

Canadian Corporate Performance on GHG Emissions, Disclosures and Target Setting: Third edition

June 2023

Authors

Simon Martin

Senior Research Associate
Institute for Sustainable Finance
simon.martin@queensu.ca

Ryan Riordan

Director of Research, Institute for Sustainable Finance
Professor, Smith School of Business, Queen's University
ryan.riordan@queensu.ca

Sean Cleary

Chair, Institute for Sustainable Finance
Professor, Smith School of Business, Queen's University
sean.cleary@queensu.ca



Contents

Executive Summary	3
Introduction	4
How Many Firms In The S&P/TSX Composite Index Disclose Emissions?	5
Emissions Disclosing Firms By Market Cap	6
Are These Emissions Verified?	7
Target Setting	8
GHG Reduction Plans	11
Executive Incentives	12
Conclusion	12
Endnotes	13

EXECUTIVE SUMMARY

The demand for corporate climate-related disclosures is growing. Much of the impetus has come from investors and financial institutions that require information that is reliable, consistent and comparable in order to assess investment and lending opportunities and risks. This is highlighted by CDP's capital market signatories, which represent over US\$136 trillion in assets, requesting environmental information from more than 15,000 companies worldwide in 2023¹.

Institutional investors are setting portfolio-level short- and long-term GHG reduction targets in response to stakeholder demands. Plans to reduce emissions also address the long-term implications of holding stranded assets that become obsolete as the world decarbonizes.

Private sector demand for climate-finance data is also being fuelled by regulators. For instance, the U.S. Securities and Exchange Commission and the Canadian Securities Administrators have proposed new rules designed to enhance and standardize climate-related disclosures for investors. The Office of the Superintendent of Financial Institutions (OSFI) proposed guidelines in March 2023 that establish expectations of federally regulated financial institutions' management of climate-related risks.²

This report provides an update to a subset of the findings of previous reports from the Institute for Sustainable Finance (ISF) on Canadian firms' performance with respect to GHG emissions disclosures and target setting for emissions reductions. Researchers at ISF have collected and summarized climate reports from the constituents of the S&P/TSX Composite Index. The results are based on information included in corporate reports released during 2022, augmented with data reported to CDP (formerly the Carbon Disclosure Project).

Key findings:

- 169 firms (72% of firms in the Index) report their GHG emissions, representing a small increase from the previous year.
- 134 firms (57% of firms in the Index) disclose GHG reduction targets, up from 113 the previous year.
- However, 36% of firms with targets provide little or no associated details on how reductions will be achieved. Only 13% of firms provide very detailed plans.
- Large firms are more likely to report emissions and have reduction targets. For example, the 72% of firms in the Index that disclose emissions cover 91% of the total Index's market capitalization.
- Relative to the previous year, the number of firms with net-zero or carbon neutral targets has increased.
- We find that 30 firms have a Scope 3 target; this metric was not tracked in previous years. We expect this number to grow.³

Overall, the quality, level, and existence of GHG emissions disclosures and target setting varies substantially across firms. However, the evidence suggests that firms are improving disclosure quality and frequency. At the same time, regulators are providing additional guidelines and regulatory certainty, suggesting that more and better disclosure is in our future.

INTRODUCTION

The following findings are derived from analyzing S&P/TSX Composite Index firms' sustainability reports released in 2022. The data is augmented with data from CDP.

Sustainability information appears in reports by firms with many different titles such as the Task Force on Climate-Related Financial Disclosures (reporting according to TCFD guidelines), Sustainability and/or ESG Reports, Responsibility Reports, and the generic Climate Report.⁴ We reviewed all reports that disclosed sustainability information.

The differences in how firms disclose climate and sustainability information have created a complex reporting environment making comparability difficult. Many firms also lack sufficient expertise to compile and report emissions data. However, as the sustainable finance industry matures, collective knowledge grows, and regulations are put in place, we expect to see higher quality and more standardized GHG emissions reporting and climate-related disclosures. The creation of the International Sustainability Standards Board (ISSB) by the International Financial Reporting Standards (IFRS) organization suggests that we are closer to a more unified climate reporting environment.⁵

Arguably the most important climate-related disclosures are firm-level GHG emissions from operations (Scope 1) and purchased or used electricity (Scope 2).⁶ Scope 3 emissions, commonly referred to as value chain emissions, are reported infrequently.

An increasing number of firms disclose future reduction targets with different timelines and levels of ambition. Some emissions reduction targets are absolute, while others are intensity-based. As well, net-zero targets by 2050 are becoming increasingly common.

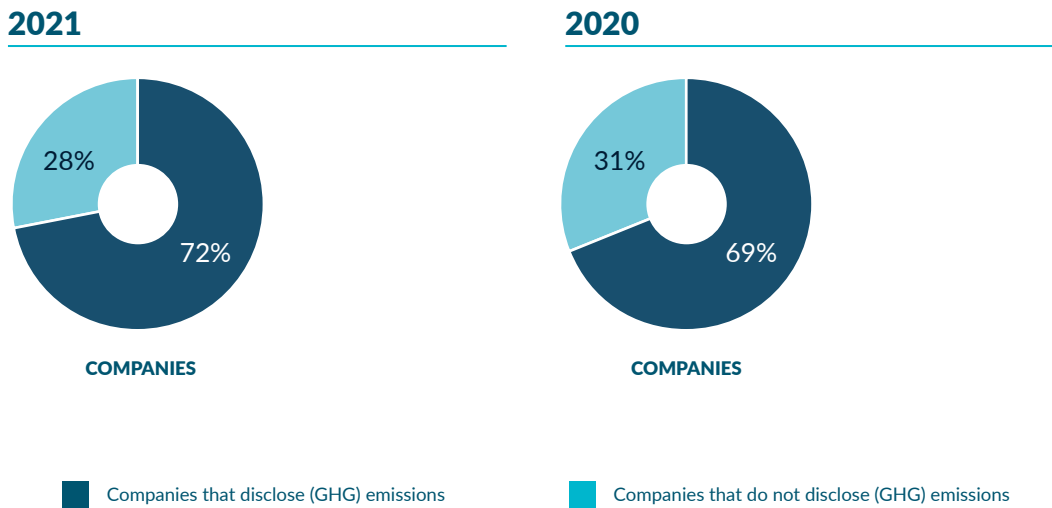
Firms are increasingly facing significant pressure to provide details regarding how they intend to achieve their targets, and link executive compensation to meeting targets. Overall, the quality, level, and existence of GHG emissions disclosures and target setting varies substantially across firms.

HOW MANY FIRMS IN THE S&P/TSX COMPOSITE INDEX DISCLOSE EMISSIONS?

Out of the total 236 firms in the Index⁷, 169 (72% of total number of firms) disclose their emissions through a sustainability report. This is up from 160 (69% of total firms) the previous year, a small year-over-year increase in firm disclosure rates.⁸

FIGURE 1

S&P/TSX Companies Disclosing GHG Emissions



Note: Year represents year of emissions. The reporting year is usually one year after.

It is interesting to compare companies listed publicly in Canada to other regions. According to one survey, 65% of companies on Japan's Nikkei Index 400 disclosed Scope 1 and Scope 2 emissions as of October 2022.⁹ For the S&P 500 in the United States, 71% of companies disclosed emissions in 2021 reporting.¹⁰ So, Canada is competitive with these jurisdictions, but it is still well behind Europe and the United Kingdom where public companies already had emissions reporting rates of 89% and 98% respectively for public firms in 2019.¹¹

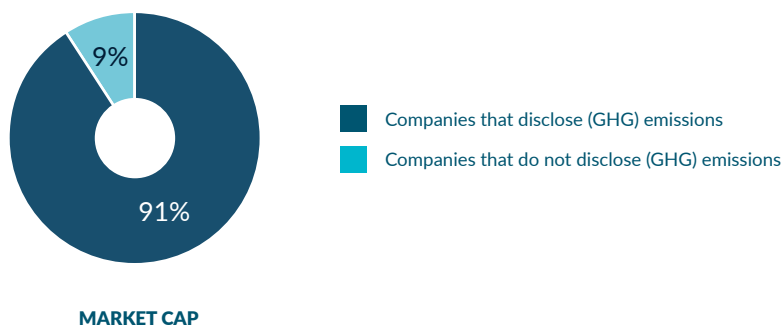
EMISSIONS DISCLOSING FIRMS BY MARKET CAP

We plot disclosure rates by market capitalization in **Figure 2**. Disclosing firms have a market capitalization of 91% of the total for the S&P/TSX Composite. This number is unchanged from the prior reporting year. A higher proportion of the Index discloses emissions when weighed by market cap instead of by firm, highlighting that larger firms are more likely to disclose emissions.

FIGURE 2

S&P/TSX Companies' Emissions Disclosures by Market Cap

2021



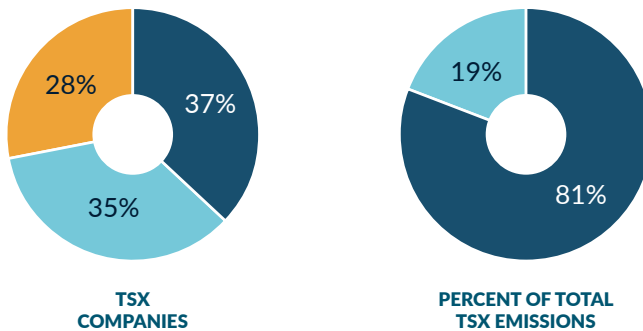
ARE THESE EMISSIONS VERIFIED?

Firms that have traditionally audited and verified financial information are now providing similar services for GHG emissions. **Figure 3** shows that 37% of Index firms report emissions that are verified by an external party, whereas 35% report unverified emissions. This is a slight improvement from 2020 when 33% of companies reported emissions that were verified, while 36% did not have their GHG disclosures verified.

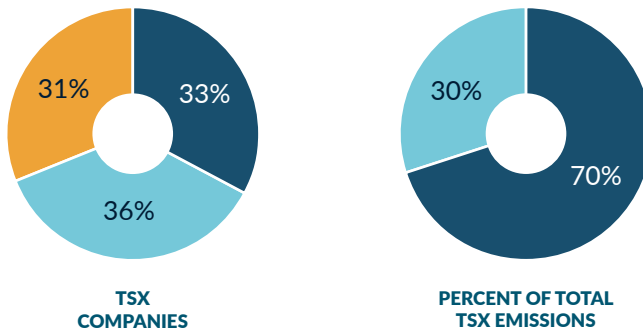
FIGURE 3

S&P/TSX Companies' Emissions Disclosure and Verification Rates

2021



2020



■ Disclosures verified ■ Disclosures not verified ■ Do not disclose

It is also helpful to report the amount of emissions verification relative to total reported amount in CO₂ equivalent, rather than to number of companies. **Figure 3** shows that 81% of reported emissions are verified by an external third party. This represents an increase from last year, where 70% of reported emissions were verified. Verification of emissions provides more confidence in the reported emissions.

Measuring GHG emissions can be a difficult task and frequently firms will re-estimate and re-release previously reported data, highlighting the amount of estimation involved. This also highlights that firms are refining their GHG measurement process and improving the accuracy of reporting.

TARGET SETTING

There has been a significant amount of pressure for firms to establish and monitor progress towards emissions reduction targets, and estimating their existing emissions is a necessary step in this process. There are a variety of ways to set and measure progress towards a target. For example, intensity-based targets may be based on emission levels relative to revenue or barrels of oil produced, meaning this type of target could be met while emissions are still growing (e.g., by having the growth rate of revenue increase at a faster rate than emissions).

It is also worth noting the distinction between net-zero and carbon neutral targets, which are often used interchangeably. In general, companies claim carbon neutrality when they reduce their CO₂ emissions by purchasing offset certificates that represent carbon not emitted or carbon captured elsewhere.¹² Net-zero emissions, on the other hand, involves the neutralization of all residual GHG emissions, which "...may be defined as those whose abatement remains uneconomical or technically infeasible under the assumptions of a specific model and mitigation scenario."¹³ Neutralization is more stringent than offsets. The Science Based Targets initiative (SBTi) states that neutralization means "to remove carbon from the atmosphere and permanently store it to counterbalance the impact of emissions that remain unabated."¹⁴ Net-zero under SBTi also requires "reducing scope 1, 2 and 3 emissions to zero or a residual level consistent with reaching net-zero emissions at the global or sector level in eligible 1.5°C scenarios or sector pathways." SBTi validates net-zero targets but does not do so for carbon neutral targets.¹⁵

Figure 4 below shows that 57% of firms (134 firms) in the S&P/TSX Composite Index disclosed in their 2022 reports that they have at least one type of GHG reduction target. This is an increase from the previous reporting year where 49% of TSX firms (113 firms) had a GHG-reduction target.

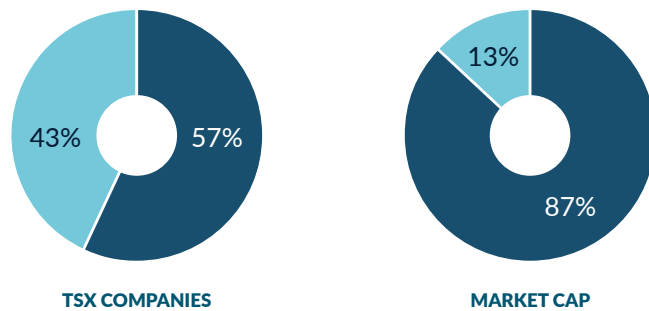
MSCI reported that as of March 2023, 41% of the 9,171 constituents in the MSCI ACWI IMI have set climate targets and approximately 15% had set or committed to set SBTi- approved targets¹⁶. These numbers can serve as a global benchmark as the index spans 23 developed markets and 24 emerging markets covering approximately 99% of the global equity investment opportunity set. Overall, we can see that Canadian firms are setting targets slightly above the global average.

Using market capitalization instead of the number of firms we see that more of the larger firms have GHG reduction targets. This is important because larger firms emit more GHG than smaller firms and more larger firms with targets suggests that less GHG will be emitted overall.

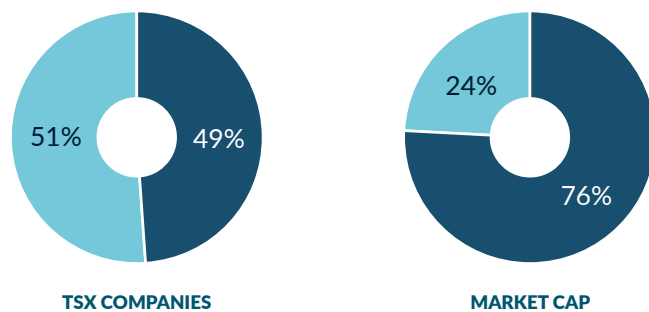
FIGURE 4

S&P/TSX Index Companies Setting GHG Reduction Targets

2021



2020



■ Have post-2020 climate targets
 ■ Do not have post-2020 climate targets

Table 1 below shows that 167 absolute targets were found, an increase from 129 last year. We also note that the number of intensity-based targets increased by only three. Thirty-six firms (or 27% of the firms with targets) have targets loosely aligned with SBTi, indicating the ambition, or lack of ambition, for firms with targets.¹²

TABLE 1

S&P/TSX Composite Index GHG Reduction Target Breakdown

	2020 (% of 113 firms)	2021 (% of 134 firms)	Change (Increase in Percentage of Firms)
Absolute targets¹⁸	129 (114%)	167 (125%)	38 (11%)
Intensity targets	41 (36%)	44 (33%)	3 (-3%)
More than one target	54 (48%)	69 (51%)	15 (+3%)
Net-zero target/carbon neutral	63 (56%)	89 (66%)	26 (+10%)
Somewhat aligned science-based targets	20 (18%)	36 (27%)	16 (+9%)

GHG REDUCTION PLANS

Setting targets is an important first step but it is more meaningful if targets are accompanied by credible plans to achieve them. We found the level of detail provided on plans for achieving GHG reduction targets varies and is often very limited.

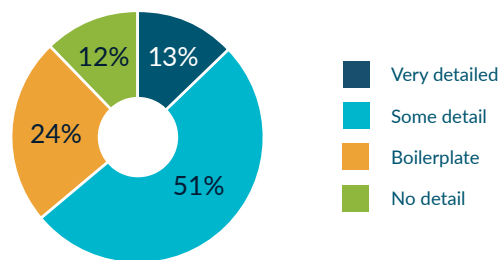
To assess the quality of firms' GHG reduction plans, we grouped each firm's plans into one of four broad categories, ranging from "no detail" to "very detailed". "No detail" is self-explanatory. "Boilerplate" means very brief or superficial language was provided on how targets will be met. "Some detail" meant there were some details regarding specific emission reduction initiatives and/or project pathways to meet the target. "Very detailed" means that the target had very specific plans such as planned investments in emission-reducing projects, expected reductions from each initiative/project and when they would be realized. Such plans provided a thorough explanation of the plan and clear timeline for meeting each target.

We found that only 13% of firms with targets provided very detailed plans to achieve them, while 51% provided at least some details. However, 12% of firms with targets provided no details about plans for meeting them, while 24% provided only boilerplate language.

FIGURE 5

S&P/TSX Composite Index GHG Reduction Plan Level of Detail

2021



A 2023 report from CDP performed a more extensive look at GHG reduction plans and the level of detail provided on an international level. They found that of the 18,600+ organizations around the world that disclose emissions through their climate change questionnaire, 4,100 of them disclosed that they had already developed a 1.5°C-aligned climate transition plan. Of these 4,100 organizations, only 81 of them reported sufficient detail to all 21 key indicators that CDP uses to assess targets.¹⁹ A PwC 2023 Canadian ESG Reporting Insights report found that just 27% of Canadian companies include clear timeframes for achieving ESG targets.²⁰

EXECUTIVE INCENTIVES

There were 73 firms in the Index that submitted data to CDP for 2021 and stated that they provide incentives for the management of climate-related issues. However, details provided for these incentives in sustainability reports were usually vague.

Table 2 below reports these 73 firms with incentive plans for two categories and compares them to last year's results. The two categories are:

1. Executive compensation is linked to climate targets.
2. Incentives exist with respect to climate-related issues, but are not considered for executives (e.g., incentives are only applicable to the Sustainability Team), or the firm has indicated that there are incentives, but provide little or no detail.

Table 2 below shows there has been an increase for both categories compared to last year. This is an encouraging sign given the importance of monetary incentives for catalysing climate action by management.

TABLE 2

Year-over-year comparison of incentives for management of climate-related issues and target attainment

	2020	2021
Executive compensation linked to climate targets	17	23
Some incentives linked to climate-related issues	35	50

As of the 2022 proxy season, Hugessen Consulting found that "75% of TSX60 companies have formally incorporated ESG into their compensation plans in some capacity, or have disclosed their intention to do so in 2022." This report also finds that 68% of these incentive plans are short term rather than long-term which may be more consistent with most climate targets.²¹

CONCLUSION

The disclosure and verification of GHG emissions data is a central element of efforts to address climate change in the corporate sector. Regulation is likely to make more disclosure mandatory in the near future. Other jurisdictions are moving even quicker than Canadian regulators. While Canadian firms did improve the amount and quality of their disclosure there is significant room to improve, particularly in the area of verified emissions, plans to meet targets, and linking sustainability goals to executive compensation. If Canadian firms want to increase the amount of foreign capital they attract, improving disclosure on these dimensions is likely to be important.

ENDNOTES

- 1 Source: CDP, [“Companies requested by CDP’s capital markets signatories,”](#) 2023.
- 2 Source: OSFI, [“Climate Risk Management,”](#) March 2023.
- 3 Scope 3 covers a wider range of emissions, it can include emissions from suppliers, customers, and investments. For more information see the GHG Protocol’s [“Corporate Value Chain \(Scope 3\) Standard.”](#)
- 4 See [TCFD publications](#).
- 5 See [IFRS Climate-related Disclosures, Current stage](#).
- 6 There are two core accounting methods for Scope 2 emissions: market and location-based. The location-based method is based on the emissions intensity of grids where the energy consumption actually occurs. Market-based reflects emissions from the electricity that companies have intentionally chosen to buy. These two approaches come from the GHG Protocol, an organization that is in the process of updating their guidance documents and determining how to refine or keep requirements for market-based emission accounting. For more information see [Survey on Need for GHG Protocol Corporate Standards and Guidance Updates](#).
- 7 The number of firms in the Index increased from 2020 to 2021 which means raw numbers for some indicators can remain the same while relative percent values can change.
- 8 We revisited some numbers from last year’s report that we have reported on again in this report. We have refined the data collection process and as such have restated values that, in some cases, have up to a 9% difference compared to their original values.
- 9 Source: Japan Exchange Group, Inc., [“Survey of TCFD Disclosure in Japan \(FY2022\),”](#) January 2023.
- 10 Source: The Conference Board, [“Report: Gap in Climate Disclosures Between Large, Small Cos Stark Gap in Climate Disclosures Exists Between Large & Small Public Companies,”](#) January 2022.
- 11 Source: FTSE Russell, [“Mind the gaps: Clarifying corporate carbon,”](#) May 2022.
- 12 Offsets are generally obtained by financing emissions reductions outside a company’s value chain. They are tricky because they involve additionality which is very difficult to determine. In essence it means showing that the emission reduction initiative was ‘additional’ to what would have happened otherwise (i.e. business as usual). A classic example of an offset is paying a forester not to cut down their forest when they had plans to do so. There are also concerns about what sort of incentives offsets create and how permanent they are.
- 13 Source: Nature Climate Change, Buck et al. [“Why residual emissions matter right now,”](#) March 2023. In their paper they also say “residual emissions are typically not well defined, conceptually or quantitatively.” Also see Nature Climate Change, Luderer et al. [“Residual fossil CO2 emissions in 1.5–2°C pathways,”](#) June 2018.
- 14 Source: SBTi, [“SBTi CORPORATE NET- ZERO STANDARD – Version 1.1,”](#) April 2023.
- 15 Source: SBTi, Paulina Tarrant, [“Net-Zero Jargon Buster – a guide to common terms,”](#) November 2021.
- 16 Source: MSCI, Watanabe, Panagiotopoulos & He, [“Assessing Science-Based Corporate Climate Target-Setting,”](#) June 2023.
- 17 For the purposes of our study, we classify firms as somewhat aligned with science-based targets (SBTs) if they have a net-zero or carbon neutral commitment any time up to 2050, and if they have an intermediate target of reducing emissions by at least 30% before and up to 2030. We recognize these criteria are not as detailed as those included in more involved assessments of whether or not a company’s targets are SBTs, such as the sector-specific guidance prescribed by the Science Based Targets initiative (SBTi). Nonetheless our criteria do provide useful guidance.

- 18 The same firm may have more than one absolute or intensity-based target. We use the assumption that a carbon neutral or net-zero target is also an absolute target.
- 19 Source: CDP, "ARE COMPANIES DEVELOPING CREDIBLE CLIMATE TRANSITION PLANS? Disclosure to key climate transition-focused indicators in CDP's 2022 Climate Change Questionnaire," February, 2023. Some indicators are from questions such as "provide details of your climate-related supplier engagement strategy" and "quantify the percentage share of your spending/revenue that is aligned with your organization's transition to a 1.5°C-aligned world."
- 20 Source: PwC Canada, "2023 Canadian ESG Reporting Insights."
- 21 Source: Hugessen Consulting, "ESG IN COMPENSATION & TAKEAWAYS FROM 2022 PROXY SEASON – Part 1: Prevalence of ESG Metrics among TSX60 Companies," July 2022.