Smart Prosperity Institute

CLEAN ECONOMY WORKING PAPER SERIES
NOVEMBER 2026 / WP 26-4

STRENGTHENING CLIMATE DISCLOSURE IN CANADA: POLICY RECOMMENDATIONS FOR A DOUBLE MATERIALITY FUTURE

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Strengthening Climate Disclosure in Canada: Policy recommendations for a double-materiality future

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Executive Summary

Canadian companies are increasingly exposed to climate-related financial and non-financial risks, yet national climate disclosures remain voluntary, inconsistent, and often insufficient for decision-making. Evidence from an empirical analysis of 138 TSX-listed firms shows weak alignment between the materiality perspectives companies claim to adopt and the climate-risk information they disclose. These gaps, along with limited long-term risk discussion, inconsistent scenario analysis, and variable treatment of climate topics, create conditions for greenwashing and hinder corporate transparency.

This brief draws on academic literature and empirical evidence to outline six targeted recommendations to strengthen Canada's climate disclosure landscape. Three recommendations focus on actions regulators can take to support more consistent, multidimensional reporting. Three additional recommendations guide business leaders in enhancing materiality practices and improving the credibility of their climate disclosures.

Recommendations for Regulators

1. Adopt a clear national definition of double materiality: Providing a unified definition would ensure firms consider both financial and societal impacts, improving comparability and reducing ambiguity in disclosure practices.
2. Embed social, ecological, and financial interconnections into disclosure guidance: Regulators should help firms understand how climate risks propagate across levels to support more comprehensive risk assessment, since there could be implications for communities, the economy, and financial stability.
3. Map climate risks to financial risks: Clear guidance linking physical and transition risks to credit, market, liquidity, operational, and enterprise-value risks will support decision-useful, sector-relevant disclosures.

Recommendations for Business Leaders

4. Adopt and meaningfully apply double materiality: Firms using this perspective disclose more climate information, but stronger alignment between materiality statements and actual disclosures is needed to avoid perceptions of greenwashing.
5. Expand time horizons in climate-risk reporting: Companies should clearly discuss short-, medium-, and long-term climate risks, ensuring scenario analysis aligns with publicly disclosed time horizons.
6. Strengthen governance oversight of climate disclosures: Engagement from boards or senior leadership, particularly through independent directors, supports more credible materiality assessments and more rigorous disclosure practices.

Together, these actions would enhance the quality, consistency, and credibility of climate-related reporting in Canada. By clarifying expectations, enhancing governance, and integrating double materiality, Canada can better prepare companies for emerging global standards while fostering greater transparency and resilience.

Introduction

Climate change poses both financial and non-financial risks to Canadian companies. These risks may lead to financial losses due to declining stock prices, supply chain disruptions, and changes in consumer behaviour (Chabot & Bertrand, 2023; Huang et al., 2025; Pankratz & Schiller, 2024). Consequently, Canadian firms encounter a range of physical and transitional challenges related to climate change and are expected to disclose those risks publicly to their stakeholders (Chewning & Higgs, 2002; Font et al., 2016; Jebe, 2019; Reimsbach et al., 2020). However, the current climate disclosure landscape in Canada remains voluntary (Cho et al., 2020), whereby companies have flexibility in the breadth and depth of their disclosures. The voluntary nature of climate disclosures has raised concerns that firms are using these disclosures as opportunities to bolster their reputation or image, referred to as greenwashing (Andersson & Arvidsson, 2023; Bingler et al., 2022; Panfilo et al., 2025).

To address these concerns, the Canadian Sustainability Standards Board (CSSB) has developed guidance on voluntary climate reporting to help integrate the reporting standards from the International Sustainability Standards Board (ISSB) from a financial and Canadian perspective (Financial Reporting & Assurance Standards Canada, n.d.; FRAS Canada, 2024). Similarly, the Canadian Securities Administrators (CSA) also considered developing guidance for firms reporting under their rules, but CSA has since paused such efforts (Canadian Securities Administrators, 2023, 2025). While these efforts signal a positive step towards more financially focused climate disclosures in the future, there remains a need for a more comprehensive, holistic understanding of climate change risks for Canadian firms that values non-financial impacts and adopts a double materiality perspective.

In light of that need, this brief draws on the insights of three research projects: an integrative literature review and two empirical analyses of TSX-listed firms to address this gap. In doing so, it presents six recommendations that underscore the importance of a multidimensional approach to materiality and offer guidance to support enhanced applications of materiality at the firm level. These recommendations consider the relationship between materiality and climate disclosures among Canadian TSX-listed firms, with a focus on corporate concerns such as financial performance, stakeholder expectations, and systemic issues related to climate change risks and financial stability. By analysing how materiality is conceptualised and applied in climate change and sustainability reporting, the brief informs regulators and reporting entities about the implications of materiality choices and provides guidance to Canadian companies to enhance the relevance and consistency of their climate-related disclosures.

This review is organised as follows: First, it provides background information on the materiality principle and summarises the findings from the integrative literature review. Next, the

findings from the two empirical analyses will be presented. Finally, the six recommendations for regulators and business leaders will be discussed in detail.

Materiality Background and Related Challenges

The materiality principle underpins all corporate sustainability reports, determining what information should be disclosed to public stakeholders (Font et al., 2016; Whitehead, 2017). Given the wide range of possible topics to disclose, materiality has been defined in two ways. First, financial materiality refers to the significance of a topic based on its actual or potential effects on a firm's financial performance, financial position, or enterprise value (Baumüller & Sopp, 2022; Puroila & Mäkelä, 2019). A topic is financially material if omitting or misstating information about it could influence investors' decisions (International Financial Reporting Standards Foundation, 2022). Second, impact materiality refers to the significance of a topic based on the actual or potential positive or negative impacts a firm has on the environment and society (De Cristofaro & Gulluscio, 2023). A topic is materially impactful if the firm's activities cause, contribute to, or are directly linked to substantial environmental or social consequences, regardless of immediate financial effects (Panfilo et al., 2025; Puroila & Mäkelä, 2019).

A critical challenge with this principle is the inherent difference within the materiality decision-making process due to the competing applications of the two materiality perspectives (Reimsbach et al., 2020). Impact materiality and financial materiality can be applied individually within a single materiality perspective, where companies consider either the financial or impact aspects (Adams et al., 2021; Christensen et al., 2021; Fiandrino et al., 2022). As such, a single financial perspective evaluates relevance based on its implications for financial performance (Chiu, 2022; Jebe, 2019). On the other hand, both impact and financial materiality can be applied together under a double materiality perspective, which considers the importance from both investors' and non-financial stakeholders' perspectives (Adams et al., 2021; Chagas et al., 2022). While both perspectives seek to provide stakeholders with relevant information regarding corporate sustainability actions and impacts, the chosen materiality perspective can affect the disclosure of information (Puroila & Mäkelä, 2019).

Moreover, given that the adopted materiality perspective may influence what is disclosed (Puroila & Mäkelä, 2019; Raith, 2023), it is imperative to understand the relationship among materiality, corporate disclosure, and climate change risks. To do so, we conducted an integrative literature review[1] that synthesised 140 academic articles on climate change disclosures, management, accounting, and finance, revealing the embedded nature of materiality in both corporate reporting practices and the broader socio-economic system. The key output of the review is Figure 1, which provides a visualisation of these connections as a conceptual model and illustrates the central role of materiality.

[1] For additional insights, please see our published paper "Unpacking climate disclosure: A multi-level integrated framework for understanding the corporate sustainability disclosure landscape" in Green Finance.

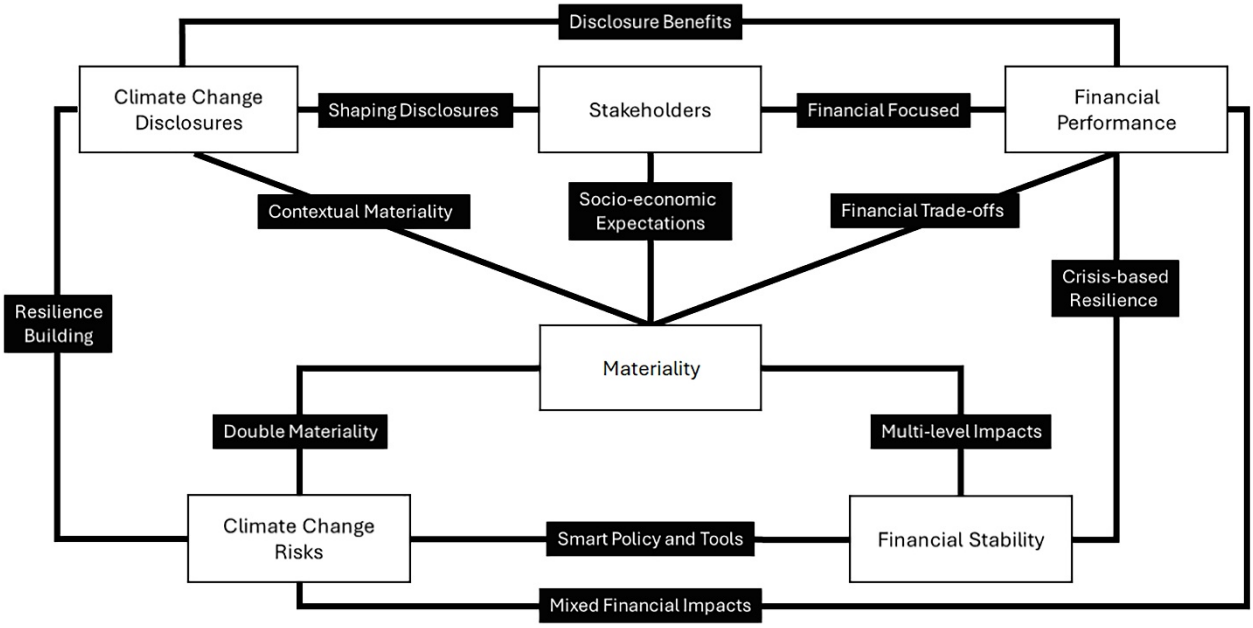


Figure 1: Conceptual model of the connections between materiality, climate change disclosure, and the socio-economic system

As noted in the literature, materiality is not merely a tool for selecting the most relevant information; it also integrates financial concerns about trade-offs with broader systemic economic stability and climate-related risks. Firms adopting a double materiality perspective may see enhanced financial performance by improving their environmental performance (Jadhav et al., 2022), with a similar outcome seen for some firms adopting a financially focused single materiality perspective (Aras et al., 2022; Carvajal & Nadeem, 2023). However, there can be considerable financial trade-offs that need to be accounted for, such as the possibility of negative financial implications of disclosing greenhouse gas emissions (Sichigea et al., 2021) or the adverse reactions by markets to the disclosure of material information (Gill et al., 2022).

While the potential financial trade-offs of disclosure relate to materiality, the connection to climate-related information disclosure is further affected by the specific contexts in which a company operates. The governance, economic, social, and cultural traditions of a country could have some impact on the materiality of climate risks (Antonini et al., 2021; Bilala et al., 2022; Caby et al., 2020; Grauel & Gotthardt, 2016), leading to external influence beyond the interests of a company's stakeholders.

Building on the financial and contextual factors, materiality is also connected to the systemic challenges posed by climate change risks and to the economy's financial stability. The literature noted that applying a double materiality perspective could allow firms to address systemic climate risks (Gruenewald et al., 2024). There was also a discussion of recognising how climate risks can affect the firm at multiple levels and of the transition between the firm and the economy (Chabot & Bertrand, 2023; Lamperti & Roventini, 2022; Sepulveda-Alzate et al.,

2022). These insights indicate that materiality connects firms' climate disclosures to financial and stakeholder concerns, as well as broader systemic issues.

However, although materiality is imperative for climate disclosures, in areas without clear mandatory reporting policies, firms are allowed to apply their own interpretations of materiality or adopt a single financial materiality perspective (De Cristofaro & Gulluscio, 2023; Remmer & Gilbert, 2019). In either case, the firm's disclosures may not provide adequate coverage of information for non-financial stakeholders (Jørgensen et al., 2022; Reimsbach et al., 2020). This ambiguity in materiality interpretation becomes especially problematic in jurisdictions without mandatory sustainability reporting requirements. In such contexts, firms may default to a narrow financial materiality lens, potentially overlooking climate-related risks, either accidentally or intentionally, that are significant to broader stakeholder groups (Bingler et al., 2022; Ng et al., 2022).

In Canada, the establishment of the Canadian Sustainability Standards Board (CSSB) signals a move toward a more standardised sustainability reporting framework within an otherwise voluntary landscape (Financial Reporting & Assurance Standards Canada, n.d.). However, the CSSB's efforts to date have focused on adapting the reporting practices of the International Sustainability Standards Board (ISSB) to a Canadian context (KPMG Canada, 2025), which would align the CSSB's mandate with the single-financial materiality approach (Financial Reporting & Assurance Standards Canada, n.d.). This perspective may create challenges because firms that only consider this approach risk prioritising information relevant to investors while neglecting the environmental and social impacts that are important to their other stakeholders (Abhayawansa & Adams, 2022). As a result, firms may underreport or misinterpret climate-related risks, leading to misleading or merely symbolic disclosures. This course of action raises concerns about the undermining of both corporate accountability and the financial system's resilience.

Current Approaches to Climate Disclosures by Canadian Firms

The results of our recent empirical analysis of 138 corporate reports from TSX-250-listed firms in 2023 highlighted a concerning trend of decoupling between the materiality perspectives applied by the companies and the climate risk topics disclosed. Of the sampled firms, 36% (50 firms) adopted a double materiality[2] perspective, while 57% (79 firms) applied a financial materiality[3] perspective, and 7% (9 firms) utilised impact materiality[4,5]. Despite having more financially material firms in the sample, this did not result in a higher frequency of climate

[2] Double materiality assesses which issues are important based on both their financial impact on the company and the company's impact on society, the natural environment, and the economy (Adams et al., 2021; Baumüller & Sopp, 2022).

[3] Financial materiality helps firms identify key information to disclose based on the impact of external sustainability topics on value creation and financial performance (Abhayawansa, 2022; Chiu, 2022; International Financial Reporting Standards Foundation, 2022).

[4] Impact materiality focuses on assessing the relevance of information based on the external impacts of corporate actions or operations on society, the natural environment, and the economy (Geldres-Weiss et al., 2021; Panfilo et al., 2025; Remmer & Gilbert, 2019).

[5] The remainder of this discussion will focus on insights related to double and financial materiality firms, since they constitute the largest portion of the sampled firms.

disclosure topics among these firms. In fact, double materiality firms tended to provide more disclosures on those topics, as noted in Table 1, apart from the scenario analysis topic. The more frequent coverage of the nine topics by double materiality firms aligns with the expectation that a double materiality perspective results in more holistic disclosures (Adams et al., 2021; Gruenewald et al., 2024; Vito et al., 2025). However, when considering disclosure trends across the overall sample, all nine climate disclosure topics were discussed in the reports, though to varying degrees.

Table 1: Percentage of Climate Disclosure by Materiality Type

Climate Disclosure Topics	Double Materiality (n=50)	Single Materiality (n=79)	Impact Materiality (n=9)
Short-term risks	14%	14%	11%
Long-term risks	16%	14%	0%
Scenario analysis	20%	30%	33%
Risk Methodology	62%	61%	44%
Physical risks	64%	56%	44%
Transition Risks	62%	52%	33%
Renewable energy	78%	65%	44%
Carbon compensation	18%	9%	11%
Carbon capture	20%	15%	11%

Variability in disclosures is expected because each firm is unique, leading to different levels of importance attached to what they need to disclose (Chewning & Higgs, 2002; Reimsbach et al., 2020). However, the results of this analysis highlight two important contradictions in firms' disclosure practices. First, 14% of both double materiality and financial materiality firms discussed short-term risks, but only 16% of double materiality and 14% of financial materiality firms discussed long-term risks. These percentages suggest that firms give more consideration to climate risks in the short term (e.g., the next 5 years) than to risks that might arise or affect them in the future (e.g., 10 years from now). Interestingly, firms in both materiality types in the sample reported applying scenario analysis to some degree, which requires consideration of short- and long-term risk mapping (Andersson & Arvidsson, 2023). Second, the risk methodology topic, which includes consideration of how firms identify physical and transition risks (Andersson & Arvidsson, 2023), was discussed by both double and financial materiality firms, with disclosure percentages of 62% and 61%, respectively. This suggests that firms are assessing the material importance of climate risks. However, double materiality firms still disclosed physical and transition risks more frequently than single materiality firms, even though these risks are financially relevant for firms (TCFD, 2021). These disclosure frequencies

suggest that financial materiality firms may be signalling engagement with climate risk practices. However, for both double and financial materiality firms, there has been insufficient integration of short-term and long-term risks, indicating a lack of preparedness for comprehensive climate-related disclosure requirements.

Furthermore, when assessing the alignment between these materiality perspectives and the nine climate disclosure topics of interest, the statistical analysis found no association[6,7]. These insights suggest that the adoption of double or single materiality does not always result in better disclosures, which contradicts expectations set by principles outlined for double materiality (Adams et al., 2021; Vito et al., 2025), but aligns with other recent empirical findings (Panfilo et al., 2025) and raises concerns that double materiality may be used as a greenwashing tactic (Bingler et al., 2022; Coen et al., 2022). As such, meaningful integration of both climate change disclosure topics and double materiality is needed to help firms move beyond simple, superficial disclosure toward more substantive disclosures grounded in meaningful corporate action.

In addition to examining the climate disclosures of 138 TSX firms, our second empirical study, was conducted to explore the associations among firms' net-zero commitments, financial performance, environmental, social and governance (ESG) ratings, and carbon intensities. The study employed a longitudinal panel of 97 TSX-listed firms from 2009 to 2025 and identified decoupling between firm commitments and firm actions. Firms with climate commitments appeared to have better financial performance and ESG ratings than those with no commitments. However, when accounting for changes within the sampled firms over time, the improved financial performance becomes statistically insignificant, indicating that climate commitments are not driving firms' financial performance. For the ESG ratings, a similar pattern emerged. Firms with commitments received higher ratings, but after accounting for fixed effects, the higher environmental ratings were no longer significant, suggesting that the higher ratings may reflect third-party raters' methodological preferences rather than actual improvements in firms' carbon intensity. Finally, when considering changes in firms' reported carbon intensities, the adoption of climate commitments did not yield statistically significant effects when compared to firms that did not make commitments. Meaning, firms could not translate their climate commitments into meaningful operational changes that lead to a reduction in carbon emission intensities. Overall, these insights highlight the decoupling between firm commitments and actions, raising additional concerns regarding the possibility of greenwashing and the need for accountability.

In summary, the integrative literature review reveals that materiality goes beyond just being a technical tool for selecting information to disclose. It involves a broader range of social and economic factors, with complex interrelationships. However, the empirical analyses show

[6] The Mann-Whitney U test was applied to explore the association between the degree of double materiality integration and the disclosure amount by the firm. Resulting in non-significant findings for committed double materiality adopters (p-value=0.88) and superficial label adopters (p-value = 0.12).

[7] The Kruskal-Wallis H test was used to determine if there was an association between the materiality type adopted and the number of topics disclosed. The results were insignificant (p-value = 0.17).

that the current disclosure practices of Canadian listed firms do not align with the materiality perspectives these companies have adopted. Additionally, the net-zero commitments firms make do not always result in meaningful climate action. Consequently, several policy recommendations can be drawn from these findings, which will be presented in the following section.

Policy Recommendations

Climate change disclosures present an opportunity for Canadian regulators and companies to reshape the current reporting landscape from one that emphasises scattered, vague disclosures to one that encourages comprehensive, double-materiality disclosures. The findings from the integrative literature review highlight six key recommendations to support this redevelopment of the Canadian reporting landscape. The remainder of this section will provide recommendations for regulators to help develop a multidivisional approach to climate disclosure. This approach aims to improve the relevance and consistency of climate disclosures in Canada, helping companies prepare for future disclosure mandates. Additionally, we will offer insights for business leaders to enhance the application of materiality at the firm level, further supporting climate disclosures.

Recommendations for Regulators

1. Adopt a clear national definition of double materiality.

Climate change disclosures worldwide often provide vague information with short-sighted perspectives on climate change risks (Abhayawansa & Adams, 2022; Andersson & Arvidsson, 2023; Ng et al., 2022; Santos & Rodrigues, 2021). As such, guidance on what to consider within public disclosure could support improving reporting by Canadian firms through a possible trickle-down effect (Cho et al., 2020) or through institutional pressures (Caby et al., 2020; Shui et al., 2023). The literature related to the theme of Double Materiality emphasises how this perspective can help tackle systemic climate risks while offering valuable insights for both financial and non-financial stakeholders (Gruenewald et al., 2024; Jørgensen et al., 2022). By adopting a double materiality definition, regulators could help shift the Canadian reporting landscape towards a model that employs universal rules or concepts to support comparability, consistency and reliability (Lee et al., 2023) since the definition of materiality adopted by firms affects the information disclosed (Raith, 2023). Therefore, a unified double materiality definition would encourage Canadian firms to focus on financially material climate risks (Migliorelli, 2023) and socio-ecologically relevant risks (Adams et al., 2021).

Moreover, the literature on the Smart Policy and Tools theme emphasises that addressing national climate risks requires strategic policies to support climate disclosure and action, rather than focusing solely on financial performance (D'Orazio, 2021; Mähönen, 2020; Malik et al., 2023; Mandel et al., 2021). The literature notes a global effort to develop a unified materiality definition for sustainability reporting (Abhayawansa & Adams, 2022; Fabris, 2020). This is not to say that strict materiality topics or materiality maps are necessary. In fact, providing such detailed or rigid guidance may create problems for firms that, due to the nature of their business or industry, may not find those topics material (Fabris, 2020; Fasan & Mio, 2017; Sichigea et al.,

2021). Thus, providing a cohesive definition of double materiality would help Canadian businesses ensure their reporting practices align with both financial and impact-related materiality. Thereby, readying firms for possible mandatory disclosures.

2. Embed social, ecological, and financial interconnections into disclosure guidance.

Regulators are encouraged not only to promote the adoption of a double materiality perspective but also to develop guidelines to help Canadian companies gain a comprehensive understanding of their climate change risks. This understanding should include how these risks are interconnected with broader social, ecological, and financial issues. The materiality research discussed in the Multi-level Impacts theme has shown that unaddressed physical risks can push the economy toward tipping points in financial stability (Lamperti & Roventini, 2022). These tipping points may have negative economic consequences, which are further exacerbated by the transmission of both transition and physical risks (Chabot & Bertrand, 2023; Liu et al., 2021). These risks can travel from households and corporations to financial institutions and ultimately affect the entire economy (Chabot & Bertrand, 2023). Understanding double materiality through an interconnected systems-level thinking perspective can help Canadian companies better grasp how their operations may be directly or indirectly affected by climate change. This understanding also supports the development of resilience against economic or financial shocks resulting from climate change (Gallego-Alvarez et al., 2014; Jung & Song, 2023; Mastouri et al., 2022). Overall, embedding considerations for multi-level social, ecological, and financial issues could support a multidimensional approach to climate disclosures within Canada.

3. Map climate risks to financial risk.

As highlighted in the sampled literature, the financial implications of not addressing climate risks are a concern for companies (Jung & Song, 2023; Karydas & Xepapadeas, 2022; Mastouri et al., 2022; Shui et al., 2023). However, the research also noted that, in some instances, disclosing climate risks might pose financial risks to firms, particularly if those companies operate in an industry with high climate risk exposure or if the market punishes climate disclosures (An et al., 2022; Matsumura et al., 2024; Migliorelli, 2023; Thai et al., 2023). This creates a disclosure paradox, whereby firms are expected to share their climate risks but, in doing so, may face negative market reactions.

Considering this challenge, regulators could support Canadian companies by explicitly mapping climate risks to financial risks in a sector-specific, decision-useful, and well-established financial risk-categories-grounded manner. Clear guidance on how physical and transition risks affect credit, liquidity, operational, and market risks, as well as long-term enterprise value, will help firms assess the financial impact of climate risks. It would also reduce uncertainty around disclosure expectations by clarifying what is considered material climate-related information in financial terms.

Moreover, providing such guidance may help firms to better integrate double materiality into their disclosures. The current empirical data highlights a disconnect between the climate information firms disclose and the materiality perspectives applied, even though there is expected to be some association (Adams et al., 2021; Panfilo et al., 2025). Regulatory guidance

would not only support firms' financial decision-making but also help create the conditions necessary for integrating double materiality into Canada's climate disclosure landscape. By explicitly mapping climate risks to financial risks, regulators provide firms with a structured way to understand how climate-related events influence both financial performance and wider societal or environmental impacts. For example, physical climate risks that cause operational disruptions can also affect community resilience (Battiston et al., 2021; Ben-Amar et al., 2023; Lavell et al., 2012) of the ability of employees to access or find work (Li et al., 2025). Thus, mapping climate risks to financial risks provides a clear pathway for Canadian firms to strengthen their alignment between disclosure practices, materiality expectations, and market concerns.

Recommendations for Business Leaders

4. Adopt and meaningfully apply double materiality

Due to its integration of financial and impact materiality, a double materiality approach allows disclosures to provide insights relevant to both financial and non-financial stakeholders (Jørgensen et al., 2022). As such, disclosures built on this materiality approach could aid companies in providing more decision-useful information and reduce the vagueness within their disclosures, while addressing pertinent climate-related risks (Baumüller & Sopp, 2022; Gruenewald et al., 2024; Ng et al., 2022).

The empirical analysis shows that some Canadian firms have begun adopting a double materiality perspective in their disclosures. This approach results in greater coverage of climate risk topics compared to firms that use a financial materiality view, which may appeal more to external stakeholders. However, simply claiming to adopt double materiality is not enough. Our results indicate that further efforts are needed to ensure that materiality assessments and statements are aligned with the disclosed topics. If alignment is not achieved, the company's disclosures could be perceived as greenwashing (Bingler et al., 2022; Panfilo et al., 2025).

As such, double materiality is a valuable option for Canadian firms that wish to provide more relevant climate-risk information for stakeholders, but there needs to be better integration between stated materiality perspectives and the topics firms disclose. Strengthening this alignment would not only improve the credibility and usefulness of these disclosures but also position Canadian firms to meet emerging global reporting expectations more effectively.

5. Expand time horizons in climate risk reporting.

The results of the empirical analysis of TSX-250 firms highlighted a tendency for firms not to fully disclose short-term or long-term climate risks, despite considering multiple time horizons in their scenario analyses. This practice can be problematic because stakeholders have limited information, which hinders their ability to assess the potential long-term implications for the firm and, potentially, impacts their investment decisions (Ilhan et al., 2023; Kamarudin et al., 2023). There is a growing need for a more detailed discussion regarding both short-term and long-term risks. This necessity is highlighted by companies' tendency to assume that their internal insights and public disclosures align. Many firms claim to offer insights into multiple

time horizons; however, they often fail to provide such information or fully articulate the long-term consequences of climate risks (Abhayawansa & Adams, 2022; Andersson & Arvidsson, 2023). Ensuring that both short-term and long-term risks are thoroughly discussed in public disclosures will help the company by providing stakeholders with the insights they need to make informed decisions. Additionally, this approach will ensure that the company's internal reporting is consistent with its external claims.

6. Strengthen governance oversight of climate disclosures.

In addition to the central role of materiality in corporate disclosures, the literature review also highlighted the benefits of integrating climate change risk disclosures into businesses' governance practices. When senior leadership participates in the climate disclosure process, the company has an opportunity to enhance its reputation as a sustainable and climate-focused entity by taking more proactive actions (Cosma et al., 2022). It is important to note that a large board is not required in order to have a positive effect on corporate climate disclosures (Amran et al., 2014; Ooi et al., 2019). What seems to be important is adding independent, or non-executive, board members to aid the firm in achieving sustainable and climate-related efforts (Amran et al., 2014; Cosma et al., 2022; Ooi et al., 2019).

These insights complement the conceptual model's findings by showing that governance structures, particularly leadership involvement and board independence, shape how firms identify material climate issues through the socio-economic expectations of board members, who serve as internal stakeholders (Cosma et al., 2022; Mehedi et al., 2024). Stronger governance creates the conditions for more rigorous materiality assessments that can integrate stakeholder interests, balance financial trade-offs, and systemic climate risks.

However, the findings from the empirical analysis highlight a need to improve disclosures on several topics, including short- and long-term risk mapping, the implementation of climate risk-related scenario analysis, and climate action efforts (e.g., carbon capital, carbon compensation, or renewable energy). In light of those findings, boards should formalise climate oversight and tie it directly to the firm's materiality process and final disclosures. By doing so, Canadian companies can utilise the central role of materiality to identify and address external climate risks and their financial implications. This approach also ensures that they provide essential information to stakeholders, further supporting their decision-making processes.

Conclusion

This analysis of disclosures from TSX-listed firms, together with insights from the academic and practitioner literature on climate change, materiality, and accounting, highlights several opportunities to strengthen climate-related reporting practices in Canada. The empirical review of corporate disclosures indicates persistent gaps in the types of climate information reported, limited alignment between materiality assessments and disclosure topics, and relatively low uptake of double materiality approaches. The literature further underscores the importance of materiality in interpreting climate-related risks and translating broader systemic challenges into firm-level implications, suggesting that additional regulatory guidance may support more consistent and decision-useful reporting.

Building on these findings, this brief outlines six recommendations for regulators and business leaders to consider when refining guidance and preparing future climate disclosures. These recommendations are intended to support a more coherent integration of double materiality into reporting practices and to enhance Canadian firms' preparedness for emerging disclosure requirements. Overall, the evidence points to a clear opportunity for coordinated improvements that can advance the quality, comparability, and accountability of climate-related reporting in Canada.

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