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Canada's Position in the Global ESG Movement

FOREWORD

Driven by planetary, social, and demographic change, investor sentiment has shifted from profit-driven to conscience-driven investing. Propelled by this change, global regulators and standards bodies are responding with efforts to improve investor transparency and enhance the effectiveness of sustainability reporting.

The resource-rich nature of Canada provides opportunities for this country to play a pivotal role in climate change solutions, but it also introduces other considerations as the world collectively drives towards net zero. To meet its net zero targets, it will be critical for Canada to reflect indigenous views and knowledge in its ESG principles and measurement frameworks. Canada is currently trailing behind other jurisdictions in terms of its ESG regulatory guidance and work is accelerating in this domain just in time, as global standards begin to converge.

The effort to shift an entrenched business landscape cannot be underestimated and comes with transition challenges that need to be thought through and overcome. Shortfalls in the availability and comparability of data and sophisticated tools to generate actionable insights is preventing organizations from meeting their ESG goals and ambitions.

A lot has been written on this global imperative. Our intention with this paper is not to cover familiar ground but to bring forth a Canadian perspective. We aim to examine Canada's progress in this global movement from a variety of lenses, surface opportunities, and successes, but also to measure performance as compared to other jurisdictions and call out challenges.

Our objective, similar to the purpose of all our Canadian Regulatory Technology Association (CRTA) programs, is to bring forward not only

theoretical issues, but also practical, informed perspectives from the RegTech community.

Our principal goal at the CRTA is to bring together regulated entities, regulators, policymakers, and technology firms to address new challenges. ESG is one of these challenges, collectively shared across the financial services ecosystem; from investment firms, corporates, and intermediaries to technology solution firms all are impacted and have a critical role to play.

Our hope is that this document provides not only some insight and perspective on the current Canadian ESG landscape and the evolution of ESG disclosure, but also opportunities for your organization to be a part of the solution.

Eleanor Morrison

Strategic Advisor, The Canadian Regulatory Technology Association

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TABLE OF CONTENTS

Foreword	1
Executive Summary	3
Background	5
Standards and Regulatory Development: Where We Are Today	6
The Regulatory Approach in Canada	6
What the Experts Say: National Instrument 51-107	8
Europe Leads the Way, United States and Others Catching Up	9
What the Experts Say: European Asset Managers Face Challenges; Help is On its Way	10
Evolution Towards a Common Standard	11
What the Experts Say: What ISSB Standards Development Means for Canada	14
What the Experts Say: Current State of ISO Standards	15
ESG in Canada – What Is Missing	16
Progress and Economic Transition Factors	16
Materiality and Maturity	17
Where is the “I” in ESG?	18
Regulatory Speed and Global Harmonization	19
What the Experts Say: Current State of ESG Reporting	20
Challenges in Implementing ESG Programs	21
Organisation ESG Program Preparedness and Adoption	21
Data Quality Challenges	22
The Devil is in the Details – Compliance and Risk Management	25
What the Future Holds	26
Solution Landscape	27
Case Study: Innovative Solution for ESG Programs	29
What Canada Needs to Do to Move the Needle	30
Conclusion	32
Appendices	32
Definitions and Acronyms	33
Contributors	36
About the Authors	36
Endnotes	37
About the Canadian Regulatory Technology Association (CRTA)	39

EXECUTIVE SUMMARY

Corporate valuations are no longer measured solely in terms of financial returns, capitalization structure, and expected future growth. Criteria relating to environmental concerns, social priorities, and governance, known as ESG, are now central to futureproofing corporate valuations and communication of corporate performance to ESG goals to a wider audience.

ESG investors and civil society organisations have been demanding more transparency on ESG metrics and corporate sustainability mandates from corporations. This is not only happening in a direct sense, but also in terms of indirect exposure, for example, through supply chain and partner relationships. Corporations must now consider risk assessment and audit processes for all suppliers to ensure relevant ESG standards are defined, measured, and reported. This further extends environmental stewardship and sustainability practices to a larger scope of firms.

Underlying ESG momentum in the corporate world is the drive to integrate profits with purpose.

In 2020, the global assets under management related to sustainable investing were US\$35.3 trillion, a 15% growth since 2018.¹ Operationally, companies also see more substantial financial returns when integrating ESG into their decision-making. Companies are seeking to maintain their social license to operate and become more resource-efficient (thus reducing operational expenses).² Evidence has emerged that a solid ESG performance can lower a company's cost of capital by 10%,³ improve returns, and reduce environmental, reputational, and legal risk. Corporate ESG programs allow companies to communicate their ESG initiatives to investors and the public. An ESG program and reporting framework enables companies to track and transparently report on their ESG efforts and performance while also allowing investors to analyze a potential investment's ESG strategy and current scorecard. Measuring and reporting ESG metrics creates an internal firm opportunity to drive innovation, identify previously unknown risks, and, potentially, reduce costs.

What was once a choice is now being mandated. ESG reporting participation rate is driven not only by corporate sustainability consciousness and investors' commitment to ESG and demands for disclosure, but now also by regulatory directives. Europe led the way with carbon emission regulatory limits and has been leading the charge to implement ESG disclosure and reporting regulation. Canada is playing catch-up, having only recently published regulatory proposals at the federal and provincial levels.

The ESG ecosystem is complex, with many, sometimes conflicting, ESG standards, laws, and regulations, which is counterproductive. There are currently an astonishing number of ESG metrics and standards in use. Consolidation of these standards is paramount to advancing the relevance of ESG reporting and tracking of the sustainable investment impact on the global environment. The only reasonable solution is for stakeholders, including financial institutions (FIs), technology providers, policymakers, and regulators, to work collectively to address the challenges of understanding what data and information to collect, which disclosure framework to employ, and how to ensure credible and auditable disclosure of ESG metrics.

In the drive to create a global ESG reporting standard, some flexibility must be permitted to allow for unique geographical and societal factors to be included. Firm size, regional energy intensity, and Indigenous populations are examples of unique characteristics that are not considered in the ESG reporting standards in use today. Canada is in a unique leadership position and has much to gain from working collaboratively to ensure Indigenous values and perspectives are considered and reflected in global ESG frameworks.

Data is key to driving a transformation challenge like ESG. The success of an ESG program is built on data capture, data analysis, and data-driven decision-making. Yet data challenges, such as availability, usability, comparability, and workflow integration, manifest downstream and are magnified when the sourcing and organizing of data has technical, structural, and integration complexity. The impact of poor data quality and unsystematic data organization is revealed by ESG reporting.

Successful ESG programs are led by leaders with strong visions that permeate through the organization and are well-understood. Strong ESG programs are led by leaders who understand the issues that are material to their organization, prioritize those issues, and then develop a plan of attack.

Implementing change programs of this size comes with inherent risk. Implementing change programs of this size comes with governance challenges, as compliance and risk management practices evolve and adjust in tandem. Fortunately, Canadian FIs can leverage the knowledge they gained from implementing [BCBS 239](#).

Technology solution providers are instrumental in collaborating with regulators and companies to develop solutions that meet both corporate needs and regulatory requirements. Technology providers and RegTechs are part of the solution as corporates and investors both require solutions to collect, track, and report on the vast amount of data. But open-source tools such as XBRL standards will be instrumental in lowering climate disclosure costs and improving reporting for the public good.

If a dozen futurists were to be asked what the ESG future holds for us, we would receive two dozen conflicting predictions. We brought in ESG practitioners to share their views on key topics discussed in this paper, but we also asked them the question: What does Canada need to do to move the needle, going forward? Although some shared cautionary wisdom, the overall tone from our experts was an optimistic one.

Canada has a role to play – it's time to execute. Who is better placed to lead on this global imperative than a resource-rich, diverse country like Canada? We may be behind now, but we have the potential, knowledge, and talent to lead and make a better future.

BACKGROUND

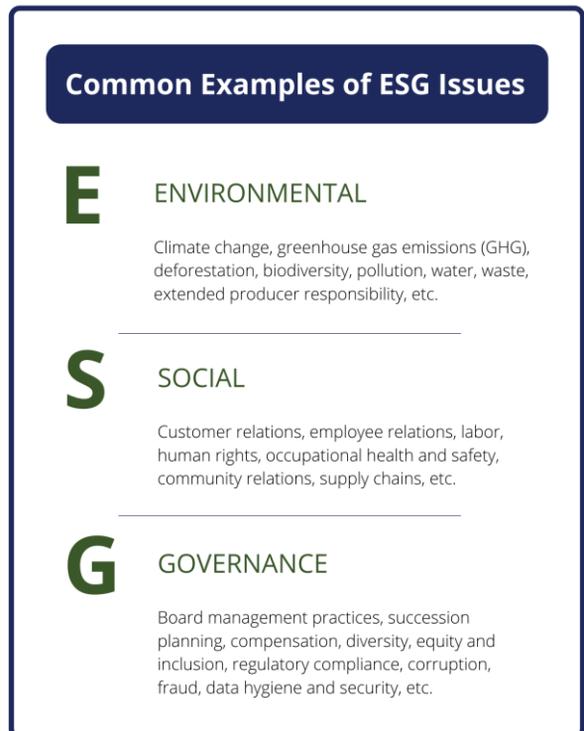
ESG terminology first gained widespread acceptance during the 2004-2008 World Bank-sponsored conference series called, “Who Cares Wins – Connecting Financial Markets to a Changing World.” This series brought together institutional investors, asset managers, financial service providers, global governmental bodies, and regulators to examine how the financial industry could better integrate environmental, social, and governance indicators into analysis, asset management, and securities brokerage; this marked a turning point towards sustainable investing.⁴

Before the ESG focus became mainstream, the term “responsible investing” meant actively considering ethical and moral criteria or views as part of the investment decision-making process. The approach to ESG differs from responsible investing, which considers avoiding investment in industries about which investors may have strong negative personal opinions, such as firearms and tobacco; ESG factors on the other hand, are

believed to have financial relevance. Another terminology that has been used prior to the arrival of ESG is “impact investing,” which refers to assisting an entity to complete a project, develop a program, or do something positive to benefit society.⁵

ESG investment factors cover a wide gamut (Figure 1) of issues that are not traditionally part of financial analysis yet are believed to have financial relevance. ESG benchmark metrics include non-financial disclosures that provide investors with information on risks such as environmental concerns (energy use, waste management, climate change); social priorities (labour relations, human rights, diversity and inclusion, product liability); and governance (leadership, philosophy, policies, practices, oversight, etc.).

Figure 1



Reference: Getting Started With ESG – Sustainalytics



STANDARDS AND REGULATORY DEVELOPMENT: WHERE WE ARE TODAY

The development of standards and regulations are often intertwined, and this is certainly true in the case of ESG. This section describes current regulatory approaches in Canada, examines the equivalent state in Europe and the U.S., and discusses efforts to evolve to a common standard, with expert opinions offered on what these developments mean for Canada.

The Regulatory Approach in Canada

The growth of interest in ESG investing and the increased evidence of greenwashing – companies making it appear they are doing more in the area of ESG than they actually are – have led securities regulators and international organizations to address transparency and benchmarking issues related to ESG investing, including ESG-focused investment funds.

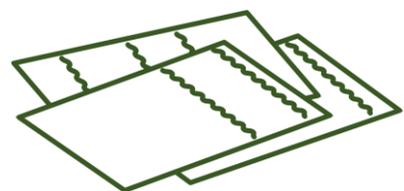
Recognizing the pace of change in both retail and institutional investors’ interest in and expectations of sustainable investment, and the need to strengthen sustainability policies and practices, as well as disclosure in the asset management industry, Canadian governmental and regulatory bodies are making strides to address ESG issues through guidance, regulation, and legislation.

The federal government’s 2022 Budget⁶ announced Climate Disclosures for Federally Regulated Financial Institutions, saying:

“The federal government is committed to moving towards mandatory reporting of climate-related financial risks across a broad spectrum of the Canadian economy, based on the international Task Force on Climate-related Financial Disclosures (TCFD) framework.

- The Office of the Superintendent of Financial Institutions (OSFI) will consult federally regulated financial institutions on climate disclosure guidelines in 2022 and will require financial institutions to publish climate disclosures—aligned with the TCFD framework—using a phased approach, starting in 2024.
- Separately, the government will move forward with requirements for disclosure of environmental, social, and governance (ESG) considerations, including climate-related risks, for federally regulated pension plans.”

The budget also commits federal financial support to the new International Sustainability Standards Board (ISSB) office recently awarded to Montreal. The ISSB is developing global sustainability standards to improve the quality and comparability of international corporate ESG reporting on ESG factors. The presence of an office in Canada will aim to help position Canada as a thought leader in sustainability reporting.



On January 14, 2022, based on replies to **OSFI's** January 11, 2021 climate-related financial risk consultation paper, seeking feedback on climate change risks that can affect the safety and soundness of federally regulated financial institutions (FRFIs) and federally regulated pension plans (FRPPs)⁷ and the results of the 2021 Bank of Canada-OSFI joint pilot project on transition risk scenarios, OSFI confirmed it would issue a draft guideline regarding its risk management expectations for FRFIs on climate-related financial risks. The areas covered by the guidance include governance and strategy, risk management, financial and operational resilience, with a focus on climate data analytics, scenario analysis for climate-related financial risks, climate-related capital and liquidity considerations, climate-related financial disclosures, stakeholder engagement, and expanding OSFI's own capabilities.

At the beginning of 2021, **Ontario's Capital Markets Modernization Taskforce (the Taskforce)** released its final report following consultations with and feedback from various stakeholders.⁸ The report sets out several recommendations that support the advancement of ESG factors such as mandatory adoption of diversity targets and standardized disclosure requirements, yet implementation is hampered by the limitations of the Ontario Securities Commission (OSC) mandate, which limits the OSC's ability to enact changes. The Final Report recognizes that the absence of a standardized disclosure framework has contributed to market confusion and is linked to compliance costs; it recommends a transition to the TCFD disclosure framework.⁹ Changes to the OSC's mandate and the Ontario Capital Markets Act are expected. In the meantime, the OSC will help to inform the process by determining which TCFD recommendations are within the scope of the OSC's current rules.

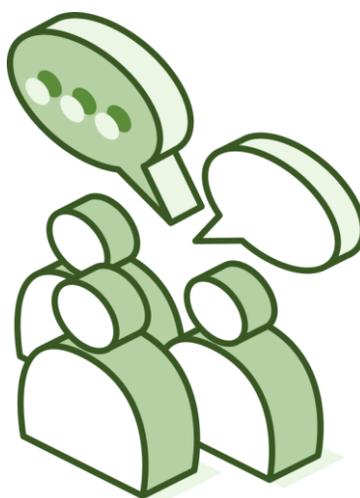
On October 18, 2021, the **Canadian Securities Administrators (CSA)** published proposed National Instrument (NI) 51-107 – Disclosure of Climate-related Matters, and its Companion

Policy,¹⁰ which would introduce related disclosure requirements for “reporting issuers” other than investment funds. The CSA highlights in the notice that Canadians have become increasingly interested in ESG investing. The investment fund industry has responded to this growing interest and investor demand by creating new ESG-related funds as well as introducing ESG considerations into existing funds.

This proposed Instrument will assist investors to make more informed investment decisions and aims to “level the playing field” by addressing incomplete, incomparable, and inconsistent climate-related disclosure practices, including disclosure requirements from the four core TCFD elements.

Proposed to become effective December 31, 2022, NI 51-107 will require disclosure of:

- i. **governance** (related to material sustainability-related risks and opportunities);
- ii. **strategy** (how sustainability risks and opportunities are factored into investment strategies);
- iii. **risk management** (processes to identify, assess, and manage sustainability risks); and
- iv. **metrics** and targets used to assess and manage risks and opportunities.



What the Experts say: National Instrument 51-107

Kate Walmsley, President, Portfolio Management Association of Canada

“Our members – over 300 asset managers managing nearly \$3 trillion – welcome more complete, comparable and consistent climate-related disclosure that increases transparency, allowing investors to make better choices for a sustainable future.”

Our response to the CSA’s National Instrument (NI) 51-107 – Disclosure of Climate-related Matters recommended the following:¹¹

- 1. Prioritize mandatory GHG emissions disclosure** [...] [to] allow comparability with the Task Force on Climate-Related Financial Disclosures (TCFD) recommendations, which is important from an information and global competitiveness point of view.
- 2. Encourage disclosure of net zero emission targets.** While we recognize that it may not be feasible to currently mandate this, issuers should be encouraged to disclose their interim and forward-looking net zero emissions targets on an annual basis, in accordance with Canada’s climate goals [...] [to] empower asset managers to meet their own net zero commitments.
- 3. Include sector-specific metrics disclosure to supplement the TCFD framework disclosure.** Sector-specific metrics that are auditable, such as those identified by the Sustainability Accounting Standards Board (SASB), should be phased in or adopted on a voluntary basis for the time being [...] [as] different sectors are impacted in diverse ways by climate change-related risks and opportunities [...]
- 4. Evaluate the disclosure requirements frequently and streamline necessary amendments.** We believe in a single set of global disclosure requirements around sustainability and believe the CSA will need to monitor developments in this rapidly evolving area [...] [to] remain current with respect to global developments in this area, particularly on the work of international standard setters such as IFRS Foundation, so that information is comparable and consistent across jurisdictions [...]
- 5. Encourage disclosure of scenario analysis and assumptions** [despite its] [...] limitations and complexity [...] [it] is important for investors to understand what scenario an issuer is using [...] [perhaps] on a comply or explain basis or with a time-limited safe harbour until such time as scenario analysis matures sufficiently to warrant mandatory disclosure.
- 6. Work to include climate-related disclosure requirements for the private market.** To avoid the risk of assets being divested to the private markets, we urge the CSA to work with the federal and provincial governments as well as other financial regulators to require climate-related disclosure in [these] [...] markets.



Did you know? The OSC is co-leading the International Organization of Securities Commissions’ (IOSCO) efforts towards global coordination of sustainability-related practices, policies and procedures, and disclosure in asset management. The IOSCO Report¹² aims to improve sustainability-related practices, policies, procedures, and disclosures in the asset-management industry through five recommendations for securities regulators and policymakers relating to 1) setting regulatory and supervisory expectations 2) product level disclosures 3) enforcement 4) common terminology and definitions and 5) investor education.

Europe Leads the Way, United States and Others Catching Up

The European Union (EU) is a trailblazer in sustainability and ESG reporting disclosures

The EU has pursued a systematic and centralised approach towards climate change and sustainable disclosure supported by law. Building on the success of the 2015 Paris Conference of the Parties (COP),¹³ European Climate Law Regulation (EU) 2021/1119 was adopted in 2021.¹⁴ The European Green Deal is the roadmap for a sustainable EU economy, targeting carbon neutrality by 2050. New ambitious sustainability reporting standards are part of its legislative actions. The EU views standards and disclosures as critical in preventing or at least mitigating systemic risks that threaten financial stability.

Under the EU's Sustainable Finance Disclosure Regulation (SFDR), asset managers are required to disclose ESG metrics on their investments at both the firm and product levels. SFDR requires firms to report on 18 mandatory Principal Adverse Impact (PAI) sustainability indicators including greenhouse gas emissions; biodiversity; water; and waste; as well as social indicators applicable to companies, sovereigns, and supranationals; and real estate assets.

The EU's SFDR impacts any company that offers investment products in the EU. This causes a massive data collection exercise for firms around the world as the coverage of the PAI indicators in corporate reporting is spotty at best. In the interests of prudence, more data is being requested rather than less, according to the various standards that are employed. This creates a challenge for all firms and is a particular difficulty for small to medium-sized entities that do not have the funding or the capacity to meet the myriad of demands for ESG metrics. The Corporate Sustainable Reporting Directive (CSRD) was recently proposed in Europe to extend and improve upon reporting requirements under the Non-Financial Reporting Directive (NFRD).

"In 2024, after a short implementation period of 18 months, it will be mandatory that annual reports comply with CSRD requirements. The CSRD focuses on large or listed companies and builds on the concept of 'double materiality', which refers to the two perspectives of sustainability risks, those that affect the company itself (outside-in 'risks') and those that might affect the environment and society (inside-out 'adverse impacts').

Martijn Groot, Alveo

Companies will be required to digitally tag the reported information so that connectivity to European reporting access systems is linked. The above requirements will require significant effort and highlight the need for data and innovative technology solutions.



What the Experts say: European Asset Managers Face Challenges; Help is On its Way

Martijn Groot, Marketing and Strategy Lead, Alveo

“The question of who is responsible for selecting, processing, and evaluating the data often remains unresolved.”

Asset managers, and asset owners, in particular, face various challenges throughout the investment process, which range from effective data acquisition and quality management to the integration of ESG data into investment decisions and reporting. This reinforces the need for a sound and harmonised ESG data architecture to provision stakeholders across the investment management process.

The new European ESG regime has a major impact across all financial market participants and corporations. The EU Taxonomy,¹⁵ sometimes referred to as the heart of the EU Action Plan, defines EU-wide principles for evaluating whether an economic activity substantially contributes to any of the EU Taxonomy Regulation’s six environmental goals¹⁶ and, at the same time, does no significant harm to any of the other objectives. By answering the question of what is seen as “economically friendly,” the Taxonomy encourages investors to channel more capital towards sustainable investments and at the same time protects investors from “greenwashing.” In March 2021, the European supervisory authorities announced new recommendations, such as the Green Asset Ratio for the banking industry, the Green Investment Ratio for the asset and investment management industry, and a Green Underwriting Ratio referring to insurance premiums related to Taxonomy-aligned and non-aligned activities for the insurance industry.

SFDR sets a framework on how to disclose and account for sustainability risks. The Regulation distinguishes between three types of products¹⁷ and, depending on the sustainability ambitions, will require detailed, quantitative disclosure of sustainability indicators in environmental and social domains. This puts pressure on companies to offer sustainable products and, at the same time, forces large companies to collect and publish data on the PAI indicators.

However, the disclosure requirements on some of these metrics for publicly listed companies that asset managers invest in lag behind the SFDR timetable. This causes a significant information gap¹⁸ and the need to supplement corporate disclosures with third-party ESG scores, expert opinion, as well as internal models, to come to an overall assessment of ESG criteria.

The United States first led the industry drive towards better ESG coverage; regulation to follow

Until recently, the institutional investor industry has solely driven the ESG disclosure and reporting agenda. Corporate ESG disclosures have grown on a voluntary reporting basis, albeit under significant pressure from large investment management firms, such as Blackrock.¹⁹ At this time, there are no audit or verification requirements on corporate disclosure content. Some argue the ESG reporting movement in the U.S. has been driven by marketing efforts by funds focused on product growth and the opportunity for higher fees linked to unique products labeled with “sustainability” or “ESG.”²⁰

In March 2022, the U.S. Securities and Exchange Commission (SEC) unveiled a breakthrough proposal for companies to disclose a wide variety of data on their climate-related risks in their registration statements and periodic reports. The aim of the proposed rule is to improve the consistency, quality, and comparability of company-reported climate-related risks, enabling investors to more readily incorporate these risks and opportunities into their fundamental assessments while simplifying the reporting regulatory expectations and process for companies. The proposed rule includes some already well-disclosed metrics and requires more expansive disclosure of climate-related risks that are likely to have a material impact on their business, either operationally or financially. Some quantitative disclosures will be similar to those codified by TCFD.²¹

Even though the U.S. has experienced an upward trend in voluntary reporting, the proposed rules would help narrow the gap between the U.S. and leading jurisdictions on ESG disclosure. It would have a significant impact on standardization of corporate climate disclosure and improve investor transparency, especially of smaller firms where voluntary disclosure is currently much lower. Despite widespread industry support, the new rule proposal is expected to encounter resistance from some SEC commissioners, as well as legal challenges.

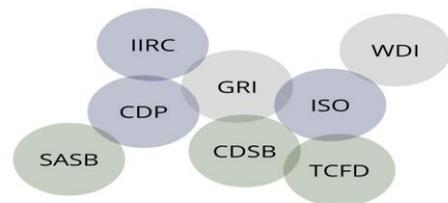
Evolution Towards a Common Standard

Few would disagree with the imperative to move to common ESG standards. Standards are central to a repeatable, harmonized, agreed, and documented manner for participants to communicate progress on ESG goals. By design, standards contain technical specifications or other detailed criteria obtained from collective work by experts in the field providing consensus at the time of development, to be used as rules, guidelines, or definitions.

Standards can be promulgated by global standard-setting organizations or others (for example, on a country or industry basis) and be linked to regulation or not.

In terms of the former, there are several uniformly accepted, globally-recognized ESG standards today. In recent years, several ESG reporting initiatives have emerged from a variety of providers. The resulting patchwork of approaches, constructed with inconsistent metrics and standards, has resulted in confusion regarding expectations in the marketplace. Some frameworks, such as those of the Global Reporting Initiative (GRI), TCFD, and SASB,²² have garnered support, yet to date there is no consistent widespread adoption of any of the ESG reporting approaches (Figure 2). Without alignment towards a common standard, ESG reporting lacks the comparability which is critical for investors.

Figure 2



As these are only some of the ESG framework and standards providers, there has been concern that confusion would reign for some time, however, the various groups have got the message from the asset managers, institutional investors, and those who care about a sustainable future, that clarity and consistency is needed, and fast. Proprietary models are less likely to survive, so the pressure and pace to converge has picked up.

In September 2020, the **Group of Five**, leading framework and standard-setting organizations – **CDP, CDSB, GRI, IIRC and SASB** – announced a vision for a comprehensive corporate reporting system including financial accounting and sustainability disclosure, connected through integrated reporting. In December 2020, this group, facilitated by the Impact Management Project, World Economic Forum, and Deloitte, published a prototype climate-related financial disclosure standard guide with examples of how the standard can be applied to climate disclosure, including both financial and non-financial content.²³ Also in 2020, this same group published a report through the The Better Alignment Project.²⁴ The report found 80% of the TCFD's 50 illustrative metrics are fully or reasonably covered by CDP, GRI, and SASB indicators

- The Big Four global accounting firms – **Deloitte, EY, KPMG, and PwC, and the World Economic Forum's International Business Council (IBC)**, which includes 120 CEOs from multinational firms, are leading the way to move towards a universal set of ESG metrics and standards to measure stakeholder capitalism. The 21 core metrics provide a common set of existing disclosures for activities within organizations' own boundaries that, if voluntarily adopted, will lead to more consistent corporate reporting, resulting in enhanced clarity and comparability for investors and other stakeholders.²⁵

- In June 2021, **SASB and IIRC merged to form the Valuation Reporting Foundation** – an important step towards consolidation of ESG framework providers to create a common benchmark reporting framework. The organization provides The Integrated Thinking Principles to guide board and management planning and decision-making; the <IR> Framework – principles-based, multi-capital guidance for comprehensive corporate reporting; and SASB Standards for disclosure to investors for investment decision-making, embedded in investment tools and processes.
- In November 2021, the **Chartered Financial Analyst (CFA) Institute**, a non-profit organisation representing investment professionals in Canada, published voluntary **Global ESG Disclosure Standards for Investment Products**, applying to all investment types, asset classes, and ESG approaches. These standards focus on principles of fair representation and full disclosure regarding investment products' ESG objectives, investment processes, and stewardship activities. Adherence to these standards will provide greater transparency and comparability to investors by enabling asset managers to clearly communicate the ESG-related features of their investment products. Comprehensive training course offering is core to the CFA's objective to support industry on ESG disclosure and reporting implementation and growth.²⁶
- **Chartered Professional Accountants (CPA) Canada** has called for standardization of ESG reporting frameworks and challenged its members to develop their knowledge in order to be value-added leaders, decision-makers, and key influencers on ESG matters.²⁷ **Chartered Professional Accountant (CPA) Ontario** has published a three-part series called **CPAs and the New Social Contract: The Rise of the Warrior Accountant**.²⁸ The accounting profession has a critical role to play in the auditing of ESG reporting metrics which will certainly be mandated soon in Canada.

- In November 2021, the **International Financial Reporting Standards (IFRS) Foundation** announced the creation of a new standards-setting body – the **International Sustainability Standards Board (ISSB)** – to help meet the demand for consistent, high-quality, reliable, comparable, and transparent sustainability disclosures by companies on climate and other ESG matters; this will allow investors and others to better evaluate enterprise value and drive further transparency regarding the financial impacts of ESG efforts. Montreal is the location of one of the two ISSB global offices.
- An outcome of COP26 Glasgow, the ISSB is focusing initially on the climate element of ESG themes – specifically non-financial factors affecting corporate performance and asset values. The IFRS Foundation also oversees the International Accounting Standards Board (IASB), responsible for internationally-recognised IFRS accounting standards required for use by more than 140 jurisdictions around the world. IFRS standards have improved comparability and transparency in financial reporting; the expectation is that the ISSB will develop formal standards for corporate sustainability reporting that will complement existing accounting standards. In March 2022, the ISSB released two proposals covering general requirements of sustainability reporting and climate-related disclosures (comments due July 29, 2022).²⁹ One accounting firm observed:
 - These standards are being developed at a much faster pace than IFRS Accounting Standards. The first standards could be

finalised within the year. Individual jurisdictions will decide whether and when to adopt but a rapid route to full adoption is expected in a number of jurisdictions. Some public and private companies may choose to adopt them voluntarily – e.g., in response to investor or societal pressure – and so reporting could be as soon as 2022 year end.

- Under the proposals, companies would report on all relevant sustainability topics (not just on climate-related risks) across four content areas that are consistent with TCFD: governance, strategy, risk management, and metrics and targets. Companies would provide globally consistent disclosures that focus on how sustainability topics affect enterprise value. Reporting would be connected to the financial statements and released at the same time. Therefore, companies will need processes and controls in place so they can provide sustainability information of the same quality, and at the same time, as their financial information.³⁰



What the Experts Say: What ISSB Standards Development Means for Canada

Stephen Lund, CEO, Toronto Global

“The ISSB and its ESG efforts are good news for Canada, and Canada has an important role in the ISSB.”

Canadian businesses and governments are increasingly looking at a triple bottom line, considering financial, social, and environmental performance as part of value creation. As a result, many are taking on initiatives to advance the fight against climate change and for other social imperatives. Canadian CleanTech venture capital investment has steadily been on the rise to support ESG projects as well as government-backed investment. The Province of Ontario pioneered what is now the largest Canadian-dollar green bond program which will drive sustainable development of projects in clean transportation, energy efficiency and conservation, climate adaptation, and other fields. The MaRS Centre for Impact Investing has mobilized more than \$200 million towards helping businesses achieve environmental and social outcomes.

With an office located in Canada, the ISSB will be able to draw upon this momentum, as well as drawing on Canada’s leadership over the last several years in pursuing standardized ESG reporting. Additionally, with a core Canadian location, the ISSB will be able to tap into our country’s experience in international standard-setting. We have proven to be effective consensus-builders, finding common objectives among disparate views and building the frameworks to achieve them.

Noteworthy: Founded and headquartered in Toronto in 2014, the World Council on City Data led the development of the now globally recognized ISO WCCD ISO 37120 Standard Series on City Data, including indicators for sustainable, smart, and resilient cities. It provides globally comparable city data to support decisions on management, planning, and investment. As well, it helps cities monitor progress towards meeting the UN’s Sustainable Development Goals. This is important for financial services firms seeking to measure financed (greenhouse gas) emissions of loans and investments in municipal projects.

The ISSB’s presence in Canada further solidifies Canada’s role as an important global player and trailblazer, in establishing a set of rules that will help measure value, impact, and progress towards achieving sustainable development goals. The standards the ISSB will introduce will provide consistency, comparability, and reliability across sustainability disclosures, which will allow investors and others to better evaluate enterprise value and bring further transparency to the financial impacts of climate change. This should not only help Canadian companies be recognized and valued for the positive impacts they are making, but also help us as country to meet our climate change commitments and achieve social and governance outcomes that benefit all Canadians and make our country more inclusive, innovative, and impactful.

What the Experts Say: Current State of ISO Standards

Chantal Guay, Chief Executive Officer of the Standards Council of Canada

“ISO standards and the standardization system will continue to help accelerate ESG action.”

As the need to act on climate change and its impacts grows more urgent each day, organizations are proactively demonstrating their commitment to ESG reporting. While corporate consciousness is a good thing, three core challenges have come to light that bring the quality of disclosures into question:

- 1. Lack of harmonization and consensus in proposed ESG frameworks.**
- 2. Lack of guidance on the best ways to transform existing processes and operations to address the indicators of various ESG frameworks.**
- 3. Lack of trust and stakeholder confidence in the ranking results of various frameworks and indices.**

Standards and conformity assessment – also known as the standardization system – are the best tools we have to address these challenges and improve ESG reporting.

Standardization ensures companies are following best practices in their products, services, and processes. It gives people trust and confidence that things work the way they are supposed to and provides tools to measure and verify impact.

More than a year ago, the Standards Council of Canada (SCC) identified many gaps in the reporting and disclosure of ESG and sustainability metrics. Since then, we have successfully advanced the establishment of an ISO ESG Strategic Advisory Group.

Noteworthy: Canada is co-leading this group with the UK and Brazil. This committee will provide recommendations for mapping existing standards to existing disclosure frameworks, improving stakeholder engagement, and defining user needs. Multiple ISO technical committees already develop standards in each area of ESG, but most of the standards they develop are currently not reflected in the proposals put forward by various ESG framework developers.

For example, ISO 26000 provides guidance on social responsibility. It helps clarify what social responsibility is, helps businesses and organizations translate principles into effective actions, and shares best practices relating to social responsibility, globally. Having guidance on how to leverage existing international standards, or how to adapt them to comply with conformity assessment requirements (i.e., assessing the conformity of a product with legislative requirements, including testing, inspection, and certification, before being placed on the market), will help create coherence, trust, and accountability related to ESG disclosure, as well as align incentives from production processes to capital markets and regulators.

In parallel with our international efforts, **the Canadian Standardization Advisory Committee on ESG and Sustainability** is exploring how the standardization system can support the evolution of Canada’s market infrastructure and the ESG ecosystem.

ESG IN CANADA – WHAT IS MISSING

Progress and Economic Transition Factors

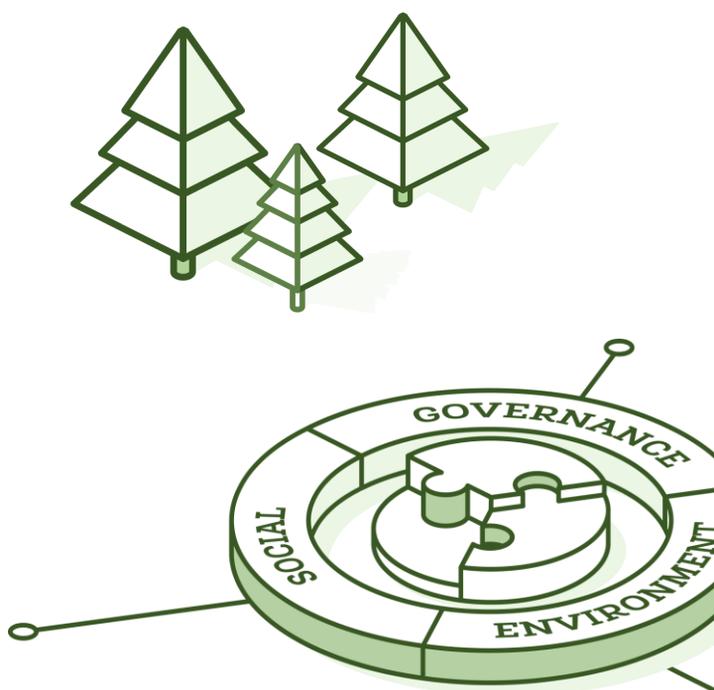
According to the Global Sustainable Investment Review 2020, from the Global Sustainable Investment Alliance, interest in ESG investing in Canada has grown considerably in the last few years, **outpacing take-up in regions such as the United States, Japan, and Australasia:**

- Canada had experienced the largest increase – growth of 48% – in “sustainable investment”³¹ assets over the preceding two years.
- The Canadian market had the highest proportion of sustainable investment assets relative to total managed assets, coming in at 62%.³²

There are other important aspects to the ESG landscape beyond the regulation and standards addressed above, such as the impact of ESG factors on the real economy, investing, and society.

Just as ESG’s impact on the global economy will be significant, the transition to a green economic structure could have a material effect on the Canadian economy. Policymakers, investors, and industry must deliberate on how to ensure Canada’s climate and sustainability priorities are aligned with economic growth strategies. Canada has significant advantages in the race to supply greener solutions, with its access to the natural resources and raw materials needed to support global evolution to a low-carbon world. Canadian steel, wood, fertilizer, cement, metals, and minerals are among the world’s cleanest, thanks to an electricity grid production capacity that is 82% free of greenhouse gas (GHG) emissions.³³ Canadian governments and companies are working hard to further increase zero carbon energy supply and drive down emissions even more. Much of the current emission reduction spend is occurring in the fossil fuel sector.

This year, global commodity volatility is leading to higher retail prices for electricity and fuels, which is impacting the population disproportionately based on income, further exasperating income inequality following the pandemic. Traditional energy supply-side investment has become sluggish given the lack of investor interest in fossil fuel corporates due to long paybacks and lower returns than from new-technology corporates. At the same time, demand-side economics have not moved quickly enough to enable fossil-fuel alternatives. The unpopularity of fossil-fuel corporates for many institutional investors and asset managers – combined with potential restrictions on fossil-fuel investments due to ESG mandates – means that when economic forces demand more energy, fossil fuel production might not be available to smooth the transition to the green economy of the future.



It is critical to continue fossil fuel sector funding and support emission reductions of current production processes, while a parallel investment stream occurs to grow net-zero-energy production volumes. Research should focus on understanding the potential of global supply side energy price shocks based on multiple financing schemes for the energy transition. Most literature on ESG initiatives focuses on the positive response by corporates to strategic changes towards long-term sustainability of companies and the environment. **In contrast, to date little research has been conducted on the impact of funding channels moving from traditional financing mechanisms to new green-technology-sector initiatives.** In addition to the energy supply-demand equilibrium, there is also a human factor that should be acknowledged. Leaders have highlighted the challenges that exist as the economy shifts from labour-intensive fossil-fuel power sources to reliance on hydro, solar, and wind facilities that require far fewer workers.³⁴ Policymakers and politicians need to understand the human impact of the economic transition under strong ESG regulations to ensure creation of opportunities for human capital investment.

Canadian buy-side (portfolio/asset managers) and sell-side (broker/dealer) firms have actively pursued participation in the transition to sustainable investing. In 2020, the eight largest pension funds in Canada, **the Maple 8, pledged to create more sustainable and inclusive growth by integrating ESG factors into their strategies and investment decisions**, indicating ESG-focused investing is an integral part of their duty to contributors and beneficiaries that will unlock opportunities and deliver long-term risk-adjusted returns.³⁵ In 2021, **the six large Canadian banks signed up to the Glasgow Financial Alliance for Net Zero (GFANZ)**, which is moderated by the United Nations and former Bank of Canada governor Mark Carney; these Canadian banks' voluntary participation in the Net-Zero Banking Alliance (NZBA) confirms their commitment to transitioning their lending and investment portfolios and business operations to net zero emissions by 2050.³⁶

Materiality and Maturity

Materiality is a well-known term in accounting, law, business, and now ESG: with respect to ESG, it means determining the most critical social and environmental issues affecting your business. ESG risks can contribute to long-term enterprise value; understanding material ESG issues is critical in making decisions and balancing business growth and sustainability. ESG frameworks expect a materiality assessment of a company's environmental and social impact and there will no doubt be further enhancements on this requirement in the future.

What has at best received limited attention is organizational maturity. While not limited to Canada, and while Canada's resource-based economy and financial sector may help make Canadian firms somewhat more "ESG-mature," a comparable way to assess a firm's ESG maturity has generally been missing from the efforts to meet investor and regulator ESG expectations.

"By measuring maturity investors can understand how deeply an organization's ESG program is integrated and operationalized. It allows investors to understand the organization's return on sustainable investments it has made and how effectively the organization is managing its unmanaged risk and delivering value to shareholders and stakeholders alike."

Matthew Ayearst, CGI

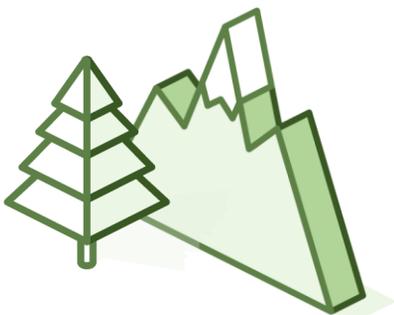
ESG materiality and maturity are, in fact, two sides of the same coin. Canadian financial institutions are well aware of the attention paid by regulators to culture, and this should help financial institutions fall closer to "mature" than "neophyte." It may be an area where Canada has a leadership role to play.

Where Is the “I” in ESG?

No – this is not a trick question. “I” stands for Indigenous. Why is this relevant? One reason is it is likely that some net zero projects will be located on Indigenous lands, a subject of great importance in resource-rich Canada.

*Indigenous Sustainable Investment: Discussing Opportunities in ESG*³⁷ reported limited instances of Indigenous Peoples having been involved in the development of leading ESG standards, despite Indigenous Peoples having been recognized as having a particular relationship with the natural environment, seeing themselves as stewards rather than owners of the land. The difference is important: whereas ownership implies dominance, stewardship refers to a responsibility for the well-being of nature and all of its creatures. Historically, Indigenous communities lived with a sustainability mindset. This cultural commitment to nature and wildlife is alive and well today, as many Indigenous Peoples are outspoken activists for environmental protections.³⁸

The reasons for including Indigenous voices in ESG developments are beginning to be heard more widely. Indeed, 21 of 131 responses to the CSA consultation paper regarding NI 51-107 discussed the need to improve climate-related disclosure through reconciliation and partnership with Indigenous Peoples.³⁹ A Business Council of British Columbia survey found that Indigenous leaders believe that their world views and traditional knowledge are reflected at least in part in ESG principles,⁴⁰ even if ESG frameworks do not reference this.



While to date these standards have focused little on Indigenous concerns, Canadian Indigenous communities themselves have not been idle on ESG matters. One example is the Reconciliation and Responsible Investment Initiative (RRII), spearheaded by the National Aboriginal Trust Officers Association (NATOA) and Shareholder Association for Research and Education (SHARE). RRII works with Canadian institutional investors to promote responsible investment policies and practices that include reconciliation goals, and better align capital markets approaches with Indigenous values and knowledge. RRII published *Advancing Reconciliation in Canada: A Guide for Investors* to help investors respect and support reconciliation and the rights of Indigenous peoples, engage in meaningful consultation and partnership with Indigenous communities.⁴¹

Canada has a lot to gain by working collaboratively to ensure Indigenous values and perspectives are reflected in global ESG frameworks. Success in this could create a further economic opportunity for many Indigenous communities and Indigenous-owned businesses, as well as contributing to global sustainability and the broader Canadian economy.



Regulatory Speed and Global Harmonization

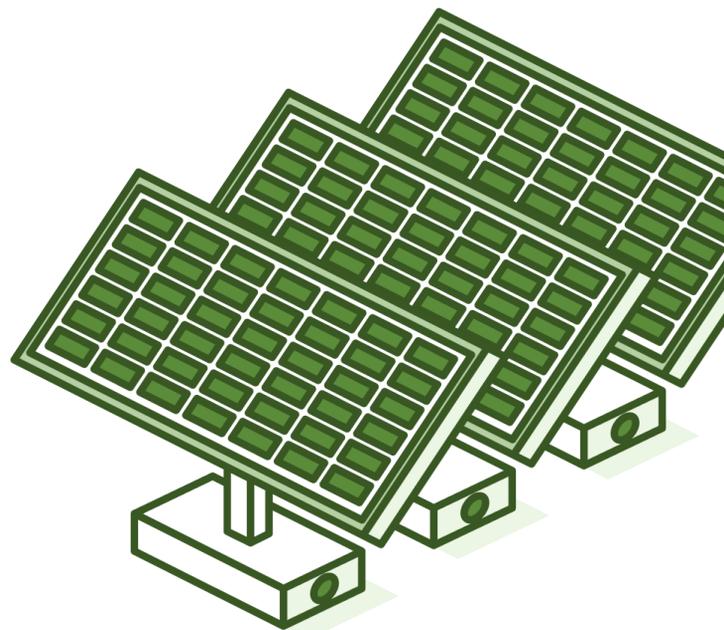
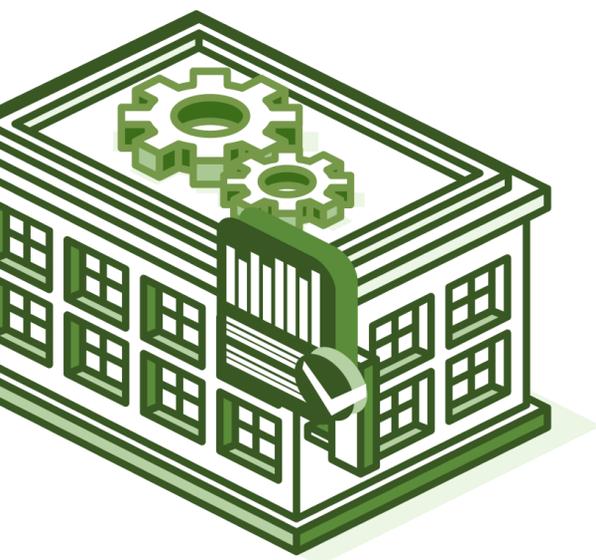
Large publicly traded corporates and other actors in the financial services industry follow the ESG disclosure and reporting practices of more progressive jurisdictions. The size of these organisations supports the creation of internal groups dedicated to developing ESG strategies and supporting regulatory reporting, with accountability for the implementation spread across the organisation.

Smaller corporates do not have the same luxury of time and money. Smaller corporates, like larger corporates, rely on the banking and investment communities to access funding for business operations. Given the variety of frameworks and reporting metrics, small organizations need direction and clarity on the relevant ESG factors for their businesses. Being asked, “What ESG metrics do you have?” by ESG solution consultants and investment advisors, is frustrating, as there are costs associated with data gathering which are, relatively speaking, more severe for smaller corporates. Developing a framework around the [WEF 21 core metrics](#), that only involves data gathering internal to the firm, is a potential solution.

Furthermore, research on the relationship between high-attention companies, such as larger, publicly traded corporates covered by financial analysts, shows that ESG mandates have an impact on ratings which is known to play a critical role in company value. Over longer time series, research shows the positive relationship directly between a firm’s ESG mandate and firm value is undecided.⁴²

For smaller corporates, this relationship is not as clear, meaning without clear direction and regulatory mandates, investing in ESG disclosure tools and reporting could be seen as a waste of precious financial resources and could impact corporate value.⁴³

Although regulators in Canada have recently increased their drive to address ESG disclosure and reporting dynamics, they are moving more slowly than their global peers. Clarity and consistency amongst Canadian and global regulators on accepted ESG frameworks and expectations for smaller corporates is needed to ensure ESG governance and compliance enables rather than disables top-line growth. The CSA NI-507 consultation asks for comments on alternative voluntary approaches for GHG emissions and the related risks, to lessen the compliance costs for smaller issuers.



What the Experts Say: Current State of ESG Reporting

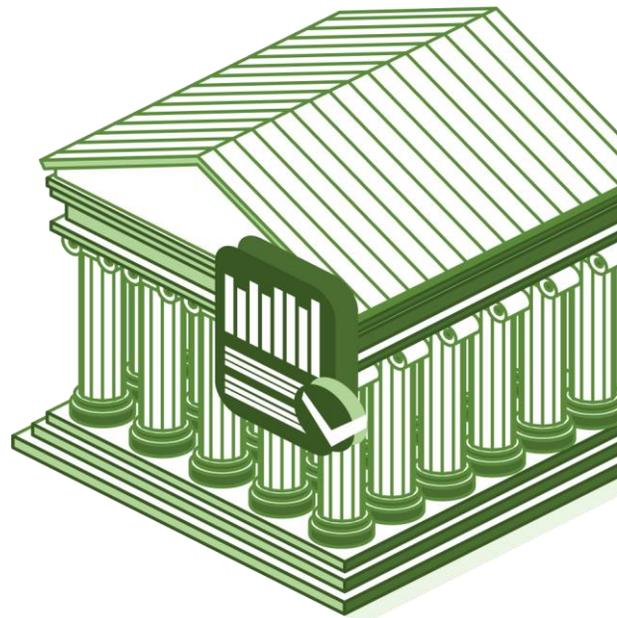
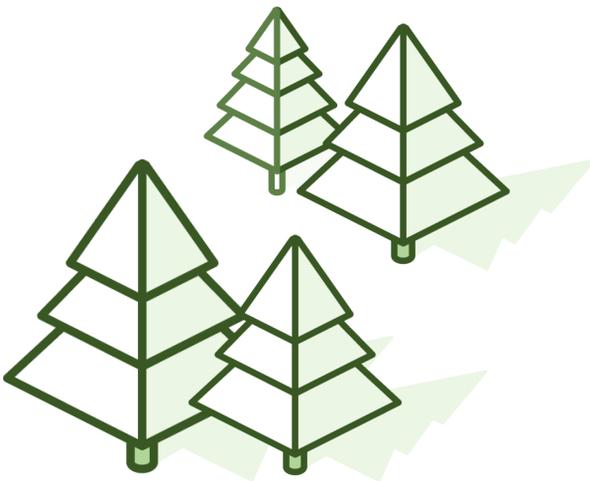
Laurie Clark, CEO of Onyen Corporation

“In today’s digital world, leveraging AI to enhance, prioritise, and verify corporate disclosures is necessary in order to manage corporate risks, comply with multi-jurisdictional regulations, and secure investors’ confidence.”

Sustainability reporting has been evolving rapidly from voluntary high-level corporate statements to now-mandated data-driven activities and targets that follow globally accepted standards and frameworks. This shift has been broadly supported by capital markets stakeholders, as investors put the spotlight on corporate activities in an attempt to eliminate greenwashing.

Staying current can be a challenge. European lawmakers, leaders in sustainability regulations, and wide-reaching reporting requirements have pushed the corporate world again, into agreeing to force roughly 28,000 foreign subsidiaries to comply with the EU’s ESG rules,⁴⁴ which if adopted, will put further pressure on all multinationals to step up their ESG activities and disclosures. As different jurisdictions have varying levels of disclosure requirements, the collection, automation, and verification of all ESG-related data will be of utmost importance. As more reporting standards amalgamate, companies should soon have a more cohesive taxonomy to work with.

To ensure Canadian businesses stay competitive, regulators need to align with established international reporting platforms, rather than create new ones. This would allow the capture of all mandatory disclosures, which could be submitted to other international institutions also, allowing regulatory gaps to be flagged easily. Technological innovation should be leveraged to reduce reporting redundancies and help companies meet international reporting requirements. Even the smallest Canadian companies could benefit from this alignment, freeing up more of their time and effort to focus on the best capital allocation in an ESG-focused world.



CHALLENGES IN IMPLEMENTING ESG PROGRAMS

An effective ESG strategy does not happen on its own; it requires support across the organization starting with support from the CEO, senior leadership, and the Board of Directors. Like any strategic initiative, the lines of communication, accountability, and expertise at the senior level of an organization will set the tone for the sequential implementation of a successful program.

Before an organization can be assessed by external parties, it needs to have a deep understanding of its own ESG profile by performing a risk assessment and by benchmarking performance against competitors and industry. This is where the hard work begins, as this assessment is bound to surface data gaps between current state and corporate aspirations. Filling these gaps can be a complex undertaking and may require financing, specialized resources, and more sophisticated tooling. Solving for data gaps and maintaining data quality is essential for generating actionable insight, yet data challenges in many areas are holding back progress.

Although enterprise risk and compliance management are not new, integration and governance of new risks requires changes to risk and business practices and may require re-training and new talent acquisition.

Organisation ESG Program Preparedness and Adoption

ESG program success requires senior executive buy-in and leadership that sets the vision, tone, and scope of the ESG program. Successful communication of the vision, whether it is modest or transformative, should permeate throughout the organization and be well-understood.

Boards of Directors have a critical role to play in setting the strategic direction of ESG programs, yet, according to PWC's Annual Corporate Disclosure Survey, 64% of board members say

that ESG is linked to company's strategy and only 25% have stated that their boards understand ESG risks very well.⁴⁵

The survey results are not surprising due to the new risks ESG presents and new types of decisions to govern. Corporate directors are bound by law in discharging their duties and must act honestly and in good faith with a view to corporate interest. With this fiduciary duty in mind, ESG oversight should ideally be performed by directors from diverse backgrounds, with the right skill sets.⁴⁶ Directors must understand how assumptions are used to design ESG goals, how to determine which factors are relevant to their corporation, and how to take these factors into account in their decision process. As Boards consider their program goals, they need to also look inward and assess the internal and external impacts of what they do and how they do it. Notably, the proposed SEC disclosure rule, would require registrants to disclose how the board is informed on climate-related risks and how frequently the board considers such risks as well as measures progress against ESG program goals.

Top performers on ESG topics are also better able to attract and retain talent; according to a report by Marsh and McLennan, the companies that are most appealing to students and young professionals scored 25% higher than their peers on ESG metrics.⁴⁷

Effectively steering an ESG program requires focused effort and internal or external ESG experts. It is becoming more common for larger organizations to hire a Chief Sustainability Officer (CSO) to shepherd the end-to-end ESG program implementation and continuous operations and improvements. As ESG programs are used for the sometimes arguably conflicting goals of reducing risk, remaining profitable, and promoting the company's commitments to climate goals and a sustainable global future, care must be taken to ensure independence and avoid conflicts of interest in the selection of the CSO or equivalent.

Data Quality Challenges

Why do we need good data?

Data-driven decision-making is a dominant strategy amongst leaders. Accurate, complete, and reliable data is essential for this to occur. Good ESG data is required for regulatory compliance and disclosure mandates, to make informed portfolio and investment decisions, and to produce and measure ESG performance. Further, the ESG reporting mandate is built on the assumption and existence of good quality, consistent data.

Common ESG Data Challenges

Data challenges, such as availability, usability, comparability, and workflow integration, primarily present themselves when sourcing and organizing data (Figure 3). The quality of the data, gathered from both internal and external sources, is often hampered by inaccurate and incomplete primary data. Data aggregators rely heavily on self-assessment-based primary data from corporates and businesses. These aggregators – and there are hundreds of them – attempt to independently verify the data, but in an unsystematic way due to the lack of uniform standards. The relevance of backward-looking information, and its usability for comparability creates a problematic situation for measuring ESG program progress and hinders a user’s ability to have trust and confidence in the metrics. Organizing the data through a data framework and integrating it both with incumbent data sets on issuers, financial instruments as well as with incumbent finance, risk, performance management and applications that often use legacy technology requires relevant knowledge and expertise that is often lacking or difficult to obtain.

“Doing or acting without understanding is a mistake. You must understand first and to understand you need data.”

Matthew Ayearst, CGI

Data Sourcing

Like for many regulatory and business imperatives, data is foundational for achieving effective outcomes: ESG is no different. Good quality data will enable financial institutions to generate actionable insights, provide informative metrics to investors, and help organizations to achieve and measure their ESG goals. However, until the recent shift in regulatory direction towards mandatory disclosure, most corporates have been independently fulfilling ESG corporate goals by relying on voluntary disclosure using a standard of their choosing.

In the absence of a uniform approach to verify ESG data, the fragmented use of standards has led to usability challenges. Without consistent data, there is no confidence in the reporting results and comparability is virtually impossible. As mentioned, many corporates rely on aggregators of ESG data to get the data to the investor base that are unable to independently verify data and assess their outputs. Due to the lack of standardization, ESG ratings may be skewed or simply inaccurate. Corporate disclosures through aggregators are supplemented with different ESG ratings and third party expert opinions, for example on emissions data to fill in the blanks in the corporate reporting record. Often financial services firms use a range of different sources to come to a composite picture

Figure 3



Corporates also find it challenging to collect non-financial data from across functional business and geographical locations and from their supplier base and supply chains. Many of these sources have not had to report data in the past and are not equipped with the knowledge, processes, or tools to provide the information. For example, social factors in ESG, such as community engagement and employee retention, have less obvious and unique data points, and in the past have been self-assessed. With immature processes and tools to support data collection and in the absence of standard measurement tools, assessing and interpreting performance is extremely difficult. Corporates may also need to rely on upstream service providers to collect metrics. The data completeness and timeliness underlying the metrics provided by these suppliers is difficult to control, potentially exposing the corporate to reporting risk.

Like other compliance areas that are reliant on large datasets, such as anti-money laundering compliance, artificial intelligence (AI) and machine learning (ML) tools will be increasingly used to collect and aggregate ESG data and extract insights.

A Common Understanding

As with other data sets, the importance of putting a firm on a common footing cannot be understated. After data sourcing and the integration of different types of data sets in an overall reference set, the integration of that data into user workflows has to lead to easy access to that data.

In some cases there may be a hard requirement to use the same data in external reporting but apart from that a common understanding and definition of ESG data elements reduces operational risk and ambiguity.

The composite ESG data sets need to be integrated into so there has to be a capability to format these data sets in different shapes and distribute them in different ways. Apart from the

data, metadata such as access permissions, quality aspects and provenance need to be kept as well. Provenance can refer both to the (external) source used as well as to other, analytical methods to create the data, for instance through proxies. Because the ESG data record has many gaps, firms may need to fill in the blanks drawing on alternate sources or using a model.

Data Organization

In addition to good, reliable inputs, organizations need to have the infrastructure to access new data sets and convert raw data into actionable insights. Establishment of data model and workflow processes to track data lineage are essential to support an ESG program. To be successful, it is critical that flexibility, scalability, and transparency exist in the architectural design. Data architecture must scale to capture rapidly growing volumes of unstructured raw data with the associated file formats.

Transparency regarding the description and origin of datasets and decision-making processes enables good governance by providing traceability back to the data owners. At the system-design level, traceability can be built in through the concept of “leaving a footprint” in archival and data-logging infrastructure. For many Canadian FIs, much of this infrastructure and process already exists and can be leveraged from the implementation of financial reporting such as BCBS 230.⁴⁸

The ESG data requirement is large and continually expanding in scope. Some performance metrics may be net new, causing integration challenges with legacy systems and risk management systems. As FIs begin to integrate climate risks into enterprise risk management (ERM) frameworks, we may see increased use of AI/ML and cloud computing to delve into risks and to connect ESG indicators to financial performance.

The impact of poor data quality and unsystematic data organization is revealed by ESG reporting.

There is significant variability in what data ESG programs report. On one end of the spectrum, companies report very little, merely to satisfy public relations, while the other end of the spectrum involves rigorous investor relations reporting with detailed disclosures in annual reports.

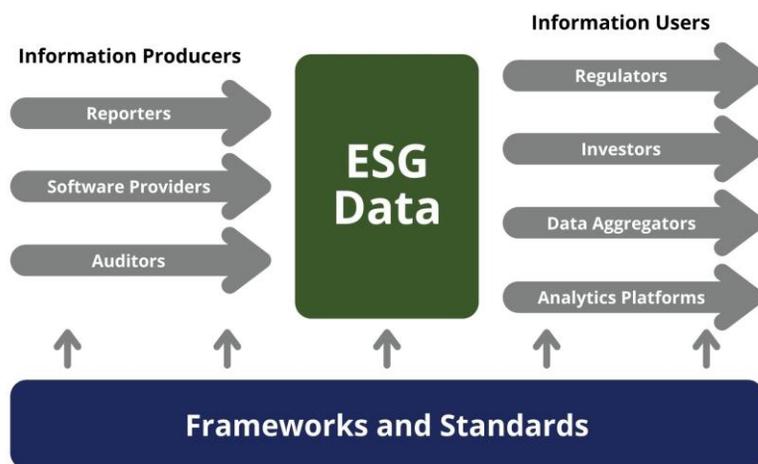
A recent study by PWC found that while 80% of Canadian firms polled declared ESG factors an important input for investment decisions, only 41% of annual reports contained ESG-related content beyond the corporate social responsibility declaration.⁴⁹

Different ESG rating methodologies used by different rating agencies, and built on unverified data sources, result in variations of ratings, making it difficult for investors to truly assess ESG performance for potential investments. A 2019 State Street Global Advisors study⁵⁰

compared the rating produced by four major ESG data providers: MSCI, Sustainalytics, RobecoSAM, and Bloomberg. The study found correlations at a level of approximately 0.53, implying that a given company’s ESG score from ratings agencies would be consistent only 50% of the time. The reason for these lower correlations is that rating agencies have different metric categories and weightings within their methodologies. Consequently, the correlation between ESG ratings for a particular firm is much lower than for a firm’s credit ratings, where the objective and drivers are universally clear.

A data set with one source of truth is elusive for institutional investors and certainly for end investors. Large institutional investors are left to aggregate and make their own ESG rating determination, but this is not a sustainable nor a realistic solution for end investors. Moving towards one single data vocabulary and taxonomy and third-party audit and assurance is essential to building investor trust and confidence.

Figure 4



The information continuum for ESG framework reporting captures the workflow interaction and relationship between the suppliers ESG data and the consumers of this information. Information producers include not only the company data aggregation team and the key corporate stakeholders, but also technology solution providers and auditors.

The Devil is in the Details – Compliance and Risk Management

As mandatory disclosure requirements become effective, regulatory rigor, analysis, and enforcement will closely follow.

Fortunately, Canadian FIs already have strong internal risk frameworks that can be leveraged. Similar to other emerging risk areas, the challenge is in mobilizing the change from the top, finding the right talent for oversight, and transitioning existing programs. Ideally, organizations should strive to have a dedicated risk group to assist the CSO to identify, assess, prioritize, monitor, and respond to ESG-related risks.⁵¹ Due to the amount of data needed, automation is a necessity, but finding the right balance between human business intelligence and automation is a challenge. There are also few if any “one-size fits all” enterprise solutions, so integration of point solutions is inevitable. This is not easy to execute in practice, especially in nascent risk areas and when technology is still maturing.

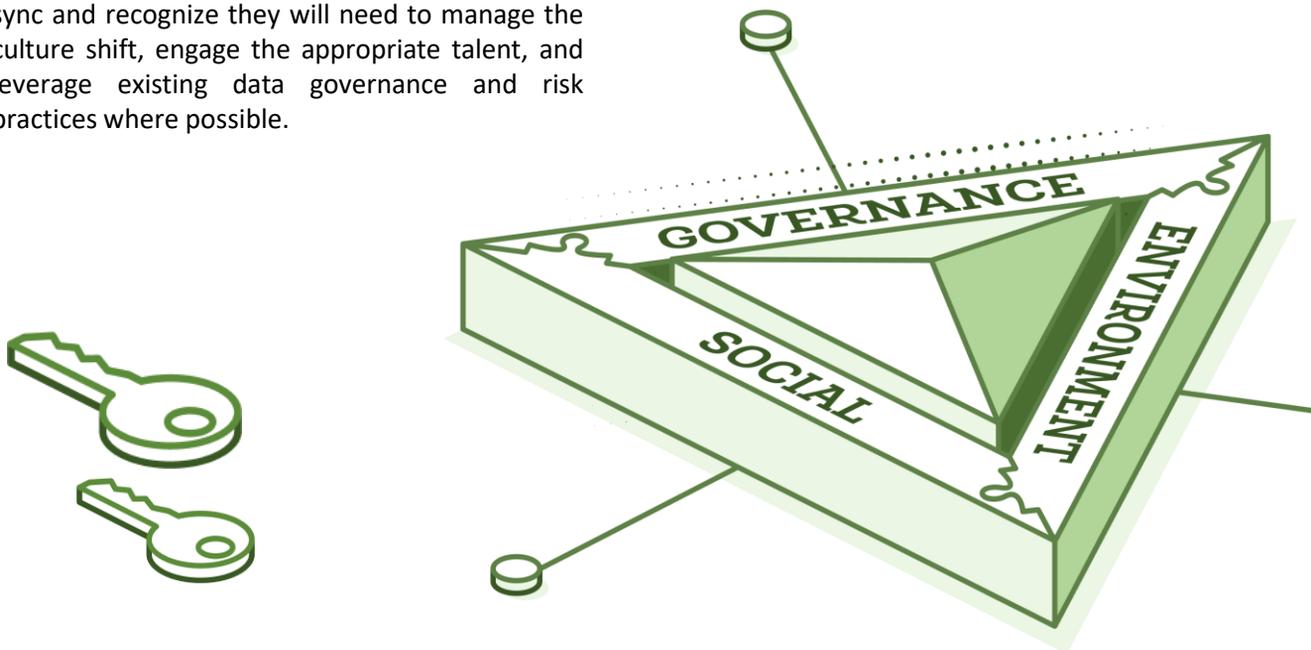
To implement a change program of this size, business and technology leaders need to be in sync and recognize they will need to manage the culture shift, engage the appropriate talent, and leverage existing data governance and risk practices where possible.

The Audit Picture

Audited and verified disclosure information is key to establishing trust. Consumers of ESG data will be keen to have assurances of both consistency of metric interpretation and accuracy of content. The audit profession is central to ESG factor disclosure and performance validation to support corporate ESG programs. Corporate ESG data metrics need verification to ensure confidence in corporate mandates and progression. Under the regulatory lens, auditors have an essential role to play in assessing the maturity of ESG investment products.

However, until there are consistent reporting standards, it will be difficult for audits to be fully effective as there are plenty of ways to greenwash. Organizations can cherry-pick their ratings or buy offsets and not change anything, and not be considered falsely reporting.

Yet the large audit companies are ramping up and internal auditing is a mature compliance function with corporates, so once there is clear direction with standards and regulatory enforcement is in place, assurances will quickly follow.



WHAT THE FUTURE HOLDS

If a dozen futurists were to be asked what the ESG future holds for us, we would receive two dozen conflicting predictions.

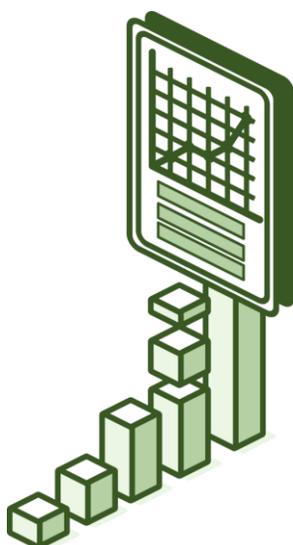
Of course, some forecasts are almost certain: ESG and sustainability will not go away but only grow more important. Requirements will be changing a lot for at least the immediate future.

There is no silver bullet, but there will be greater clarity regarding all the challenges and solutions described here. Also, there are some likely outcomes that companies can prepare for now: forewarned is forearmed. And there is some good news: new RegTech solutions are coming. Here is what we are hearing about what the future could hold for ESG:

- ESG frameworks were developed by standards bodies and other organizations, and now by regulators, in the interests of investors, meaning the focus has been largely on material risks to financial returns. These – and weather-related events themselves – have led to most attention focussing on the “E” of “ESG,” and within the focus on “E,” Canada’s attention may so far have focused more on reducing the carbon footprint, given the large

economic contributions of the oil and gas sector. Less focus has been placed on the supply chain and consumer engagement in net zero solutions. Attention to “G” is growing. **Expect ESG developments to better capture social and governance considerations in financial and non-financial metrics.**

- **Where there are laws/regulations and metrics – as there now are with ESG – expect lawsuits.** In Canada, federally regulated banks and insurance companies that do not meet expected disclosure requirements may face regulatory enforcement penalties and litigation as public corporations already have in Europe.⁵² The risk for companies that fail to meet disclosure requirements is not just regulatory action or court proceedings – it is a higher cost of capital and possible limitations on capital availability.
- There are a growing number of ESG solutions and best practices that will, among other things, make it easier to report against one or multiple frameworks through the use of open data and RegTech options.

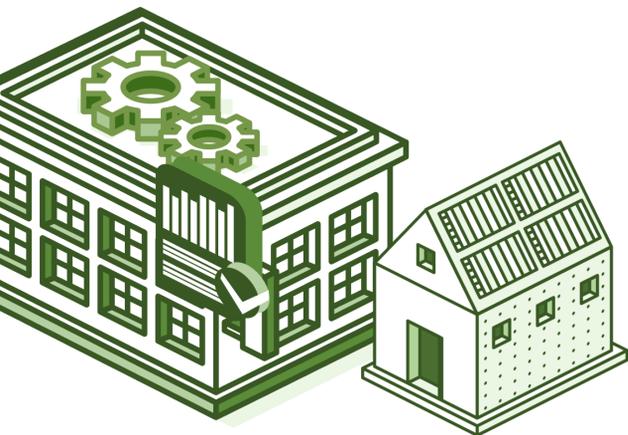


Solution Landscape

ESG data models, architecture, and infrastructure are required

ESG metrics are currently compiled and reported annually, usually within a company's annual report, and unlike financial statements, quarterly ESG reports are scarce, usually due to the great effort needed to gather the required data across multiple businesses units within the organization. This means any decisions involving ESG factors are often made using annual data. More mature organizations may be able to leverage existing data governance frameworks and models used for financial reporting, but these will have to be re-modelled for ESG factors and adjusted to handle the more dynamic expectations of ESG investors.

An ESG data model should be selected and implemented to allow for analytics and agile reporting against required ESG frameworks. With the demand for more transparent reporting, increased regulatory compliance requirements, and the need for integration of an ESG strategy into the business model, it is essential to understand the source of the data and how is it governed and managed in the data architecture.

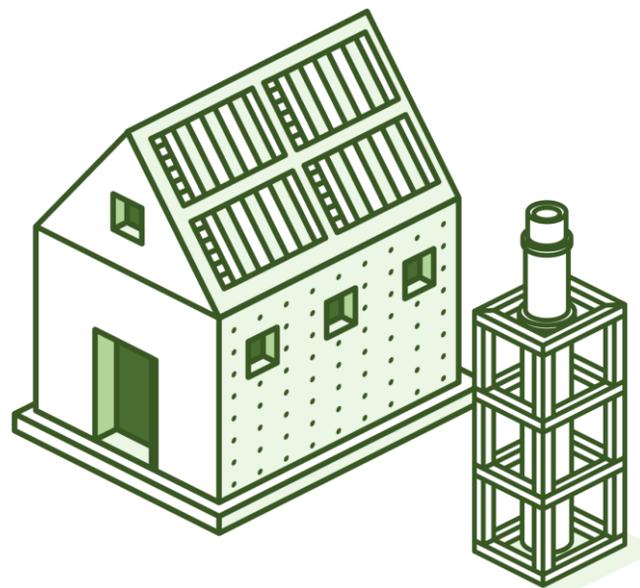


Open-source software should be leveraged

With the reliance on ESG data intensifying, there are significant opportunities for lowering the costs involved by leveraging open-source tools and software.

Initiatives like the recently announced Digitalization Sustainability Data Lab (DSD Lab) will be instrumental in aligning climate disclosure mandates across the world. By using the XBRL standard, the intention is to bring together global regulators and standards bodies to create standard compliance guidelines for global data comparison using freely available open-sourced technologies, to improve decision making and provide solutions to address climate-change.⁵³

The challenge for organizations will be how to leverage this data to infer aspects of broader business strategy, such as business optimization, accessing new markets, measuring sustainable impact, engaging external stakeholders with objective data to encourage participation, and effectively addressing misinformation.

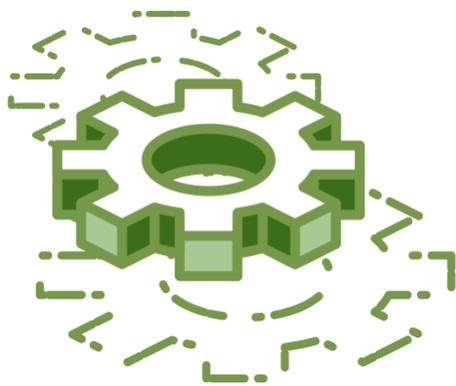


Pairing data and data models is needed for data-informed business decisions

Aggregating and sharing data is not enough: one of the most important reasons for pairing reliable, current ESG data with an ESG data model is to enable an organization to more readily adopt ESG factors into decision-making. By using key performance indicators (KPIs), or perhaps more appropriate, key risk indicators (KRIs), progress can be monitored against internal and external targets. If an organization seeks to reduce its carbon footprint for one of its product lines, it must understand at what stage in the value chain the emissions occur and where to best focus reduction efforts.

Using Artificial Intelligence (AI) to scale

The intensity and complexity of ESG disclosure, whether motivated by regulatory mandates or by internal or external stakeholders, is only going intensify. The added complexity comes from both the extent of the data needed to be processed and assimilated and the variety of the data outputs needed to be produced. Adding to this complexity is that the data is spread over multiple documents and sources. This is where AI comes in. AI can augment human intelligence to gather and process these disparate datasets and turn them into actionable insights. Solution providers like Montreal-based Novisto or Clarity AI deliver products in this space.



RegTech is playing an ever-increasing role

New RegTechs are emerging, and existing RegTechs are extending their footprints to meet this growing need. These solutions will be instrumental in filling data gaps, managing compliance and risks, measuring performance, and evaluating third parties. The CRTA has several ESG solutions within our roster of members, including Alveo, Cube, and Onyen.

CUBE has extended its RegPlatform offering to include ESG. The solution uses advanced technology to capture all ESG-related regulatory content from across the globe, make sense of it, and work out what is relevant. Using AI, CUBE can determine what data matters to a particular company or business area. This means that companies seeking to understand the fast-emerging regulatory landscape for ESG receive the earliest possible forewarning of pending ESG regulation, as well as a standardized library of in-force regulations. CUBE is an organization that lives and breathes regulatory change, so as ESG rules continue to develop, it is able to harness these changes and create a purpose-built regulatory ontology to provide a global or regional view of ESG regulation.

Alveo provides standard solutions for the sourcing, mastering, quality management and distribution of pricing and reference data, including ESG information. Alveo helps firms address common ESG data challenges, including data availability, usability, comparability, and workflow integration

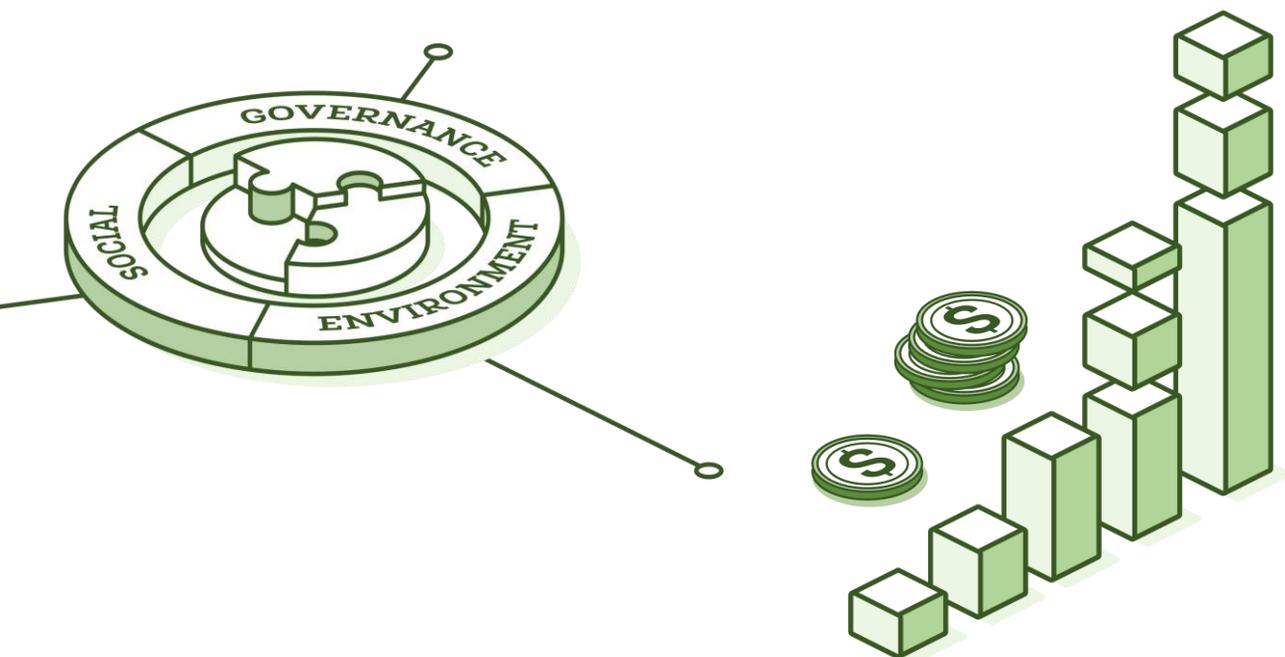


Case Study: Innovative Solution for ESG Programs

“Technology lives in the heart of organizations. It connects people, places, and processes to optimize information exchange, which is critical for managing corporate risks and opportunities.” *Laurie Clark, CEO, Onyen Corporation*

With this truism in mind, the Onyen ESG software system emerged as a solution to a plethora of challenges, both in terms of the quality, comparability, and consistency of ESG data stemming from multiple standards, as well as the rising costs for keeping up with reporting requirements. As the future for many companies depends on automation, data analysis, and regulatory compliance, it is hard to imagine any efficiency in data collection and reporting without technology. Estimates now point to 6,813 average employee hours large organizations spent on climate-related reporting alone.⁵⁴ Smaller companies do not have this capacity to filter different standards and to handle all mandatory and voluntary disclosures. This is where artificial intelligence (AI) tools can be successfully leveraged.

As many ESG risk factors are interconnected and have compounding effects, even the ones that are not currently reflected in financial statements have long-term financial implications. Early detection of negative trends and the ability to address challenges are key to business sustainability. Capital providers are focused on such factors, which are now better-defined through ESG frameworks, and they continue to demand disclosures so that they can better assess the viability of business models and the cost of capital in a rapidly changing climate and geopolitical environment. Such data streams, however, are first and foremost crucial for boards and management teams, that need to be able to pivot capital investments and build resilience in their business models.

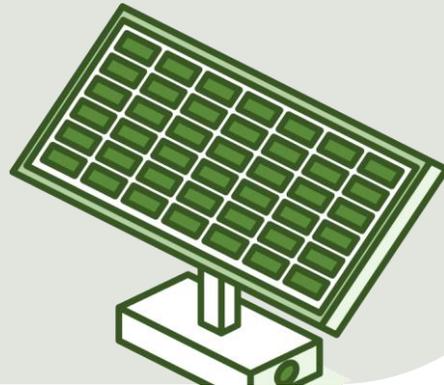


WHAT CANADA NEEDS TO DO TO MOVE THE NEEDLE

Eleanor Morrison

Strategic Advisor, The Canadian Regulatory Technology Association

“Canada has a unique opportunity to show the world how to use ESG tools to support the transition from a fossil-fuel-focused economic model to a greener, natural- resource-supported economic model that engages a diverse civil society and innovates technological solutions.”



Stephen Lund

CEO, Toronto Global

“As a diverse and connected global financial centre at the forefront of the sustainability movement, it’s critical that business and government in the Toronto Region and across Canada work together to build standards and tools that allow us all to put ESG considerations at the forefront of decision-making.”

Laurie Clark

CEO of Onyen Corporation

“To ensure Canadian businesses stay competitive, regulators need to align with established international reporting platforms, rather than create new ones. This would allow the capture of all mandatory disclosures, which could be submitted to other international institutions; allowing regulatory gaps to be easily flagged. Technological innovation should be leveraged to reduce reporting redundancies and assist companies in meeting international reporting requirements. Even the smallest Canadian companies could benefit from this alignment, freeing up more of their time and effort to focus on capital allocation in an ESG-focused world.”



Chantal Guay

CEO, Standards Council of Canada

“Bringing the full power of standardization to the financial disclosure world will help accelerate ESG solutions for the real economy. Working together and combining our knowledge is the only way we can achieve our collective vision for a sustainable future.”



Donna Bales

Founder, The Canadian Regulatory Technology Association

“For decades, data has been heavily relied upon to meet regulatory compliance obligations, but it has also been its Achilles heel. The industry needs to work collaboratively and creatively to make ESG data freely accessible and easy for end users to consume while keeping the cost of compliance in check.”

Matthew Ayearst

Director Sustainability and ESG, CGI

“Canada needs publicly traded companies to lead as a means of futureproofing the Canadian economy.”



Barb Amsden

Principal, PQbd

“Canada is as free as it is because most Canadians understand the need to balance social and economic interest, the rights of some with the rights of others.

The least intrusive way to address environmental issues is disclosure. We’re nearing clear ESG benchmarks; requiring disclosure against these will help investors better understand the full impact of their choices.”

CONCLUSION

ESG initiatives have now become strategic imperatives for nearly all organizations in Canada. In addition to addressing growing global climate and societal risk, the ESG directive says that if sustainability-related system-level challenges are not aggressively addressed, they will have a material impact on the financial market and economic stability.

The ESG discussion in Canada has largely been focused on how to reduce our carbon footprint given the large contributions of the oil and gas sector to the Canadian economy. There has been less focus on the supply chain and consumer engagement in net zero solutions such as electric vehicles and net zero mass transit opportunities. Canada is in a unique leadership position and has much to gain from working collaboratively to ensure Indigenous values and perspectives are considered and reflected in global ESG frameworks. Although there has been recent advancement on proposed reporting mandates at both the federal and provincial level, efforts need to be accelerated to catch up to our peers and address global ESG factor fragmentation.

As discussed in this paper, to address transparency and elicit investor trust, data challenges must be addressed. Before FIs, corporates, and data aggregators can begin to solve the data gaps, global ESG standards alignment and consolidation is needed, with clear regulator directives and strong government and industry cooperation. Quality data and effective data orchestration are compulsory and foundational for robust and reliable ESG disclosure and performance reporting. Yet, implementing change programs of this size comes with governance challenges, as compliance and risk management practices evolve and adjust in tandem.

Technology providers and RegTechs are part of the solution as corporates and investors both require solutions to collect, track, and report on the vast amount of data. Solutions that are compatible with the regulatory demands and freely available are critical given ESG reporting mandates impact small firms at the same rate as large multinational firms.

None of these challenges are insurmountable, but they will require dedication, openness, and a collective will to drive change towards a more sustainable future. The financial services industry has a role to play as communicators of insights to the broader ecosystem, and only with collective efforts will we succeed.

Definitions and Acronyms

Carbon Disclosure Project (CDP) – a global initiative to accelerate solutions to climate change by putting relevant information at the heart of business, policy, and investment decisions.

Chief Sustainability Officer (CSO) – interprets changes in the external sustainability environment and works out the strategic consequences for their firm. The CSO is also charged with influencing, communicating, and cutting through organizational complexity to allow their firm to deliver on ESG commitments.

CleanTech – short for “clean technology,” used to refer to various companies and technologies that aim to improve environmental sustainability.

Climate Disclosure Standards Board (CDSB) was an international consortium of business, environmental, and social NGOs, committed to advancing and aligning the global mainstream corporate reporting model to equate natural social capital with financial capital. It has now consolidated into the IFRS Foundation.

Conference of the Parties (COP) – the decision-making body responsible for monitoring and reviewing the implementation of the United Nations Framework Convention on Climate Change. It brings together the 197 nations and territories – called Parties – that have signed on to the Framework Convention.

Corporate Sustainability Reporting Directive (CSRD) – project of revisions of the Non-Financial Reporting Directive (NFRD) which the European Commission (EC) published on 21 April 2021.

Environmental, social, and governance (ESG) Criteria – a set of standards for a company’s operations that socially conscious investors use to screen potential investments. Environmental criteria consider how a company performs as a steward of nature. Social criteria examine how it manages relationships with employees, suppliers, customers, and the communities where it

operates. Governance deals with a company’s leadership, executive pay, audits, internal controls, and shareholder rights.

Environmental, social, and governance (ESG) Report – a report published by a company or organization about ESG impacts. It enables the company to be more transparent about the risks and opportunities it faces. It is a communication tool that plays an important role in convincing sceptical observers that the company’s actions are sincere.

Environmental, social, and governance (ESG) Metrics – non-financial data, such as the level of greenhouse gas emissions or the number of health and safety incidents in a year, used to assess a company’s exposure to a range of environmental, social and governance risks. These metrics can be used for a range of ESG integration approaches, such as benchmarking and scenario analysis.

ESG Factors – while there is no standard definition of ESG factors that has been accepted among the investment community, “ESG factors” can be described as a broad term that encompasses a wide range of environmental, social, and governance factors. Environmental factors relate to a company or industry’s interactions with the physical environment; social factors concern the social impact of a company and/or industry on a community or society; and governance factors typically relate to how companies and/or countries are governed.

ESG Frameworks – there are no less than a dozen major ESG reporting frameworks in existence – each with their own metrics, methodology, and scoring systems. These reporting frameworks become the basis for how companies set KPIs, what they measure, and what information goes into the sustainability reports they create. Some ESG frameworks include CDP, CDSB, GRI, IIRC, and SASB.

ESG Materiality – refers to the effectiveness and financial significance of a specific measure as part of a company's overall ESG analysis. Material factors are financial elements deemed fundamental to the long-term success of a company's ESG strategy.

Environmental, social and governance (ESG) Ratings – third-party providers evaluate international and domestic public (and many private) companies on their environmental, social and governance (ESG) performance. Institutional investors, asset managers, financial institutions, and other stakeholders are increasingly relying on these reports and ratings to assess and measure company ESG performance over time and as compared to peers.

EU Action Plan – an action plan for financing sustainable growth, released by the European Commission in March 2018. It is a response to recommendations from the High-Level Expert Group (HLEG) on Sustainable Finance. Four actions set out in the action plan are taxonomy, investment advice, sustainability benchmarks, and investor duties.

EU Taxonomy – a classification system establishing a list of environmentally sustainable economic activities. The EU taxonomy would provide companies, investors, and policymakers with appropriate definitions for which economic activities can be considered environmentally sustainable.

European Green Deal – the EU's main new growth strategy to transition the EU economy to a sustainable economic model. Presented in December 2019, the overarching objective of the EU Green Deal is for the EU to become the first climate neutral continent by 2050, resulting in a cleaner environment, more affordable energy, smarter transport, new jobs, and an overall better quality of life.

Glasgow Financial Alliance for Net Zero (GFANZ) – launched in April 2021 to unite net zero financial-sector-specific alliances from across the

globe into one industry-wide strategic alliance. GFANZ provides a forum for leading financial institutions to accelerate the transition to a net zero global economy. Its members currently include more than 450 member firms from across the global financial sector.

Global ESG Disclosure Standards for Investment Products – the first global voluntary standards for disclosing how an investment product considers ESG issues in its objectives, investment strategy, and stewardship activities.

Global Reporting Initiative (GRI) – independent, international organization that helps businesses and other organizations take responsibility for their impacts, by providing them with the global common language to communicate those impacts. GRI provides the world's most widely used standards for sustainability reporting – the GRI Standards.

Green Asset Ratio – the ratio of a bank's loans and securities meeting the EU environmental taxonomy (including European green bonds) to most on-balance sheet banking book assets.

Group of Five – five international sustainability reporting bodies: CDP, Climate Disclosure Standards Board (CDSB), Global Reporting Initiative (GRI), International Integrated Reporting Council (IIRC) and Sustainability Accounting Standards Board (SASB), working together toward a globally accepted comprehensive corporate reporting system.

International Integrated Reporting Council (IIRC) – global coalition of regulators, investors, companies, standard setters, the accounting profession, academia, and NGOs. It is the primary institutional forum for expression of the Value Reporting Foundation's broad market view on matters relating to integrated reporting and integrating thinking, as well as a medium for its interaction and provision of advice, guidance, and input on issues of relevance for the organization.

International Sustainability Standards Board (ISSB) – an independent, private-sector body that develops and approves IFRS Sustainability Disclosure Standards (IFRS SDS). The ISSB operates under the oversight of the IFRS Foundation.

Maple 8 – the CEOs of Canada’s eight leading pension plan investment managers: AIMCo, BCI, Caisse de dépôt et placement du Québec, CPP Investments, HOOPP, OMERS, Ontario Teachers’ Pension Plan, and PSP Investments, who have called on companies and investors to provide consistent and complete environmental, social, and governance (ESG) information to strengthen investment decision-making and better assess and manage their collective ESG risk exposure.

Net zero – cutting greenhouse gas emissions to as close to zero as possible, with any remaining emissions reabsorbed from the atmosphere by oceans and forests.

Net-Zero Banking Alliance (NZBA) – an industry-led, UN-convened Alliance that brings together banks worldwide, representing about 40% of global banking assets, which are committed to aligning their lending and investment portfolios with net zero emissions by 2050.

Non-Financial Reporting Directive (NFRD) – an EU directive that lays down the rules on disclosure of non-financial and diversity information by large public interest entities. Intended to be replaced by the CSRD.

Open Footprint Forum – a forum focused on developing open and vendor-neutral industry standards to provide consistent and accurate measurement and reporting of environmental footprint data.

Principal Adverse Impact (PAI) – negative, material or likely to be material effects on sustainability factors that are caused, compounded by, or directly linked to investment decisions and advice performed by the legal entity. A key concept in the EU’s Sustainable Finance Disclosure Regulation (SFDR).

Disclosure Regulation (SFDR) – one of the EU Action Plan on Sustainable Finance’s landmark regulations.

Reconciliation and Responsible Investment Initiative (RRII) – a partnership between the National Aboriginal Trust Officers Association (NATOA) and the Shareholder Association for Research & Education (SHARE) that works with Canadian institutional investors to promote responsible investment policies and practices that include reconciliation goals.

Shareholder Association for Research and Education (SHARE) – a unionized, not-for-profit organization dedicated to promoting the responsible investment of workers’ capital using shareholder engagement, advisory services, research and education.

Sustainability Accounting Standards Board (SASB) – a non-profit independent standard-setting organization that develops and maintains standards enabling businesses around the world to identify, manage, and communicate financially material sustainability information to investors.

Sustainable Industry Classification System (SICS) – a system developed by SASB to group like companies based on their sustainability-related risks and opportunities.

Sustainable Finance Disclosure Regulation (SFDR) – a European regulation introduced to improve transparency in the market for sustainable investment products, to prevent greenwashing, and to increase transparency around sustainability claims made by financial market participants.

Task Force on Climate-Related Disclosures (TCFD) – created by the Financial Stability Board to develop recommendations on the types of information that companies should disclose to support investors, lenders, and insurance underwriters in appropriately assessing and pricing risks related to climate change.

Valuation Reporting Foundation – a global non-profit organization that offers a comprehensive suite of resources designed to help businesses and investors develop a shared understanding of enterprise value—how it is created, preserved and eroded.

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About the Canadian Regulatory Technology Association (CRTA)

The Canadian RegTech Association is a non-profit organization focused on solving regulatory challenges through collaborative efforts between key RegTech stakeholders: regulated entities, technology vendors, regulatory bodies, government and professional service providers.

The goal is to facilitate dialogue, raise standards and promote growth and innovation within the Canadian RegTech eco-system. The organization will endeavor to solve regulatory challenges through collaborative discussion and engagement in proof-of-concept initiatives.

www.canadianregtech.ca



This report was prepared using sources available prior to publication that we believe to be credible and accurate. The white paper is provided for general information only and to promote discussion of the current status ESG and RegTech. It is no substitute for legal, or any other professional advice or reference to legislation and regulations. Readers are encouraged to retain qualified, independent counsel and advisors to answer legal and other questions or address such issues.

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