SGXFIRST

Centre for Governance and Sustainability
NUS Business School

Sustainability Reporting Review

2023

Contents

Executive Summary

The 2023 assessment of sustainability reporting differs from previous editions with its strong focus on climate-related disclosures, which many Singapore Exchange (SGX)-listed issuers have begun reporting for their financial years beginning 2022.

To highlight best practices, particularly in climate reporting, this year's review contains short case studies featuring a range of different issuers from large cap issuers to smaller entities.

The report also includes tips (insights) to help investors analyse sustainability reports as well as a list of frequently asked questions on greenwashing, which is on the rise as issuers' green credentials are subject to greater scrutiny by governments, investors, customers and interested parties.

This year's review covers SGX-listed issuers that have published sustainability reports available as of 31 July 2023, and measures their overall performance compared to previous reviews in 2019 and 2021. For the first time, the review also looks at the climate transition plans of issuers.

The key findings from this year's assessment of sustainability reporting by SGX-listed issuers include:

The average score continued to improve based on common measures used in the 2019 and 2021 reviews. Compared to 2021, the greatest improvement was seen in the disclosures on board statement and governance structure. Small and medium cap issuers, which comprise around 85% of SGX-listed issuers, posted the strongest improvement in scores.

However, the average score decreased with the inclusion of climate-related disclosures. This is to be expected as such disclosures are new to many issuers. The average score will likely improve in the coming years when reporting practices mature and become more robust.

393

Issuers provided climate-related disclosures

Out of the 535 SGX-listed issuers that published their sustainability reports, 393 issuers provided climate-related disclosures based on the Task Force on Climate-related Financial Disclosures (TCFD) framework.

86%

Issuers disclosing at least one of their Scope 1, 2, or 3 GHG emissions

Metrics and targets was a bright spot, with 86% of issuers disclosing at least one of their Scope 1, 2, or 3 greenhouse gas (GHG) emissions.

However, there is room for improvement in other areas, particularly in terms of identifying climate-related risks and opportunities, and bolstering the involvement of the board and management in overseeing and managing these challenges. Scenario analysis, which provides insights into the resilience of an issuer's climate strategy, is another area that can be strengthened.

Greenwashing risks threaten to undermine the credibility of sustainability reports. The inclusion of the TCFD-aligned climate-related disclosures should reduce the incidents of greenwashing since it prescribes a specific disclosure framework, making it easier for stakeholders to analyse and compare the data. However, this year's review found that many issuers did not disclose any negative developments in their sustainability reports. While this may be due to concerted efforts by Singapore issuers to improve their performance, a closer examination of such issuers is required.

30

Issuers sought external assurance

External assurance remains an uncommon practice. Only 30 issuers sought external assurance for their sustainability reports. While SGX only requires internal reviews, external assurance provides an additional layer of checks against greenwashing.

65

Issuers provided climate transition plan disclosures

A total of 65 issuers provided climate transition plan disclosures. The majority set themselves targets backed by climate science with board-level governance in place. Out of these, however, only 34 issuers provided quantitative and time-based targets. There is also room for improvement in terms of providing more details about how the transition is being monitored. Addressing these gaps will inspire confidence in the issuer's ability to achieve its sustainability goals.

1. Introduction

Sustainability reporting is an important tool for companies to communicate their environmental, social and governance (ESG) performance to stakeholders.

By disclosing ESG information ranging from carbon emissions to employee welfare and community engagement, companies can better engage customers, investors, suppliers and potential employees who have becoming increasingly conscious about the environment, corporate social responsibility, ethics and transparency in business.

This report, which is the third edition of the SGX Sustainability Reporting Review, has a slightly different format as it takes into account changes to the Singapore Exchange Securities Trading Limited Listing Rules (Listing Rules) since the previous report published in 2021. As compared to the 2019 and 2021 reviews, the major difference in this year's edition is the assessment of climate-related and transition plan disclosures, which many issuers are reporting for the very first time.

This year's review aims to present a comprehensive overview of the state of sustainability reporting among listed issuers in Singapore, and to provide a practical guide to identify strengths, areas for improvement, and sharing of best practices in reporting among issuers.

Besides climate-related disclosures in line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), this report also looks at other aspects of sustainability reporting such as the identification of material ESG factors guided by the principles of the Global Reporting Initiative (GRI) standards (GRI Standards) and the Sustainability Accounting Standards Board (SASB) standards (SASB Standards).

Stakeholders from investors and bankers to customers and local communities are scrutinising climate-related disclosures more closely due to the rise in global temperatures, which has in turn led to increased incidents of droughts, forest fires, rising sea levels, and floods around the world.

Recognising the demand for such information, Singapore Exchange Regulation (SGX RegCo) in 2021 introduced a phased approach to mandatory climate reporting for listed issuers based on the recommendations of the TCFD.

In July 2023, the Accounting and Corporate Regulatory Authority (ACRA) and SGX RegCo also published a public consultation on the recommendations by the Sustainability Reporting Advisory Committee (SRAC) to advance climate reporting in Singapore. The recommendations proposed that all listed issuers report International Sustainability Standards Board (ISSB)-aligned climate-related disclosures starting from financial year (FY) 2025. Large non-listed companies with annual revenue of at least S$1 billion will follow suit in FY 2027.

This report will also examine transition plans, which show how issuers intend to deliver on their climate commitments. Transition plans form the foundation of, and are intricately linked to, climate-related disclosures as they show the issuer's past, present, and future in terms of environmental-related performance.

The European Union (EU) adopted the European Sustainability Reporting Standards (ESRS) in July 2023, setting ambitious standards for companies. The standards cover the full spectrum of ESG issues, including climate change, biodiversity and human rights. The United States' Securities and Exchange Commission (SEC) has similarly proposed climate disclosure regulation which includes climate targets and transition plans disclosure.

In an era characterised by heightened public expectations on sustainability, companies need to focus on the triple bottom line of profit, people and planet.

2. Methodology

2.1 Research Scope

This study covers all SGX-listed issuers that had published their sustainability reports for FY 2022[1]. It excludes issuers that are newly-listed, suspended from trading, secondary listings, special purpose acquisition companies, cash companies, and companies under judicial management. A total of 537 listed issuers were eligible for assessment, spanning 11 industries based on The Refinitiv Business Classification (TRBC)[2] methodology. More details of the methodology can be found in **Appendix A**.

Where relevant, comparison is made against the previous reviews conducted in 2021 and 2019, which assessed sustainability reports published as of 31 December 2020 and 31 December 2018, respectively.

The assessments are based solely on the sustainability reports of listed issuers available on SGXNet[3]. This includes standalone sustainability reports, sustainability reports contained within the annual reports, and integrated sustainability reports. Sustainability policies and practices published on external sources (such as the issuer's corporate website or its other publications) are not evaluated.

2.2 Assessment Framework

The assessment framework is developed based on the primary components required for sustainability reports set out in Listing Rule 711B[4] and is in accordance with the SGX Sustainability Reporting Guide[5], which refers to the GRI Standards and the TCFD's recommendations.

In addition to the five components that were adopted as evaluation criteria by the 2019 and 2021 assessment framework, this year's assessment framework has included climate-related disclosures as an additional evaluation criterion following SGX's amendment of Listing Rule 711B on 1 January 2022[6].

Climate-related disclosures was assigned the highest weightage of 25% to underscore its relative significance as a first step towards mitigating the effects of climate change. The other five primary components – material ESG factors; policies, practices and performance; targets; sustainability reporting framework; and board statement and governance structure – each have an equal weightage of 15%. This year's assessment framework also removed "general scope" as an evaluation criterion since it does not form part of the primary components for reporting.

The assessment framework, including detailed categories and weightages, is represented as a scorecard in **Table 1**. The scores were first calculated based on the points in relation to each category, then normalised to 100 points based on the weightage shown.

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[1] Based on the latest sustainability report with the FY ending in calendar year 2022, and available as of 31 July 2023. Eight issuers had sought an extension of the deadline to release their sustainability reports.
[2] Refinitiv. (n.d.). *TRBC Sector Classification.* Retrieved 8 November 2023, from https://www.refinitiv.com/en/financial-data/indices/trbc-business-classification.
[3] SGX. (n.d.). *Annual Reports & Related Documents*. Retrieved 8 November 2023, from https://www.sgx.com/securities/annual-reports-related-documents.
[4] SGX. (n.d.). *SGX-ST Listing Manual.* Retrieved 8 November 2023, from https://rulebook.sgx.com/entiresection/4830.
[5] SGX. (n.d.). *Practice Note 7.6 / Practice Note 7F Sustainability Reporting Guide, SGX-ST Listing Manual.* Retrieved 8 November 2023, from https://rulebook.sgx.com/rulebook/practice-note-76-sustainability-reporting-guide.
[6] *Supra* note 4.

The study also reviewed issuers' reports against certain reporting principles, including stakeholder engagement, reporting of sustainability risks and opportunities, timeliness, balance in reporting, and assurance practices. These are, however, not included in the assessment framework as they do not form part of the primary components.

As international sustainability reporting standards evolve, the assessment framework is subject to future adjustments to align with global best practices.

SGX-CGS sustainability reporting scorecard 2023

Category	Weightage
Material ESG factors	15%
Climate-related disclosures	25%
Policies, practices and performance	15%
Targets	15%
Sustainability reporting framework	15%
Board statement and governance structure	15%
Total	**100%**

Table 1: SGX-CGS sustainability reporting scorecard 2023

3. Updates on SGX's Sustainability Reporting Requirements

3.1 Regulatory Updates

Since the last study published in 2021, several amendments were introduced to Listing Rules 711A and 711B[7], which came into effect on 1 January 2022. The amendments are set out below.

Listing Rule 711A

The reporting timeline has been amended as follows:

Issuer which **has not** conducted external assurance	Issuer which **has** conducted external assurance
The deadline to issue its sustainability report has been shortened from "no later than five months" to **"no later than four months"** after the end of its FY.	It must issue its sustainability report **"no later than five months"** after the end of its FY.

Listing Rule 711B and SGX Sustainability Reporting Guide

The primary components required for sustainability reports have been amended as follows:

Climate-related disclosures

Issuers are now required to provide climate-related disclosures **consistent with the recommendations of the TCFD**.

Targets

Greater granularity in disclosures such that targets for defined short-, medium-, and long-term horizons should be considered. The time horizons adopted should be **internally consistent with those used for strategic planning and financial reporting**. If they are not consistent, issuers are required to disclose the reasons for the inconsistency.

Board statement and governance structure

In addition to a board statement, the sustainability report should also **describe the roles of the board and management** in the governance of sustainability issues.

[7] *Supra* note 4.

3.2 Primary Components

According to the Listing Rules as of the date of this report's publication, an issuer's sustainability report should comprise the following primary components:

Component	
Material ESG factors	The sustainability report should identify the material ESG factors and describe both the reasons for and the process of selection, taking into consideration their relevance or impact to the business, strategy, financial planning, business model and key stakeholders.
Climate-related disclosures	The sustainability report should contain disclosures related to climate risks and opportunities, consistent with the TCFD recommendations.
Policies, practices and performance	The sustainability report should set out the issuer's policies, practices and performance in relation to the material ESG factors identified, providing descriptive and quantitative information on each of the identified material ESG factors for the reporting period. Performance should be described in the context of previously disclosed targets.
Targets	The sustainability report should set out the issuer's targets for the forthcoming year in relation to each material ESG factor identified. Targets should be considered for defined short-, medium-, and long-term horizons, and if not consistent with those used for strategic planning and financial reporting, the reasons for the inconsistency should be disclosed.
Sustainability reporting framework	The issuer should select a sustainability reporting framework (or frameworks) to guide its reporting and disclosure. For climate-related disclosures, the issuer should report based on the TCFD recommendations. The sustainability reporting framework selected should be appropriate for and suited to the issuer's industry and business model. The issuer should state the name of the framework, explain its reasons for choosing the framework, and provide a general description of the extent of the issuer's application of the framework.
Board statement and governance structure	The sustainability report should contain a statement by the board that it has considered sustainability issues in the issuer's business and strategy, determined the material ESG factors, and overseen the management and monitoring of the material ESG factors. In addition, the sustainability report should describe the roles of the board and the management in the governance of sustainability issues.

3.3 Climate-related Disclosures

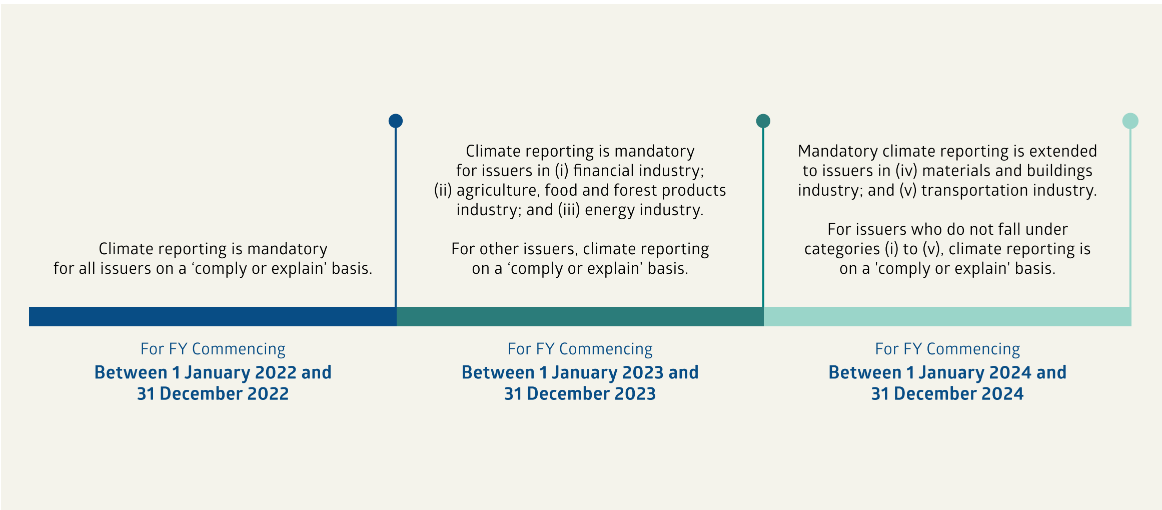
As the effects of climate change have become increasingly pronounced, governments around the world have stepped up efforts to stem emissions and set net-zero goals while companies are facing greater scrutiny over practices relating to the environment.

In Singapore, the government has unveiled a Green Plan[8] with 2030 targets such as reducing waste per capita that goes into landfills by 30%, reducing energy consumption in existing Housing and Development Board towns by 15%, and ensuring 80% of Singapore's buildings by gross floor area meet green standards. Like many governments around the world, Singapore aims to achieve net zero emissions by 2050.

Given the impact such developments will have on businesses, SGX in 2021 introduced a phased approach to mandatory climate reporting[9].

Commencing from FY 2022, all SGX-listed issuers are required to include climate reporting based on the 11 recommendations of the TCFD in their sustainability reports on a "comply or explain" basis. This means issuers that do not disclose such information will have to state what was excluded and describe what was done instead, giving reasons for doing so.

Climate reporting will become mandatory for issuers in the (i) financial, (ii) agriculture, food and forest products, and (iii) energy industries from FY 2023, while those in the (iv) transportation and (v) materials and buildings industries must do so from FY 2024[10].



[8] *Singapore Green Plan 2030*. (n.d.). https://www.greenplan.gov.sg/.
[9] SGX. (n.d.). *Sustainability Reporting*. Retrieved 8 November 2023, from: https://www.sgx.com/sustainable-finance/sustainability-reporting.
[10] See **Appendix A** for more details on the issuers which must provide mandatory climate reporting based on their sector classification.

The TCFD recommendations are structured around four pillars that represent core elements of how organisations operate, namely: governance, strategy, risk management, and metrics and targets **(Figure 1)**[11].

Recommendations and Supporting Recommended Disclosures

Governance	Strategy	Risk Management	Metrics and Targets
Disclose the organization's governance around climate-related risks and opportunities.	Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.	Disclose how the organization identifies, assesses, and manages climate-related risks.	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.
Recommended Disclosures	**Recommended Disclosures**	**Recommended Disclosures**	**Recommended Disclosures**
a) Describe the board's oversight of climate-related risks and opportunities.	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	a) Describe the organization's processes for identifying and assessing climate-related risks.	a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.
b) Describe management's role in assessing and managing climate-related risks and opportunities.	b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	b) Describe the organization's processes for managing climate-related risks.	b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.
	c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.

Figure 1: TCFD recommendations and supporting recommended disclosures

[11] TCFD. (June 2017). *Recommendations of the Task Force on Climate-related Financial Disclosures.* https://www.fsb-tcfd.org/publications/.

4. Sustainability Reporting Performance

4.1 Overview of Sustainability Reporting Practices

The submission rate has been close to 100% since 2019.

Out of the 537 listed issuers eligible for assessment, 535 issuers had released their sustainability reports as of 31 July 2023[12]. This translates to a 99.6% submission rate, comparable to 99.5% in 2021 and 99.8% in 2019. Unless explicitly defined, this review only considers the 535 submitted reports and all charts are based on a total of 535 issuers.

Most issuers released their sustainability reports within the stipulated time frame.

Excluding first-time issuers, all issuers must submit their sustainability reports within four months of the end of the FY or within five months of the end of the FY if external assurance on the sustainability report is sought[13]. The timely publication of sustainability reports enables stakeholders to make prompt decisions based on the information disclosed.

For the FY 2022 reports, most issuers (86%) released their sustainability reports within the stipulated time frame **(Figure 2)**. Among those that failed to release their sustainability reports on time, a significant majority (66 issuers)[14] were small cap issuers with market capitalisation below S$300 million[15]. For issuers that failed to meet the deadline, it is recommended that they initiate their sustainability reporting process at an earlier date.

Timeliness of sustainability reporting

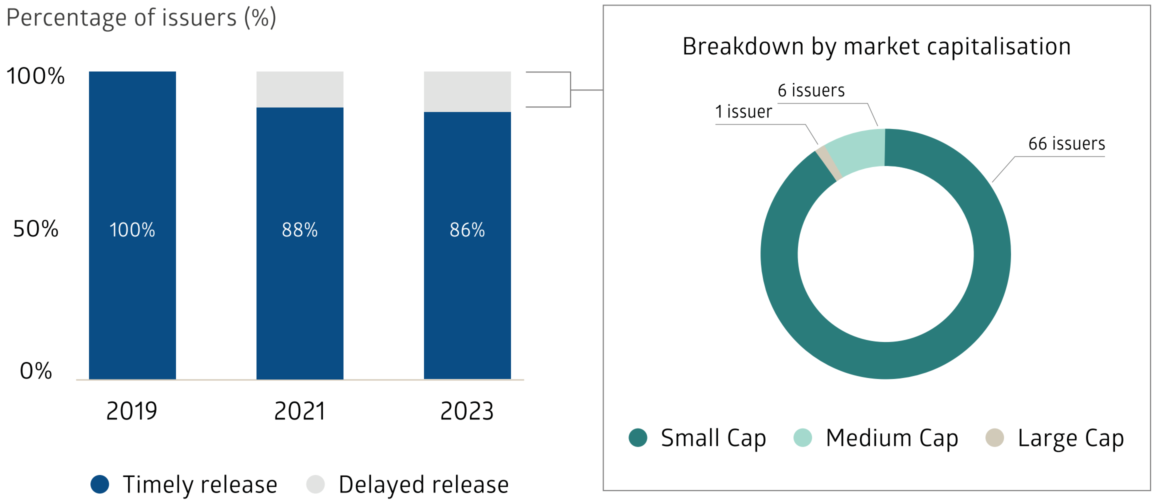


Figure 2: Timeliness of sustainability reporting

[12] *Supra* note 1.
[13] *Supra* note 5, at paragraphs 6.1 and 6.3.
[14] Numbers in this report may not add up due to rounding.
[15] Listed issuer's market capitalisation compiled by SGX based on Bloomberg data as of 31 May 2023. "Large cap" refers to a market capitalisation above S$1 billion, "medium cap" refers to a market capitalisation between S$300 million and S$1 billion, and "small cap" refers to a market capitalisation below S$300 million.

Issuers used different formats to provide sustainability disclosures. The majority (53%) of issuers published a standalone sustainability report, 45% had a sustainability report contained within its annual report, and 2% (11 issuers) adopted the Integrated Reporting Framework and published an integrated report[16].

Issuers of all sizes reported improved performance based on common measures, with small and medium cap issuers attaining the most significant increase in scores.

To ensure a fair comparison across the periods of review, the scores were initially normalised to 100 points using the six components from the 2019 and 2021 review: (i) general scope; (ii) material ESG factors; (iii) policies, practices and performance; (iv) targets; (v) sustainability reporting framework; and (vi) board statement and governance structure. The weightage assigned to each component is consistent with the 2019 and 2021 reviews. These scores, calculated and normalised using the six common components, are referred to in this report as "common measures".

Based on these common measures, more issuers achieved higher scores with the majority (72%) getting more than 70 out of a maximum possible of 100 points **(Figure 3)**. The average sustainability reporting score among the 535 issuers stands at 75 points, which is an improvement of three points since the 2021 review.

A score above 70 points indicates strong alignment with SGX's sustainability reporting requirements, while a score below 50 points indicates limited alignment.

Medium cap issuers, which refers to issuers with market capitalisation between S$300 million and S$1 billion, saw the largest increase in scores based on common measures **(Figure 4)**.

When compared to the 2019 review when SGX first started assessing listed issuers' sustainability reporting performance, medium cap issuers reported an impressive increase of 16 points. Small cap issuers also showed a strong improvement of 16 points compared to 2019. As small and medium cap issuers account for about 85% of all SGX-listed issuers[17], the improvement in sustainability reporting performance can be described as widespread.

[16] Integrated Reporting. (n.d.). *Integrated Reporting Framework*. https://www.integratedreporting.org/resource/international-ir-framework/.
[17] Based on market capitalisation data as of 31 May 2023.

Distribution of scores (common measures)

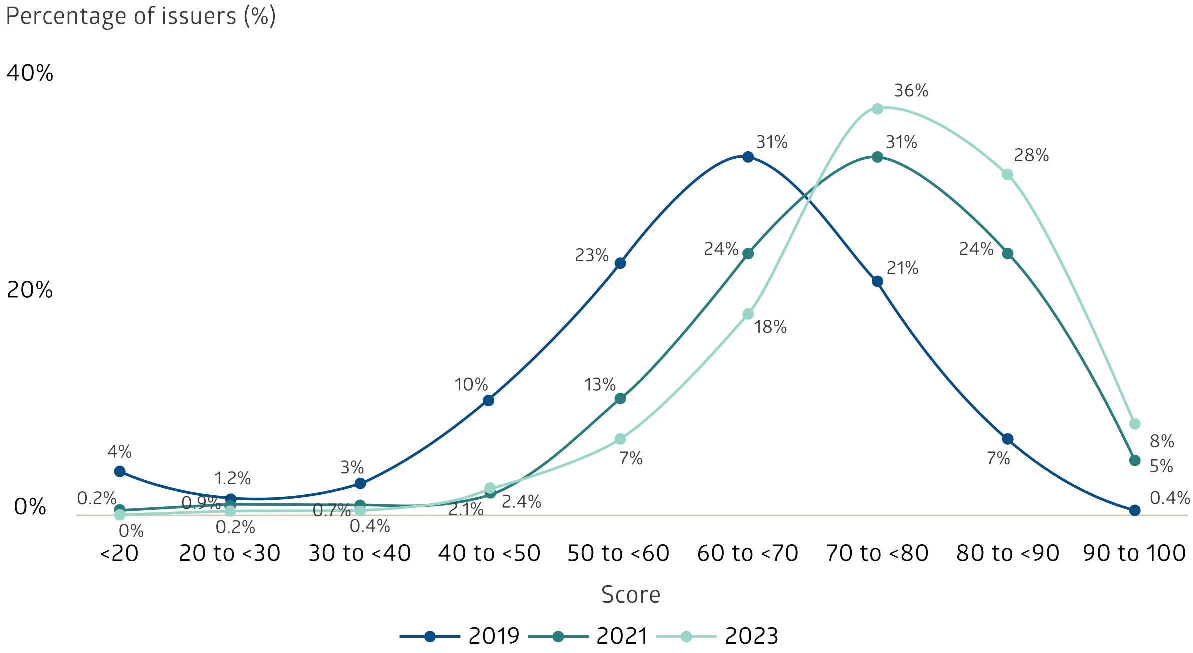


Figure 3: Distribution of scores (common measures)

Average scores by market capitalisation (common measures)

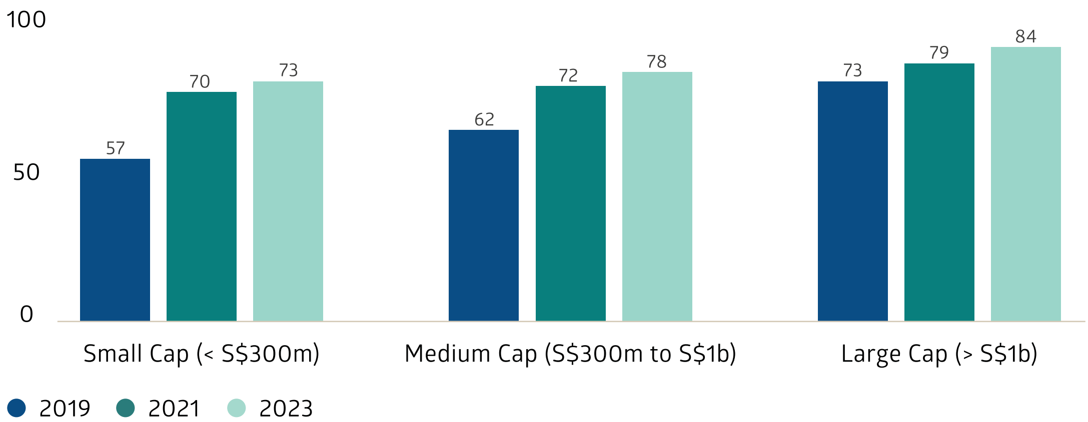


Figure 4: Average scores by market capitalisation (common measures)

Scores have decreased with the inclusion of climate-related disclosures but are expected to improve in the near future.

Climate-related disclosures were introduced into the Listing Rules as a primary component of sustainability reports in 2021 owing to market recognition that climate reporting is an important first step towards efforts to mitigate the effects of climate change.

To reflect this regulatory update, this study has integrated climate-related disclosures into the assessment framework with the highest weightage of 25% to underscore its relative significance, while maintaining equal weightages for the other five primary components. As international sustainability reporting standards evolve, the assessment framework is subject to future adjustments to align with global best practices.

After incorporating climate-related disclosures, most issuers reported a decrease in scores, with only 38% of issuers scoring above 70 points, out of a maximum possible of 100 points **(Figure 5)**. The average score among the 535 issuers declined to 66 points from 75 points.

As this is the first year when sustainability reporting performance is being assessed with climate-related disclosures as a primary component, these results should not be surprising. The scores should improve in subsequent years for the following two reasons:

First, the results indicate that most SGX-listed issuers are still in the early stages of disclosing climate-related information. As climate reporting is an iterative process, early reporters will develop more mature and robust reporting practices over time.

Second, it bears mentioning that when sustainability reporting was introduced on a "comply or explain" basis for reports published from 2018, the average score of issuers based on common measures was 61 points in the inaugural year of review (i.e., in the 2019 review). That review was similarly carried out shortly after the implementation of sustainability reporting requirements for SGX-listed issuers. The average score in the 2023 review is now 75 points, an increase of 14 points. Given time, issuers should achieve better scores as they become more familiar with climate-related disclosures.

Distribution of scores
(common measures vs when climate-related disclosures are included)

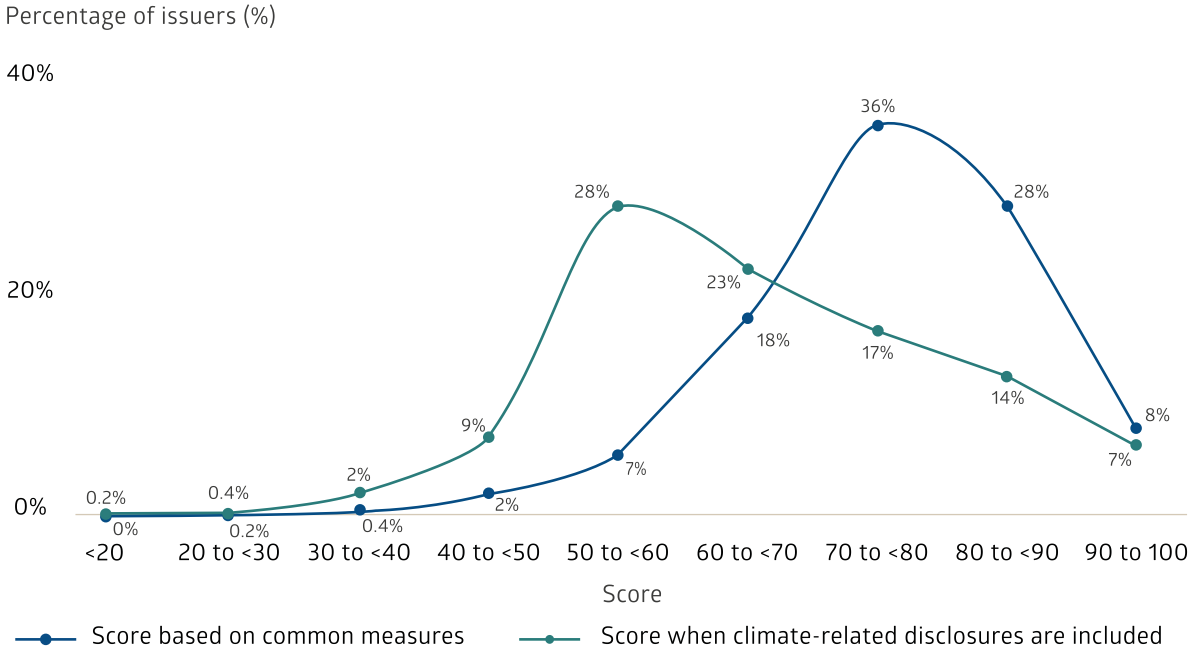


Figure 5: Distribution of scores (common measures vs when climate-related disclosures are included)

4.2 Sustainability Reporting Scores: by Listing Board, Market Capitalisation and Industry Sector

The discussion in this section is based on the SGX-CGS Sustainability Reporting Scorecard 2023, which includes climate-related disclosures. **Appendix B** sets out the profile of issuers assessed in this report by listing board, market capitalisation and industry sector.

While Mainboard issuers performed better than Catalist issuers for the first year of incorporating climate-related disclosures, the difference in scores is not substantial.

Mainboard issuers scored an average of 68 points, just two points above the overall average of 66 points, while Catalist issuers scored an average of 62 points, four points below the overall average **(Figure 6)**. The average scores of Mainboard and Catalist issuers do not deviate too greatly from the overall average score, and the difference is small. This could be attributed to a mix of both high and low-scoring issuers among Mainboard issuers. This pattern was discussed in the 2021 review[18], where the average score for Mainboard issuers was influenced by underperforming small cap issuers within that group.

Average scores by listing board

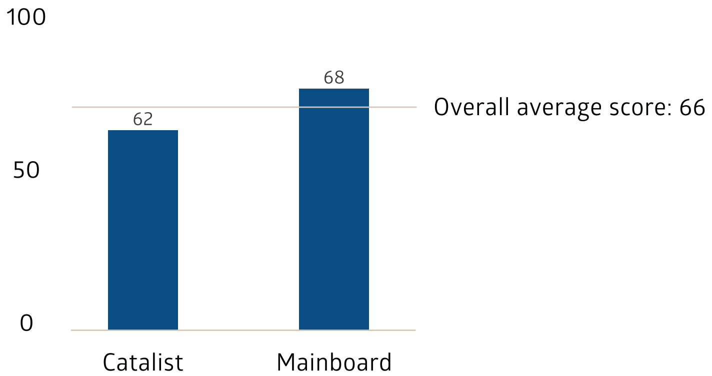


Figure 6: Average scores by listing board

Larger issuers have the highest scores and are looked upon to set best practices in reporting.

Large cap issuers experienced a mere two points drop from 84 points to 82 points upon the inclusion of climate-related disclosures **(Figure 7)**. Conversely, small cap issuers faced the steepest drop of 11 points – from 73 points to 62 points. This suggests larger issuers were better prepared to meet the new climate reporting requirements.

[18] SGX, CGS. (May 2021). *Sustainability Reporting Review 2021*. https://api2.sgx.com/sites/default/files/2022-04/Sustainability%20Reporting%20Review%202021_p.pdf.

Average scores by market capitalisation (common measures vs when climate-related disclosures are included)

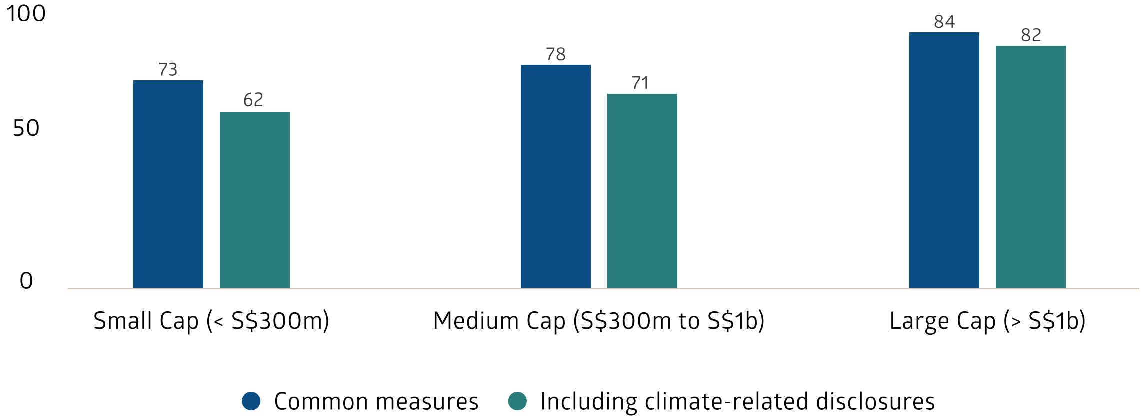


Figure 7: Average scores by market capitalisation (common measures vs when climate-related disclosures are included)

Utilities, consumer non-cyclicals, and real estate sectors outperform.

Issuers in the utilities, consumer non-cyclicals and real estate sectors, which include some of the issuers most impacted by climate change, scored above 70 points on average, surpassing the overall average score of 66 points **(Figure 8)**. More details on the sector classification, which follows TRBC methodology, can be found in **Appendix A**.

The TCFD has identified certain industries that are most affected by climate change and the transition to a lower-carbon economy. SGX has therefore prioritised climate reporting for issuers in these industries. Collectively, these issuers account for over 40% of SGX's total market capitalisation[19], providing a significant lever that can catalyse meaningful improvement in sustainability and climate reporting performance across SGX-listed issuers. Given that climate reporting will soon become mandatory for issuers in the financial; agriculture, food and forest products; and energy industries for FY 2023, these industries will likely record an improved performance in the next review.

[19] Based on market capitalisation data as of 31 May 2023.

Average scores by industry sector

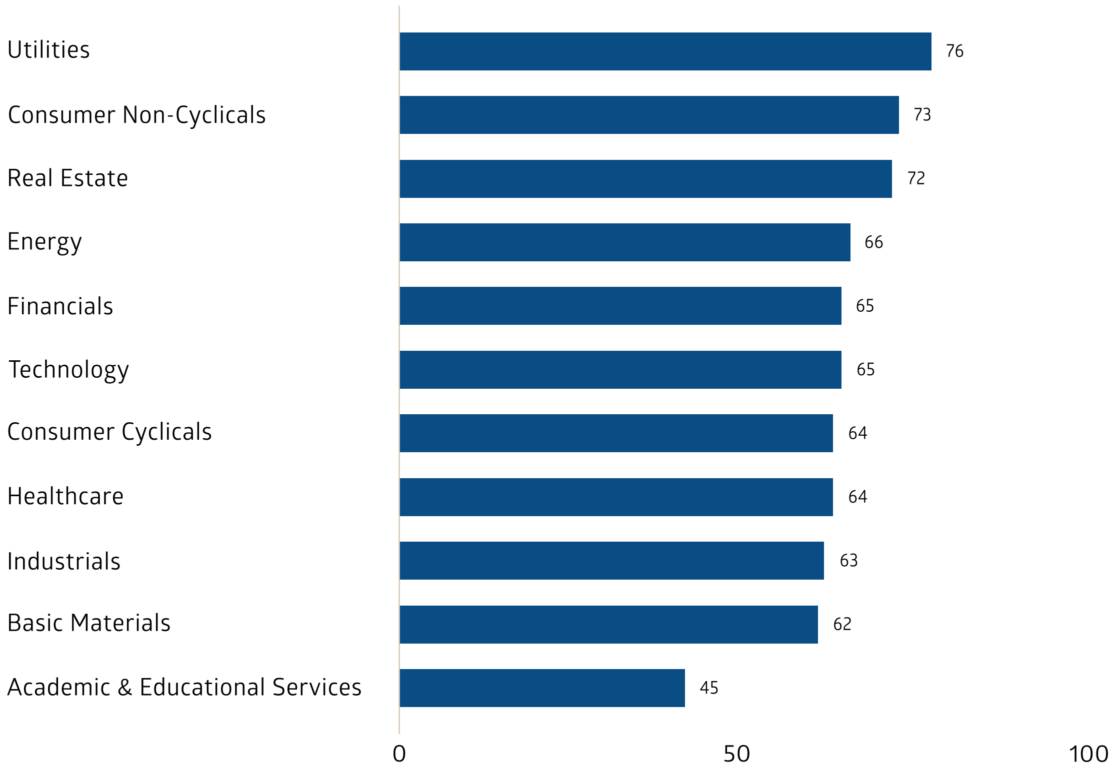


Figure 8: Average scores by industry sector

5. Component Disclosures in Sustainability Reports

This section will discuss the findings of the sustainability reporting assessment based on the general scope of the reports, as well as the six primary components set out in Listing Rule 711B.

5.1 General Scope

The scope of a sustainability report refers to the extent and boundaries of the information covered in the report. For instance, an issuer's sustainability report may only contain emissions data for its operations in Singapore but exclude data from its overseas subsidiaries.

Insights

If an issuer's consolidated financial statements group the parent company and subsidiaries under a single reporting entity, the sustainability disclosures should cover the same units[20]. The need for consistency is important for several reasons:

- Comprehensive assessment: This ensures that all relevant impacts, risks and opportunities have been reviewed, providing a more accurate picture for investors and other stakeholders.
- Transparency: Full coverage enhances transparency, which is essential for building trust and helping stakeholders make informed decisions.
- Risk management: Comprehensive reporting helps identify and manage risks and opportunities across the issuer's entire operation. This allows stakeholders to assess performance over time and have better comparability, facilitating benchmarking and informing investment decisions.
- Value creation and stakeholder expectations: A comprehensive sustainability report demonstrates commitment, enhancing business value in the form of improved brand reputation, increased stakeholders' loyalty and reduced business costs[21].

[20] *IFRS—IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information*, at paragraphs 20 and B38. (June 2023). Retrieved 8 November 2023, from https://www.ifrs.org/issued-standards/ifrs-sustainability-standards-navigator/ifrs-s1-general-requirements/.

[21] Salazar, P. (2019, July 18). The Importance of Environmental Awareness When Running a Business. *Maryville University Online*. https://online.maryville.edu/blog/importance-of-environmental-awareness-when-running-a-business/.

Overall improvement in disclosures on reporting scope, but room for more detailed explanations.

A significant proportion of issuers (94%) disclosed the scope of their report, with 75% of these issuers providing an explanation on how the scope was determined **(Figure 9)**. More issuers provided additional details including organisational boundaries, geographical boundaries, and operational boundaries to bridge the gap between disclosing and explaining the reporting scope.

Overall, among the issuers that disclosed the scope of their report, 41% of issuers stated that their reporting encompassed their full business operations, while 77% stated their reporting scope included at least one subsidiary **(Figure 9)**. Issuers that did not cover the entire business in their reporting need to explain and provide a timeline for inclusion.

Disclosures on reporting scope

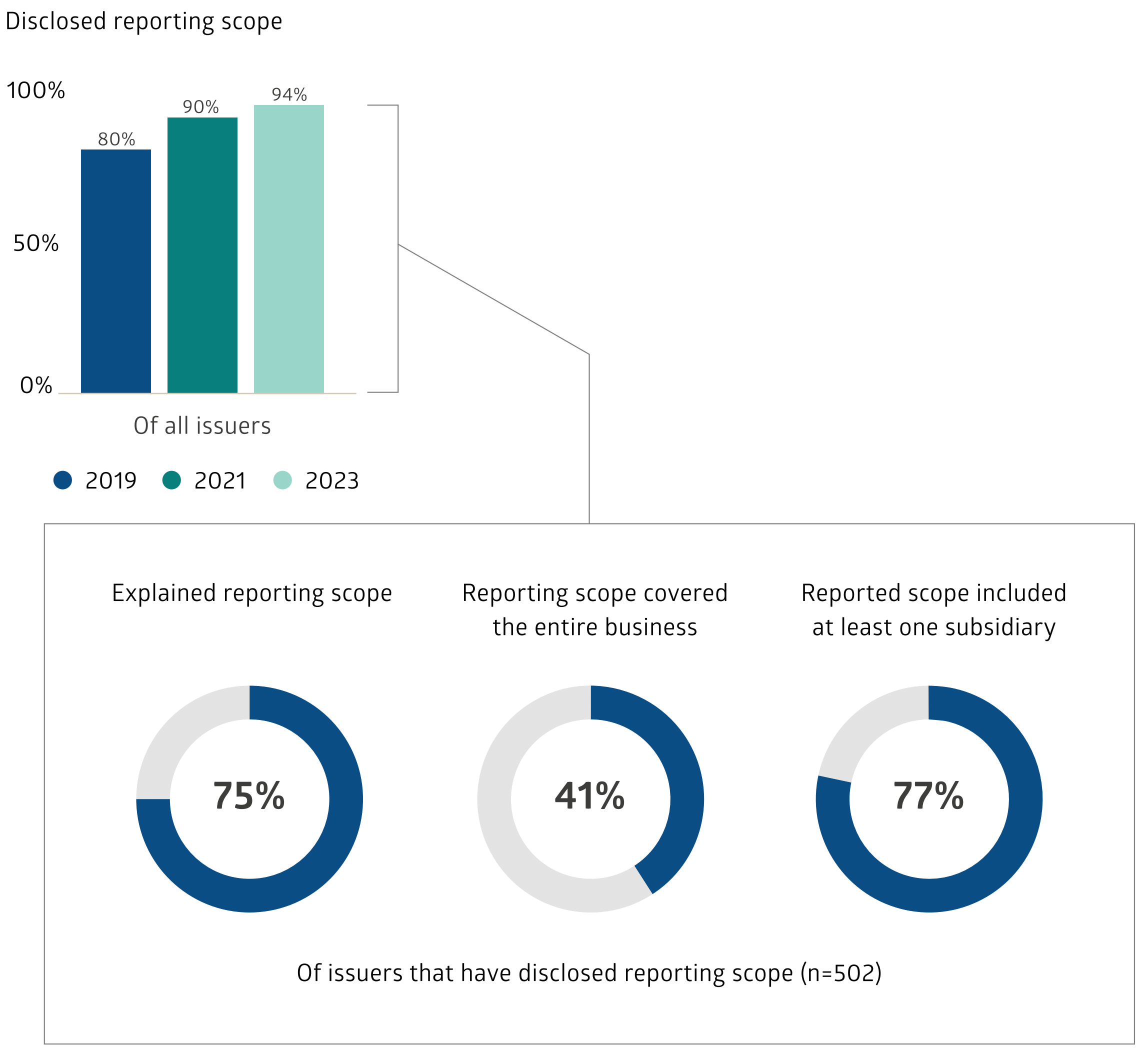


Figure 9: Disclosures on reporting scope

Insights

Investors should consider the following elements when assessing an issuer's reporting scope:

- Boundaries: Some sustainability reports may exclude certain subsidiaries or joint ventures due to the difficulty in obtaining timely information. Other reports may exclude certain regions of the world or non-core operations. Investors will have to judge whether these exclusions are warranted or if they skew the overall picture.

- Time period: Investors should note the period when the data is collected and reported. Ideally, the data should cover the entire 12 months and is not based on a sample taken over a much shorter period. This information can usually be found under the section on reporting scope, or upon careful reading of the sustainability report.

- Scope of assurance: In some cases, issuers seek external assurance for their sustainability report to enhance credibility, accuracy and reliability. The external assurance may not, however, cover every area.

5.2 Material ESG Factors

Sustainability reporting relates to the most important ESG risks and opportunities that will act as barriers or enablers to issuers achieving business goals in the short-, medium-, and long-term. Generally, what is material in sustainability reporting would also be considered material in financial terms, if not in the immediate period, then over time.

The following key elements should be considered when assessing materiality:

- Stakeholder engagement: It is important to engage stakeholders such as investors, customers, employees, suppliers, regulators and local communities to get their perspectives on what ESG issues to prioritise. The outcome of such engagement should be included in the sustainability report.

- Materiality assessment: This helps issuers identify and prioritise ESG issues to address. Issuers can consider adopting a four-step approach of (i) coming up with a list of material factors, (ii) rating them, (iii) prioritising them by running them through a matrix to consider likelihood and impact, and (iv) validating the prioritised factors internally and obtaining sign off from the board and management[22].

- Global reporting standards: Sustainability reporting frameworks such as the GRI Standards may also provide guidelines on materiality for issuers.

- Relevance to strategy: Issuers should evaluate how the identified material factors directly impact business strategies and long-term goals.

[22] *Supra* note 5, at paragraphs 4.21 and 4.25.

Materiality disclosure close to 100%, with more issuers consulting both internal and external stakeholders.

Two issuers failed to identify their material factors in FY 2022, resulting in a 99.6% disclosure rate compared with 100% in the 2021 review.

After a drop in disclosure of the selection process used to identify material factors in 2021 compared to 2019, it is encouraging to see more issuers (95%) integrating the selection process into their materiality assessments **(Figure 10)**. The selection process commonly involves the use of materiality matrixes to help issuers prioritise material factors and connect them to the relevant goals, targets and impacted stakeholders.

Compared to 2021, a significantly greater number of issuers consulted internal stakeholders (85%) and external stakeholders (75%) to define their material ESG factors – an increase of 19 percentage points and 23 percentage points, respectively **(Figure 10)**.

Disclosures on materiality

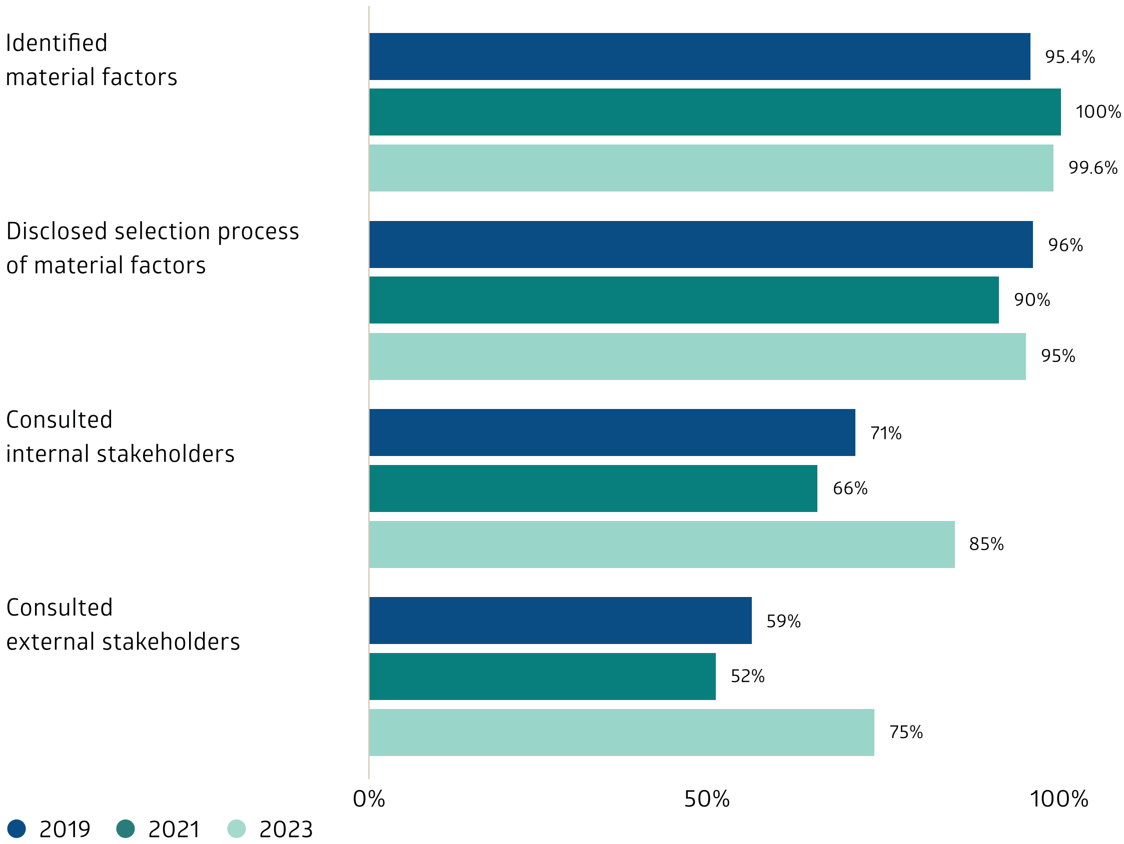


Figure 10: Disclosures on materiality

More issuers are consulting their stakeholders, but not documenting the response.

Almost every issuer (99%) identified the stakeholders consulted, an increase from 95% in the 2021 review. Among these issuers, 50% revealed their processes for selecting and identifying stakeholders **(Figure 11)** – a big improvement from 36% in the previous review.

Among the issuers that identified the stakeholders consulted, only a minority of issuers (38%) stated how they responded to their stakeholders' concerns, although this was an improvement of six percentage points over 2021 **(Figure 11)**. While it may not be possible to list every concern raised by stakeholders, issuers can highlight a few of the key areas and explain how these were addressed.

Based on the sustainability reports reviewed, among the issuers that identified the stakeholders consulted, the top three stakeholders most frequently engaged are employees (99.8%), the government (89%) and customers (88%) **(Figure 12)**.

Disclosures on stakeholder engagement

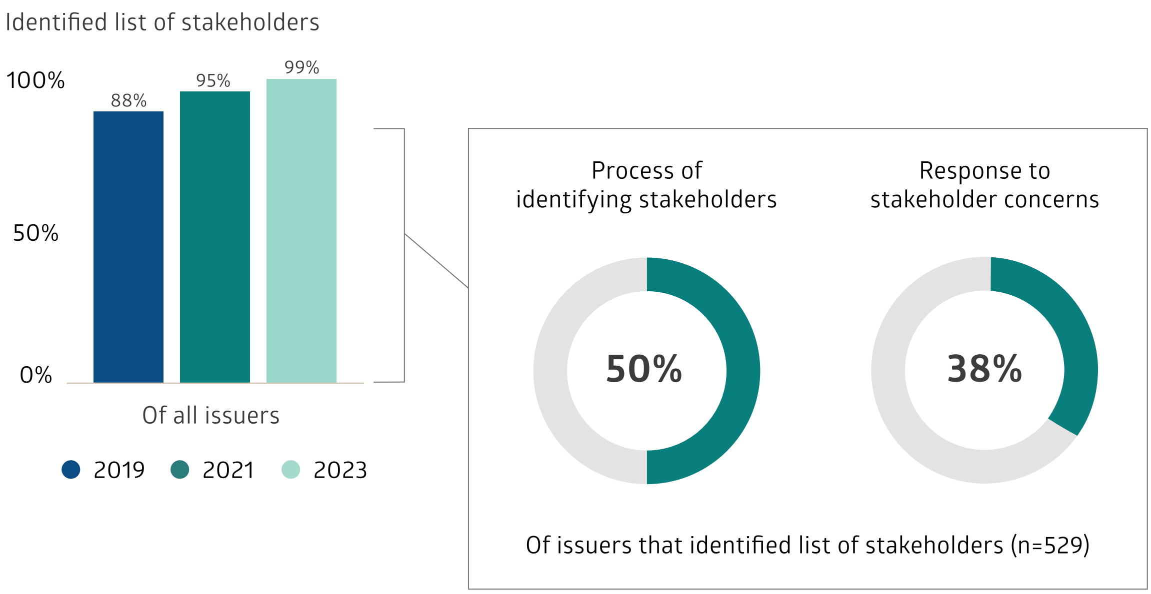
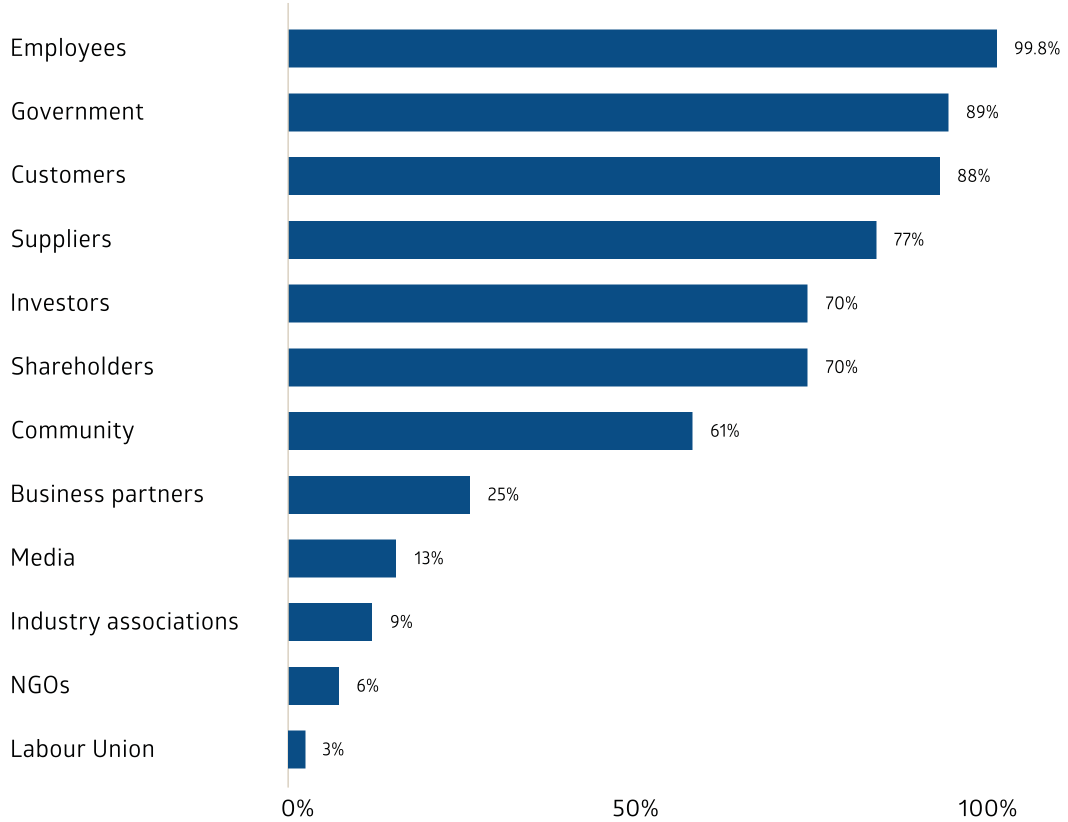


Figure 11: Disclosures on stakeholder engagement

Most frequently mentioned stakeholders



Of issuers that identified list of stakeholders (n=529)

Figure 12: Most frequently mentioned stakeholders

Environmental factors cited most frequently, followed by social factors related to employees.

Across the economic, environment, social and governance (EESG) spectrum, issuers determined environmental-related factors to be the most material, accounting for five of the top 10 cited material factors compared to two in the 2021 review **(Figure 13)**.

This is in line with the increasing focus on climate-related disclosures and climate transition strategies. Emissions, water, effluents, waste, and energy consumption are some of the common climate-related metrics used by issuers to track their progress in achieving environmental targets.

Like in the 2021 review, three of the social-related material factors in the top 10 relate to employees – diversity and equal opportunities; occupational health and safety; and labour practices and relations.

Top 10 material factors[23]

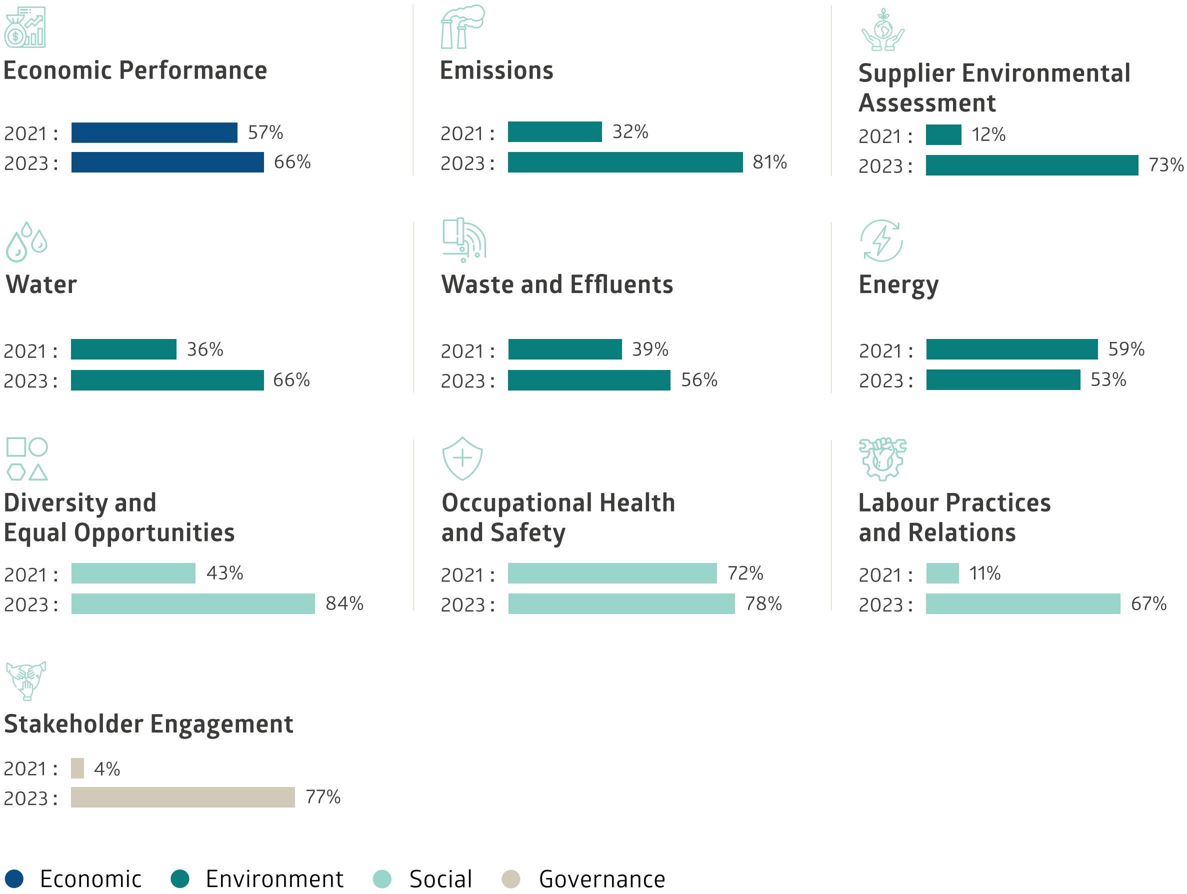


Figure 13: Top 10 material factors

[23] The material factors are defined based on the GRI Topic Standards, which contain disclosures for providing specific information on an issuer's material topics. For more information: https://www.globalreporting.org/standards/.

Excluding climate, disclosures of sustainability-related risks decreased while disclosures of sustainability-related opportunities increased.

When climate-related risks are included, the disclosure rate for sustainability-related risks increased to 80% of issuers in 2023, from 75% in 2021. But when climate-related risks are excluded, the disclosure rate decreased to 71% **(Figure 14)**. This decline suggests that more issuers recognise the importance of climate-related risks and are prioritising them over other sustainability risks. Excluding climate, the commonly observed sustainability risks include cybersecurity, health and safety, and compliance.

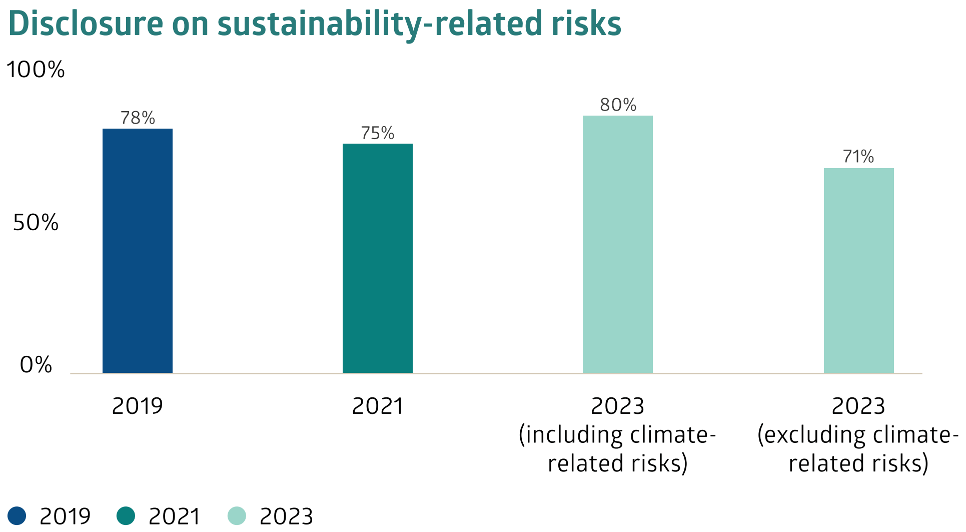


Figure 14: Disclosure on sustainability-related risks

As for sustainability-related opportunities, the disclosure rate increased to 65% of issuers, a substantial improvement from 49% of issuers in 2021 **(Figure 15)**. The commonly observed sustainability opportunities include career growth and upskilling for all employees, enhancing efficiency through technology innovation, and partnerships.

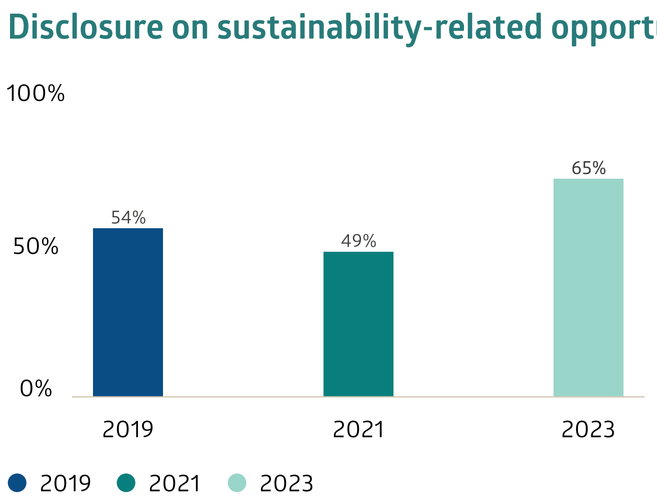


Figure 15: Disclosure on sustainability-related opportunities

Insights

Investors should consider the following elements when assessing an issuer's material factors:

- Relevance to business model and strategy: When material ESG factors are aligned with the issuer's industry, products, services, strategic goals and long-term plans, it indicates the board and management are better prepared to deal with the risks and opportunities.
- Performance metrics and risk management: Issuers that set clear, consistent, and measurable targets along with robust risks assessment frameworks are better positioned to protect and enhance shareholder value.
- Sustainability impact: By successfully identifying and addressing material factors, the board and management strengthens the issuer's brand and reputation, which will in turn generate business value in the long run.

5.3 Climate-related Disclosures

Most issuers have commenced climate reporting before it becomes mandatory for some after FY 2023.

Of the 535 issuers that released a sustainability report, 73% (or 393 issuers) provided climate-related information for at least one of the 11 TCFD recommendations.

Singapore issuers, however, lag their global peers in climate disclosures as the 43% that disclosed information relating to at least five of the 11 TCFD recommendations is lower than the global average of 58% based on the 2023 TCFD Status Report[24].

Utilities (100%), consumer non-cyclicals (87%), real estate (87%), energy (84%) and financials (81%) are the top performing sectors in terms of high climate-related disclosures rate **(Figure 16)**. Among the different pillars, "metrics and targets" tops the list with 92% **(Figure 17)**.

The charts in **Section 5.3** adopt a base of 393 issuers, representing the number of issuers that have disclosed climate-related information in their FY 2022 sustainability reports.

[24] TCFD. (October 2023). *2023 Status Report*. https://www.fsb-tcfd.org/publications/.

Issuers that produced at least one TCFD disclosure

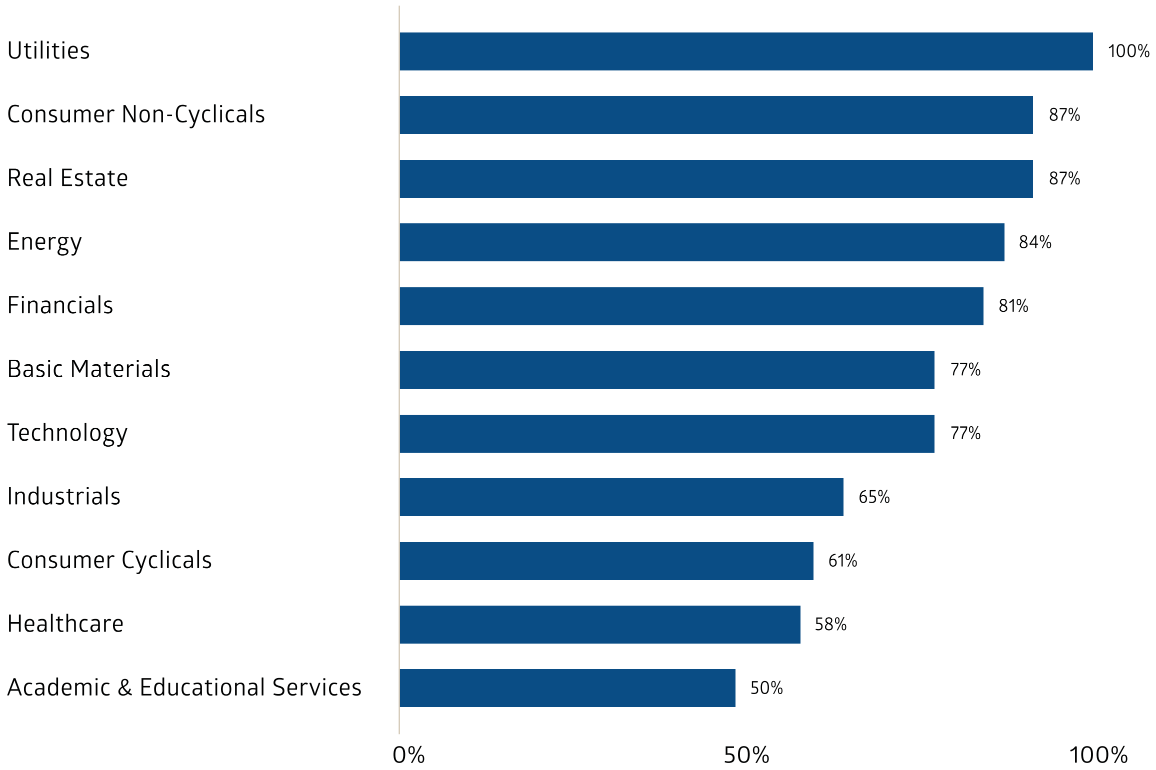


Figure 16: Issuers that produced at least one TCFD disclosure

Disclosure rate across TCFD pillars

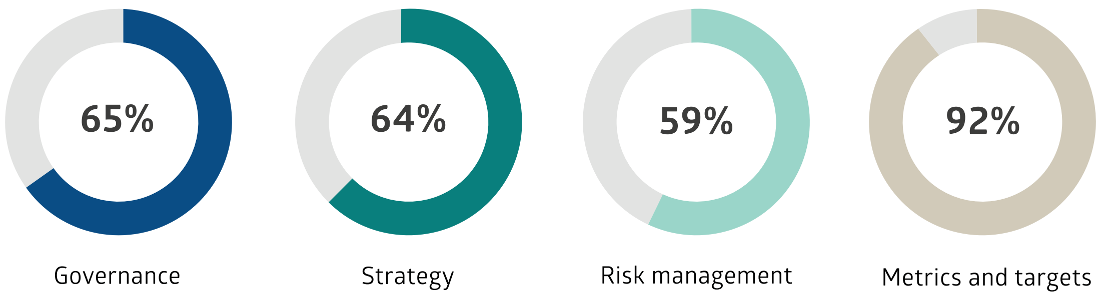


Figure 17: Disclosure rate across TCFD pillars

5.3.1 Governance

Roles and responsibilities for climate issues can be better communicated.

There is room for improvement for issuers to clearly communicate the roles of the board and management in the oversight, assessment, and management of climate-related risks and opportunities. This year's review found only 60% of issuers describing the board's role in providing oversight, and 57% explaining the management's role **(Figure 18)**.

Issuers may consider extending the same governance structure for identifying, assessing and managing sustainability risks to those involving climate.

Climate-related disclosures: Governance

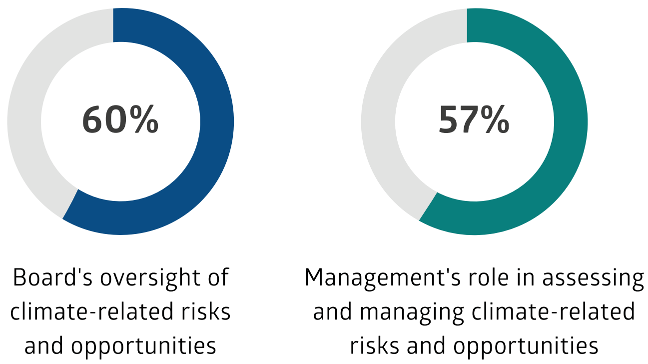


Figure 18: Climate-related disclosures: Governance

Insights

Poor disclosure under the Governance pillar does not inspire confidence in the abilities of the issuer's leadership to manage climate-related risks and opportunities. Here are some ways issuers can improve their communications with stakeholders.

- Provide more information on board responsibility. Instead of merely stating that "the board oversees the management and governance of the Group's sustainability efforts", issuers can provide details such as how the board considers and monitors climate-related issues; whether there is a board committee overseeing climate risk and how regularly this committee meets; and how targets are set and monitored.

- Provide disclosure about management's role. Issuers need to explain how climate-related risks and opportunities are handled at the management level and provide assurance that key staff have adequate training.

5.3.2 Strategy

Poses a challenge but offers benefits if executed well.

Disclosures on strategy under the TCFD recommendations require issuers to disclose the actual and potential impacts of climate-related risks and opportunities on their business, strategy and financial planning where such information is material.

While the majority of issuers (59%) discussed how the identified climate-related issues have affected their businesses, strategy and financial planning, less than a third (31%) identified climate-related risks and opportunities over the short-, medium- and long-term **(Figure 19)**.

Climate-related disclosures: Strategy

Figure 19: Climate-related disclosures: Strategy

Climate-related scenario analysis, a key aspect of the strategy pillar, is a commonly used method that issuers can employ to develop robust strategic plans to react to a range of different climate conditions in the future. However, just 23% of issuers described how resilient their strategies are based on such analysis **(Figure 19)**. Issuers need to consider how climate change will affect their operations under different scenarios to enhance their business resilience.

The key benefits of performing climate-related scenario analysis include:

- Helping the board and management understand how different climate scenarios will affect operations.
- Explaining the issuer's climate-related risks and opportunities to investors and other stakeholders.
- Building resilience by "rehearsing for the future" and testing an issuer's business strategy against a set of scenarios; developing contingency plans; and establishing "trigger points" to set contingency plans in motion[25].

[25] ISCA. (13 April 2023). *ISCA Climate Disclosure Guide Volume 2 - First steps in conducting climate-related scenario analysis.* https://isca.org.sg/standards-guidance/sustainability-and-climate-change/thought-leadership/isca-climate-disclosure-guide-first-steps-in-conducting-related-climate-scenario-analysis.

CASE STUDY 1

Daiwa House Logistics Trust's first standalone scenario analysis

As the owner of 16 modern logistics properties across Japan, SGX-listed Daiwa House Logistics Trust (DHLT) is most concerned about global warming and how it might affect its business. As such, the real estate investment trust's (REIT) inaugural sustainability report focused on risks related to rising temperatures, their impact on operations, and steps to mitigate these challenges.

DHLT's sustainability report stands out as it had conducted a scenario analysis to evaluate the most pertinent climate-related risks that properties owned by DHLT could be exposed to. Some noteworthy features include (page 69 of DHLT's annual report):

- 100% coverage of all the REIT's logistic properties
- Disclosing choice of baseline year
- Assessing a variety of climate scenarios, including a 2°C or lower scenario in line with the TCFD recommendations

Scenario parameters	
Assets and countries coverage	100% coverage (14 logistics properties located in Japan)
Baseline year	2021
Scenarios explored[1]	1.5°C warming (The Network for Greening the Financial System("**NGFS**") Net-Zero & Representative Concentration Pathways ("**RCP**") 2.6) > 3°C warming (NGFS Current Policies & RCP 8.5)
Timeframes explored	Short term : 2030 Long term : 2050

Based on the risks identified according to the different scenarios, some associated mitigation measures are disclosed (page 70 of DHLT's annual report):

Risk / opportunity type	Potential impacts	Risk level 1.5°C warming (2030 to 2050)	Risk level > 3°C warming (2030 to 2050)	Mitigation measures
Extreme and more frequent heatwaves	Increase in cooling demand which may lead to higher utilities costs for the landlord-controlled areas	Moderate	Moderate to High	Investing in adaptation measures for locations with high physical risks
Flooding	Loss of asset value	Moderate	Moderate	Performing specific site level climate risk assessments Considering mitigation and adaptation measures Reviewing insurance coverage
Windstorms, such as tropical cyclones	Loss of asset value	Moderate	Moderate to High	Performing specific site level climate risk assessments Considering mitigation and adaptation measures Reviewing insurance coverage
Carbon pricing	Increase in operational costs associated with carbon pricing	High	Low	Developing a decarbonization roadmap
Changing customer behaviors	Increased focus on green certifications while making landlord choices	Moderate (2030 perspective)		Green building certifications to stay up to date with industry trends

(Source: Daiwa House Logistics Trust Annual Report 2022)

Insights

Issuers can do the following to improve disclosures on strategy:

- Provide detailed description of climate-related risks for each time horizon (short-, medium-, and long-term) that could have a material financial impact on the issuer. The time horizon adopted should be specifically defined, for example, medium-term (two to five years) and long-term (more than five years).
- Consider the impact on all areas including products and services, supply chain, value chain, current or planned investments in climate adaptation and mitigation activities, investments in research and development, operations, acquisitions or divestments, and access to capital.
- Describe the resilience of the strategies to climate-related risks and opportunities, taking into consideration a transition to a low-carbon economy that will cap the rise in global temperatures to 2°C or lower. This could include taking into account the available financial resources to respond to the effects identified in the climate-related scenario analysis; the flexibility in using these financial resources; and the ability to redeploy, repurpose, upgrade or decommission existing assets.

5.3.3 Risk Management

Climate risks need to be integrated into the overall risk strategy.

Just over half (51%) of issuers described their processes for identifying and assessing climate-related risks while 55% described the processes for managing climate-related risks. Only 39% have integrated climate change into their overall risk management **(Figure 20)**. This indicates that a majority (61%) are managing such risks in silos, even though climate affects many aspects of the business.

Identifying, assessing, and managing climate-related risks are important for the following reasons:

- Mitigating financial risks: Climate change can pose substantial financial risks to businesses through physical risks (such as damage to property and infrastructure) and transition risks (such as policies enacted by governments to transition to a lower-carbon economy)[26]. Identifying and managing these risks will help ensure financial stability and long-term viability.
- Long-term planning and strategy: Identifying and managing climate-related risks can help issuers develop sustainable and long-term strategies that consider changing market dynamics, customer expectations and environmental conditions.

[26] *Supra* note 11.

Climate-related disclosures: Risk management

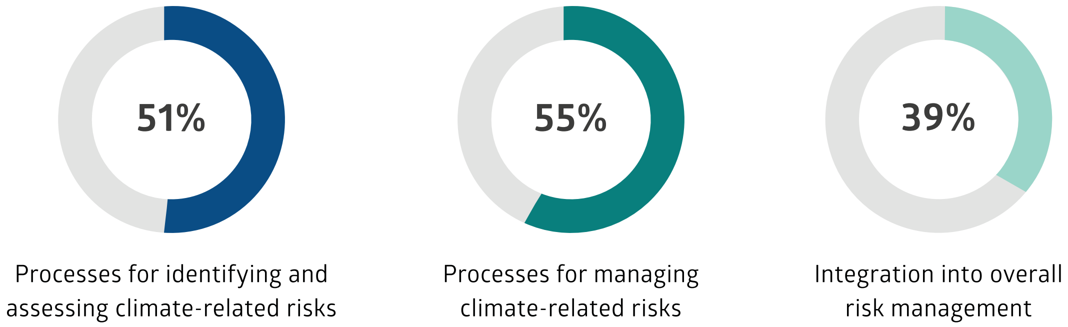


Figure 20: Climate-related disclosures: Risk management

CASE STUDY 2

YHI links climate risks with business performance

YHI International Limited (YHI), a distributor of automotive and industrial products with a global presence, shows how a detailed understanding of climate risk can be integrated with business planning.

The section on climate reporting in its sustainability report stands out as it identifies both physical and transition risks; states the potential financial impact; and describes the processes to manage climate-related risks as seen in the table below (pages 24 to 25 of YHI's sustainability report):

Climate-Related Risks Faced by YHI

Distribution Manufacturing

TYPE		DESCRIPTION OF RISK	SCOPE	TIME FRAME	POTENTIAL FINANCIAL IMPACT	RISK MITIGATION STRATEGY
Physical	Acute	Disruptions to the supply chains and delays in product deliveries, due to frequent and severe torrential rain, inland flooding and bushfires	Distribution	Short- to long-term	• Increase in logistic costs and insurance premiums	• To set up warehouses in regions that are less vulnerable to flooding and bushfires • To vigilantly monitor the weather forecast when arranging delivery routes and provide timely updates to customers about any delays
Physical	Chronic	Significant fluctuation in the demand for winter wheels, resulting from global warming and unpredictable snowfall patterns	Manufacturing	Short- to long-term	• Significant year-on-year fluctuations in the sales of winter wheels, as unsold inventories age and impair in value	• To diversify the revenue streams of our manufacturing segment and minimise any potential financial impacts arising from the fluctuation in demand for winter wheels
Physical	Chronic	Reduced productivity and increased absenteeism rates at the production floor and our warehouses, due to rising temperature and heatwaves	Distribution Manufacturing	Medium- to long-term	• Increase in capital expenditure and staff costs	• To retrofit the air ventilation and cooling system within our facilities • To provide additional monetary incentives, on par with or above market rates, to workers manning certain functions (e.g., furnaces for aluminium ingot smelting), especially during hot spells and the summer

Climate-related risks have been incorporated into YHI's Enterprise Risk Management (ERM) framework, demonstrating the issuer's recognition of the linkages between sustainability and climate-related risks and the overall business.

(Source: YHI International Limited Sustainability Report 2022)

Insights

Issuers can do the following to improve disclosures on risk management:

- Identify relevant risks: Issuers should highlight pertinent physical and transition risks. These risks may include supply chain disruptions, market shifts or changes in weather patterns.

- Phased integration into overall risk management: Enterprise Risk Management (ERM) requires a continual process of obtaining and sharing necessary information from both internal and external sources, which flows up, down, and across the organisation[27]. Issuers should implement a phased approach to incorporate climate-related risks into their overall ERM strategy to ensure that climate-related risks are systematically considered.

- Leverage risks as opportunities: Issuers can also transform identified risks into opportunities, for example by tapping energy-efficient technologies and exploring new business prospects. This proactive approach can yield competitive advantage and foster sustainability.

5.3.4 Metrics and Targets

High disclosure rate in climate-related metrics; more issuers to start Scope 3 reporting early.

Metrics and targets are key to tracking an issuer's progress in managing climate issues. It is encouraging to see 86% of issuers disclosing at least one of the Scope 1, 2, or 3 greenhouse gas (GHG) emissions **(Figure 21)**. The majority of issuers (83%) disclosed data for Scope 2 GHG emissions **(Figure 22)**.

Progress on reporting Scope 3 emissions, which are the indirect GHG emissions incurred by an issuer as part of its value chain, was slower with just 20% of issuers providing such data **(Figure 22)**.

While tracking Scope 3 emissions such as those arising from employees' business travel and the emissions from purchased goods and services can pose a challenge for smaller issuers, these can account for around 75% of an issuer's GHG emissions by some estimates[28]. Tracking and reporting Scope 3 GHG emissions early will, in time, result in more accurate and standardised data.

Nearly two-thirds (62%) of issuers disclosed metrics used to measure and manage climate-related risks and opportunities **(Figure 21)**. Besides carbon emissions, more issuers should consider including metrics on other climate-related risks such as water and energy consumption, land use, and waste management where relevant and applicable.

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[27] Everson, M. E. A., Bagin, M., Perraglia, S. J., Chesley, D. L., Katz, H., Zelnik, K. C., Martens, F. J., Sylvis, K. T., & Grimshaw, M. (2017). *Enterprise Risk Management Integrating with Strategy and Performance* (p. 6). Committee of Sponsoring Organizations of the Treadway Commission. https://www.coso.org/_files/ugd/3059fc_61ea5985b03c4293960642fdce408eaa.pdf.

[28] World Resources Institute. (24 June 2022). *Trends Show Companies Are Ready for Scope 3 Reporting with US Climate Disclosure Rule*. https://www.wri.org/update/trends-show-companies-are-ready-scope-3-reporting-us-climate-disclosure-rule.

Climate-related disclosures: Metrics and targets

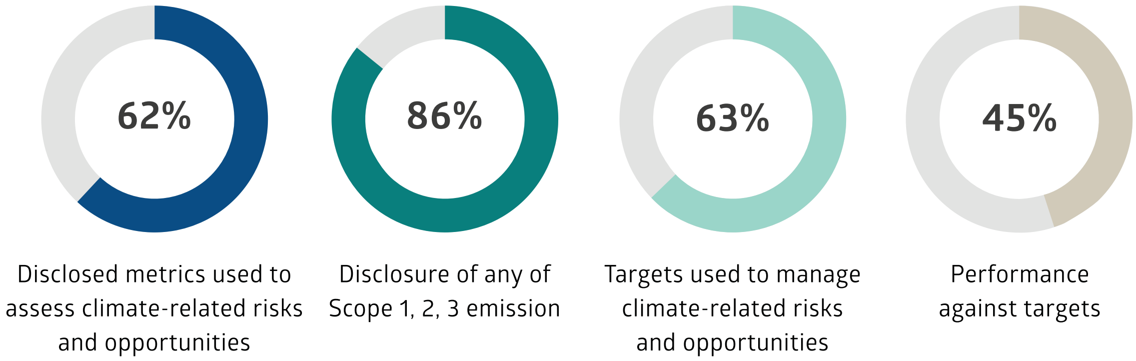


Figure 21: Climate-related disclosures: Metrics and targets

GHG emissions disclosure

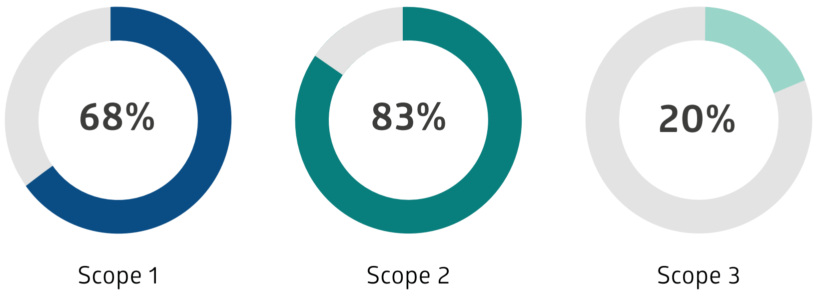


Figure 22: GHG emissions disclosure

CASE STUDY 3

5E Resources' first sustainability report shows promise

5E Resources Limited (5E), a provider of waste management services in Malaysia, shows small cap issuers can provide comprehensive climate emissions data that is largely aligned with the GHG Protocol and GRI Standards in their inaugural sustainability report.

While 5E does not provide historical data for comparison, its Scope 1 and Scope 2 disclosures stand out because of the details, as seen in the table below (page 35 of 5E's annual report). 5E also provided emission intensity per employee, in line with the TCFD's guidance for industries with high energy consumption.

This data will provide the base for comparisons in subsequent years.

Pollutant	CO_2	CH_4	N_2O
Emission Factor[1]	2.68	0.000023	0.000032
Global Warming Potential (GWP)	1	28	265

	FY2022
Fuel Used	Diesel
Fuel Consumed (l)	737,771
CO_2 Emissions (tCO_2e)	1,983.82
CH_4 Emissions (tCO_2e)	0.00478
N_2O Emissions (tCO_2e)	0.06221
Total GHG Emissions (tCO_2e)	1,983.88
Number of employees	155
GHG Intensity (tCO_2e/employee)	12.80

In addition, 5E disclosed plans to reduce future emissions. Examples include switching to newer, fuel-efficient vehicles with lower emissions, regular maintenance of vehicles to ensure optimal engine performance and fuel consumption, and minimising electricity consumption by adopting more energy-efficient LED lights and using motion sensors to turn off the lights when people are not around.

5E has set out clear and objective targets across different time frames in its sustainability report, with a mix of quantitative and qualitative targets (page 38 of 5E's annual report).

Material Topics	Short-Term Target (1-2 years)	Medium-Term Target (2030)	Long-Term Target (2050)
Climate Change	• Increase awareness of climate change as well as its impact on business practices and core services.	• Accelerate transition to a lower-carbon practice by 2030.	• Aim to achieve climate-neutral by 2050.
Greenhouse Gas Emissions	• Adopt the use of other renewable energy. • Consider replacing more vehicles with green engines or switching to lower emissions vehicles.	• Reduce GHG emission levels and emission intensities by 20%. • Disclose more categories under Scope 3 emissions.	• Perform scenario analysis with more quantitative outcomes.
Energy Consumption and Efficiency	• Adopt the use of energy efficient features and fittings.	• Reduce electricity consumption and intensities by 10%. • Adopt energy efficient methods in waste management operations. • Launch initiatives to install solar panels.	• Achieve 80% of features and fitting that are energy efficient and environmentally friendly.
Waste Management	• Reduce waste generated and waste intensities by 10%. • Increase recycled waste composition by 5%.	• Reduce waste generated and waste intensities by 20%. • Increase recycled waste composition by 15%.	• Reduce waste generated and waste intensities by 30%. • Increase recycled waste composition by 30%.
Environmental Policy Compliance	• Maintain zero incidents of environmental policy related fines.		

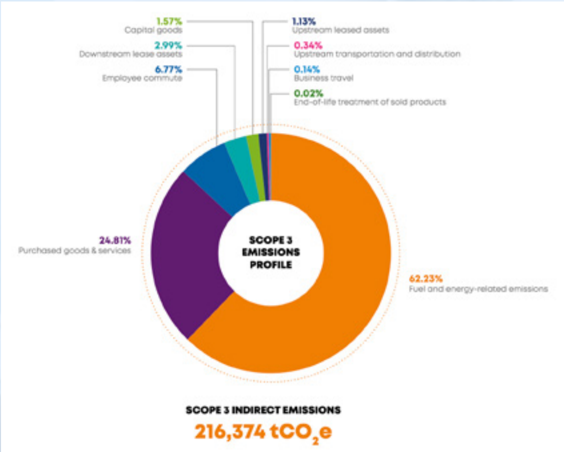
(Source: 5E Resources Limited Annual Report 2022)

CASE STUDY 4

SBS Transit leads the way in reporting Scope 3 emissions

Scope 3 emissions represent the largest source of GHG emissions, and being able to accurately measure them is key to helping companies identify areas in the supply chain where they can achieve the biggest reduction in their carbon footprint.

SBS Transit Ltd (SBS Transit), which operates bus and rail services in Singapore, provides a breakdown of its most pertinent Scope 3 emissions by source as well as explains in detail how the emissions are calculated based on the requirements stated in the GHG Protocol (page 28 of SBS Transit's sustainability report).



As a transport operator, the bulk of SBS Transit's Scope 3 emissions is linked to fuel and energy related emissions. The breakdown, however, also shows that potential reductions may be attained by closer scrutiny of purchased goods and services as well as shortening employee commute.

SBS Transit goes further to clarify when actual or estimated (screened) data is used in calculating Scope 3 emissions (page 30 of SBS Transit's sustainability report).

Scope 3 Category	Screened or Calculated	Total emissions (tCO_2e)
Category 1: Purchased goods & services	Calculated	53,693.37
Category 2: Capital goods	Calculated	3,394.95
Category 3: Fuel- and energy-related activities not included in Scope 1 & Scope 2	Calculated	134,663.24
Category 4: Upstream transportation and distribution	Screened	743.22
Category 5: Waste generated in operations	Calculated	0.11
Category 6: Business travel	Screened	303.12
Category 7: Employee commute	Screened	14,641.25
Category 8: Upstream leased assets	Screened	2,436.62
Category 12: End-of-life treatment of sold products	Calculated	34.68
Category 13: Downstream lease assets	Screened	6,463.51

Screened Scope 3 categories refer to the categories in which identifies the initial GHG estimation. Calculated Scope 3 categories refer to the categories in which emissions are calculated based on SBS Transit's data.

Issuers, particularly those in industries associated with higher GHG emissions, are facing greater scrutiny by investors and lenders. Detailed Scope 3 disclosures will help these stakeholders better understand the issuer's exposure to climate-related issues. The details also help issuers set targets and come out with better transition plans.

SBS Transit's targets are integrated into the transition plan of its parent company, ComfortDelGro Group, whose transition plan is discussed in **Section 7.4**.

(Source: SBS Transit Ltd Sustainability Report 2022)

Majority of issuers set climate targets, with emphasis on short-term climate targets.

Nearly two-third of issuers (63%) have set climate-related targets related to GHG emissions, water usage, energy usage or waste management to manage climate-related risks and opportunities **(Figure 21)**. The TCFD recommendations encourage issuers to state whether the target is absolute or intensity based, the time frames over which the target applies, the base year from which progress is measured, and key performance indicators used to assess progress against targets.

Of the 249 issuers that have disclosed targets to manage climate-related risks, 71% provided quantitative targets[29]. Within this category, 40% of issuers set absolute targets only while 47% gave intensity targets only. The remaining 13% set both absolute and intensity targets **(Figure 23)**. The most common ratios used by issuers when setting intensity targets are emissions per employee, unit of revenue, and unit of production.

Out of the 249 issuers that disclosed targets to manage climate-related risks, 86% defined the time frame adopted, which means they have explained short-, medium-, and long-term. The majority (66%) set short-term climate targets, demonstrating an immediate commitment to reduce emissions. However, these short-term targets need to be complemented with longer-term strategies and targets to address the systemic nature of climate change and to align with global decarbonisation goals. Only 35% of issuers set themselves long-term climate targets, and even fewer (30%) provided medium-term targets **(Figure 24)**.

[29] For avoidance of doubt, this includes issuers that have disclosed quantitative targets only, and issuers that have disclosed both quantitative and qualitative targets.

Quantitative vs qualitative targets

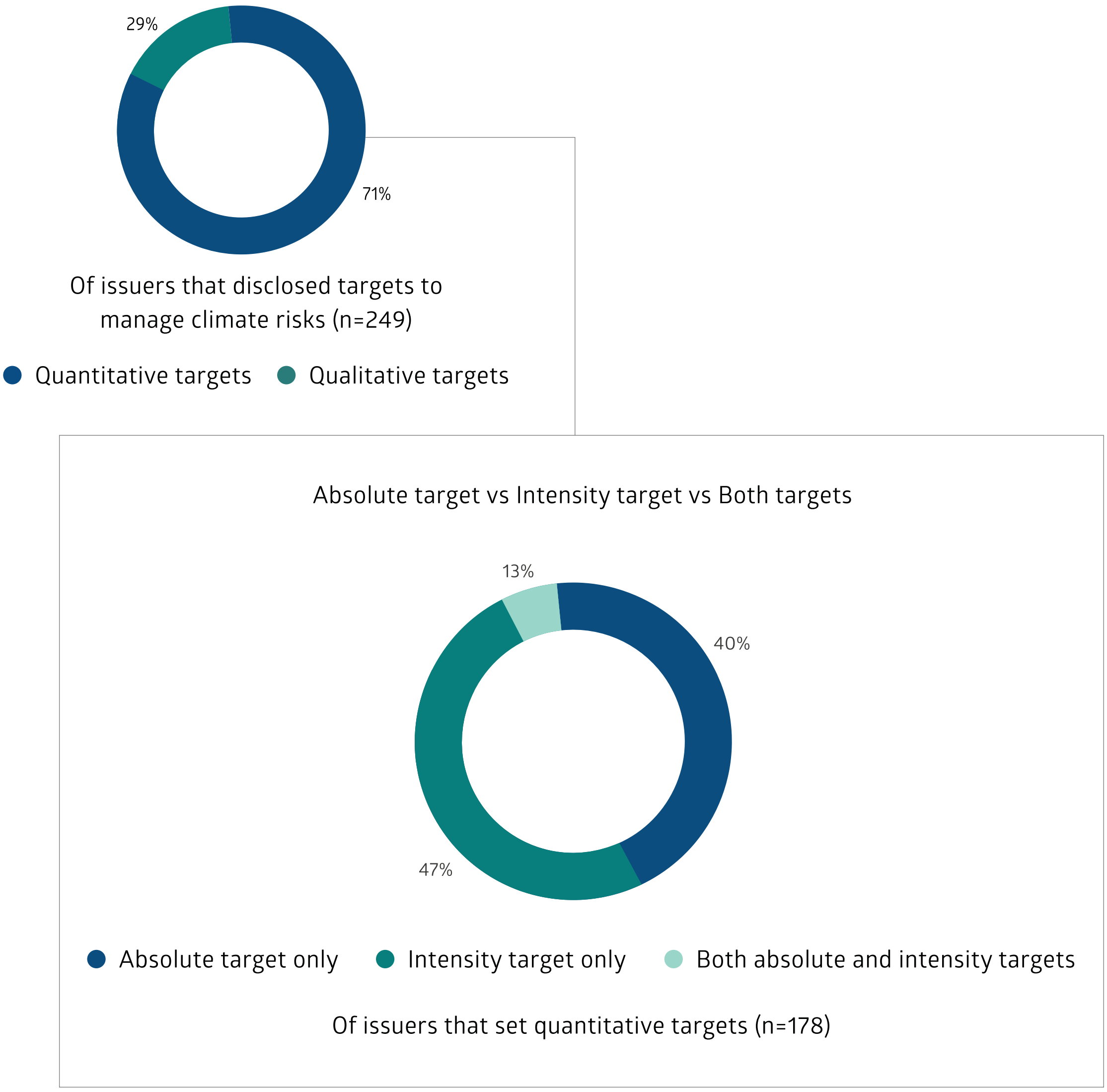


Figure 23: Quantitative vs qualitative targets

Disclosure of time frame for climate targets[30]

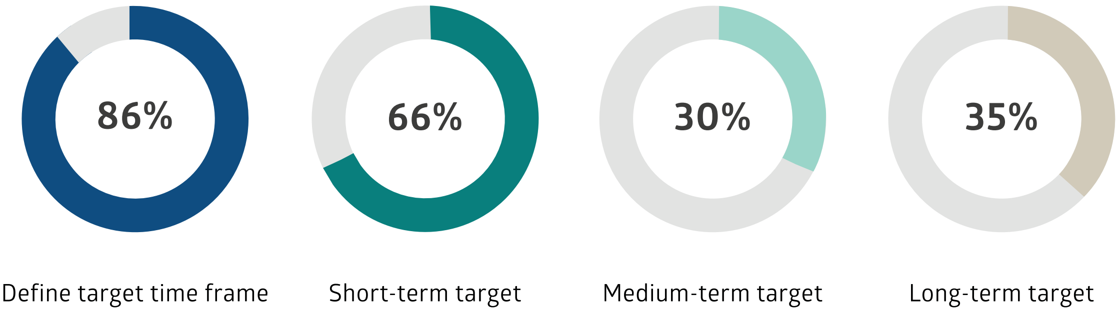


Figure 24: Disclosure of time frame for climate targets

Insights

Issuers can do the following to improve their disclosures on metrics and targets:

- Climate targets should be set at a level that best suits an issuer's business activities and strategy. This may include setting targets for the entire group, targets tailored to specific business lines, or to specific geographies. Issuers should also consider how climate scenario analysis and climate science would influence the determination of targets and their broader strategy and risk management goals. To effectively measure and track progress against targets, they should be linked to relevant metrics, quantified and measurable where possible[31].

- To consider differences in scale or better gauge output efficiency, issuers should consider providing intensity data on top of absolute data. This could be in terms of emissions per employee or revenue (e.g. per $1 million of sales), both of which are good proxies for operational efficiency. This approach enables investors to take into consideration growth and allows for year-on-year and intra-industry comparison[32].

- Issuers should also complement short-term targets with medium- and long-term targets to address the systemic nature of climate change and align with global decarbonisation goals. These targets should be quantitative to provide a clear and measurable framework for tracking progress.

[30] Unless defined by the issuers themselves, for the purposes of this report, targets set for the next reporting period are considered "short-term targets"; targets that are set two to five years into the future are considered "medium-term targets"; and targets set beyond five years are considered "long-term targets".
[31] TCFD. (2021). *TCFD Guidance on Metrics, Targets, and Transition Plans.* TCFD.
https://assets.bbhub.io/company/sites/60/2021/07/2021-Metrics Targets _Guidance-1.pdf.
SGX. (n.d.). *SGX Core ESG Metrics*. Retrieved 8 November 2023, from:
https://www.sgx.com/sustainable-finance/sustainability-reporting#SGX%20Core%20ESG%20Metrics.
[32] Funk, C. M. (2020). *Carbon Footprinting: An Investor Toolkit* (Environmental, Social and Governance (ESG)). EMEA.
https://www.ssga.com/library-content/pdfs/insights/carbon-footprinting-an-anvestor-toolkit.pdf.

5.4 Policies, Practices and Performance

Policies, practices and performance are crucial elements in sustainability reporting as they ensure issuers disclose policies and processes to adequately and effectively manage the risks associated with the identified material ESG factors, along with key mitigation features. Disclosing ESG practices and performance across historical and the current reporting periods allows stakeholders to track progress. These metrics form the baseline for target setting.

Based on the SGX Sustainability Reporting Guide, issuers should disclose the following[33]:

- Description of ESG practices and performance over a specified time period
- Linkage of performance incentives to ESG performance
- Policies to manage ESG-related risks
- Practices and processes to manage ESG-related risks

Continued improvement in disclosure of sustainability performance data since 2019.

Consistent with the 2019 and 2021 reviews, almost all issuers (99%) disclosed past year sustainability performance data **(Figure 25)**. The most commonly mentioned environmental performance data include energy efficiency, carbon emissions, water, and waste and effluents. This is consistent with the earlier finding that environmental factors are the most cited material ESG factor by issuers in this year's review **(Figure 13)**. The majority of issuers also disclosed their policies (82%) and processes (76%) to manage ESG-related risks.

Fewer issuers linked remuneration for top executives to sustainability performance.

There was a decrease in the number of issuers that linked top executive remuneration to sustainability performance from 26% in 2021 to 16% in 2023 **(Figure 25)**.

At the global level, the incorporation of sustainability performance into remuneration frameworks is still at the early stage of development and comes with a range of challenges. For example, climate-related metrics tend to be incorporated primarily into senior management's short-term incentive plans. The impact of incorporating such metrics is also relatively modest at present as their weights are still small or they are only used as an overall adjuster or modifier.

Geographical differences which reflect different levels of stakeholder demand may result in varying practices. Most importantly, gaps in the availability and reliability of relevant and meaningful metrics, as well as the difficulty in developing such yardsticks, continue to hinder progress. The Financial Stability Board acknowledges that more time is needed before a consistent practice of linking sustainability to executive remuneration emerges[34].

[33] *Supra note 5*, at paragraphs 4.27 and 4.28.
[34] Financial Stability Board. (20 April 2023). *Climate-related Financial Risk Factors in Compensation Frameworks.* https://www.fsb.org/2023/04/climate-related-financial-risk-factors-in-compensation-frameworks/.

Policies, practices and performance disclosures

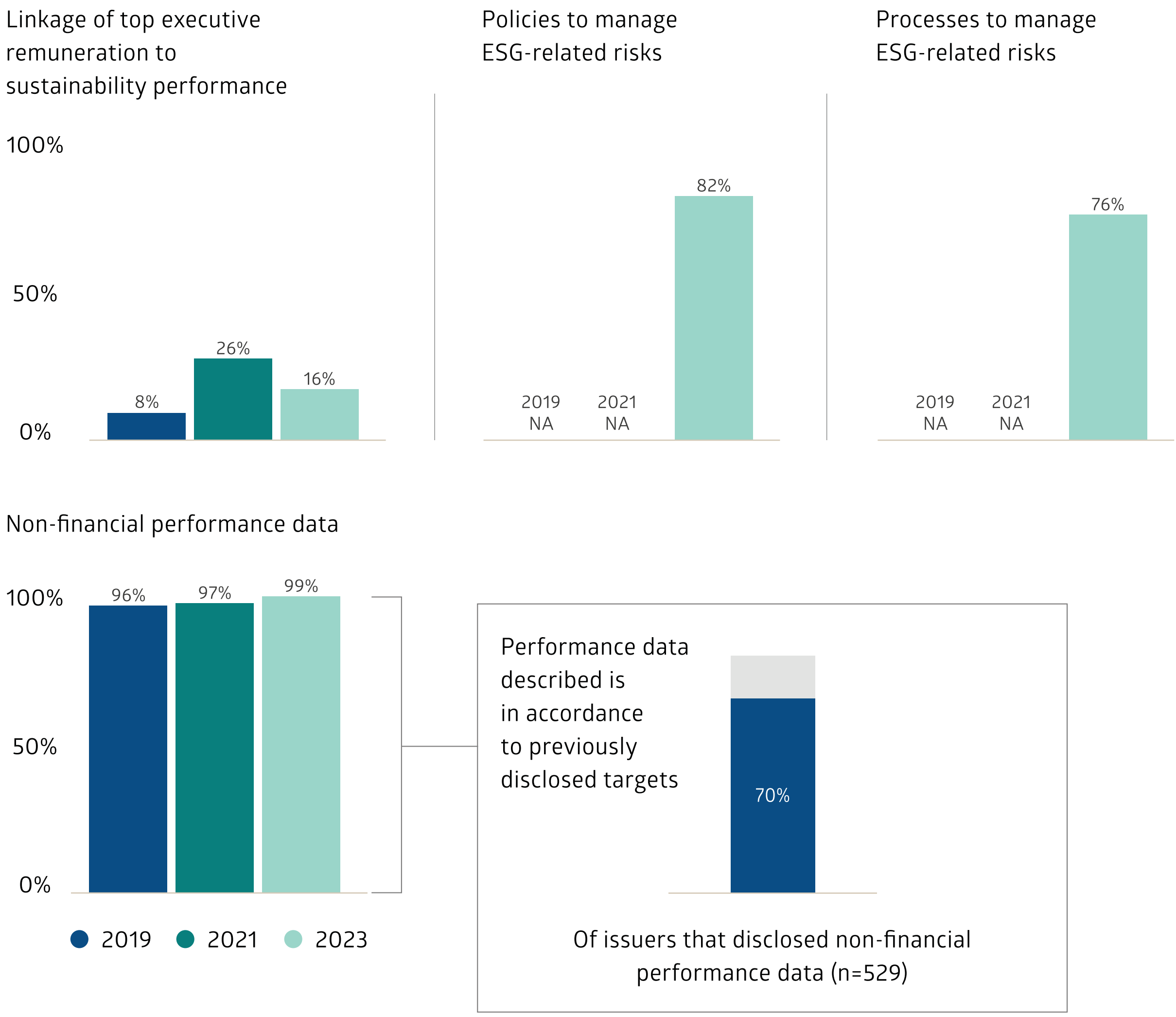


Figure 25: Policies, practices and performance disclosures

Insights

The following are some of the key sustainability performance data that investors should look out for:

- Environmental data:
  - GHG emissions: By disclosing Scope 1, 2, and 3 GHG absolute emissions and emissions intensity, the issuer discloses its carbon footprint and sets the baseline for tracking its progress in reducing emissions.
  - Energy efficiency: Data on energy usage helps issuers identify opportunities to reduce costs while contributing to the environment.
  - Water: Information on water consumption and management is critical for sustainable water resource management and assessing water-related risks.
  - Waste and effluent: Tracking metrics such as waste generation, recycling rates, waste management, and waste-to-landfill helps measure resource efficiency and waste reduction efforts.
  - Biodiversity and ecosystems: Reporting on nature-related risks is important for issuers with material nature-related dependencies. It is especially important for issuers in industries directly dependent on nature, such as agriculture and forestry. Examples of nature-related risks can be found in the recently published Taskforce on Nature-related Financial Disclosures (TNFD) recommendations[35].
- Social data:
  - Diversity, Equity and Inclusion (DEI): Data on workforce diversity, equity and inclusion demonstrate the issuer's commitment to a fair and inclusive workplace.
  - Health and safety performance: Data on workplace accidents, injuries, and health and safety initiatives shows the level of employee wellbeing and compliance with related regulations.
  - Labour practices: Information on labour practices – including fair wages, working hours and employee rights – helps ensure ethical labour management.
  - Community engagement: Such activities and partnerships demonstrate the issuer's commitment to the local community and burnish its credentials as a responsible corporate citizen.
  - Product safety and quality: Data on product safety and quality builds customer trust and indicates the level of compliance with regulations.
- Governance data:
  - Board diversity and structure: Reporting on board composition, independence and diversity enhances corporate governance transparency.
  - Ethics and compliance: Information on ethics, anti-corruption efforts, and compliance with legal and regulatory requirements demonstrates a commitment to ethical business practices.

[35] TNFD. (September 2023). *Taskforce on Nature-related Financial Disclosures (TNFD) Recommendations.* https://tnfd.global/publication/recommendations-of-the-taskforce-on-nature-related-financial-disclosures/.

CASE STUDY 5

How Mewah identifies and manages material ESG issues

Mewah International Inc (Mewah), a large Singapore-headquartered global food and agribusiness, shows how issuers can significantly reduce waste and protect the environment by closely examining their supply chain and identifying key areas to focus on.

- **Environmental protection and stewardship:** As milling accounts for the highest water consumption in the processing life cycle of crude palm oil, Mewah has put in place a mechanism to calculate the water consumption intensity of its palm oil mill operations as well as the quality of discharged wastewater. To ensure compliance with local regulated environmental standards, control measures include installing proper wastewater treatment systems and regular sample monitoring (pages 27 to 28 of Mewah's sustainability report).

- **Responsible supply chain:** Mewah has established comprehensive policies to ensure that its entire palm oil and coconut oil supply chains remain free from links to deforestation and exploitation of human rights. For palm oil, the key feature of the policy includes rejecting new oil palm development in forested peatland plantation after 2015 and respecting the rights of indigenous people and local communities where oil palm plantation development takes place. For coconut oil, the policy includes improving the livelihoods of smallholders by helping them become more productive. Mewah's policies apply to all subsidiaries and third-party suppliers (pages 39 to 40 of Mewah's sustainability report).

(Source: Mewah International Inc. Sustainability Report 2022)

5.5 Targets

Sustainability targets allow issuers to strategically address material ESG factors, ensure accountability, and track their sustainability performance over different time horizons. Unless defined by the issuer themselves, for the purposes of this report, targets set for the next reporting period are considered "short-term targets"; targets that are set two to five years into the future are considered "medium-term targets"; and targets set beyond five years are considered "long-term targets".

Sustainability targets include targets set across all three aspects of ESG. Some examples include targets relating to energy consumption, employee health and safety, cybersecurity, anti-corruption, and anti-bribery.

Scarcity of medium- to long-term targets.

While 83% of issuers have set at least one short-, medium-, or long-term sustainability target, only 8% disclosed targets across all three periods. Another 16% of issuers set targets across two different time frames. Most issuers (59%) set targets for only one time frame **(Figure 26)**.

As with climate-related targets, most issuers that have set targets set short-term targets (89%), while only a small minority disclosed medium-term (26%) and long-term targets (24%) **(Figure 27)**. Many issuers provided perpetual and qualitative targets without specifying time frames.

Quantitative and measurable targets specifying target years are needed to track progress and ensure accountability, and failure to do so raises doubts about the issuer's commitment to achieving set targets.

Targets disclosed across different time frames

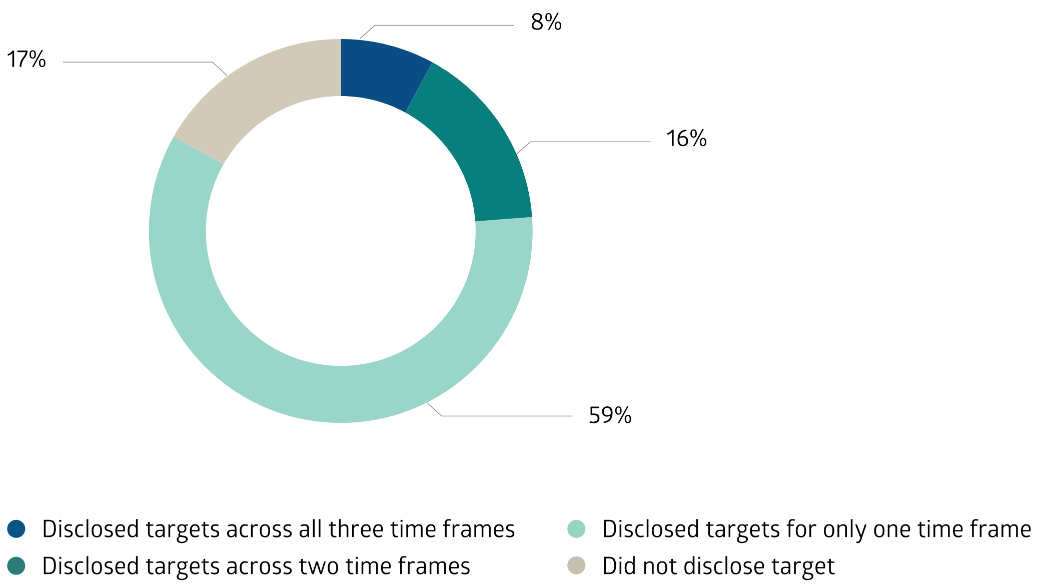


Figure 26: Targets disclosed across different time frames

Sustainability targets time frame

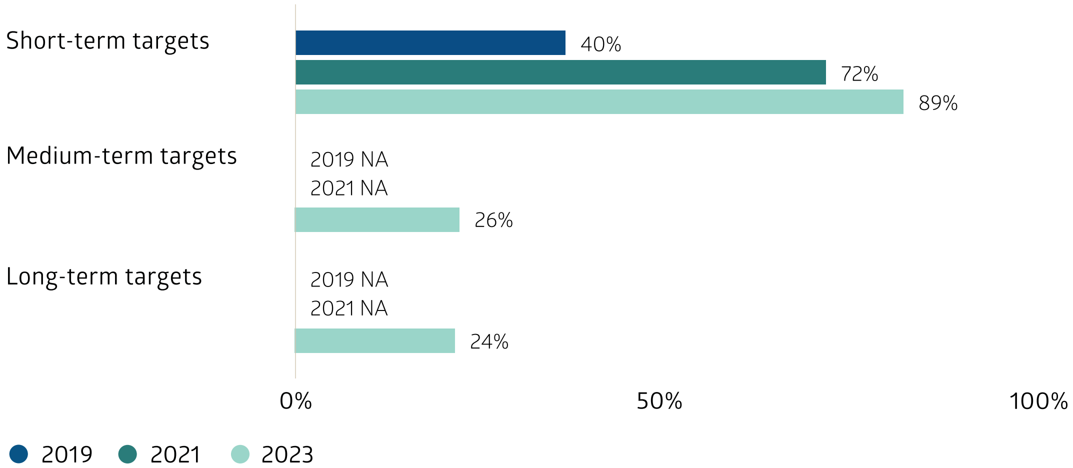


Figure 27: Sustainability targets time frame

Fewer issuers link sustainability targets to corporate strategy and financial performance.

After a substantial improvement in 2021, the proportion of issuers that linked sustainability targets to their overall corporate strategy fell to 63% from 70%. There was also a drop in linking sustainability targets to financial performance from 46% to 36% **(Figure 28)**.

An example of an issuer that has linked its sustainability targets to business strategy is an industrials company that plans to transition 90% of its total car fleet to cleaner energy vehicles by 2030, and 100% by 2040. This issuer also plans to build new partnerships with electric vehicle charging operators and new mobility technology start-ups in Singapore.

As for linking sustainability targets to financial performance, an issuer in the consumer non-cyclical sector set short-term, medium-term and ongoing targets to reduce waste and packaging with the aim of reducing its use of disposable carrier bags and the cost of packaged materials. This issuer has also set targets to reduce food waste as a cost-saving measure.

Sustainability targets linked to business strategy and financial performance

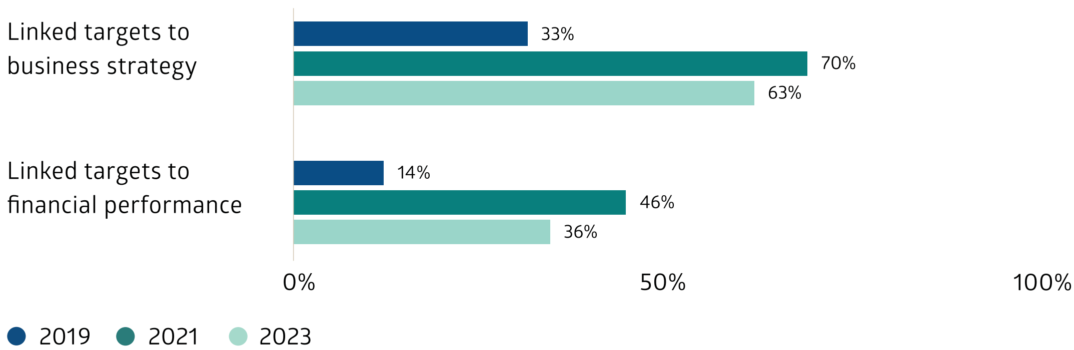


Figure 28: Sustainability targets linked to business strategy and financial performance

Insights

The following are examples of poor disclosures of sustainability targets as observed in the reports assessed and suggestions on how these can be improved:

- Failure to define short-, medium-, and long-term horizons, such as expressing an ambition to obtain certain ESG credentials without providing a definite time frame. A statement such as "our perpetual target is to reduce our environmental impact" says little. There should be specific short-term, medium-term and long-term targets to allow stakeholders to track progress and align targets with strategic planning.

- Failure to define quantitative targets. For instance, merely stating that "workers will be educated on safety practices" falls short. Issuers are expected to set quantitative targets whenever possible, such as specifying the number of workers to be trained each year, or a target date to complete safety training for all staff. Effective targets are specific, measurable, achievable, relevant and time-bound for easy tracking by management, investors and other stakeholders.

- Long-term focus and alignment with global goals. Given the likelihood of increased regulation and to demonstrate the issuer's commitment to combating climate change, long-term targets should be aligned with global sustainability frameworks such as the 2030 United Nations (UN) Sustainable Development Goals (SDGs), the Paris Agreement and the Nationally Determined Contributions (NDC) of countries the issuer operates in.

5.6 Sustainability reporting framework

The push for standardisation is underway with standards being consolidated or made interoperable with other key standards. Some of the reporting standards adopted by issuers in Singapore include the GRI Standards, SASB Standards, and TCFD recommendations.

GRI remains the most popular reporting standard by Singapore issuers, followed by TCFD and SDG.

Overall, there is a substantial improvement in the number of issuers disclosing and explaining the choice of reporting framework.

For FY 2022, 534 issuers adopted at least one sustainability reporting framework. Out of these issuers, 79% explained their framework selection, up from 46% in 2021. GRI continues to be by far the most popular reporting framework with almost all issuers using the GRI Standards (99.8% or 533 issuers) **(Figure 29)**. This has been the practice for some time with 98.9% and 99.1% of issuers using the GRI Standards in 2019 and 2021 respectively.

As for climate-related disclosures, 73% (or 393 issuers) adopted TCFD in their sustainability reports.

The United Nations (UN) Sustainable Development Goals (SDGs) were another popular framework with 42% (or 223 issuers) committing to achieving some of them.

Sustainability reporting framework adoption

Number of issuers

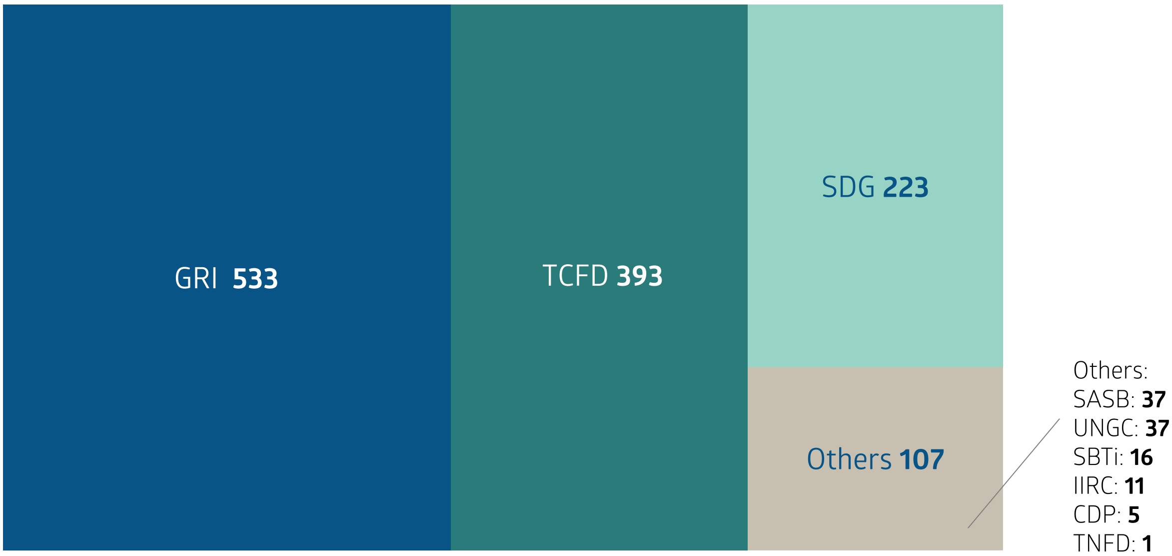


Figure 29: Sustainability reporting framework adoption

The recent standards and frameworks include those published by ISSB and TNFD:

- ISSB: The inaugural IFRS Sustainability Disclosure Standards (ISSB Standards) are designed to provide a global baseline of sustainability-related disclosures for the capital markets and were published in June 2023. IFRS S1 provides a set of disclosure requirements designed to enable companies to communicate to investors about the sustainability-related risks and opportunities they face over the short-, medium-, and long-term. IFRS S2 sets out specific climate-related disclosures and is designed to be used with IFRS S1. Both fully incorporate the recommendations of the TCFD[36]. In May 2023, the ISSB sought feedback to conduct three potential research projects on sustainability-related risks and opportunities in its next two-year work plan. The projects are associated with biodiversity, ecosystems and ecosystem services; human capital; and human rights[37].

- TNFD: After a two-year consultative development process, the TNFD published its final recommendations for nature-related risk management and disclosure in September 2023. The recommendations aim to promote better decision making by companies and capital providers, and ultimately contribute to a shift in global financial flows toward nature-positive outcomes and the goals of the Kunming-Montreal Global Biodiversity Framework[38].

While the scope of disclosure in sustainability reports continues to evolve, issuers must not overlook the importance of including explanations for their framework selection and providing clear illustrations of how extensively these frameworks are applied.

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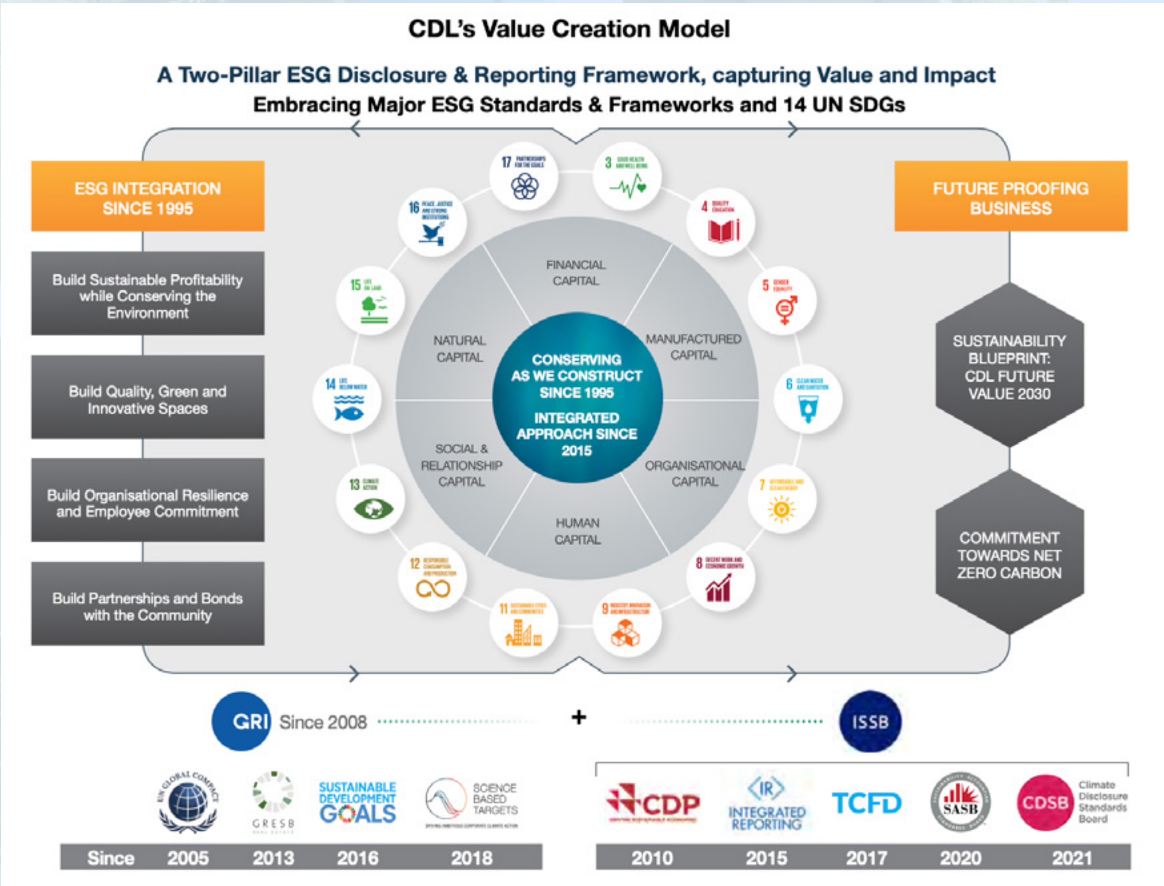
[36] IFRS Foundation. (26 June 2023). *ISSB issues inaugural global sustainability disclosure standards.* https://www.ifrs.org/news-and-events/news/2023/06/issb-issues-ifrs-s1-ifrs-s2.
[37] IFRS Foundation. (4 May 2023). *ISSB Consultation on Agenda Priorities.* https://www.ifrs.org/projects/work-plan/issb-consultation-on-agenda-priorities/.
[38] TNFD. (19 September 2023). *Final TNFD Recommendations on nature related issues published and corporates and financial institutions.* https://tnfd.global/final-tnfd-recommendations-on-nature-related-issues-published-andcorporates-and-financial-institutions-begin-adopting/.

CASE STUDY 6

CDL harmonises multiple reporting frameworks

With over 600 ESG reporting standards and frameworks globally[39], one of the big challenges facing companies is producing a sustainability report that addresses the needs of different stakeholders across the globe.

Singapore property heavyweight City Developments Limited (CDL), which owns and manages real estate around the world, achieves this by adopting a two-pillar sustainability reporting framework that harmonises nine key ESG reporting standards and the 14 UN SDGs (page 18 of CDL's sustainability report). CDL first adopted the GRI Standards in 2008.



In this diagram and in subsequent pages of the report, CDL highlighted the relevant frameworks and standards that it adheres to. For instance, actions taken to address top material ESG factors and sustainability-related risks and opportunities are mapped to UN SDGs and the TCFD framework.

As for its goal of reaching net-zero carbon emissions by 2030, CDL tracks its progress through Carbon Disclosure Project (CDP) disclosures and sets targets that have been validated by the Science Based Target initiative (SBTi).

(Source: City Developments Limited Integrated Sustainability Report 2023)

[39] EY, & Oxford Analytica. (2021). *The future of sustainability reporting standards: The policy evolution and the actions companies can take today.* https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/sustainability/ey-the-future-of-sustainability-reporting-standards-june-2021.pdf.

5.7 Board Statement and Governance Structure

The board has ultimate responsibility for the issuer's sustainability reporting. Consistent with its role, the board should determine the ESG factors that are material to the business and see to it that these are monitored and managed. Management has responsibility to make sure that the ESG factors are monitored on an ongoing basis and enforce compliance at all levels of the organisation. If any question is raised regarding the issuer's sustainability reporting, the board and management should make sure that answers are provided[40].

Substantial improvement in board statement and governance structure.

The board's involvement is essential to ensure that sustainability is integrated into the organisation's core strategy and operations. The leadership shown by the board and management also fosters a culture of responsibility for sustainability practices across the organisation[41].

In their FY 2022 sustainability reports, 94% of issuers said in their board statements that sustainability is part of the strategic formulation. The board's involvement in determining ESG factors rose from 48% of issuers in 2021 to 75% in 2023. The board's involvement in managing and monitoring ESG factors also improved from 54% of issuers in 2021 to 81% in 2023; while 89% of issuers provided details of the management's role compared with 73% in 2021 **(Figure 30)**.

Board statement and associated governance structure for sustainability practices

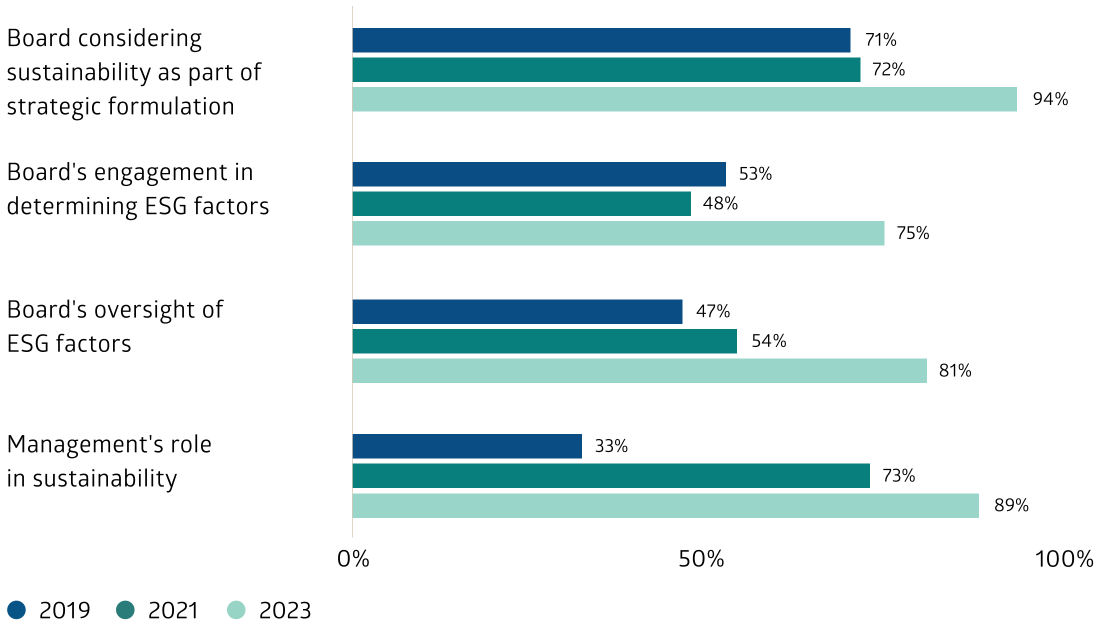


Figure 30: Board statement and associated governance structure for sustainability practices

[40] *Supra* note 5, at paragraph 3.1.

[41] Eccles, R. G., Johnstone-Louis, M., Mayer, C., & Stroehle, J. C. (1 September 2020). The board's role in sustainability. *Harvard Business Review*. https://hbr.org/2020/09/the-boards-role-in-sustainability.

Insights

The board statement and governance structure sections provide critical insights into how the issuer manages sustainability issues from the top. Investors should consider the following:

- Clear board commitment: The board statement should clearly express the board's commitment to sustainability and the integration of material ESG factors into the issuer's strategy.

- Board oversight: Investors should assess the extent to which the board is involved in overseeing sustainability matters. Useful information includes whether there is a board committee overseeing sustainability issues or if sustainability comes under the purview of an existing board committee (e.g. audit or risk), the frequency of meetings and updates, and how management is held accountable.

- Capacity building and regular updates: Issuers should provide board members and senior leadership with the necessary training to carry out their roles and responsibilities. Some issuers have appointed chief sustainability officers to lead sustainability efforts.

- Executive compensation: Issuers that link executive pay to sustainability goals often demonstrate a stronger commitment to sustainability[42]. Compensation plans should be tied to clear key performance indicators and measurable targets, although this is still a nascent area.

[42] Cook, M., Savage, K., & Barge, F. (2023, February 7). Linking executive pay to sustainability goals. *Harvard Business Review*. https://hbr.org/2023/02/linking-executive-pay-to-sustainability-goals.

6. Assurance Practices

Assurance practices include internal review of an issuer's sustainability reporting process and external assurance on the sustainability report. These help increase stakeholders' confidence in the accuracy and the reliability of the information disclosed. Assurance plays a pivotal role in detecting and reducing greenwashing risks as it verifies the authenticity of sustainability claims.

6.1 State of Disclosures

Issuers' sustainability reporting process must be subject to internal review.

The issuer's sustainability reporting process must be subject to internal review[43]. The SGX Sustainability Reporting Guide further details the requirements for the internal review[44]:

- Role and responsibilities: The internal audit function conducts the internal review, and may involve relevant functions such as risk management, sustainability, or other specialist functions.

- Procedure: The identified processes relating to sustainability reporting should be incorporated into the internal audit plan, which should cover key aspects of the sustainability report. The review may take place over the audit cycle, which may span a period of more than one year for risk-based planning and be subject to approval by the audit committee.

- Framework for internal review: The internal review should be conducted in accordance with the International Standards for the Professional Practice of Internal Auditing issued by the Institute of Internal Auditors.

While there is no requirement for issuers to provide a separate statement on internal review, over half (55%) disclosed that their sustainability reporting process is subject to internal review. In line with market practice, responsibilities for internal reviews were typically attributed to the issuer's internal audit function, the board, the audit committee, or the sustainability committee.

There are available resources to provide guidance on conducting internal review. For example, the Institute of Internal Auditors Singapore has developed a guide to provide navigating points for internal audit professionals to facilitate their internal reviews of their sustainability reports[45].

Slight increase in issuers seeking external assurance, though this remains low.

The proportion of issuers seeking external assurance for their sustainability reports doubled to 6% (30 issuers) in 2023 but is nonetheless still low **(Figure 31)**. All issuers that sought external assurance disclosed the framework adopted, while 28 issuers specified the scope of assurance. The most cited frameworks include ISAE 3000 (cited 18 times), SSAE 3000 (cited eight times), SSAE 3410 (cited four times), AA1000AS (cited three times), and ISAE 3410 (cited twice)[46].

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[43] *Supra* note 4, at Listing Rule 711B(3).
[44] *Supra* note 5, at paragraph 5.3.
[45] The Institute of Internal Auditors (Singapore). (4 November 2022). *Guide to Internal Review of Sustainability Report.* https://iia.org.sg/Tenant/C0000023/AC%202022/IIA%20Singapore%20-%20Guide%20to%20Internal%20Review%20on%20the%20Sustainability%20Report.pdf.
[46] International Standard on Assurance Engagements (ISAE) 3000 - Assurance Engagements Other Than Audits or Reviews of Historical Financial Information; Singapore Standard on Assurance Engagements (SSAE) 3000 - Assurance Engagements Other than Audits or Reviews of Historical Financial Information; SSAE 3410 - Assurance Engagements on Greenhouse Gas Statements; AccountAbility's 1000 Assurance Standard (AA1000AS); ISAE 3410 - Assurance Engagements on Greenhouse Gas Statements.

Among the 30 issuers that sought external assurance, 29 were from the Mainboard and one was listed on Catalist. Of these, 25 were large cap issuers, a significant increase from 15 issuers in the 2021 review **(Figure 31)**. Additionally, two medium cap and three small cap issuers sought external assurance, a notable increase from one and zero in the previous report. The real estate sector had the highest number of issuers (11) seeking external assurance **(Figure 32)**.

Disclosure of external assurance

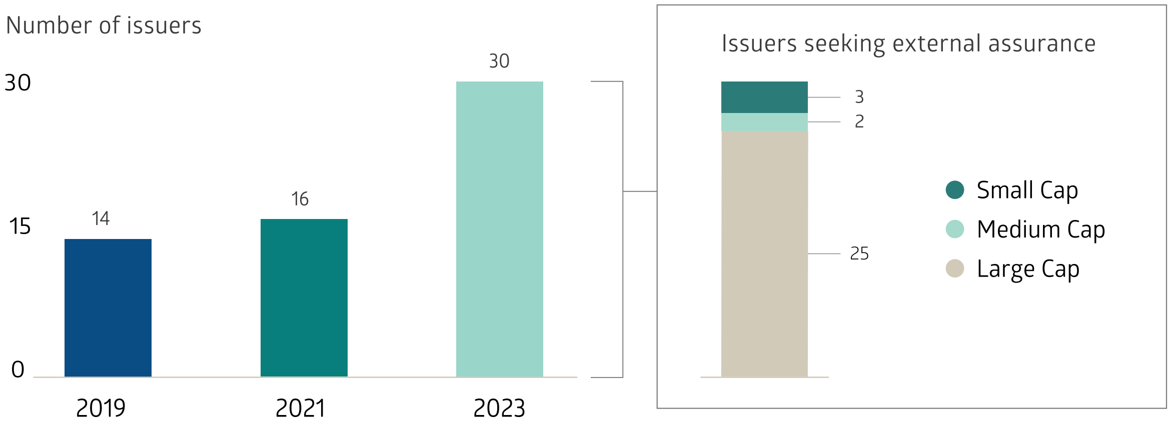

Figure 31: Disclosure of external assurance

Issuers seeking external assurance by industry sector

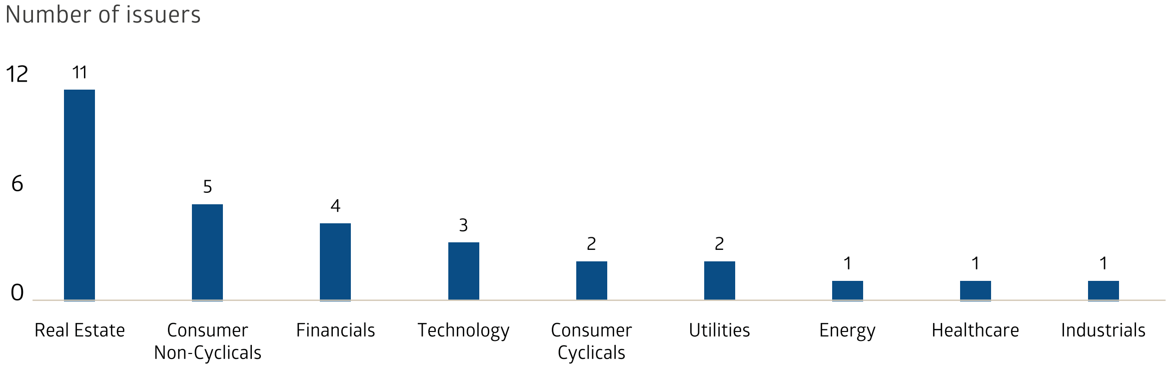

Figure 32: Issuers seeking external assurance by industry sector

The following summarises a selection of recent international sustainability-related assurance standards under development as of the date of this report:

- International Auditing and Assurance Standards Board (IAASB): In August 2023, the IAASB released a proposed standard that will serve as a comprehensive, stand-alone standard suitable for any sustainability assurance engagements[47].

- International Ethics Standards Board for Accountants (IESBA): In December 2022, the IESBA approved two new standard-setting projects that will develop profession-agnostic ethics and independence standards for sustainability reporting and assurance and on the related topic of "use of experts"[48].

[47] IAASB. (2 August 2023). *Proposed international standard on Sustainability Assurance 5000, General Requirements for Sustainability Assurance Engagements.* Retrieved 8 November 2023, from: https://www.iaasb.org/publications/proposed-international-standard-sustainability-assurance-5000-general-requirements-sustainability.

[48] IESBA. (n.d). *Sustainability reporting and assurance: a focus on ethics and independence.* Retrieved 8 November 2023, from: https://www.ethicsboard.org/focus-areas/sustainability-reporting-and-assurance.

6.2 Greenwashing - Answers to Frequently Asked Questions

As companies step up efforts to reduce emissions and make commitments to slow climate change under pressure from governments, investors, and consumers, accusations of "greenwashing" have increased due to closer scrutiny of companies by environmental groups and other non-government organisations. The following questions and answers, which focus on what is contained in issuers' sustainability reports, aim to help stakeholders better understand the issues involved.

Q1: What is greenwashing?

ClientEarth, an environmental law charity, defines greenwashing as the use of advertising and public messaging to make companies appear more climate friendly and environmentally sustainable than they really are. It is also a technique used by certain companies to distract consumers from the fact that their business model and activities do a lot of environmental harm[49].

Greenwashing can take many forms. In the area of advertising, an organisation may make claims about its products that are either false or misleading. For instance, a well-known U.S. fast food company claimed its paper straws were environmentally friendly even though they were not recyclable.

Issuers may also publish sustainability reports that omit negative developments to create an overly positive corporate image[50], or engage in symbolic gestures that do little to help the environment[51].

Planet Tracker, an environmental group, says a common tactic used by companies is to shine the spotlight on a particularly green feature of its operations to draw attention away from environmentally damaging activities conducted elsewhere[52].

Greenwashing also occurs in finance where green or ethical investing has become increasingly popular, particularly in the funds space where fund managers may use misleading environmental labels and claims to entice well-meaning customers.

A particular challenge of greenwashing is in assessing normative claims when our understanding of what is sustainable is still evolving. For example, the EU is proposing to ban terms such as "environmentally friendly", "natural", "climate-neutral" or "eco-" without proof of recognised excellent environmental performance relevant to the claim[53].

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[49] ClientEarth. (n.d.). *Greenwashing*. https://www.clientearth.org/what-we-do/priorities/greenwashing/.

[50] Lyon, T. P., & Maxwell, J. W. (2011). Greenwash: Corporate Environmental Disclosure under Threat of Audit. Journal of Economics & Management Strategy, 20(1), 3–41. https://doi.org/10.1111/j.1530-9134.2010.00282.x.

[51] Walker, K., & Wan, F. (2012). The Harm of Symbolic Actions and Green-Washing: Corporate Actions and Communications on Environmental Performance and Their Financial Implications. Journal of Business Ethics, 109(2), 227–242. https://doi.org/10.1007/s10551-011-1122-4.

[52] Willis, J., Bofiliou, T., Manili, A., Reynolds, I., & Kozlowski, N. (2023). *The Greenwashing Hydra*. https://planet-tracker.org/wp-content/uploads/2023/01/Greenwashing-Hydra-3.pdf.

[53] European Parliament. (2023, September 19). *EU to ban greenwashing and improve consumer information on product durability | News | European Parliament*. https://www.europarl.europa.eu/news/en/press-room/20230918IPR05412/eu-to-ban-greenwashing-and-improve-consumer-information-on-product-durability.

Q2: What has SGX done to prevent greenwashing?

By mandating climate-related disclosures based on the TCFD framework, SGX-listed issuers will have to report emissions and other climate-related information in a format that is more easily verifiable and which investors, lenders, and insurance underwriters can use to compare different issuers. The new climate reporting requirements also include mandatory sustainability training for all directors of SGX-listed issuers[54].

The Listing Rules also contain provisions that govern the disclosure of material information. An issuer must announce any information that is necessary to avoid the establishment of a false market in its shares or information that would likely materially affect its share price. When an announcement is made, it should avoid the omission of important but unfavourable developments[55]. These provisions aim to tighten the veracity of information disclosed, which reduces the possibility of greenwashing.

SGX participates in industry wide initiatives such as the Monetary Authority of Singapore's Green Finance Industry Taskforce and co-led a workstream on improving ESG disclosure standards throughout Singapore's financial sector[56].

Q3: What are some of the red flags that can be found in sustainability reports?

The climate-related disclosures based on the TCFD framework introduced by SGX require issuers to provide data in a consistent manner that allows for easier comparison with other sustainability reports. For investors who have concerns about greenwashing, the red flags include:

- Changes in reporting scope without reason: Issuers may exclude certain subsidiaries and joint ventures from their reporting scope for reasons such as the relatively small size of the operations or difficulty in obtaining quality emissions data in a timely manner. Changes in the reporting scope from the previous year without a clear explanation should be a cause of concern.

- Absence of sustainability reporting framework: Robust reporting frameworks such as the TCFD or the new ISSB Standards make it easier for investors to compare climate-related information and assess an issuer's climate performance in a more systematic and consistent manner. Conversely, reporting sustainability performance without reference to a framework could result in the release of information that is irrelevant or misleading, thus elevating the risk of greenwashing.

- Omission of negative developments: Only 54% of issuers disclosed unfavourable outcomes in their FY 2022 reports **(Figure 33)**. In many cases, the absence of negative developments reflects greater efforts on the part of Singapore issuers to improve their sustainability performance. It may, however, also indicate the issuer is trying to convey an overly positive corporate image or that the targets that were met were too "soft" to begin with.

- Absence of external assurance and internal review: While external assurance is not mandatory, audits by an external party enhances the credibility of the information presented. As with reporting scope, investors should also examine the scope of external assurance, such as whether it covers the entire organisation or if there are areas that have not been covered, or whether limited or reasonable assurance was sought. For issuers that rely on internal reviews, the procedures can be clearly stated to reduce concerns about greenwashing.

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[54] SGX. (2022, March 17). *SGX RegCo announces start of sustainability training for company directors—SGX Group.* https://www.sgxgroup.com/media-centre/20220317-sgx-regco-announces-start-sustainability-training-company-directors.

[55] *Supra* note 4, Listing Rule 703 and Appendix 7.1.

[56] GFIT. (2023). *Green Finance Industry Taskforce: Cultivating Singapore's Sustainable Finance Ecosystem to Support Asia's Transition to Net-Zero.* https://www.mas.gov.sg/-/media/gfit-publication_june_2023.pdf.

Balance in sustainability reporting

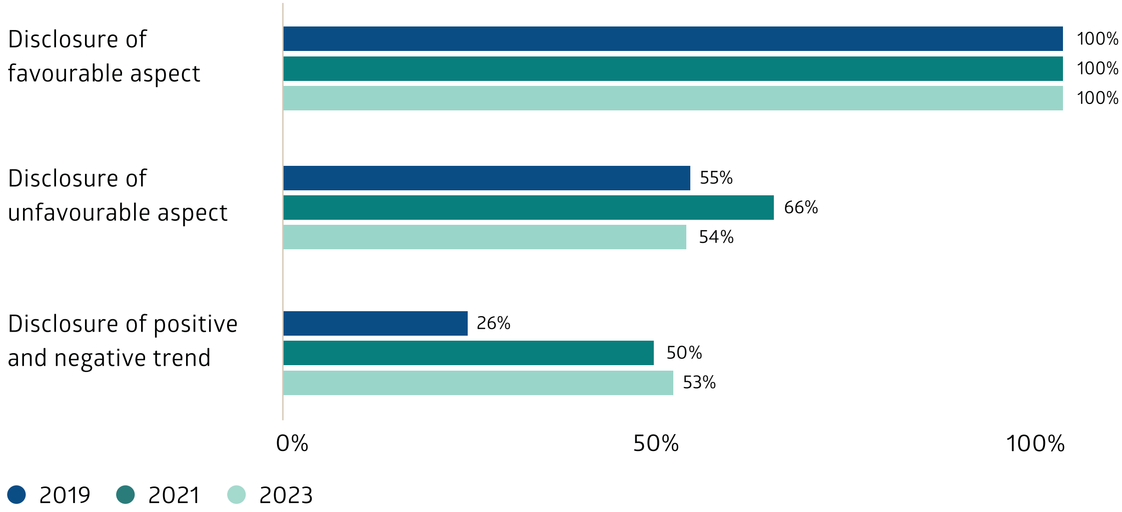


Figure 33: Balance in sustainability reporting

Q4: Does inclusion in sustainability themed ESG indices count as a form of external validation?

An ESG index tracks companies that meet certain sustainability criteria and typically excludes or underweights less sustainable companies. An inclusion in such indices can be considered as an external validation of a company's credentials.

However, inclusion in ESG indexes might not comprehensively validate all facets of an issuer's sustainability reports. The use of external assurance and globally recognised assurance frameworks provide a more holistic view of an issuer's sustainability reporting efforts.

Q5: How does membership of international bodies like RSPO provide an additional level of assurance?

By becoming a member of international bodies like the Roundtable on Sustainable Palm Oil (RSPO), the issuer commits to following a set of global standards. Such international bodies often have a systematic and rigorous verification or certification process. These memberships and certifications function as a means of external validation for the issuer's sustainability practices.

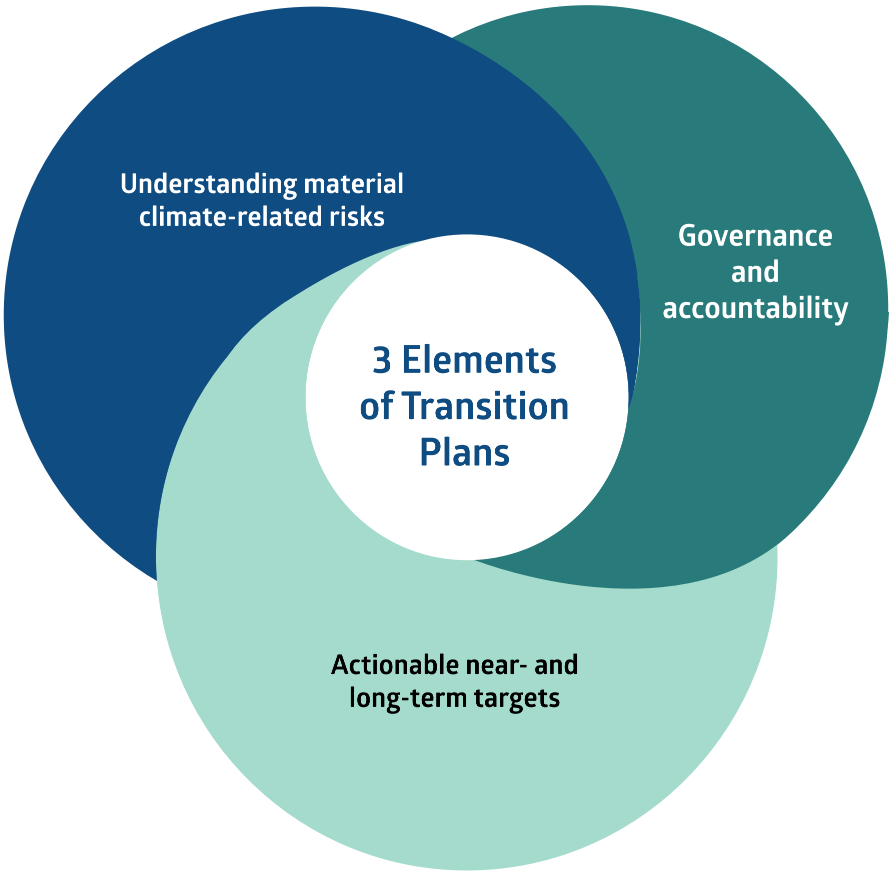
The quality of verification or certification, however, varies from organisation to organisation.

7. Transition Plans

7.1 Developing Credible and Actionable Plans

Many of the world's governments have committed to achieving net-zero emissions by 2050 and have implemented or are in the process of implementing regulations that will compel companies to significantly reduce their GHG emissions. McKinsey estimates the transition will require an estimated US$9.2 trillion in annual average spending on physical assets[57].

Companies, including those listed on SGX, must therefore come up with comprehensive transition plans to show how they intend to reduce emissions, energy consumption and water usage, for example, as well as to address the challenges and opportunities that lie ahead. The plans need to be updated regularly to reflect changes in regulations and technology.



There is currently no global consensus on the best format for a transition plan. At the jurisdiction level, the UK Transition Plan Taskforce launched its disclosure framework in October 2023, which provides the basis for companies to set out their transition plans[58]. In Singapore, SGX RegCo has identified three key elements[59] that a credible climate transition plan should contain:

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[57] McKinsey & Company. (25 January 2022). *Six characteristics define the net-zero transition.* https://www.mckinsey.com/capabilities/sustainability/our-insights/six-characteristics-define-the-net-zero-transition.
[58] UK Transition Plan Taskforce. (12 October 2023). *Huge welcome for launch of 'gold standard' TPT Disclosure Framework.* https://transitiontaskforce.net/huge-welcome-for-launch-of-gold-standard-tpt-disclosure-framework/.
[59] SGX. (8 September 2023). *Regulator's Column: Developing and executing a credible climate transition plan.* https://www.sgxgroup.com/media-centre/20230908-regulators-column-developing-and-executing-credible-climate.

- Issuers must first identify the material climate risks that affect their business and come up with strategies to mitigate these risks, allowing for different scenarios such as the pace of global warming. The plans should cover both physical and transition risks. This will require engaging with a wide range of stakeholders to better understand the risks across the value chain. Assessing risks at the asset level is especially crucial for issuers operating in capital-intensive industries.

- Such transition plans also need a clear governance structure, lines of accountability, and appropriate incentives to drive implementation. Formal oversight from the board of directors and senior management will set the right tone at the top. There should be accountability at all levels, supported by appropriate incentive structures and the provision of resources to the personnel involved. As the shift to net-zero costs money, issuers need to consider how they can obtain financing and allocate scarce resources.

- Finally, issuers need to set actionable, near and long-term science-based targets[60] that are consistent with a global policy environment to achieve net-zero emissions by 2050 and limit the rise in global average temperature to 1.5°C in 2100. As this transition will take place over a long period, issuers should outline processes and metrics to track their progress.

These three key elements will be fleshed out in the case studies on Oversea-Chinese Banking Corporation Limited (OCBC) and ComfortDelGro Group Limited (CDG).

Amid growing concerns about global warming and climate change, a credible transition plan is crucial for issuers to demonstrate their future readiness to staff, shareholders, suppliers, customers and financiers.

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[60] Science-based targets provide a clearly defined pathway for companies to reduce greenhouse gas emissions, helping prevent the worst impacts of climate change and future-proof business growth. Targets are considered "science-based" if they are in line with what the latest climate science deems as necessary to meet the goals of the Paris Agreement which is to limit global warming to 1.5°C above pre-industrial levels. For more information: https://sciencebasedtargets.org/.

7.2 State of Disclosures

In this year's review, 65 issuers have disclosed some form of a transition plan.

Of the 535 issuers assessed for this report, 65 issuers (12%) have produced reasonably detailed climate transition plans[61]. These range from modest efforts to reduce carbon emissions, water, and energy consumption within the organisation to more ambitious plans to drive change in the community and across the entire supply chain.

There were cases where issuers pledged to transition to a lower carbon economy through reducing emissions in the medium-term without discussing the board's and management's roles and responsibilities in the transition plan.

The greatest concentration of issuers with a transition plan are in the real estate sector (28 issuers), followed by industrials (14 issuers), and consumer non-cyclicals (7 issuers) **(Figure 34)**.

The charts in **Section 7** adopt a base of 65 issuers, representing the number of issuers with transition plans.

Disclosure of transition plan

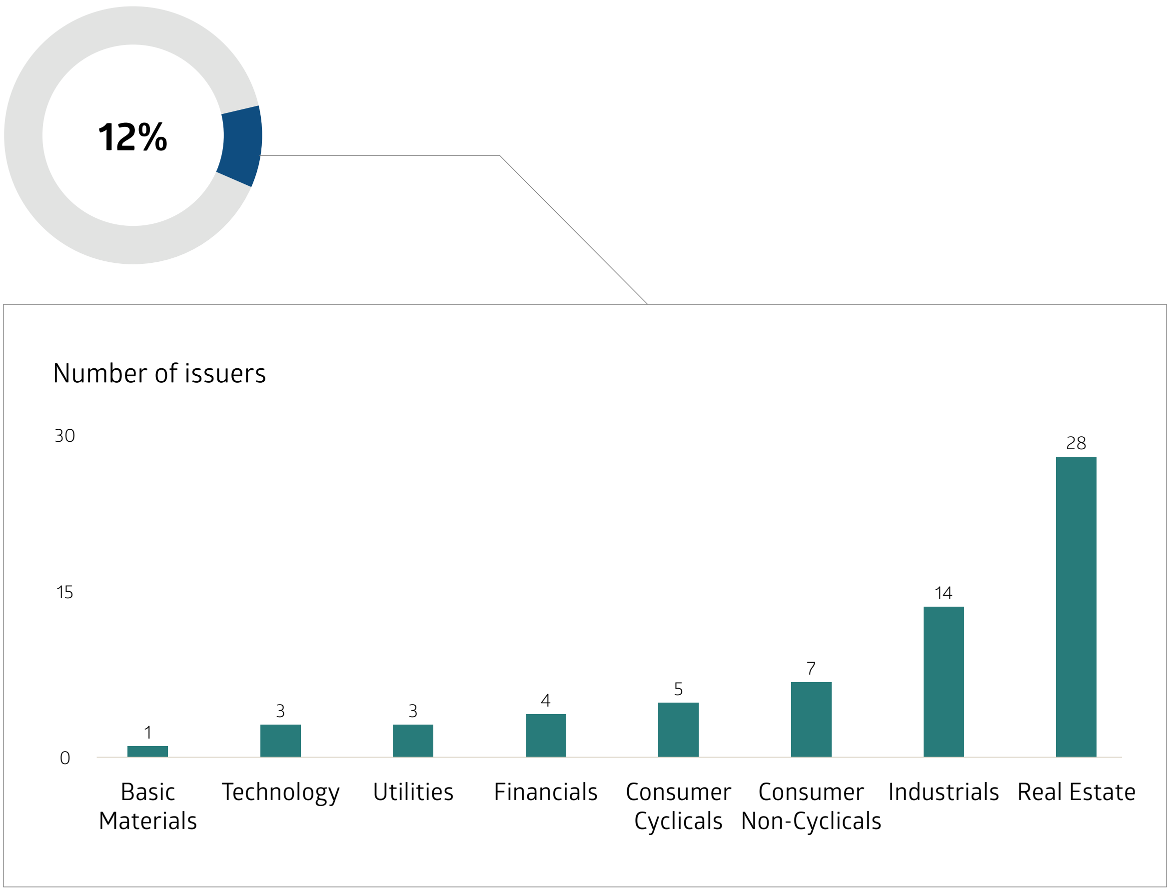


Figure 34: Disclosure of transition plan

As understanding material climate-related risks has been mentioned in previous sections (see **Section 5.3 and 5.5**), the following sections will present findings from the two elements: building strong governance structures to ensure accountability, and monitoring targets.

[61] A 'transition plan' can take various forms, including but not limited to net zero plan, decarbonisation plan, carbon neutral plan and low carbon plan.

7.3 Governance and Accountability

As mentioned earlier, an effective climate transition plan requires the involvement of the board as well as a clearly defined governance mechanism to ensure accountability at every level. This would include setting targets for management and monitoring their progress.

While 40 issuers with a transition plan said that their boards were involved in the planning for climate change **(Figure 35)**, only nine issuers provided detailed terms of reference.

As a transition plan is closely linked to the issuer's strategy and business model, issuers should describe the board's role in setting the direction and keeping track of management to ensure that objectives are met.

Fewer than half of issuers with a transition plan (28 issuers) provided details about their management's role in executing the transition plan, adding to the ambiguity.

Engagement with stakeholders such as staff, customers, suppliers and regulators also appeared to be lacking with just 27 issuers stating that they had engaged stakeholders while drawing up their transition plans. These issuers did not, however, identify the stakeholders who were consulted **(Figure 35)**.

In terms of developing the necessary skillsets, nearly half the issuers with a transition plan (31 issuers) said they have provided board members and management with training to help them develop and implement a climate transition plan.

While issuers should be given some leeway since climate reporting is a relatively new requirement, it is hoped that the roles of the board and management will become clearer in subsequent years.

Transition plan: Governance and accountability

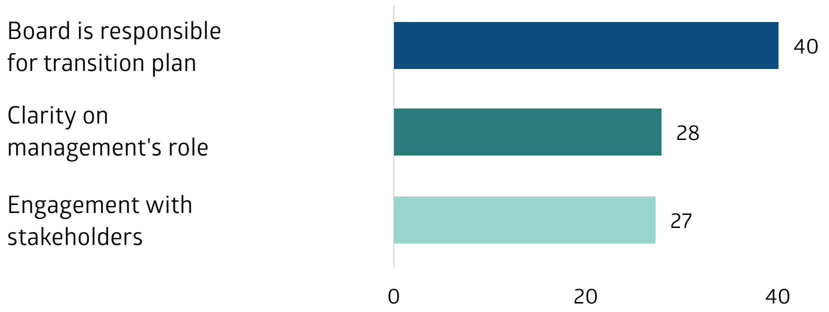


Figure 35: Transition plan: Governance and accountability

7.4 Actionable Near- and Long-term Targets

While Singapore has set clear targets for reducing GHG emissions in line with the Paris Agreement, which aims to slow and eventually stop the rise in global temperatures, SGX-listed issuers have yet to move in tandem.

Out of the 59 issuers that have disclosed targets backed by climate science in their transition plans, only 34 issuers set quantitative and time-based targets that would allow investors and customers to better track their progress or verify if the targets are in line with climate science **(Figure 36)**.

Transition plan: Setting targets backed by climate science

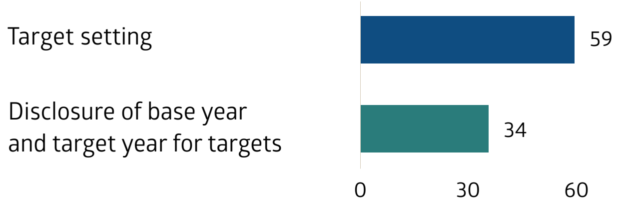


Figure 36: Transition plan: Setting targets backed by climate science

There is plenty of room for improvement.

While 61 issuers with transition plans disclosed the processes used to monitor climate risks, only 31 issuers explained how they intend to keep track of progress in meeting their targets.

While 63 issuers disclosed Scope 1 or 2 emission or emission intensity data for the FY, only seven issuers provided absolute emissions projections while three issuers provided emissions intensity projections **(Figure 37)**.

Transition plan: Monitoring of transition plan

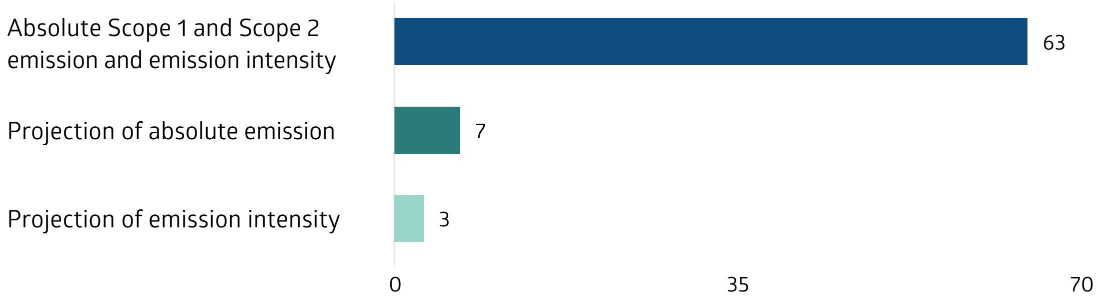


Figure 37: Transition plan: Monitoring of transition plan

CASE STUDY 7

OCBC

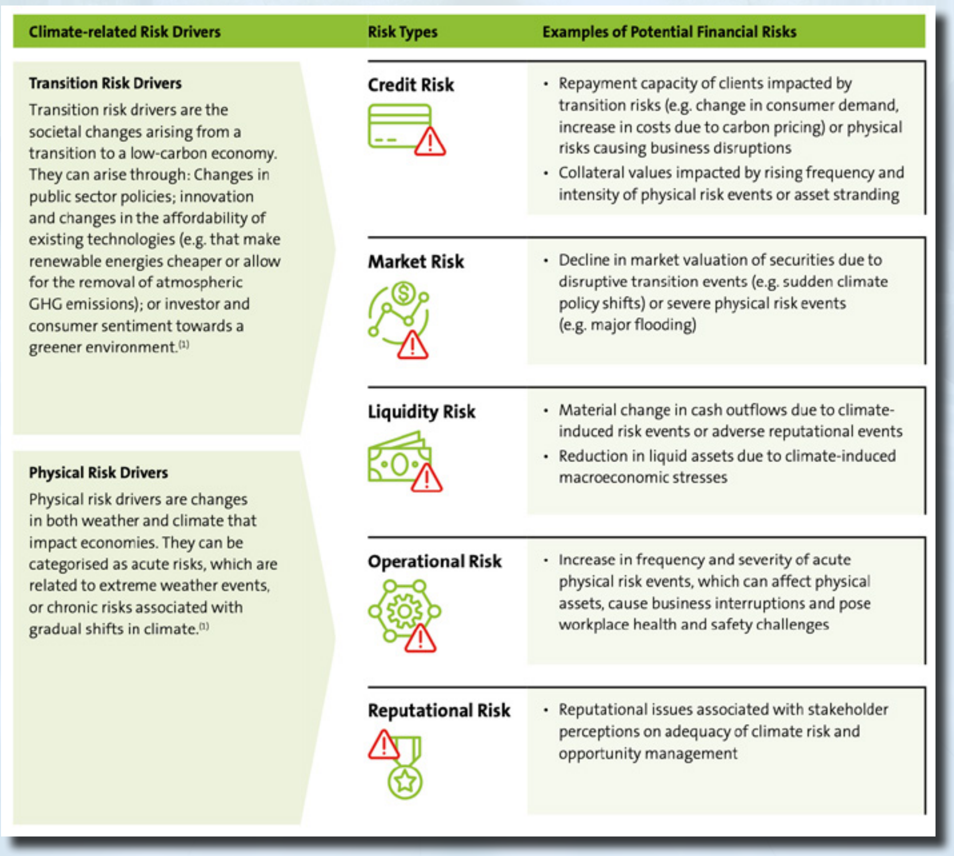
Oversea-Chinese Banking Corporation Limited (OCBC), Singapore's second largest bank by market capitalisation, has a comprehensive climate transition plan that spells out the risks affecting its business, explains how the board and senior management are addressing climate challenges, and provides a range of targets at the operational level and in the composition of its loan portfolio.

In 2021, OCBC unveiled its five-year Climate Strategy that outlined how it planned to become a regional leader in sustainable and responsible banking for a low-carbon economy by 2026. The bank became a signatory to the United Nations-convened, industry-led Net Zero Banking Alliance in October 2022, committing itself to adopting aggressive decarbonisation strategies in its operations and lending.

In May 2023, OCBC unveiled decarbonisation targets that are backed by climate science for six of the sectors it lends to – Power, Oil and Gas, Real Estate, Steel, Aviation and Shipping – as part of its commitment to achieve net-zero in its financed emissions by 2050. The six sectors account for 42% of OCBC's corporate and commercial banking loan portfolio.

Identifying climate risks

OCBC's 62-page sustainability report sets out the bank's priorities and explains how it identifies climate risks. The report also explains how it formulates policies to mitigate the risks. The bank has a Sustainability Working Group that meets regularly to discuss the latest ESG trends and propose strategies to deal with the challenges ahead. OCBC will then validate these recommendations with the help of stakeholders and external consultants before presenting them to the board for approval. Climate action comes under the purview of this working group.



Climate-related Risk Drivers	Risk Types	Examples of Potential Financial Risks
Transition Risk Drivers Transition risk drivers are the societal changes arising from a transition to a low-carbon economy. They can arise through: Changes in public sector policies; innovation and changes in the affordability of existing technologies (e.g. that make renewable energies cheaper or allow for the removal of atmospheric GHG emissions); or investor and consumer sentiment towards a greener environment.[1]	**Credit Risk**	• Repayment capacity of clients impacted by transition risks (e.g. change in consumer demand, increase in costs due to carbon pricing) or physical risks causing business disruptions • Collateral values impacted by rising frequency and intensity of physical risk events or asset stranding
	Market Risk	• Decline in market valuation of securities due to disruptive transition events (e.g. sudden climate policy shifts) or severe physical risk events (e.g. major flooding)
Physical Risk Drivers Physical risk drivers are changes in both weather and climate that impact economies. They can be categorised as acute risks, which are related to extreme weather events, or chronic risks associated with gradual shifts in climate.[1]	**Liquidity Risk**	• Material change in cash outflows due to climate-induced risk events or adverse reputational events • Reduction in liquid assets due to climate-induced macroeconomic stresses
	Operational Risk	• Increase in frequency and severity of acute physical risk events, which can affect physical assets, cause business interruptions and pose workplace health and safety challenges
	Reputational Risk	• Reputational issues associated with stakeholder perceptions on adequacy of climate risk and opportunity management

As seen above, the climate-related risks include transition risks arising from policy changes, technological innovations, and a shift in investor and consumer sentiments (page 16 of OCBC's Sustainability Report). OCBC's scenario planning takes into consideration the possibility that the world may not meet the 2050 net-zero target and that the response to climate change will be messy and haphazard, necessitating stronger climate action in future.

Governance and accountability

OCBC's Board Sustainability Committee ensures strong board oversight over ESG issues, while a Sustainability Council chaired by the Group CEO keeps track of initiatives on an ongoing basis. The governance structure is clearly illustrated in the following diagram (page 7 of OCBC's Sustainability Report).

Below the Board Sustainability Committee, a Sustainability Working Group proposes key performance indicators and targets for approval by the council annually, while a separate group produces five-year plans focusing on three priorities including achieving net-zero emissions in line with the Paris Agreement.

Our Performance

Emissions[1][2][3]	2022	2021[3]	2020
Total emissions (t CO_2e)	61,618	65,373	–
Scope 1 (t CO_2e)[4][6]	160	237	–
Scope 2 (t CO_2e)[5][6]	59,941	63,496	66,470
Scope 3 (t CO_2e)[7]	1,517	278	–
Emission Intensity Ratios	**2022**	**2021**	**2020**
Scope 2 (t CO_2e/sq ft)[8]	0.011	–	–
Electricity	**2022**	**2021**	**2020**
Total electricity consumption (MWh)[8]	110,789	115,733	121,075
Electricity intensity (MWh/sq ft)[8]	0.020	0.022	0.023
Water	**2022**	**2021**	**2020**
Total water consumption (m^3)[9]	400,322	407,051	507,510
Water intensity (m^3/sq ft)	0.10	0.08	0.09
Waste	**2022**	**2021**	**2020**
General waste (tonnes)	1,229	–	–
Recycled waste (tonnes)[10]	163	–	–
Office paper (tonnes)[11]	369	379	445

(1) Our approach to carbon emissions is aligned to the GHG Protocol Standards, using the operational control approach to determine carbon emissions boundaries. The environmental data covers all our operations in Singapore, Malaysia, Bank OCBC NISP in Indonesia and OCBC Wing Hang (China, Hong Kong and Macau) unless otherwise stated.
(2) Emission factors used to calculate carbon emissions are derived from, or in reference to, the Intergovernmental Panel on Climate Change (IPCC) emission factor database.
(3) We expanded our carbon inventory in 2021 to include Scope 1 emissions as well as Scope 3 carbon emissions that are material to our operations. We do not provide Scope 1 and 3 emission data for previous years as the data is not available.
(4) Scope 1 carbon emissions include direct carbon emissions from backup diesel generators on OCBC premises and carbon emissions from petrol consumption by corporate cars. Energy consumption from these non-renewable sources of fuel amounted to approximately 2,210 GJ in 2022.
(5) Scope 2 carbon emissions refer to purchased electricity. OCBC reports Scope 2 carbon emissions using the location-based approach. Emission factor source: Energy Market

Achieved **carbon neutrality for OCBC's banking operational emissions** in 2022

Achieved **BCA Green Mark Certification** for OCBC Campus, OCBC AMK Hub branch and OCBC Jurong Point branch

Installed **12 electric vehicle charging stations** at OCBC Centre carpark and Menara OCBC (Malaysia)

Our Targets

Maintain carbon neutrality for OCBC's banking operational emissions in 2023

Provide electric vehicle charging facilities to other major Group-owned commercial buildings by 2025

Bank of Singapore to achieve BCA Green Mark Healthier Workplace award for all new offices in 2023

All OCBC Bank branches to receive BCA Green Mark Awards by 2030

Achieve 3% reduction from 2022's office paper usage within the Group offices for business operations in 2023

Actionable near- and long-term targets

OCBC provides details about emissions from its operations along with historical data so investors and customers can track the bank's progress (page 21 of OCBC's Sustainability Report).

The bank has committed to hitting certain targets such as providing electric vehicle charging facilities in larger commercial buildings that it owns in 2023 and growing its sustainable financing portfolio to $50 billion by 2025.

Other points to note

OCBC's latest sustainability report has a section on responsible financing that covers a wide range of topics from green loans and sustainable financing to ESG ratings on private bank portfolios. ESG ratings are also available for funds sold on the bank's robo-investing platforms. OCBC has set climate-related targets and sustainability-related targets across the short-, medium-, and long-term.

(Source: Oversea-Chinese Banking Corporation Limited Sustainability Report 2022)

CASE STUDY 8

ComfortDelGro Corporation

SGX-listed ComfortDelGro Corporation Limited (CDG), which provides land transportation services in several countries including Singapore, UK, Ireland, Australia and China, has pledged significant cuts in its GHG emissions and aims to achieve net-zero emissions by 2050 in line with the Paris Agreement. Its plans include switching its fleet of cars and buses to vehicles that run on cleaner energy.

CDG, which has been issuing standalone annual sustainability reports since FY 2015, is the first mobility operator in Southeast Asia to commit to and have its decarbonisation plan approved by the Science Based Targets initiative (SBTi).

Identifying climate risks

As a global land transport operator, CDG identified a wide range of transition risks including increases in carbon pricing, changes in the low-carbon transition policies of the countries where it operates, as well as physical risks linked to climate change including floods, heatwaves, storms and cyclones, wildfires, water scarcity, and rising sea levels.

These risks have been included in the issuer's various contingency plans that assuming different scenarios such as a 1.5°C increase in global temperatures above pre-industrial levels, which the world's governments hope to achieve, and temperature increases of more than 3°C that will significantly alter weather patterns.

Governance and accountability

CDG's board of directors, guided by its board-level Sustainability Committee, maintains oversight of the issuer's sustainability ambitions, strategies and performance. This includes overseeing the integration of ESG into the overall business strategy. CDG's chairman is also a member of the committee.

ESG matters are deliberated by the Sustainability Committee at least once every quarter and every single board member has attended sustainability training in line with SGX's directive.

Actionable near- and long-term targets

CDG publishes a long list of climate-related targets with specific target dates. The targets include achieving a 54.6% reduction in absolute Scope 1 and Scope 2 GHG emissions from operations, as well as 61.2% reduction in absolute Scope 3 GHG emissions from fuel and energy-related activities by 2032 (pages 18 to 20 of CDG's Sustainability Report).

The issuer uses science-based targets validated by SBTi, which is an international partnership between CDP, the United Nations Global Compact (UNGC), World Resources Institute (WRI), and the World Wide Fund for Nature (WWF).

OUR TARGETS AND PERFORMANCE HIGHLIGHTS

To reiterate our continuous effort in our sustainability journey, ComfortDelGro has undertaken a revision of our short-, medium- and long-term targets relating to each pillar, for better alignment with our material topics and sustainability framework.

● Achieved/on track
● Requires improvement

MATERIAL TOPICS	2022 PERFORMANCE & ACHIEVEMENTS	PROGRESS	SHORT-TERM, MEDIUM-TERM & LONG-TERM TARGETS
CLIMATE CHANGE ADAPTATION AND MITIGATION • **Climate friendly mobility** • **Sustainable products and services**	• 65% of our total car fleet globally are cleaner energy vehicles	●	• Transition 90% of our total car fleet across all our operations globally to cleaner energy vehicles by 2030 and 100% by 2040 • Transition 50% of our total bus fleet across all our operations globally to cleaner energy vehicles by 2030 and 100% by 2050 • Continue to keep 100% of our total rail across all our operations globally to using electric traction power • Continue to remain abreast of climate-friendly mobility solutions and adopt appropriate solutions for future mitigation and adaptation
EMISSIONS	• Reduced GHG emissions intensity in 2022 from 2021 (240 tCO_2e/S$M Revenue)	●	• 54.6% reduction in absolute Scope 1 and Scope 2 GHG emissions from our operations by 2032 from a baseline year of 2019 • 61.2% reduction in absolute Scope 3 GHG emissions from fuel and energy-related activities by 2032 from a baseline year of 2019 • Aiming to reach net zero timelines and targets for the transport sector, set by the countries that we operate in

CDG has established key metrics to measure and monitor its environmental performance. It discloses, for instance, absolute Scope 1, 2, and 3 emissions, as well as Scope 1 and 2 emissions intensity.

Other points to note

Unlike many SGX-listed issuers, CDG provides information about missed targets and cases where it had fallen short of the standards it aspires to. This is commendable as it paints a more accurate and balanced picture of CDG's sustainability performance.

(Source: ComfortDelGro Corporation Limited Sustainability Report 2022)

Conclusion

The need for quality and up-to-date descriptive components in sustainability reports has never been more urgent. As the world grapples with pressing environmental and social challenges, stakeholders are increasingly reliant on these reports to gauge issuers' commitment to sustainability[62]. Sustainability reporting is not merely a box ticking exercise but is instrumental in fostering trust, accountability, and helping the world progress towards a sustainable future.

One crucial aspect of this growing need is the heightened risk of greenwashing. As sustainability claims proliferate, stakeholders have become more discerning, scrutinising reports for authenticity and rigour. Issuers must recognise that merely showcasing a commitment to sustainability is insufficient. Instead, they must demonstrate tangible actions, measurable progress, and trackable targets.

To navigate the dynamic landscape of sustainability reporting effectively, issuers should look at the following if they have not already done so:

- Provide regular updates: Issuers should regularly update the disclosures in their sustainability report to remain competitive and investible.

- Ensure relevance and substance: The number of pages in a sustainability report does not matter. To this end, issuers are reminded that readability is key when communicating to stakeholders, and reports should be concise. However, reports should also include all salient points, and issuers will do well to follow the Listing Rules and the SGX Sustainability Reporting Guide.

- Seek external assurance: Engaging an independent professional body to analyse the reporting process and verify the information disclosed adds a layer of credibility and trustworthiness to the information presented.

- Build technical capacity: Staff should attend workshops and training sessions, for example those organised by SGX, to build up sustainability knowledge and expertise among different stakeholders. Past examples of training provided by SGX include general and sectoral workshops on implementing the TCFD recommendations and mandatory sustainability training courses for directors of listed issuers. Details of training events can be found here[63].

- Tap knowledge resources: There are numerous resources on sustainability topics by various organisations that are available to issuers. For example, issuers may refer to the Sustainability Knowledge Hub, a one-stop information platform[64] for listed issuers, investors and other key stakeholders to access the latest information on SGX's sustainability-related publications and engagements, external disclosure standards and frameworks, as well as other resources on sustainability and sustainable finance that are pertinent.

- Make use of the SGX Sustainability Reporting Guide[65]: The guide provides guidance on the expected structure and contents of the sustainability report and the preparation needed. The guide also provides a suggested phased implementation approach to climate reporting.

- Share best practices: To contribute to the shared long-term goal of achieving net-zero emissions by 2050 and fostering a sustainable future for all, issuers should share their best practices with industry peers. Highlighting exemplary performances as case studies, as this report has done, can catalyse collective progress.

Sustainability is not a buzzword but a moral and strategic imperative. For issuers that want to make a positive impact, a detailed and well-written sustainability report is a prerequisite for successful planning and to bring key stakeholders onboard.

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[62] World Economic Forum. (2022, August 17). *ESG could build or break trust in companies. Here are 5 ways to do it right.* https://www.weforum.org/agenda/2022/08/esgs-build-trust-sustainability-reporting/.
[63] SGX. (n.d.). Capacity Building and Training. Retrieved 8 November 2023, from: https://www.sgx.com/sustainable-finance/capacity-building-training.
[64] SGX. (n.d.). Sustainability Knowledge Hub. Retrieved 8 November 2023, from: https://www.sgx.com/sustainable-finance/sustainability-knowledge-hub.
[65] *Supra* note 5.

Appendix A

Issuers identified in this report have been classified based on TRBC methodology, and are categorised based on their TRBC Economic Sector. More details on issuers' categorisation based on TRBC Business Sector can be found on SGX's Stock Screener webpage[66]. Table 2[67] maps TRBC Business Sectors against their respective TRBC Economic Sector according to TRBC methodology.

TRBC Economic Sector	TRBC Business Sector
Academic & Educational Services	Academic & Educational Services
Basic Materials	Applied Resources* Chemicals* Mineral Resources*
Consumer Cyclicals	Automobiles & Auto Parts* Cyclical Consumer Products Cyclical Consumer Services Retailers
Consumer Non-Cyclicals	Consumer Goods Conglomerates Food & Beverages* Food & Drug Retailing Personal & Household Products & Services
Energy	Energy – Fossil Fuels* Renewable Energy
Financials	Banking & Investment Services* Collective Investments* Insurance* Investment Holding Companies
Healthcare	Healthcare Services & Equipment Pharmaceuticals & Medical Research
Industrials	Industrial & Commercial Services* Industrial Goods Transportation*
Real Estate	Real Estate*
Technology	Financial Technology (Fintech) & Infrastructure Software & IT Services Technology Equipment Telecommunications Services
Utilities	Utilities*

Table 2: TRBC classification

[66] SGX. (n.d.). Stock Screener. https://investors.sgx.com/stock-screener.
[67] An asterisk (*) represents that issuers with the following TRBC Business Sectors must provide mandatory climate reporting based on Listing Rule 711B of the SGX-ST Listing Manual as it falls within one of the TCFD-identified industries of:
(i) Financial – Banking and Investment Services, Collective Investments, or Insurance;
(ii) Agriculture, Food and Forest Products – Applied Resources, or Food & Beverages;
(iii) Energy – Energy – Fossil Fuels, or Utilities;
(iv) Materials and Buildings – Chemicals, Mineral Resources, Industrial & Commercial Services, or Real Estate; and
(v) Transportation – Automobiles & Auto Parts, or Transportation.

Appendix B

Listing Board	2019	2021	2023
Mainboard	130	181	358
Catalist	365	385	177
Total	**495**	**566**	**535**

Market Capitalisation	2019	2021	2023
Large cap (above S$1 billion)	83	78	75
Medium cap (between S$300 million and S$1 billion)	68	72	73
Small cap (below S$300 million)	344	416	387
Total	**495**	**566**	**535**

Industry Sector (TRBC)	2019	2021	2023
Academic & Educational Services	1	3	2
Basic Materials	45	48	43
Consumer Cyclicals	75	93	89
Consumer Non-Cyclicals	30	34	37
Energy	32	26	25
Financials	22	29	26
Healthcare	23	34	31
Industrials	119	137	133
Real Estate	89	101	92
Technology	48	51	47
Utilities	11	10	10
Total	**495**	**566**	**535**

List of Figures and Tables

List of Abbreviations

ACRA	Accounting and Corporate Regulatory Authority
CDP	Climate Disclosure Project
CGS	Centre for Governance and Sustainability
ERM	Enterprise Risk Management
ESG	Environmental, Social, and Governance
ESRS	European Sustainability Reporting Standards
EU	European Union
FY	Financial Year
GHG	Greenhouse Gas
GRI	Global Reporting Initiative
IAASB	International Auditing and Assurance Standards Board
IESBA	International Ethics Standards Board for Accountants
IFRS	International Financial Reporting Standards
IIRC	Integrated Reporting Framework
ISAE	International Standard on Assurance Engagements
ISO	International Organization for Standardization
ISSB	International Sustainability Standards Board
NDC	Nationally Determined Contributions
NUS	National University of Singapore
REIT	Real estate investment trust
RSPO	Roundtable on Sustainable Palm Oil
SASB	Sustainability Accounting Standards Board
SBTi	Science Based Targets Initiative
SDG	Sustainable Development Goals
SEC	U.S. Securities and Exchange Commission
SGX	Singapore Exchange
SGX RegCo	Singapore Exchange Regulation
SME	Small and Medium Enterprise
SRAC	Sustainability Reporting Advisory Committee
SSAE	Singapore Standard on Assurance Engagements
TCFD	Task Force on Climate-related Financial Disclosures
TNFD	Taskforce on Nature-related Financial Disclosures
TRBC	The Refinitiv Business Classification
UN	United Nations
UNGC	United Nations Global Compact
WRI	World Resources Institute
WWF	World Wide Fund for Nature

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Singapore Exchange Regulation (SGX RegCo) is the independent Singapore Exchange subsidiary undertaking all frontline regulatory functions including as securities market regulator. Our activities include the admission and supervision of issuers, intermediaries and Catalist sponsors, the surveillance of trading and issuers' disclosures, and the formulation and improvement of policies and products, guided by market feedback. We also have the Whistleblowing Office to look into allegations of issuers' regulatory shortfalls and the Sustainable Development Office to house ESG-related regulatory efforts. Regulation Asia has named us Exchange of the Year four times in recognition of efforts to uphold the integrity and development of our markets.

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