularly hard to measure, but there is little clarity on what is the best way forward for reporting social metrics. Some authors have sustained the need to move beyond from "checklist of material factors" and embrace a shared value strategy (Porter et al., 2019); others suggest the scope of "S" should be redefined (Neilan et al., 2020); while others suggest that the way forward is to strive for standardization and quantifiable data (Saul, 2022).

In any case, the debate around "S" remains vivid and remains critical for ESG efforts. Therefore, it is imperative to find better ways to assess real progress in relevant social metrics while offering investors transparent methods for evaluating financial decisions.

iv. *The "G," in Canada*

The above-mentioned 2022 RIA report also ranks the governance issues that Canadian investors incorporate into their investment analysis: The top-ranked metric on governance factors are: "B*oard diversity & inclusion"* (80%); followed by a significant margin by "E*xecutive pay"* (65%); then there is "*Independent directors"* and "*Shareholder rights"* tied with 64%; and *"Audit and financial reporting"* with *59%.*

Unlike the lack of consensus and clarity around social factors previously outlined, the "G" presents relatively less debate when it comes to defining and understanding the scope of governance factors. Well before the arrival of ESG or other ways of responsible investing, there were consolidated guiding principles, global standards, and best practices for good corporate governance. In addition, previous events like the 2008 financial crisis propelled enhanced oversight of governance practices. These factors permitted that by the time ESG became mainstream, there was already an established track record of market data that allowed a relatively smoother transition into ESG metrics (Neilan et al., 2020).

Nevertheless, the “G” on ESG remains highly dynamic and faces challenges ahead. Based on inputs from the primary and secondary research, as well as considering the scope and purpose of this study, two main challenges have emerged that warrant further attention. These challenges are deeply intertwined and mutually reinforcing. The first challenge is the distinctive nature of compliance obligations for “G” on public companies and large privately owned companies. The second challenge relates to an internal imbalance within the ESG umbrella, resulting in a relatively lesser global appetite for governance factors.

Both publicly and privately owned businesses are experiencing growing pressure from internal and external stakeholders to report transparently operational impacts on ESG factors. However, in the specific case of governance factors, the legal nature of those obligations is significantly different for private (even large ones) and public companies. Public companies are required by law to disclose board information, financial performance, corporate structure, and tax-related information, among others, to be listed in any of the Canadian capital markets (Dentons, 2021). Moreover, once an organization goes public, it needs to disclose operational results periodically and other internal information, as required by the relevant securities commission and other regulatory bodies. In contrast, private organizations face significantly fewer legal restrictions, and any ESG-related disclosure is basically done voluntarily and as convenient.

As mentioned before, one input constantly arising in the primary research of this project was the internal imbalances within ESG. In the context of the climate crisis, environmental degradation, and biodiversity decline, the “E” agglutinates most of the global focus and joint efforts among ESG factors. Social factors are becoming increasingly relevant, particularly after the COVID-19 pandemic. However, governance factors have not experienced the same boost in the last few years. Available data also suggest such a claim.

The already-mentioned 2022 RIA Report on investment trends reveals that among the top ten combined ESG metrics for all environmental, social, and governance factors that Canadian investors currently incorporate into their investment analysis, only two governance metrics make it to the top ten (Bo*ard diversity & inclusion”* on number 3 and “E*xecutive pay”* on number 10).

Additionally, A 2020 study analyzing over 130 rating agencies, including the Reporting Exchange Platform, concluded that not all indicators receive an equal amount of attention, with governance being addressed least frequently (Veenstra et al., 2020).

Both challenges outlined contribute to increasing disparities among public and private businesses regarding ESG compliance. The fact that public companies face significantly higher scrutiny and mandatory regulations while private companies rely mostly on voluntary compliance, combined with the relatively lower demand for governance-related ESG metrics, reinforces the status *status-quo* and may deter any future considerations to further regulate disclosures upon privately owned businesses.

b. Stakeholders map

The ESG landscape in Canada is highly complex and dynamic, with new actors continuously entering the space. Moreover, several key stakeholders are multifaceted and have different roles simultaneously.

For instance, some provincial governments have created programs to promote ESG while simultaneously regulating publicly traded companies and other relevant financial actors (through provincial securities commissions), but at the same time issuing green bonds aiming to attract ESG investors to raise public funds. Hence provinces are promoters, regulators, and beneficiaries simultaneously. Other multifaceted actors are large Canadian banks, such as Scotiabank, CIBC, and RBC, among others. These banks are publicly traded companies actively reporting ESG while promoting the widespread use of ESG standards, but at the same time, acting as asset managers bound to fiduciary duty with their customers. Similarly, there are large external auditors that perform as consultants and are publicly traded while commercializing their own ESG standards and frameworks.

The following stakeholder matrix aims to provide a deeper understanding of the current operating system in Canada. However, the stakeholder matrix presented herein has been simplified to reflect high-level, relevant stakeholders. Moreover, the key stakeholders have been

clustered to help create a simpler matrix while still contributing to the systemic analysis and the purpose of this research.

Lastly, the stakeholders have been arranged in a two-by-two matrix following two axes: the *high-low capacity to drive change* and how *highly-slightly the stakeholder is impacted by ESG*. On the first axis, the capacity to drive change is deemed high if an actor can impose or has a high relative weight to leverage change on its own. Conversely, the capacity to drive change is deemed low if an actor has little or no capacity to drive change on its own. On the second axis, an actor is deemed highly impacted by ESG when emerging ESG practices significantly affect or will affect that stakeholder's regular operations. Conversely, an actor is deemed slightly impacted by ESG when emerging ESG practices barely or do not affect its regular operations.

The stakeholders will first be listed to provide some rationale as needed and then placed in a table to allow easier visualization of the stakeholder's breakdown.

i. Stakeholder list and table

1. Actors with high capacity to drive change / highly impacted by ESG Practices

- Large and listed companies within relatively highly polluting industries, in accordance with the emissions tracked and reported by the Canadian Government. Such industries are
  - Large construction/real estate businesses
  - Large oil & gas businesses
  - Large transport businesses
  - Large businesses in the combustion vehicles industry,
- Provinces of Alberta, Saskatchewan, and Newfoundland & Labrador. The provinces were placed in the matrix considering their electrical grid, primary economic industries, and provincial GDP. The general assumption is that a province that relies relatively more on fossil fuels for power generation and income generation faces a higher level of impact from ESG. However, a province with a higher GDP also has

more relative weight to drive changes, innovate, and tap into all the available funds and innovations associated with transitioning into a greener economy.

- National Energy Board
- Large importers of Canadian fossil fuels (US, Japan, EU, among others)
- Large asset managers, including investment divisions of federal banks (CIBC, RBC, TD, BlackRock, Mackenzie investment, Fidelity, Brookfield, among others)
- Large raters (MSCI, Sustainalytics, Refinity, S&P Global, Bloomberg, among others)
- Listed companies not reporting ESG or with relatively low scores
- Shareholders of listed and large companies
- Non-ESG large & Institutional investors (Pension and retirement funds such as Ontario Teachers' Pension Plan, Caisse de dépôt et placement du Québec, and hedge funds, among others)
- Large external auditors/consultancy (EY, Deloitte, KPMG, PWC)

Actors with a high capacity to drive change / slightly impacted by ESG practices

- Federally regulated financial institutions under the scope of incoming mandatory ESG disclosure using TCFD standards (CIBC, TD, BMO, Scotiabank, RBC, among others). ESG impact is deemed lesser in these specific entities because, as of 2024, they will be required to disclose ESG by law. Moreover, large banks in Canada are particularly relevant players in ESG efforts. The financial industry's global average on the equity market is around 17%, and Canada almost doubles the global average to around 30%. The financial industry in Canada is huge, and that is mainly because of the tremendous size of the five major banks, which have been a dominating force in the Canadian capital market for more than a century (Brinks, 2023)
- Regulatory bodies
    - Federal & provincial security agencies
    - Federal & provincial Ministers of Environment
    - Canadian Council of Ministers of the Environment (CCME)
    - Canadian Securities Administrators (CSA)
    - Municipal government agencies on environmental protection

  - Investment Industry Regulatory Organization of Canada (IIROC)
  - Environment and Climate Change Canada (ECCC)
- Federal government: The federal government has been considered a different actor from other levels of government because the federal government is primarily bound to comply with international agreements (such as the Paris Treaty) and overseas federal plans.
- Canadian Renewable Energies Association (CanRea)
- United Nations: Although the United Nations is an international organization with limited capacity to impose a change in Canada, it remains a highly influential actor.
- Employees within ESG-rated companies: As mentioned above, employees are rapidly becoming a driving force supporting better practices on ESG issues
- Financial specialized media
- Traditional media
- Providers of emerging technologies, such as AI and automation, that can drastically influence ESG reporting and compliance.
- Impact investment funds and institutional investors with impact mandate (such as Renewal funds, CoPower, Impak Finance, among others)
- Provinces such as Ontario, Manitoba, Quebec, and British Columbia. Based on the same criteria as above.

Actors with low capacity to drive change / slightly impacted by ESG practices

- ESG framework providers & harmonizing efforts: (Such as GRI, IIRC, CDSB, TCFD, among others)
- ESG standards providers (Such as ISSB, CDP, and SASB, among others)
- Non-listed organizations in low-emission industries (such as education, consulting, and social services, among others)
- Other relevant international efforts on ESG (such as The Global Impact Investment Network (GIIN), World Business Council for Sustainable Development (WBCSD)
- ESG Data provider organizations
- Analytics Platforms

- TMX Group and associated organizations such as Toronto Stock Exchange (TSX), Toronto Venture Exchange (TSX), and Canadian Depository for Securities.
- Alternative Trading Systems (ATS) (Such as Liquid Net, Nasdaq, Questrade, Interactive Brokers, and Omega OTS, among others)
- Canadian National Stock
- Impact-driven customers
- Indigenous communities across Canada
- Traditional media & specialized financial media
- Social actors
    - Universities
    - Independent research & development
    - Think tanks
    - Canadian Responsible Investment Association (RIA)
    - NGOs and activism (such as Corporate Knights, Canadian Club, Realpac, Influence Watch, and Transparency International Canada, among others)
    - Pro-fossil fuels NGOs (Such as Canada Action)

Actors with low capacity to drive change / highly impacted by ESG practices

- Smaller organizations within the supply chain of ESG reporting organizations
- Provinces such as Prince Edward Island, Nova Scotia, New Brunswick, Yukon, Northwest Territories, and Nunavut (Based on the same criteria and assumptions)
- Trading platforms not operated by stock exchanges or ATS
- Relatively smaller and external auditors and data providers
- Relatively smaller asset managers
- Privately owned and smaller businesses in highly polluting industries (Such as beef farmers, fishing industries, among others)
- Social organizations within highly polluting industries (such as the Canadian Association of Petroleum Producers (CAPP) and Real Property Association of Canada, among others)

High change capacity/ highly impacted	**High change capacity/ slightly impacted**
- Public and large companies on polluting industries - Provinces of Alberta, Saskatchewan, and Newfoundland & Labrador - National Energy Board - Large importers of Canadian fossil fuels - Large asset managers - Large raters - Listed companies not reporting ESG or low scores - Shareholders of listed and large companies - Non-ESG large & Institutional investors	- Federally regulated financial - Relevant regulatory bodies - CanRea - United Nations - Employees within ESG-rated companies - Financial specialized media - Traditional media - Providers of emerging technologies - Impact investment funds - Institutional investors with impact mandate - Provinces such as Ontario, Manitoba, Quebec, and British Columbia.
Low change capacity/ highly impacted - Smaller organizations within the supply chain - Provinces such as Prince Edward Island, Nova Scotia, - New Brunswick, Yukon, Northwest Territories, and Nunavut - Trading platforms not operated by stock exchanges or ATS - Relatively smaller and external auditors - Data providers - Relatively smaller asset managers - Privately owned/smaller businesses in highly polluting industries - Social organizations within highly polluting industries	**Low change capacity/ slightly impacted** - ESG framework providers & harmonizing efforts - ESG standards providers - Non-listed organizations in low-emission industries - Other relevant international efforts on ESG - ESG Data provider organizations - Analytics Platforms - TMX Group and associated organizations - Alternative Trading Systems (ATS) - Canadian National Stock - Impact-driven customers - Indigenous communities across Canada - Social actors

c. Systemic Analysis

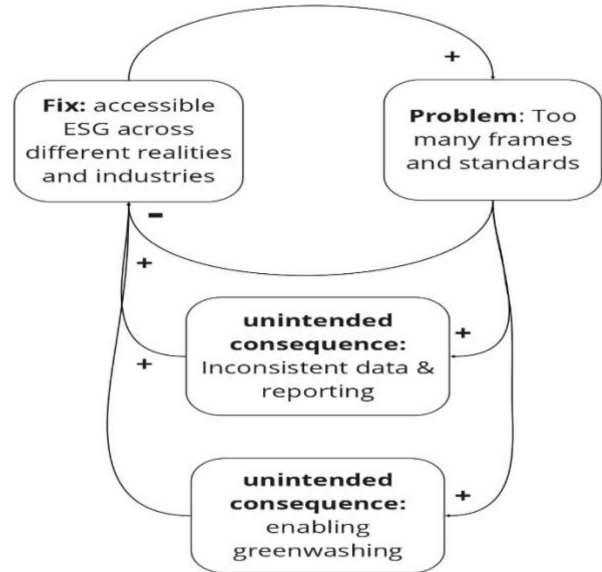
The Canadian ESG context and the stakeholder's map described above were used to inform and explore several "Systemic Archetypes," which serve to bring together all the background primary and secondary research into one single, interconnected, systemic narrative. Moreover, The Systemic Archetypes herein were used "*diagnostically*" to provide insights into the underlying structures operating in the ESG Canadian context (Braun, 2002) and as a stepping stone for the set of possible scenarios.

Five different systemic archetypes have been identified in the current Canadian ESG context, which can be categorized into two groups. The first two archetypes (Fixes that Fail and Shifting the Burden) arise from lacking or misleading corrective actions that have been taken but which have not been sufficient to stop greenwashing practices or to avoid skepticism around

ESG efforts. The last three archetypes (Success of the Successful, Limits to Grow, and Accidental Adversaries) are emerging dynamics arising from the increasing size and complexity of the ESG field.

i. *Fixes that fail*. The unintended ESG industry and its perils

The Fixes that Fail archetype occurs when actors perceive problem symptoms as unique occurrences within a relatively small, isolated subsystem. Consequently, such actors tend to concentrate on these symptoms and to provide isolated, short-term solutions without considering larger implications in the overall system. However, those isolated solutions progressively deteriorate the situation in which the initial problem symptoms are exacerbated by the remedies applied to them. (Braun, 2013).



In the context of ESG, this archetype illustrates the reality of the overly complex ESG landscape. It is understandable that different economic sectors may need different metrics or standards and that some level of flexibility and divergence in ESG reporting must be allowed to accommodate different industries. However, the overwhelming number of standards, frameworks, and the array of service providers associated with the ESG industry has spiraled out of control. A 2018 report from the former Global Initiative for Sustainability Ratings estimated that there are over 100 organizations collecting some form of ESG and 500 ESG rankings (Consolandi et al., 2020). Moreover, a 2021 report from Ernst and Young found there are approximately 600 different ESG standards.

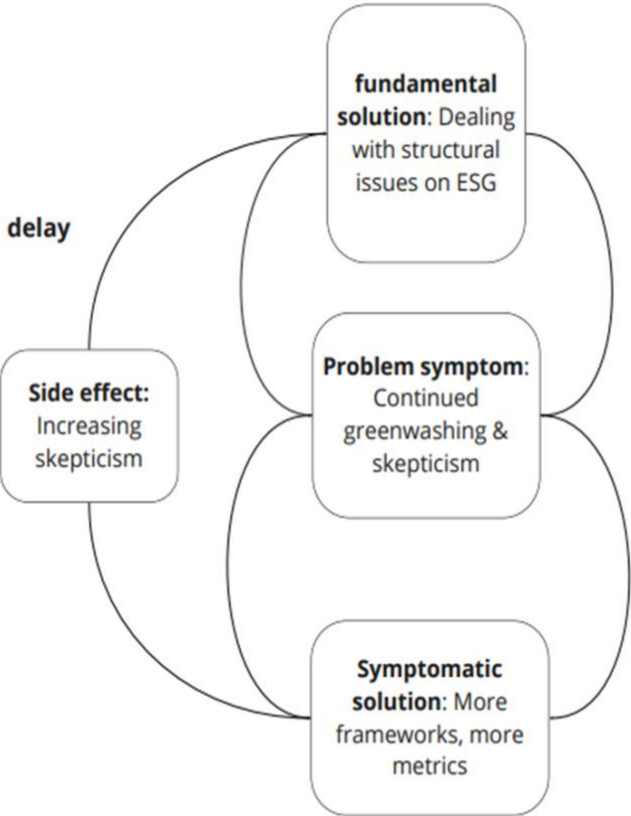
Such a vast landscape of options for ESG reporting undermines any effort to compare or standardize ESG metrics. Even among the most widely used frameworks, the differences are

significant. Joint research carried out by MIT and the University of Zurich in 2021 found significant divergence among six of the most used ESG ratings worldwide (Berg et al., 2021). Moreover, despite ongoing efforts and initiatives to consolidate and create a global baseline, the overall tendency remains increasingly complex and divergent.

This reality has two major consequences for ESG efforts. Firstly, it fuels ESG critics regarding the lack of transparency, poor data quality, and lack of standardization. Secondly, each new standard, frame, rater, or provider adds an extra layer of complexity to an already hypercomplex landscape. Such a high level of complexity may very well deter organizations that are considering entering into the ESG effort.

ii. *Shifting the burden.* Unattended structural ESG issues

The Shifting the Burden archetype occurs when a solution to a systemic issue addresses only the superficial symptoms and does not address the underlying problem. In these instances, the proposed remedy may temporarily alleviate the symptoms, creating an illusion of progress or improvement. However, this deceptive sense of resolution distracts stakeholders from recognizing and addressing the true root causes of the problem (Meadows, 2008).



In previous sections of this report, several underlying issues regarding ESG have been discussed. For instance: a) the predominant voluntary nature of ESG disclosures in Canada, which allows companies to decide for themselves what information to disclose and how; b) the existing imbalances among the “E,” “S,” and “G,” where numerous efforts are being made to address environmental factors and to respond to the

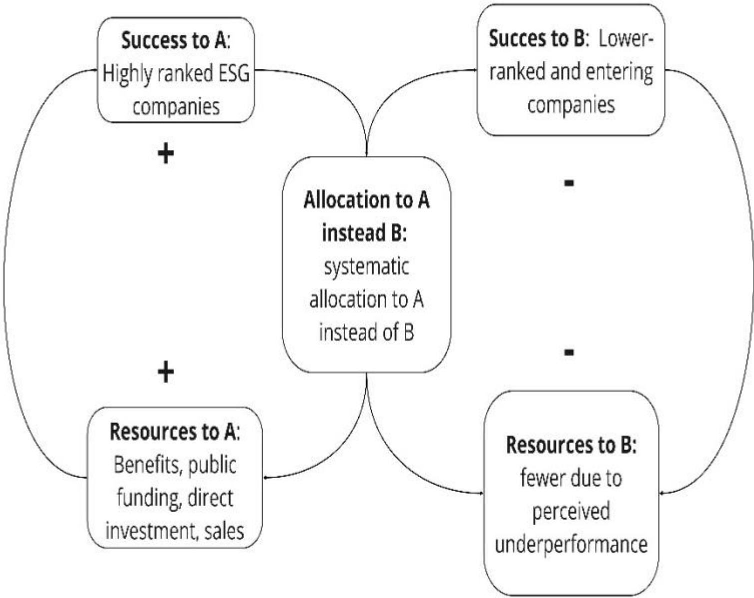
climate crisis, while there is relatively less attention on governance factors, preventing a holistic, balanced ESG approach; or c) the intrinsic complexities in measuring social metrics and creating a clear link between reporting social factors and making meaningful, lasting progress in social metrics, leaving "S" particularly vulnerable to greenwashing practices.

These underlying problems have a different nature than ESG reporting issues mentioned in the previous archetype "Fixes that Fail". These underlying issues cannot be solved only by standardizing metrics or improving data quality. Addressing these underlying issues requires additional actions that are yet to be taken and honest conversations about ESG's limitations and structural shortcomings.

While there have been valuable efforts to address these underlying issues, such as the continuous development of the financial materiality principle, these underlying issues continue to persist. If they are not adequately addressed, the long-term sustainability and effectiveness of the entire ESG effort may be at risk. Greenwashing practices will likely endure and continue to undermine ESG efforts.

iii. *Success of the successful*. The Dynasty of the high performers

The Success to the Successful archetype describes the common practice of rewarding high performers with more resources in the expectation that performance will continue to improve. Such practice is rooted in the belief that successful organizations have "earned" their reward through past performance. However, a potential drawback to this belief is that current performance might be more indicative of the initial conditions or starting



points rather than a genuine reflection of the entities' capabilities or dedication to peak performance. This highlights the need for a more nuanced approach to resource allocation, considering factors beyond immediate success in order to foster a more equitable and effective environment (Braun, 2103).

As previously mentioned, ESG is designed to motivate contributions from businesses to complex global challenges and sustainable development goals. In this context, organizations engaged in ESG efforts are rewarded by the market and society per their perceived achievements on ESG-related goals. Most incentives associated with high ESG performance are financial by nature, including increased direct investment from ESG investors, higher sales by appealing to responsible consumers, access to special funds or tax benefits, and enhanced brand and reputational value.

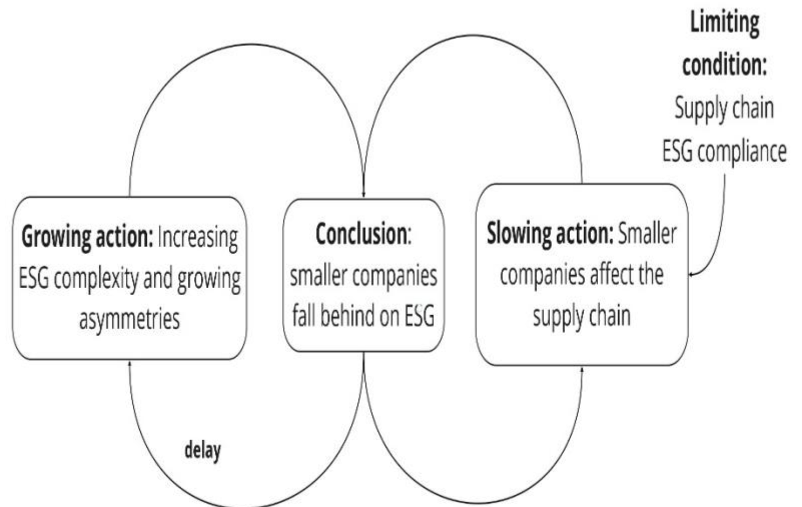
However, the exponential growth of ESG and the increasing complexity of the ESG landscape have made achieving a favorable perception of ESG performance a highly competitive and challenging endeavor. Consequently, organizations must devote more resources to maintain their competitive edge in ESG performance.

This dynamic implies that organizations already seen as good ESG performers or those with substantial financial resources are better positioned to maintain high ESG rankings and capitalize on ESG financial incentives to sustain their perceived high performance.

Unfortunately, this situation gives rise to two potentially dangerous and self-reinforcing dynamics. Firstly, the growing focus on achieving better ranking results may overshadow the genuine commitment to making meaningful and tangible contributions to complex global challenges and sustainable development goals. Secondly, smaller organizations with limited resources or those attempting to enter the ESG space as newcomers face increasing entry barriers.

iv. *Limits to Grow*. Growing complexity as an entry barrier

The "Limits to Growth" archetype reveals that a system experiencing rapid growth or expansion will ultimately face a balancing process as the system's boundaries are reached. This concept suggests that as efforts continue to push towards these limits, the returns on investment will progressively diminish. In other words, the closer one gets to the system's constraints, the less effective further attempts at growth or expansion become (Braun, 2103).



This archetype illustrates a potential limitation for the expansion of ESG efforts. Such limitation is fed and reinforced by the increasing complexity of the ESG landscape mentioned in the Fixes that Fail archetype and the increasing gap between “winners” and ‘losers” highlighted in the “Success of the Successful archetype.

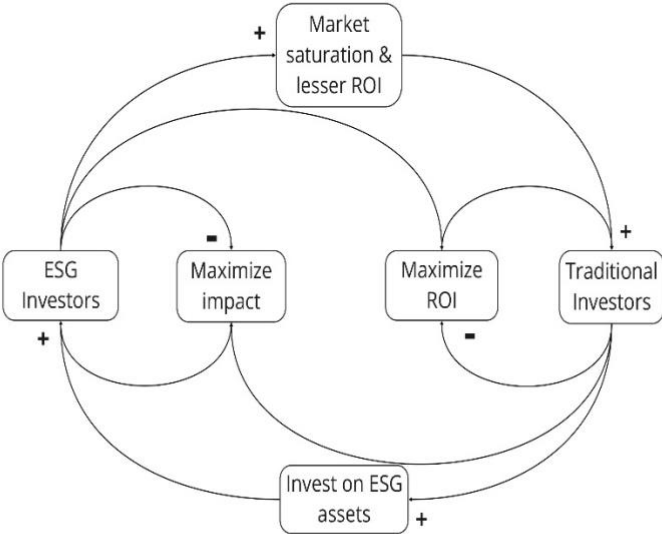
Global ESG efforts are increasingly focusing on measuring ESG metrics across the entire supply chain of the reporting organization. In this sense, in 2022, the German government issued its *Supply Chain Due Diligence Act* (SCDDA), which stipulates significant penalties and liabilities for breaches across the supply chain (up to 2% of the global revenue). Such practice is also becoming predominant in Canada. In fact, Scope 3 of the Canadian 2030 Emissions Reduction Plan measures emissions resulting from an organization’s operations, explicitly including emissions from supply chains.

However, as the ESG landscape continues to gain more complexity (Fixes that Fail), and the ESG incentive structure continues to widen the breach between larger, more resourceful organizations, and smaller, new players (Success of the Successful), smaller organizations operating within the supply chain of large and publicly traded organizations will face mounting challenges to meet supply chain ESG demands.

If these ESG asymmetries, increasing barriers, and harming dynamics are not considered and properly addressed, they could eventually become a limitation for the entire ESG system to continue experiencing its current growth rate.

v) *Accidental adversaries*. The (potential) investing dilemma

The "Accidental Adversaries" archetype illustrates how parties seeking the same goal can turn into adversaries when a win-win situation becomes unintentionally dominated by adversarial behavior. This issue emerges when one or both parties are dissatisfied with their present performance and implement corrective actions that unintentionally impede the other party's success, leading to a cycle of unintended competition and conflict (Kemeny, 2016).



In the Canadian ESG context, this archetype illustrates an emerging conflict that may potentially occur in the financial markets with major implications, including another limitation to growth (as outlined in the previous archetype). Moreover, this dynamic also raises important questions related to ESG limitations mentioned in the "*Shifting the Burden"* archetype.

This report has consistently highlighted the astonishing growth and reception ESG has experienced in the financial markets. In Canada and worldwide, ESG assets continue to soar, and

such a financial drive has moved markets, businesses, society, and regulators to articulate and join efforts around ESG.

Such a success lies in the conception that ESG is a way of doing "good business" while leading into a more sustainable market, as accurately put by the United Nations when it first coined the ESG umbrella. Consequently, the predominant feature of ESG is that it remains a business/financial decision at its core. ESG is mainly used as a way to assess financial decisions with an enhanced understanding of long-term risk variables such as environmental risks, social risks, and corporate governance risks.

The fact that most current Canadian regulations only allow ESG-based decisions on large, institutional investors subordinated to the financial objectives of the fund is consistent with this conception. Moreover, the 2022 Investment Trends report issued by the RIA reveals that around 80% of the stated reasons for organizations to consider ESG factors are financially or business oriented, such as minimizing risk, improving returns, or fulfilling the fiduciary duty.

The underlying issue with this logic is that ESG is increasingly becoming a valuable tool for those investors seeking to do "good business while leading into a more sustainable market," but it is also a great tool to protect any other investor in the larger financial system that is just looking to mitigate any potential impact on long-term investment.

However, this common appetite for ESG assets across all investors, regardless of their needs and priorities, raises important questions. For instance, how would the Canadian markets behave if demand for ESG assets continues to grow to the point that demand for ESG assets surpasses the offer or if the market gradually reaches a point of ESG saturation? These tendencies will likely reduce the ROI of ESG investments. In such a case, will ESG investors continue to endorse ESG efforts at the expense of lesser returns? Will other (non-ESG driven) investors consider ESG as a good long-term strategy when the profits are diminished?

The goal of this archetype is not to judge if the current ESG conception as a predominantly financial/business decision is right or wrong. The goal of this archetype is to

acknowledge that the initial ESG conception has been relatively successful and has allowed ESG to evolve from a good intention to a global driving force. However, this initial conception may also entail a structural limitation for the continued success of ESG efforts.

All these systemic archetypes are intrinsically intertwined and need to be carefully considered to articulate a set of truly valuable possible scenarios for ESG in Canada by 2043.

Section 3
Scenarios and implications

Scenario generation is a strategy tool that derives from the impossibility of knowing precisely how the future will be and yet the increasing need to be resilient and better prepared in a world that is rapidly becoming more dynamic and complex (Wilkinson, 2009).

Therefore, a good approach is to design strategies that consider a spectrum of different possibilities and that are flexible enough to respond and adapt. Each scenario that will be described below is essentially a constructed story about a possible future, each one modeling a distinct, plausible world in which we might someday live. Generating scenarios acknowledges the fact that the "real" future will not be any of the four scenarios described in this report, but it will contain elements of all the scenarios herein (Wilkinson, 2009).

Strong scenario generation should not only rely on imagination or creativity. It must be rooted in a solid understanding of the past and the present of the topic at hand (Dator, 2009). That is the main reason why the first two sections of this report are dedicated to understand the ESG background and underline the connection between ESG and Sustainable Development Goals (past), and dive deep into the current operating system of ESG in Canada (present). This final section builds on the inputs and knowledge of the previous sections of this report.

The first two sections of this report were informed by a significant array of research methods, including qualitative methods of primary research and qualitative and quantitative methods of secondary research. For instance, qualitative data were gathered through unstructured

interviews with experts in several related areas, such as ESG consulting, asset managers and other financial operators, ESG compliance and policy experts, and oil & gas experts, among others, to gain deep insights into their past experiences, knowledge, and stories.

For this final section, another primary research method was also undertaken to strengthen the scenarios. The method used was a participatory design session using the Three Horizons framework. Seven knowledgeable individuals on ESG were summoned to an in-person workshop to co-create a desired future of ESG in Canada.

The Three Horizons model is a tool that allows reflecting on what has been defined as short, medium, and long-term futures (Sharpe, n.d). In this framework, the participants are asked to collaboratively address questions about the dominant present system ("Business as usual" or Horizon One); their different visions of a desired future (Horizon Three); and what needs to happen in the transition zone from the present system to the desired future (Horizon Two) (Sharpe, nd). The Three Horizons framework was used as a normative foresight tool, which means that it was used to create one common vision of a desired future. Such a version of a common desired future was used as a baseline and to inform the set of possible scenarios herein.

In terms of secondary research methods for the scenario generation part, seven emerging trends with potentially high impact on the futures of ESG have been identified. The trends supporting have been developed through the Horizon Scan and literature review and were compiled using the same STEEPV+L framework mentioned in the first section of this report. Horizon Scan is a useful research method to explore futures, emerging issues, early signals, and the things to come in the topic at hand, which in this case is ESG (Cuhls, 2020).

The trends are also used as a baseline to inform the four different scenarios using a combination of what is known as "modal technique" and "systemic scenarios." Simply put, seven already emerging trends have been selected and have been extrapolated into the future using empirical data to consider how they may impact possible futures on ESG. Additionally, the implications among each trend and the topic under analysis (ESG) is also considered to create futures that are coherent and distinctive (Bishop et al., 2007)

Finally, all the trends and inputs gathered from primary and secondary research were poured into a scenario-generation tool called Generic Four Alternatives Images of the Future of the Manoa School, which relies on systemic archetype logic (Curry, 2009) to generate four distinctive futures of ESG in Canada by 2043. In sum, this entire report has been designed with the hope of providing a set of scenarios that can effectively contribute to ESG efforts moving forward and offer key stakeholders a valuable input.

a. Relevant trends

The following trends have been identified, selected, and built, based on their particular relevance to the set of possible scenarios that will be introduced later in this section. Each trend has a high-level description, key evidence supporting the trend, some supporting and conflicting signs, and finally, what is the implication of that trend for the future of ESG. Conflicting signs are also important to consider because one key feature of a trend is that they are not linear. They evolve as they emerge. Usually, there are conflicting forces shaping the future of a trend (Webb, 2016).

i. First trend. *Climate Injustice*

Trend description: The climate crisis is a multidimensional problem with many different implications. In this sense, this trend focuses particularly on the injustices and increased social inequalities arising from the climate crisis.

In many cases, there are significant differences in the level of impact suffered across different communities. Typically, already vulnerable and marginalized communities are particularly exposed to the effects of ongoing environmental degradation.

Supporting evidence:
-The richest 10% of people on the planet, 771 million people, are responsible for 47.6% of global carbon emissions and the least impacted by emissions (Chancel, 2021)
- An annual average of 21.5 million people has been forcibly displaced by weather-related hazards each year since (UNHCR, 2016)

- By 2040, a total of 5.4 billion people will live in the 59 countries experiencing high or extreme water stress (Institute for Economics & Peace, 2020)

Supporting signs:
- Discussions for climate reparations
- Greenwashing
- Ontario Government cutting down climate action programs (McCarthy, 2021)
- Lack of consensus among G7 countries to phase out fossil fuel by 2030 (Whitton, 2022))

Conflicting signs:
- Canada's climate is warming twice as fast as the global average (Center for Climate Change Research, 2019)
- According to a projection made by KPMG, the world economy could double in size by 2050 (KPMG, 2017)

Potential implications for the futures of ESG: Although the climate crisis is a global phenomenon, pre-existing inequalities will likely result in different levels of the climate crisis. Richer countries and richer communities will likely be better prepared to respond to the effects of the climate crisis, contributing to enlarging already existing global and local inequities. This also means the timeline of the climate crisis can be relatively different across regions, countries, and communities.

ii. Second trend. *Fight for social justice*

Trend description: There is a growing number of articulated efforts happening across society to respond to situations harming vulnerable minorities. Some recent examples of movements for social justice include "Me Too," "Black Lives Matter," and social anti-war efforts. Many large corporations, NGOs, politicians, and governments are now effectively supporting social justice causes, which significantly amplifies the impact of these social justice movements.

Supporting evidence:
- GenZs in the United States of America are more racially and ethnically diverse than previous generations. They believe in societal changes like same-sex and interracial marriage (Parker et al., 2023)
- X Gender Marker Available on U.S. Passports Starting
- On April 11, 2022 - Airbnb pledged to temporarily house up to 100,000 Ukrainian refugees for free

Supporting signs:
- Black Lives Matters movement
- Reconciliation process with Indigenous communities

Conflicting signs:
-U.S. Supreme Court overturns Roe v. Wade affecting abortions rights
- 39% of Canadians outside of Quebec hold an unfavorable view of Islam, reaching 53% in Quebec ()

Potential implications for the futures of ESG: Increasing demands for social justice can potentially increase pressure over social factors of ESG and also increase pressure on businesses to incorporate new and stronger measures to ensure tangible and meaningful progress to social metrics.

iii. Third trend. *Global trust crisis*

Trend description: In a world increasingly fast and complex, an overwhelming influx of opinions, information, misinformation, and disinformation is available in real time. This situation has generated an increasingly weary and distrustful population. Decreasing trust is visible in businesses, governments, and even within society.

Supporting evidence:
- A global survey carried out by the OECD revealed that younger people have lower levels of trust in government (OECD, 2021)
- Recorded trust in European institutions such as national governments, the police, and news media has declined over the past two years (Eurofound, 2022)
-Canadians' "trust in government to do what is right" had dropped from 58% in late 2020 to 43% (Norquay, 2022)

Supporting signs:
- Rising armed, extremist groups in the US (Youngblood, 2020)
- Diminished social cohesion in Canada (Norquay, 2022)
- Ottawa's Freedom Convoy of Winter 2022

Conflicting signs:
- Branded activism, as companies are increasingly expected to take a public position on social and political issues deemed unfair (Alliance Manchester Business School, 2022)
- Government financial support during COVID-19

-Reconciliation process with indigenous communities.

Potential implications for the futures of ESG: Trust is an essential element of the capital markets and financial assessments. Allocating personal savings or any funds into a financial organization is ultimately a decision based on trust. Continued deterioration of trust could negatively impact how investors see and interpret ESG data, standards, and any other ESG-based decisions, eroding global efforts to uphold ESG.

iv. Fourth trend. *Growing digital divide*

Trend description: More and more service providers are using digital channels to interact with users. Essential, everyday services such as health, banking, or education are becoming predominantly digital, which is deemed to be faster, more convenient, and more efficient. However, as this tendency continues to grow, communities with lesser or no access to the internet or digital technologies, or any other person just unable to follow the pace of emerging technological trends, will be systematically marginalized.

Supporting evidence:
- According to estimates from Gartner, 25% of people will spend at least one hour a day in the metaverse doing activities ranging from shopping, education, or entertainment (Gartner, 2022)
- In Canada, the digital divide negatively impacts many rural and Indigenous populations from accessing digital literacy and skills training opportunities (Klyne, 2023)

Supporting signs:
- Social inclusion experts are concerned about the metaverse, as it requires specific gear and reliable connection to the internet not available in vulnerable communities (Sharma, 2022)
- Amazon and other large companies are moving forward to offering financial services online

Conflicting signs:
- 5% decrease in non-users or basic users of the internet and digital technologies in the last years in Canada (from 23.8% to 18.9%) (Statistics Canada, 2022)
-Tech fatigue. 1 of each three consumers questioned in a Deloitte report mentioned feeling overwhelmed by tech management during COVID-19 (Auxier, et al., 2021)

Potential implications for the futures of ESG: Continuous technological development is a reality, and it will be key to facing some of the most complex challenges in today's world. In fact, new technologies will be critical to address the climate crisis or improving ESG reporting quality and transparency. However, embracing new technologies without fully understanding potential or unintended consequences could lead to a new array of social problems.

v. Fifth trend. *The end of ownership*

Trend description: Rising inflation, higher interest rates, reduced affordability, and growing macroeconomic complexity are some of the major drivers reshaping long-held conceptions and values around ownership and property. Many consumers, particularly among younger generations, are shifting from an ownership culture to a culture of "usership" and shared property. The subscription economy and new customer habits privileging experiences instead of products are steadily increasing.

Supporting evidence:
- Subscription models for using vehicles are experiencing healthy growth, particularly in Western Europe. Such growth is mainly fueled by the general shift from ownership to usership and from offline to online transactions (Lang et al., 2023)
- Over the past 11 years, subscription-based companies in the SEI have grown 3.7x faster than the companies in the S&P 500 (Arthur, 2023)
- In Canada, the growth in renter households outpaced the growth in homeowner households from 2011 to 2021 in each of the 41 large urban centers (CMAs) (Statistics Canada, 2021)

Supporting signs:
- Increasing focus on delivering "experiences" rather than products
- The right to repair movement
- Remote working and digital nomads

Conflicting signs:
- Rising number of young Canadians moving from Ontario to Alberta for affordable housing (Taylor, 2023)
- Existing benefits in Canada for first-time house buyers, such as the Home Buyer's Plan (HBP)

Potential implications for the futures of ESG: Changing long-held conceptions around ownership will significantly impact many of the aspirations, values, and needs driving financial and investment decisions. Such a structural change will open new opportunities and new visions on how and why to invest.

vi. Sixth trend. *Green innovation*

Trend description: As mentioned in the first trend above, the climate crisis is a multidimensional problem with many different implications. However, not all those implications are necessarily terrible. The current inflection point has also sparked significant levels of technological innovations that could help humanity overcome the climate crisis and some other highly complex challenges nowadays.

Supporting evidence:
- Major cities like Sidney, Singapore, New York, Delhi, and Barcelona, among others, are undertaking major projects for rewilding the city (World Economic Forum, 2023)
- Sustainable smartphones, like Fairphone and Teracube, are already available on the market.
- United Airlines has bought 100 19-seater, zero-emission electric planes and is aiming to take flight for short hops in the United States in 2026 (Lampert, 2021)

Supporting signs:
- The right to repair movement
- Canadian Government is investing 14.9 billion dollars in the next 8 years for cleaner transit (Infrastructure Canada, 2023)

Conflicting signs:
- Ontario Government cutting down climate action programs (McCarthy, 2021)
- Lack of consensus among G7 countries to phase out fossil fuel by 2030 (Whitton, 2022)

Potential implications for the futures of ESG: Technological innovation is crucial to address the climate crisis, but it is not cheap. Estimations made by McKinsey and the World Economic Forum suggest that to achieve net zero by 2050, around $3.5 trillion will be required year after year until 2050. That's around the size of the Japanese economy every single year and a 60% increase in today's level of investment in green tech (WEF, 2022). As the climate crisis continues to grow, there will be mounting pressure to meet the investment requirements for a full transition into a net zero economy. Such pressure will impact investment decisions and could potentially lead to new regulations and policies, to ensure that green tech is sufficiently funded.

vii. Seventh trend. *Deglobalization*

Trend description: Since the 2008 financial crash, global commerce went from

decades of steady growth, known as “Hyperglobalization” to a downward trend coined “Slowbalization.” However, with COVID-19, the war in Ukraine, and the Suez Canal obstruction, there are growing concerns about global supply chains. Such concerns may trigger a sharper decline in world commerce and consolidate the “deglobalization” process already emerging (Irwin, 2020).

Supporting evidence:
- The increase in onshoring of works is peaking in Asia and is also increasing in Europe and North America (World Economic Forum, 2023)
- World Trade Organization projections on global trade for 2023 have been sharply reduced. 2023 projections went from a 3.4% growth to a 1% growth (WTO, 2022).
- According to the Trade Openness Index, world economic integration has been in a slow decline since 2008, for the first time since World War II (Irwin, 2022)

Supporting signs:
- Emerging economies moving away from the US dollar
- COVID-19 and the threat of other pandemics

Conflicting signs:
- Croatia joining the Schengen Area in 2023
- Increasing green shipping technologies and decarbonizing the shipping industry.

Potential implications for the futures of ESG: Some deglobalization principles are aligned with environmental efforts. Lesser global trade could lead to significantly lesser emissions within the transport industry. However, a less articulated and interconnected world may also be less capable of addressing global challenges like climate change or propelling the UN’s Sustainable Development Goals. In any case, the delicate balance between globalization and deglobalization will have a direct impact on the future of ESG.

b. Scenarios

Before getting into the scenario descriptions, the table below works as a helpful guide to consider which are some of the most relevant ESG dynamics discussed in this report and how they contrast with each other in each scenario.

	Scenario 1 *Playing with fire*	**Scenario 2** *The missed train*	**Scenario 3** *Boxing through progress*	**Scenario 4** *The Bittersweet Tech Miracle*
Overly Complex ESG landscape	Continue to grow	Eliminated through mandatory regulations	consistently reduced by harmonization and regulations	Shifts to local social and governance metrics
Disparities between E, S, & G	Remain persistent as they currently are (More E, less S, and lesser G)	All of them become equally forced by legal mandates.	More balanced, holistic approach across E, S, & G	S becomes the most relevant, G becomes more important, and E decreases
ESG Financial Momentum	Soars	Crashes	Steady growth	Steady decrease
Mandatory regulations for ESG	Scattered and local	Criminal penalties	Articulated and comprehensive	Scattered and local
Greenwashing	Remains prevalent	Paid with jail time	Significant fines	Shifts to social and governance false claims

i. **Scenario 1**. "*Playing with fire.*"

Climate action remains a high priority in society and the political agenda. New technologies also greatly contribute to creating a more efficient economy. However, effective, tangible efforts to meaningfully revert economic degradation are unarticulated and on a need-to basis. Such efforts have been just enough to dodge catastrophic environmental events, but the overall trend of environmental degradation remains dominant.

Nevertheless, climate change and climate action have inadvertently allowed new opportunities, resulting in an overall trend of economic growth in Canada.

For instance, rising global temperatures have opened up more land in northern Canada for farming. Increased farming in historically remote areas has also sparked the need for larger infrastructure, services, and rising economic activity in such areas.

Moreover, global warming has also driven a migratory influx into Canada, particularly from tropical regions where the temperatures have become particularly high, resulting in massive migration from these regions. Furthermore, rising temperatures have resulted in higher average temperatures across Canada, and shorter winters, making Canada a more appealing destination to qualified workforce looking to immigrate. Consequently, the Canadian population and workforce have experienced healthy and steady growth.

However, the cost of this economic growth has been high to the environment and to society. Poles have been severely reduced, and wildlife and biodiversity have suffered greatly. Pandemics have been increasingly common, respiratory diseases have doubled, and overall mental health has deteriorated.

Moreover, economic growth has not reached all communities at the same level. Indigenous communities, some rural communities in remote provinces and territories, and racialized and marginalized communities have not enjoyed the same levels of economic prosperity. In fact, social inequities and gaps are steadily becoming wider.

Calls for social equity and Indigenous reconciliation remain present. However, because there is an overall sense of general economic prosperity among large portions of Canadian society, such claims are not enough to drive a robust, articulated set of policies, regulations, or business practices. Some progress on social and governance factors has been made, but that progress has been sporadic and irregular across the different industries, provinces, and territories.

ESG assets and ESG-driven investment continue to proliferate, as does the overall Canadian market, in line with the increased economic performance. Therefore, the incentives and need for businesses to report ESG metrics and to achieve a high score has also increased, even if

that ESG score has yet to reflect real operational progress on ESG metrics. Consequently, the overly complex ESG landscape has continued to grow, and greenwashing practices have also peaked.

In sum, this scenario explores the possibility that economic growth and climate crisis can coexist in the specific Canadian context for the following 20 years. Social inequities and corporate governance goals are also yet to be achieved, and the overall ESG remains an afterthought. Meanwhile, the threat of a major catastrophic event continues to loom large.

ii. **Scenario 2**. "*The missed train*"

Despite failing to meet the emission goals in 2030 and missing the window of opportunity to keep global warming within 1.5 Celsius, overall trends on global greenhouse emissions and climate degradation continued to show a steady increase.

Several significant environmental tipping points have been reached, and as a result, several nations are facing a situation of structural collapse. Global supplies of food and fresh water are declining due to water contamination and continuous flooding.

Canada has managed to stay relatively afloat, mainly because of its financial and natural resources. However, other countries are publicly urging and even threatening to sanction Canada if it does not continue sharing its significant reserves of freshwater, despite the fact that Canada is already supporting global efforts to mitigate scarcity. Tensions are on the rise.

As a desperate measure to reduce emissions, the Canadian government has intervened in the capital markets. The intervention resembles previous similar efforts in Canadian history, such as the 1980 National Energy Program (NEP) or the measures taken during the 2008 financial crash. However, in this critical emergency case, the government intervention level is much more significant.

The government has launched a comprehensive "Federal Emergency Plan," which includes the right to immediately and forcibly dismantle any power generation plant based on fossil fuels. It has also imposed a mandatory federal cap on greenhouse emissions across all sectors based on their importance in maintaining essential public services or meeting the basic needs of the population.

All carbon offset programs have been suspended, and any breach of the emissions cap is considered an offense carrying criminal charges for board members, directors, and any other representative of the organization in question.

Such measures have precipitated a harsh economic reality. Overall economic activity has drastically decreased to remain within the newly-imposed cap, leading to lower productivity and higher scarcity levels. With a growing demand for fewer products, inflation has also peaked. As a result, political and social unrest has also sparked, and protests and civil unrest have become typical scenes in major Canadian cities.

Nevertheless, many social, business, and government forces have come together to articulate joint efforts and respond to the situation. Disruptive innovation and collaborative approaches across society, governments, and businesses are striving and peaking, driven by the sense of survival.

Regarding ESG, the main driver of the system has shifted from a system of social and market incentives to a legal mandate based on the priorities outlined in the "Emergency Federal Plan." Such a plan also lists strategic focus areas for investment. Investors are being required to invest following a mix of "voluntary investment" and "required investment" to fund these "strategic focus areas." Investment in the focus areas is centrally allocated by an “Investment Committee” created by the federal government on a need-to-basis. The Investment Committee has representatives from large banks, large asset managers, and provincial securities agencies, but the final allocation decision rests with the Federal Government representative.

As a way to keep investors in the markets, minimal (and modest) growth targets have been set by the government for any "required investment," and any investor that does not reach the minimal growth will be awarded some kind of palliative benefit, such as tax credit.

Some investors moved away from the financial markets, and some others endorsed these efforts to prevent further collapse, even at the cost of lesser returns. In any case, ESG decreased its financial momentum, and the entire ESG ecosystem of multiple frames, standards, raters, and related actors, shrank significantly.

In sum, this scenario explores the possibility that sufficient corrective action is only taken after major tipping points are reached. The social, economical, and political consequences of this scenario are tremendous. Drastic and painful action is the only way out. However, this scenario also triggers meaningful, joint efforts across different actors to drive structural change.

iii. **Scenario 3.** *"Boxing through progress."*

After Canada fell short in achieving its 2030 greenhouse gas emissions target, and in line with visible, ongoing environmental degradation, different social actors, businesses, and political actors came together to articulate further a common agenda to promote and incentivize decisive action into a more sustainable economy and way of living.

Such efforts started gaining supporters and momentum. However, as the agenda demanded more structural and meaningful change and increased its impact on existing businesses and structures, growing skepticism also started to mount.

Pro-agenda subscribers mainly argue that it was imperative to significantly reduce the pace of environmental degradation, even at the cost of economic degrowth. According to them, that was the only way to buy enough time to achieve a full transition into clean energies and to allow new eco-materials, recycling, cleaning, and carbon-capturing technologies to build up and reverse climate degradation.

Conversely, anti-agenda subscribers argued the agenda was technically unfeasible and financially unrealistic. According to them, the cost of undertaking such an effort was tremendously high for the Canadian economy but would also harm public services, including health, education, and transit. Therefore, the agenda was self-defeating because it entailed reversing other areas of the broader conception of sustainable development.

Politicians tried to tap into the political capital of each side and translate such social claims into policies and regulations or prevent initiatives that may have been detrimental to their agenda from becoming policies or regulations. Such power dynamics and conflicting agendas resulted in slow and irregular policy and regulatory progress toward structural change and sparked episodes of social conflict and political polarization.

Nevertheless, the relative political and regulatory paralysis has triggered coordinated responses from a significant, highly-committed portion of society and businesses to take decisive action. Despite continuous setbacks and rising conflicts, there are growing spaces for deep and meaningful conversations to improve ESG efforts and tangible progress toward sustainable development goals. Over time, such efforts eventually resulted in stronger coordinated action across different stakeholders.

From an ESG standpoint, the efforts driven mainly by social will and committed businesses have achieved significant progress in some structural shortcomings of ESG efforts. Progressively, ESG is effectively embedded in meaningful ways into emerging business models and is less seen as an afterthought.

Moreover, The conception that the E, the S, and the G, are deeply intertwined and that all factors must be addressed holistically becomes predominant. Therefore, intrinsic imbalances within ESG have been addressed slowly but steadily.

Efforts to unify ESG frameworks and standards were prioritized by global and local organizations in the ESG arena, driven by the meaningful involvement of many businesses, large portions of society, and some government actors. All ESG standards and frameworks that

do not meet emerging industry standards are being left behind. In fact, a large portion of them has effectively disappeared at this point.

Similarly, all the supporting ESG industries, including raters, external auditors, ESG software companies, and ESG data providers, have agreed to meet these emerging universal standards. A viable, manageable ESG landscape has been achieved by the collective action of social and business actors, despite regulatory and policy inconsistencies. The current ESG landscape allows some level of divergence to accommodate differences across industries while remaining manageable and allowing comparable and better-quality data.

However, before achieving such correcting action, high levels of unrest and conflict have been experienced, and the progress made so far is relatively fragile since it is yet to be equally endorsed across all businesses and social actors and does not have an articulated legal and regulatory landscape to back it up.

In sum, this scenario explores the possibility that meaningful, corrective action is taken mostly by social and business actors just before any major environmental tipping points are reached. Moreover, this scenario also sees a higher level of meaningful and articulated action to address the underlying ESG issues mentioned in the previous section of this report, such as the intrinsic imbalances among ESG factors.

Attempting to enforce fully coordinated action without an undeniable certainty of a real and existential threat will be unlikely a linear effort. There will potentially be complex power dynamics and conflicting interests operating.

iv. **Scenario 4**. *The Bittersweet Tech Miracle.*

Once-emerging technologies are now mainstream, cheaper, and accessible. These new technologies range from more efficient clean energies, waste management systems, carbon capture, and clean energy storage, among others. These technologies have been instrumental in achieving major levels of global transition into clean energies and circular economy.

Climate degradation is not only being stopped but is slowly showing signs of regression. The earth is healing little by little. The largest economies worldwide, such as the EU, USA, China, Japan, Australia, and Canada, systematically continued their efforts to a full transition into a 100% clean grid. Clean technologies in other highly polluting industries like transportation or construction are also available, reducing general emissions in Canada and globally.

Although there are still important levels of pollution and waste, new technologies in recycling, ocean cleaning, and carbon capture, among others, have allowed for maintaining Canadian and global output within planetary boundaries.

Other technologies, such as digitalization or artificial intelligence, have also become dominant and have allowed more efficient ways to do daily activities such as banking, learning, going to the doctor, and socializing, among others. However, increasing overdependence on new technologies has also entailed a new arride of social issues.

Rural communities, Indigenous communities, refugees arriving in Canada, and other communities with lesser or slower access to the internet or digital tools, are becoming structurally marginalized by these technologies. Continuous access for these communities to basic public services such as health and education is compromised in this digital era.

Since the urgency of climate action is no longer present with the same level of intensity to drive investment decisions, ESG has lost momentum in the Canadian and global capital markets. Investment in social and governance factors is still deemed relevant to a small subset of investors but is insufficient to promote joint, meaningful action across different stakeholders. Moreover, problems around data quality and transparency remain persistent. Even with new AI technology, “socialwashing” and “governwashing” practices continue to grow.

In sum, this scenario explores how current emerging technologies, such as storing sands for cleaning energies, solar windows, and carbon capture, may become fully operational and

mainstream in the next decades. Such new technologies could meet urgent environmental needs and eventually begin a slow but steady environmental recovery process.

However, these new technologies create a new array of social inequities and structurally marginalize already vulnerable communities across Canada. Moreover, without the "E" element as the main driver of ESG global efforts, other systems may need to be designed to attend to this new set of social and governance challenges. ESG as we know it may no longer be a suitable vehicle to drive global progress toward UNs SDGs. Social factors particularly may become increasingly local, and existing social gaps may continue to grow.

c. Scenario Implications

Scenarios are useful tools because they allow us to think about future implications for stakeholders and the ESG space as a whole. Below, scenario-specific implications for public companies, large private companies, the ESG regulatory landscape, and the supply chain are considered.

Implications *Playing with fire* scenario

Brief description	No structural change is made towards ESG. Current dynamics remain persistent, and the overall ESG landscape grows larger and more complex, driven by financial and macroeconomic growth.
Direct implications for public companies	Greenwashing remains present, and the underlying issues on ESG have not been entirely addressed. As a result, investors' trust in ESG reporting has significantly eroded. Successful organizations will likely need to aim to go above and beyond with their reporting. They leverage blockchain and AI technologies to offer real-time validation of their ESG claims and use a comprehensive communication strategy to differentiate themselves from greenwashers and tap into impact and ROI-driven investment.
Direct implications for large private companies	Privately owned companies will not be required by law to report ESG metrics. However, there will be an increasing number of private companies reporting ESG and mounting expectations from consumers and employees. Therefore, reporting good-quality ESG metrics is strategically advisable. No legal mandate means private companies can still pick the right time and place to ramp up their ESG reporting.

Implications for the ESG regulatory landscape	The ESG regulatory landscape remains highly irregular. Large and listed organizations will both be required to respond to different regulations simultaneously, depending on the industry and the different locations where they have active operations. Active environment scan and stakeholder engagement will be critical to responding to a highly irregular landscape.
Implications for supply chain	Growing complexity will potentially mean that smaller businesses and suppliers may lack the required resources to engage in ESG reporting efforts. Consequently, there will be higher incentives for small suppliers to greenwash. And most options will be only limited to larger suppliers, who will probably increase their prices as they become increasingly demanded.

Implications for "*The missed train*" scenario

Brief description	Comprehensive, tangible, and articulated actions towards ESG are made across all relevant stakeholders, but only after major environmental tipping points and a situation of environmental collapse has been reached.
Direct implications for public companies	ESG disclosures for public companies are legally binding, and any misrepresentation can carry large fines. In cases of ESG-related breaches by gross negligence or willful misconduct (like proven greenwashing), board members and senior management directly responsible for ESG obligations could face criminal charges. ESG leaders need to have immediate and continuous access to C-suite executives. Additional safety and risk management protocols must be designed. Sufficient insurance needs to be secured at all times.
Direct implications for large private companies	Large private companies will also be held to the same legal standards as listed companies. However, as a result, the associated costs of going public are lower. Therefore, for those private companies that are in a good position to go public, it could be a good strategy to go public to secure the required funds to comply with the new mandatory regulations.
Implications for the ESG regulatory landscape	The overall regulatory landscape on ESG is punitive and highly regular. Large and public companies will be exposed to the same regulatory risks, regardless of the industry or geographical location.
Implications for supply chain	Organizations with a legal mandate to comply with ESG standards will likely need to be prepared to immediately drop any supplier at the slightest sign of a potential breach of ESG obligations. In this sense,

	backup suppliers will need to be at hand, and the cost of inventory will likely rise as organizations will need to be ready for supply chain disruptions.

Implications for *Boxing through progress* scenario

Brief description	Tangible and articulated actions towards ESG are made across an increasing number of relevant stakeholders before any major environmental catastrophe or tipping points are reached. Change is achieved through a slow, complex, and intricate path of conflicting interests and power dynamics.
Direct implications for public companies	ESG is increasingly becoming more regulated and controlled by public companies. However, a more controlled ESG landscape with lesser frameworks and standards means that ESG processes have become more standardized and easier to manage. Additionally, increased transparency has resulted in more ESG investment. In this scenario, it is critical to reach out to work collaboratively with regulators and policymakers to ensure that emerging regulations are balanced and well-designed. In this scenario, it is also important to open channels for customers and employees to participate in the discussion. The main challenge is to navigate the high level of polarization and political conflict. Therefore, ESG reporting must be designed to be neutral and flexible.
Direct implications for large private companies	Mandatory ESG regulations for private companies are already being assessed in some provinces and industries. In this scenario, it is crucial that private companies are well-prepared for imminent legal obligations arising from ESG.
Implications for the ESG regulatory landscape	Incentives contribute to ESG efforts, applicable regulations, and the level of ESG importance will significantly change depending on the geographical location or the industry.
Implications for supply chain	As the overall complexity of the ESG landscape is reduced and there is a steady standardization of reporting metrics, an increasing number of suppliers of smaller and larger suppliers should be able to navigate the ESG landscape.

Implications for *The bittersweet tech miracle* scenario

Brief description	New technologies allowed to address the climate crisis. However, new technologies also widen existing social gaps, and ESG as an instrument of global sustainable development is highly diminished.
Direct implications for public companies	The social factors of ESG have become dominant. Governance factors have also gained importance, and environmental factors remain present, but their importance has been on a steady decline. The S has become the new E. Therefore, S is the element most valued by potential investors. In this scenario, successful public companies have found ways to make tangible and meaningful contributions to social factors.
Direct implications for large private companies	Contributing to ESG efforts is relatively less urgent for large private companies. The resources required for ESG efforts can be placed to support other efforts in the company. The most relevant actions are associated with social factors. Private companies that have found innovative ways to achieve tangible progress in social factors relevant to the Canadian context have succeeded, regardless of their level of commitment to ESG efforts.
Implications for the ESG regulatory landscape	Policies and regulations regarding ESG practices will not be in the spotlight. In this scenario, organizations actively promoting new and meaningful ways to support social and governance causes will likely gain a competitive edge.
Implications for supply chain	ESG obligations across the supply chain may no longer be a major priority. However, managing a responsible supply chain, particularly around social metrics, could be highly desirable and will likely provide a competitive edge.

d. Scenario limitations

Although scenario generation is a useful tool for thinking strategically about the future and building resilience, it is critical to recognize and acknowledge its limitations in an honest and responsible way. The scenarios presented in this report are affected by at least four factors: i) personal bias and worldviews; ii) Geographical limitations on the primary research; iii) Rapidly evolving situations iv) the limited number of participants.

i) The scenarios generated in this report have been made by a single researcher with distinctive biases, worldviews, and preconceptions. Although valuable inputs have been collected through interviews, participatory design, and multiple work sessions with the Primary Advisor overseeing this research, certain choices and decisions have ultimately been made by the single author of the report. Therefore, there is a level of bias that must be considered. Ideally, this research would have been conducted alongside a diverse group of researchers that can bring different lenses and worldviews to the research.

ii) The scenarios generated in this report aim to address the Canadian context. The Canadian context can be vastly different depending on the province, city, or territory. However, most of the primary research made to support the Canadian context has been done in the Province of Ontario and, most specifically, the Greater Toronto Area (GTA). Therefore, the primary research undertaken may not be enough to capture the differences in provinces and cities across Canada. Ideally, this research would have more time and financial resources to undertake research activities in a wider range of Canadian cities, provinces, and territories to capture the full essence of the national context.

iii) This report and its scenarios are based on a snapshot of the overall ESG situation at this specific moment in time. However, ESG is a highly complex and dynamic system continuously evolving. As time goes by, the veracity and usability of the assumptions made to build the scenarios may decrease. Ideally, scenario generation efforts are continuously revised and assessed as new inputs, signals, and trends emerge.

iv) Among the different primary research methods used in this project, there were nine unstructured interviews and a single participatory design workshop with seven participants. All participants in both methods gracefully offered their opinion and expertise on relevant areas for this research and provided meaningful and valuable insights. However, fully addressing a highly complex topic, such as ESG across Canada, would have benefited from a larger base of participants to gather an even wider range of opinions, worldviews, and stories.

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Conclusion

This project aimed to generate a set of possible scenarios for ESG in Canada by 2043 and draw some potential implications for large and public companies. However, considering the distinctive capacity that large and public organizations can have to augment ESG efforts across the entire Canadian economy, and the existing correlation between ESG and United Nations SDGs, this report can benefit a larger set of relevant actors, including policymakers, regulators, and social organizations pushing for expanding ESG practices.

The overarching purpose of this project is that the scenarios, the implications, and the overall systemic analysis articulated in this report can help key stakeholders to build future-oriented strategies, gain resilience, and be better prepared for the challenges ahead. This research hopes to become a humble contribution to making tangible and meaningful progress to the complex challenges currently faced on environmental, social, and governance issues.

With this goal in mind, the first section of this report briefly introduces some key elements of the global dynamics around ESG and highlights the direct relation between ESG efforts and the United Nations Sustainable Development Goals. The first section also introduces the research process and methodology to the reader to provide a clearer understanding of the report's structure, overall goal, and scope.

The second section delves into the current local situation, exploring some similarities and differences between the global ESG context and the Canadian-specific ESG context and referencing Canada's environmental, social, and governance factors. The section continues by introducing a high-level, clustered map of the relevant stakeholders in the ESG spaces to continue drawing a clear picture of ESG in Canada. Finally, all these findings and research of the Canadian context are poured into several systems archetypes to create one single, interconnected, systemic view of the current Canadian context.

Lastly, the third and final section of the report articulates a set of four possible yet distinctive scenarios for ESG in Canada by 2043. These scenarios are informed by relevant

emerging trends, primary and secondary research, and all the knowledge built in the two previous sections. The section finalizes with a set of potential implications for large and public companies in each one of those possible future scenarios.

Although the main goal of this research was to create a set of possible scenarios to help key stakeholders in the ESG space, there are other learnings in the way that can also offer value. For instance, this research identifies and contextualizes specific dynamics and challenges within Canada, such as the lack of mandatory regulations on ESG practices in Canada, the vast asymmetries on environmental factors accross different industries and sectors, the underlying challenges to effectively measure social factors, or the different legal obligations among public and privatly held businesses on governance factors.

This MRP also identifies highly relevant dynamics on ESG and matches them to systemic archetypes, offering an excellent opportunity to better understand highly complex dynamics happening below the surface. Moreover, this MRP also introduces a number of emerging trends that may play a significant role in shaping the futures of ESG.

All these additional learnings offered by this research can also be helpful and valuable to any person in the ESG space. For instance, systemic archetypes can be used to find potential points of intervention and improve the overall ESG system. Similarly, each one of the trends can help to think creatively about the future, identify risks, and seize opportunities.

References

Arthur, J. (2023). Subscription-based companies outpace the S&P 500, says new research. Performance Marketing World. Link to article here

Arvidsson, S., & Dumay, J. (2021). Corporate ESG reporting quantity, quality and performance: Where to now for environmental policy and practice? Business Strategy and the Environment, 31, 1091–1110. here

Alliance Manchester Business School. (2022). Brand Activism: Why It's No Longer Sufficient For Businesses To Remain Reactive To Societal Issues. Forbes. Link to article here

Auxier, B., & Silverglate, P. H. (2021). About one-third of consumers report feeling overwhelmed by tech management during COVID-19. Deloitte Insights. Link to article here

Bennani, L., le Guenedal, T., Lepetit, F., Ly, L., Mortier, V., Roncalli, T., & Sekine, T. (2018). How ESG Investing Has Impacted the Asset Pricing in the Equity Market. SSRN Electronic Journal. Link to article here

Berg, F; Koelbel, J; Rigobon, R (2022) Aggregate confusion: The divergence of ESG ratings. Review of Finance. Oxford. Link to article here

Bishop, P., Hines, A., & Collins, T. (2007). The current state of scenario development: an overview of techniques. Foresight, 9(1), 5–25. Link to article here

Blair, M. (2021). Evolution Of ESG Reporting Within the Canadian Energy Industry (Unpublished master's project). University of Calgary, Calgary, AB. Link to article here

Braun, W. (2002). The System Archetypes. Link to article here

Brinks, R., & Birke, S. (2023). Compare the Big Five Canadian banks in April 2023. Finder CA. Link to article here

Canada, I. (2023). Government of Canada invests in Zero Emission Public Transit Infrastructure in Toronto. Canada.ca. Link to article here

Canada Revenue Agency. (2023, March 17). Type of corporation. Canada.ca. Link to article here

CFA Institute. (2020). ESG Integration in Canada. Link to article here

Canada, E. a. C. C. (2023, April 14). Greenhouse gas emissions. Canada.ca. Link to article here

Chancel, L. (2021.). Global Carbon Inequality over 1990-2019. Link to article here

Christensen, Zach (2022) Inequality: Global trends — Development Initiatives. Development Initiatives. Link to article here

Consolandi, C., Eccles, R. G., & Gabbi, G. (2020). How material is a material issue? Stock returns and the financial relevance and financial intensity of ESG materiality. Journal of Sustainable Finance & Investment, 12(4), 1045–1068. Link to article here

Cuhls, KE. Horizon Scanning in Foresight – Why Horizon Scanning is only a part of the game. Futures Foresight Sci. 2020; 2:e23. Link to article here

Curry, A., & Schultz, W. (2009). Roads Less Traveled: Different Methods, Different Futures. Journal of Futures Studies, 35–60

Dator, J. (2009). Alternative futures at the Manoa School. Journal of Futures Studies

Delgado-Ceballos, J., Ortiz-De-Mandojana, N., Antolín-López, R., & Montiel, I. (2023). Connecting the Sustainable Development Goals to firm-level sustainability and ESG factors: The need for double materiality. BRQ Business Research Quarterly. Link to article here

Dentons (2023) Guide to going public and listing in Canada Q3 2021

Dorfleitner, G., Kreuzer, C., & Sparrer, C. (2020). ESG controversies and controversial ESG: about silent saints and small sinners. Journal of Asset Management, 21(5), 393–412. Link to article here

Eccles, R. G., Lee, L.-E., & Stroehle, J. C. (2020). The Social Origins of ESG: An Analysis of Innovest and KLD. Organization & Environment. Link to article here

Escrig, E., Fernández, M., Ferrero, I., Rivera, J., & Munoz, M. (2019). Rating the Raters: Evaluating how ESG Rating Agencies Integrate Sustainability Principles. Sustainability of Organizations and CSR Management Research Group-IUDESP, University Jaume I. Link to article here

ESG and Responsible Institutional Investing Around the World: A Critical Review - Google Play. (n.d.). Link to article here

Environment and Climate Change Canada. (2019). Canada's climate is warming twice as fast as global average. Link to article here

ESG Investing: Cure-all or Placebo? (2021, October 20). Kenaninstitute.Unc.Edu. Retrieved August 20, 2022. Link to article here

ESG Reports and Ratings: What They Are, Why They Matter. (2017, July 27). The Harvard Law School Forum on Corporate Governance. Retrieved August 7, 2022, Link to article here

Fein, M., ESG Investing by Pension Fiduciaries in Canada (March 2019). Available at SSRN: Link to article here

Feldman, K. (2018). Input-Process-Output (I-P-O) - isixsigma.com. Link to article here

Friede, G., Busch, T., & Bassen, A. (2015). ESG and financial performance: aggregated evidence from more than 2000 empirical studies. Journal of Sustainable Finance & Investment, 5(4), 210–233. Link to article here

Gartner. (2022). Gartner Predicts 25% of People Will Spend At Least One Hour Per Day in. Link to article here

Gelles, D. (2023, March 2). How Environmentally Conscious Investing Became a Target of Conservatives. The New York Times. Link to article here

Giese, G., Lee, L. E., Melas, D., Nagy, Z., & Nishikawa, L. (2019). Foundations of ESG Investing: How ESG Affects Equity Valuation, Risk, and Performance. The Journal of Portfolio Management, 45(5), 69–83. Link to article here

Gwi. (2023.). The World Wide Ebb - Social Media's Tipping Point. Link to article here

Government of Canada, Innovation, Science and Economic Development Canada, Office of the Deputy Minister, Competition Bureau Canada & Competition Bureau Canada. (2022, January 20). Environmental claims and greenwashing. Link to article here

Government of Canada, Statistics Canada. (2022). The Daily — To buy or to rent: The housing market continues to be reshaped by several factors as Canadians search for an affordable place to call home. Link to article here

Government of Canada, Statistics Canada. (2022, June 27). Small and medium businesses: driving a large-sized economy. Statistics Canada. Link to article here

Government of Canada, Statistics Canada. (2022a, April 28). The Daily — Study: Canadians' use of the Internet and digital technologies before and during COVID-19 pandemic. Link to article here

Government of Canada, Statistics Canada. (2023, April 27). Employment, average hourly and weekly earnings (including overtime), and average weekly hours for the industrial aggregate excluding unclassified businesses, monthly, seasonally adjusted. Link to article here

Henisz, W., Koller, T., and Nuttall., (2019). Five ways that ESG creates value: Getting your environmental, social, and governance (ESG) proposition right links to higher value creation. Here's why. Mckinsey Quarterly Link to article here

IFRS - ISSB describes the concept of sustainability and its articulation with financial value creation, and announces plans to advance work on natural ecosystems and just transition. (n.d.).Link to article here

Irwin, D. (2020) The pandemic adds momentum to the deglobalisation trend. CEPR. Link to article here

Kemeny, J. (2016, September 23). "Accidental Adversaries": When Friends Become Foes - The Systems Thinker. The Systems Thinker. Link to article here

Kell, G. (2018, July 11). The Remarkable Rise Of ESG. Forbes. Link to article here

Klyne, M. (2023) Canada, Senate: Canada's digital divide hurts Indigenous and rural communities: Senator Klyne. SenCanada. Link to article here

Korzinski, D. (2023). Islamophobia in Canada: Four mindsets indicate negativity is nationwide, most intense in Quebec. Angus Reid Institute. Link to article here

Kotsantonis, S., & Serafeim, G. (2019). Four Things No One Will Tell You About ESG Data. Journal of Applied Corporate Finance, 31(2), 50–58. Link to article here

Matos, P. (2020) ESG and Responsible Institutional Investing Around the World: A Critical Review – CFA. Link to article here

McDougall, M. (2023, April 4). News release: 2023 Federal Budget ushers in new era for Canadian renewables - Canadian Renewable Energy. Canadian Renewable Energy Association. Link to article here

McCarthy, S (2021) Net-zero report card: How future-friendly are Canadian provinces? Corporate Knights. Link to article here

Meadows, D. (2015). Thinking in Systems. Chelsea Green Publishing.

Neilan, J; Reilly P; Fitzpatrick, G. (2020) Time to Rethink the S in ESG. The Harvard Law School Forum on Corporate Governance. Link to article here

Norges Bank Investment Management. (2021, July). The Asset Pricing Effects of ESG Investing. DISCUSSION NOTE. Link to article here

Lang, N., Schellong, D., Sadek, P., & Wachtmeister, A. (2023). Driving Success in Car Subscriptions. Canada - EN. Boston Consulting Group. Link to article here

Luc Hoffmann Institute. (2019, February 20). The Three Horizons framework explained by Bill Sharpe [Video]. YouTube. Link to video here

Orazalin, N., Ntim, C. G., & Malagila, J. (2023). Board Sustainability Committees, Climate Change Initiatives, Carbon Performance, and Market Value. British Journal of Management. Link to article here

Organisation for Economic Co-operation and Development (OECD). (2019, October). Strategic Foresight for Better Policies Building: Effective Governance in the Face of Uncertain Futures. OECD. Link to article here

Parker, K., Igielnik, R., & Mitchell, T. (2023). On the Cusp of Adulthood and Facing an Uncertain Future: What We Know About Gen Z So Far. Pew Research Center's Social & Demographic Trends Project. Link to article here
Porter, M. (2021, July 19). The Changing Role of Business in Society. Retrieved March 5, 2023, Link to article here

Porter, M. E., Serafeim, G., & Kramer, M. (2019, November 20). Where ESG Fails. Institutional Investor. Link to article here

PRI. (2023). Canada: Integrating sustainability goals across the investment industry. Link to article here

PricewaterhouseCoopers. (2022). How to measure your ESG performance. PwC. Link to article here

PricewaterhouseCoopers. (2022.). ESG-focused institutional investment seen soaring 84% to US$33.9 trillion in 2026, making up 21.5% of assets under management: PwC report. PwC. Link to article here

PricewaterhouseCoopers. (2022.). 2023 Canadian ESG Reporting Insights. PwC. Link to article here

Rhisiart, M., Miller, R., & Brooks, S. (2015). Learning to use the future: developing foresight capabilities through scenario processes. Technological Forecasting and Social Change, 101, 124–133. Link to article here

Responsible Investment Association. (2022). Canadian RI Trends Report -. Responsible Investment Association. Link to article here

Saul, J. (2022) Fixing the S in ESG. Stanford Social Innovation Review. Link to article here.

Sebastiensomchit. (2021). The ESG Global Survey 2019 - Securities Services. Securities Services. Lnk to article here

Service Canada. (2022, July 12). 2030 Emissions Reduction Plan – Sector-by-sector overview. Canada.ca. Link to article here

Sharma, M. (2022, January 12). How the Metaverse Could Worsen the Digital Divide. Lifewire. Link to article here

Sharpe (n.d.,)Three Horizons | International Futures Forum. Link to article here

Smart Cities World, (2022). Cities urged to prepare for more extreme urban heat. Smart Cities World News. Link to article here

Sustainable economy: Parliament adopts new reporting rules for multinationals | News | European Parliament. (2022, October 11). Link to article here

Sustainable Development Goals | United Nations Development Programme. (n.d.). UNDP. Link to article here

Taylor, J. (2023). Changing migration trends across Canada. Business Council of Alberta. Link to article here

The Corporate Governance Institute. (2023, March 16). ESG reporting standards and frameworks: the differences - CGI. Link to article here

The Hartvard Law School Forum on Corporate Governance. (2021). Corporate Governance Update: "Materiality" in America and Abroad. Link to article here

The GSIA Releases its Global Sustainable Investment Review 2020 - Responsible Investment Association. (2021, July 19). Responsible Investment Association. Link to article here

The rising role of social media 'finfluencers' - Financial services blog | Deloitte China. (n.d.). Deloitte China. Link to article here

Telem, D. (2022, September 29). The ESG imperative. KPMG. Link to article here

Tocchini, F., & Cafagna, G. (2021, January 6). The ABCs of ESG reporting: What are ESG and sustainability reports, why are they important, and what do CFOs need to know. Wolters Kluwer. Retrieved August 6, 2022. Link to article here
UNHCR - The UN Refugee Agency. (2023). Frequently asked questions on climate change and disaster displacement. UNHCR. Link to article here

Veenstra, E. M., & Ellemers, N. (2020). ESG Indicators as Organizational Performance Goals: Do Rating Agencies Encourage a Holistic Approach? Sustainability. Link to article here

Voros, J. (2003). A generic foresight process framework. Foresight, 5(3), 10–21. Link to article here

Youngblood, M. (2020) "Extremist ideology as a complex contagion: the spread of far-right radicalization in the United States between 2005 and 2017." Humanit Soc Sci Commun. Link to article here

Webb, A. (2016). The signals are talking: why today's fringe is tomorrow's mainstream. PublicAffairs

Whitton, F. (2022). COP27: No deal to phase out oil and gas, but the energy transition continues - Clean Energy Canada. Clean Energy Canada. Link to article here

Williams, A. (2022). ESG Reporting for Investors: Trends and Drivers — Chronos Sustainability Ltd. Chronos Sustainability Ltd. Link to article here

Wilkinson, L. (1995). How To Build Scenarios. WIRED. Link to article here

World Economic Forum. (2023). Deglobalisation: here's what you need to know. Link to article here

World Economic Forum. (2023). What's the price of a green economy? An extra $3.5 trillion a year. Link to article here

World Economic Forum. (2023). 8 cities rewilding their urban spaces. Link to article here

World Trade Organization. (2022). Trade growth to slow sharply in 2023 as global economy faces strong headwinds. Link to article here